

BEFORE THE MAUI PLANNING COMMISSION  
COUNTY OF MAUI  
STATE OF HAWAII

In the Matter of the Application of )  
 )  
MR. ERIC CANT, Vice President, AOA ) Docket No. 94/SSV-4  
PIKAKE ) 94/SM1-9  
 ) Mr. Eric Cant  
 ) (ds)  
 )  
to Obtain a Shoreline Setback Variance )  
and Special Management Area Use Permit )  
for a rock revetment at the Pikake )  
Condominium, TMK: 4-3-6:63, Lahaina, )  
Maui. )

Maui Planning Department's Conclusions of Law  
and Recommendations  
September 27, 1994

CONCLUSIONS OF LAW

SSV Based on the aforementioned report and analysis, shoreline erosion is likely to cause hardship to the applicant if the revetment is not allowed within the shoreline area by the need to protect private property and existing structures. The proposed revetment is a better solution than continuously repairing the existing vertical seawall. The design may promote sand accumulation, while still protecting private property from shoreline erosion. Further, the Applicant has reviewed the agency comments and has revised the construction plans to illustrate no work or excavation occurring makai of the certified shoreline. As such, the proposed development meets the intent of granting a shoreline variance.

SMA Based on the aforementioned report and analysis, the development:

1. will not have any substantial adverse environmental or ecological effect;
2. is consistent with the objectives, policies, and special management area guidelines of this chapter, and any guidelines enacted by the legislature; and
3. is consistent with the county general plan, and zoning.

## RECOMMENDATIONS

The Maui Planning Department recommends approval of the subject Shoreline Setback Variance and Special Management Area Use Permit to construct a rock revetment along the makai boundary of the Pikake Condominium subject to the following conditions:

1. That construction of the proposed project shall be initiated within two (2) years from the date of the granting of this permit, to expire on September 27, 1996. Further, initiation of construction shall be determined as issuance of a building permit and initiation of construction of the revetment. Failure to comply within this two (2) year period will automatically terminate this Special Management Area Use Permit unless a time extension is requested no later than ninety (90) days prior to the expiration of said two (2) year period.
2. That the construction of the project shall be completed within five (5) years after the date of its initiation. Failure to complete construction of this project will automatically terminate the subject Special Management Area Use Permit.
3. That final construction shall be in general accordance with preliminary engineering plans dated June 1994, report #P214101.
4. That appropriate measures shall be taken during construction to mitigate the short term impacts of the project relative to soil erosion from wind and water, ambient noise levels, and traffic disruptions. Precautions shall be taken to prevent eroded soils, construction debris and other contaminants from excessively entering the coastal waters.
5. That the conditions of this Shoreline Setback Variance and Special Management Area Use Permit shall be self enforcing and, accordingly, upon due notice by the Planning Department to the permit holder and the Maui Planning Commission that there is prima facie evidence that a breach has occurred the permit shall be automatically suspended pending a hearing on the continuity of such Special Management Area Use Permit, provided that written request for such a hearing is filed with the department within ten (10) days of the date of receipt of such notice of alleged breach. If no request for hearing is filed within said ten (10) day period, the Maui Planning Commission may revoke said Special Management Area Use Permit.

6. That the subject Special Management Area Use Permit shall not be transferred without the prior written approval of the Maui Planning Commission. However, in the event that a contested case hearing preceded issuance of said Special Management Area Use Permit, a public hearing shall be held upon due published notice, including actual written notice to the last known addresses of parties to said contested case and their counsel.

7. That the applicant, its successors and permitted assigns shall exercise reasonable due care as to third parties with respect to all areas affected by subject Special Management Area Use Permit and shall defend, indemnify and hold the County of Maui harmless from and against any loss, liability, claim or demand arising out of this permit.

8. That full compliance with all applicable governmental requirements shall be rendered.

9. That the Petitioner shall submit to the Planning Department a detailed report addressing its compliance with the conditions established with the subject Special Management Area Use Permit. Further, this report shall be reviewed and approved by the Planning Department prior to issuance of the building permit.

10. That no construction, operation of equipment, storage of materials, excavation or deposition of soil or other materials shall occur seaward of the certified shoreline dated September 13, 1993.

11. That no contaminants, pollutants, petroleum products, construction materials, etc. shall be allowed to be mixed in the sand and water makai of the certified shoreline;

12. That prior to construction, stakes shall be placed along the certified shoreline and verified by the Department of Land and Natural Resources, Land Management Division.

13. That all associated debris, litter and remnants of the collapsing seawall that may be deposited seaward of the Applicant's Property that could adversely affect aquatic resources, nearshore waters and public enjoyment of the shoreline, shall be removed.

14. If human skeletal remains or materials indicative of historic deposits are encountered during excavation for the revetment toe, work in the area of the find shall cease and the Maui office of the Historic Preservation Division shall be notified immediately at 243-5169.

15. That the Applicant is advised to use water-conserving soil preparation, irrigation and mulching in the proposed landscape. The Applicant is further advised to use native shoreline plant species.

16. That alternative means of disposal of grubbed material, rock and concrete shall be utilized other than disposed of at the County landfills.

APPROVED:

*Brian Miskae*  
for BRIAN MISKAE,  
Planning Director

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MAUI PLANNING DEPARTMENT'S REPORT  
for the  
Maui Planning Commission Meeting on  
September 27, 1994

Shoreline Setback Variance  
Special Management Area Use Permit

Planning Department  
County of Maui  
250 S. High Street  
Wailuku, HI 96793

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MAUI PLANNING DEPARTMENT'S REPORT

**THE APPLICATION**

1. This matter arises from an application for a Shoreline Setback Variance ("SSV") and Special Management Area ("SMA") Use Permit filed on February 23, 1994, and deemed complete and ready for processing by the Department of Public Works and Waste Management on April 6, 1994. The applications were filed pursuant to Title MC-12 Department of Planning, Subtitle 02 Maui Planning Commission, Chapter 5 Rules of the Maui Planning Commission Relating to the Shoreline Area of the Islands of Kahoolawe, Lanai, and Maui; and Chapter 202 Special Management Area Rules for the Maui Planning Commission; by Eric Cant, on behalf of the Pikake Condominium Association ("Applicant"), on approximately 23,752 sq. ft. of land, situated in the Lahaina District, Island of and County of Maui, identified as Maui Tax Map Key No.: 4-3-6: 63 ("Property").

2. The Applicant is requesting for a Shoreline Setback Variance and a Special Management Area Use Permit to construct a rock revetment along the makai frontage of the Pikake Condominium.

**APPLICABLE REGULATIONS**

3. SSV Standards for reviewing an SSV application are found under Title MC-12 Department of Planning, Subtitle 02 Maui Planning Commission, Chapter 5 Rules of the Maui Planning Commission Relating to the Shoreline Area of the Islands of Kahoolawe, Lanai, and Maui. §12-5-13 Action by the authority, states the following:

"(a) A shoreline area variance may be granted for a structure or activity otherwise prohibited by this chapter, if the authority finds in writing, based on the record presented, that the proposed structure or activity is necessary for or ancillary to:

...(g) Private facilities or improvements that may artificially fix the shoreline; provided that, the authority also finds that shoreline erosion is likely to cause hardship to the applicant if the facilities or improvements are not allowed within the shoreline area; and provided further that, the authority imposes conditions to prohibit any structure seaward of the existing shoreline unless it is clearly in the public interest...

(b) For the purposes of this section, hardship shall not include an economic hardship to the applicant; county zoning changes, planned development permits, cluster permits, or subdivision approvals after June 16, 1989; any other permit or approval which may have been issued by the authority. If the hardship is a result of actions by the applicant, such result shall not be considered a hardship for purposes of this section.

(c) No variance shall be granted unless appropriate conditions are imposed:

(1) To maintain safe lateral access to and along the shoreline or adequately compensate for its loss;

(2) To minimize the risk of adverse impacts on beach processes;

(3) To minimize risk of structures failing and becoming loose rocks or rubble on public property; and

(4) To minimize adverse impacts on public views to, from, and along the shoreline."

4. SMA Standards for reviewing an SMA application are found under Chapter 202 Special Management Area Rules for the Maui Planning Commission. A proposed action may have a significant adverse effect on the environment when the proposed action:

"(A) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;

(B) Significantly curtails the range of beneficial uses of the environment;

(C) Conflicts with the county's or the state's long-term environmental policies or goals;

(D) Substantially affects the economic or social welfare of the community, county, or state;

(E) Involves substantial secondary impacts, such as population changes and increased effects on public facilities, streets, drainage, sewage, and water systems, and pedestrian walkways;

(F) In itself has no significant adverse effects but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

(G) Substantially affects a rare, threatened or endangered species of animal or plant, or its habitat;

(H) Is contrary to the state plan, county's general plan, appropriate community plans, zoning and subdivision ordinances;

(I) Detrimentially affects air or water quality or ambient noise levels;

(J) Affects an environmentally sensitive area such as a flood plain, shoreline, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh waters, or coastal waters.

(K) Substantially alters natural land forms and existing public views to and along the shoreline; or

(L) Is contrary to the objectives and policies of HRS Chapter 205A."

5. Pursuant to §12-202-15(g), the commission shall approve a special management area use permit, subject to terms and conditions as permitted in HRS sections 205A-26(1) and 205A-26(3), as amended, if it finds the criteria set forth in HRS sections 205A-26(2) and 205A-26(3), as amended, have been met. Pursuant to HRS §205A-26 Special Management Area guidelines, the authority shall adopt the following guidelines for the review of developments proposed in the special management area:

"(1) All development shall be subject to reasonable terms and conditions set by the authority to insure that:

(A) Adequate access, by dedication or other means, to publicly owned or used beaches, recreation areas, and natural reserves is provided to the extent consistent with sound conservation principles;



(B) Adequate and properly located public recreation areas and wildlife preserves are reserved;

(C) Provisions are made for solid and liquid waste treatment, disposition, and management which will minimize adverse effects upon special management area resources; and

(D) Alterations to existing land forms and vegetation, except crops, and construction of structures shall cause minimum adverse effect to water resources and scenic and recreational amenities and minimum danger of floods, landslides, erosion, siltation, or failure in the event of earthquake.

(2) No development within the special management area shall be approved unless the Authority has first found that:

(A) The development will not have any substantial adverse environmental or ecological effect, except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health, safety, or compelling public interest. Such adverse effect shall include, but not be limited to, the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect and the elimination of planning options.

(B) The development is consistent with the objectives, policies, and special management area guidelines of this chapter, and any guidelines enacted by the legislature; and

(C) The development is consistent with the county general plan, and zoning. Such a finding of consistency does not preclude concurrent processing when a general plan or zoning amendment may also be required.

(3) The Authority shall seek to minimize, where reasonable:

(A) Dredging, filling or otherwise altering any bay, estuary, salt marsh, river mouth, slough, or lagoon;

(B) Any development which would reduce the size of any beach or other area usable for public recreation;

(C) Any development which would reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams within the Special Management Area and the mean high tide line where there is no beach;

(D) Any development which would substantially interfere with or detract from the line of sight toward the sea from the State Highway nearest the coast; and

(E) Any development which would adversely affect water quality, existing areas of open water free of visible structure, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land."

#### **PROCEDURAL MATTERS**

6. On April 13, 1994, the Applicant published a "Notice of Application" in the Maui News.

7. On July 27, 1994, the Maui Planning Department mailed a notice to the Applicant and appropriate state and county agencies notifying them of the scheduled public hearing.

8. On September 27, 1994, the Applicant mailed a letter of notification and location map to all owners and recorded lessees within 500 feet of the subject property describing the application(s) and notifying them of the scheduled hearing date, time and place by either certified or registered mail receipt. Copies of the letter, location map, list of owners and recorded lessees, certified and registered mail receipts are on file in the Planning Department.

9. On August 26, 1994, a notice of hearing on the applications were published in the Honolulu Advertiser and Maui News by the Maui Planning Department.

#### **BACKGROUND INFORMATION**

10. On July 8, 1994, a draft environmental assessment determination was published in the Office of Environmental Quality Control Bulletin anticipating a negative declaration determination. The 30 day comment period end date was on August 8, 1994.

11. On August 9, 1994, the Maui Planning Commission reviewed the final environmental assessment determination for the project, and determined that there will be no significant environmental effect. As such, a negative declaration was issued for the project, and published in the OEQC Bulletin on August 23, 1994.

#### DESCRIPTION OF THE PROPERTY

12. The Property is located at the Pikake Condominium, 3701 L. Honoapiilani Road, Lahaina, Maui. The Property is currently developed with resort-type condominium units (exhibit 1).

13. The structure on the Property is a wooden, two story building housing 14 apartment units. The building is approximately 37 feet from the seawall (exhibit 2).

14. A seawall was constructed about 25 years ago, prior to the Shoreline Setback Law. In 1982, winter storms removed significant quantities of beach sand exposing the base of the wall to wave action. As such, sinkholes began to appear in the lawn behind the wall. Repairs including drainage layers, replacement of backfill, installation of tie-back anchors and injection of foam grout slowed erosion, but failed to halt the sink hole formation as well as tilting and settlement of the wall. Therefore, the Property owners have requested remedial reconstruction of the shoreline protection.

15. The Land Use Designations for the Property are as follows:

- a. State Land Use District -- Urban
- b. Lahaina Community Plan -- Multi-Family
- c. Zoning -- A-2 Apartment District
- d. Other -- Special Management Area and Shoreline Setback area.

16. The Surrounding Land Uses are as follows:

- a. North -- Hale Maui Condominium
- b. East -- Lower Honoapiilani Road
- c. South -- Hale Kai Condominium
- d. West -- Ocean

17. The properties to the north and south are developed and protected by seawalls and rock fill. The shoreline structures on these adjacent properties extend approximately 15 to 25 feet makai of the subject Property, forming a small cove.

18. Offshore from the site is a fringing reef, and the terrain landward of the reef has been built up by successive layers of beach sand, dune sand, and recent alluvium. The surface of the backshore is relatively flat with a gentle mauka gradient from about elevation 8 feet MSL behind the seawall to an average elevation along the Honoapiilani Road of about 7 feet MSL. The Property along the shoreline is about 125 feet in length. The beach in front of the seawall is sandy, but the quantity of sand has been gradually decreasing over the past decade.

19. The beach sand slopes at between 5:1 (horizontal: vertical) and 8:1 to low tide level. Below low tide level, the inshore surface slopes at between 10 to 30:1 and flatter for a distance of about 500 feet to the fringing reef. Intermittent ridges of cemented sand are visible between the shoreline and the reef (exhibit 3).

20. The beach fronting the site is subject to seasonal changes in dimension due to the longshore transport of sand. The sand comes and goes on a cyclical basis, but has gradually been lost over the past years as the general coast line has gone through a period of degradation. The protruding seawalls on the adjacent properties tend to trap a small sandy beach in front of the Pikake, but whether the beach will rebuild again in the future is uncertain.

#### **DESCRIPTION OF THE PROPOSED DEVELOPMENT**

21. The Applicant wishes to obtain a Special Management Area Use Permit and a Shoreline Setback Variance to construct a rock revetment along the alignment of the existing seawall to protect the Property from shoreline erosion.

22. The Applicant states that this type of protection has the least impact on the maintenance of a sand beach. The location and exterior slopes of the revetment are designed to be placed below the normal profile of the foreshore and backshore to the degree possible. The outer slope of the revetment is designed to minimize disruption of existing wave runup and longshore drift patterns while minimizing the impact on useable land. Further, all material excavated during construction other than clays, if encountered, would be used to cover the revetment.

23. The design wave height of 5 feet has been used to calculate both the required weight of rock to be used in the revetment, as well as the anticipated depth of scour under design conditions. To achieve the required design configuration, it would be necessary to excavate to elevation -5.0 feet msl for the toe of the revetment. The face of the revetment would be a 2:1 (horizontal: vertical) slope that would provide runup control and wave energy dissipation.

24. A filter fabric is recommended for placement on the base of the excavation prior to placing any rock. The purpose of the filter fabric is to prevent loss of foundation support by migration of underlying beach sediments into the rockfill.

25. The rock sizes to be used in the revetment have been calculated based on the exterior slope of the revetment and the design wave. One zone of rock is planned. However, to reduce the potential for damage to the underlying filter cloth and to provide the best outer zone for energy absorption, the Contractor should place the finer rock at the bottom and back of the zone, and the coarser rock at the face. The main purpose of this approach is to reduce the requirements for processing the rock.

26. The crest of the revetment would be constructed to elevation +7 feet msl. It is recommended that at least a 2-foot high cap wall be provided, and the mauka side of the cap wall be backfilled to original site grade for landscaping, with the filter fabric wrapped around the back and top of the rock fill to stop topsoil and sand from washing into the rock. The cap wall should be tied into the rock fill with gunite and reinforcing steel to reduce the potential for damage due to settlement and shifting of the rock fill.

27. At each end of the revetment, the rock fill should be tied into the existing shoreline protection on the adjacent properties. The total length of the revetment would then be about 125 feet, as measured along the crest.

28. Originally, the Applicant's plans showed excavation activities occurring makai of the certified shoreline survey. After reviewing the aforementioned agency comments, the plans have been revised to show no construction activities makai of said survey (exhibit 4).

#### **AGENCY REVIEWS**

29. Department of Agriculture, Soil Conservation Service -- Agrees with the Applicant's assessment. Recommended other condominium owners along the Honokowai coast do the same (exhibit 5).

30. Department of Accounting and General Services, Survey Division -- no objections (exhibit 6)

31. Department of Land and Natural Resources, Division of Aquatic Resources -- no significant long term impact adverse to aquatic resource values are expected from the activity proposed. However, the revetment should not encroach seaward of the Applicant's certified shoreline, and public access to and along the shoreline should not be inhibited by the structure. Precautions should be taken during construction of the revetment to prevent debris, petroleum products and other contaminants from entering the marine environment. Finally, all associated debris, litter and remnants of the collapsing seawall that may be deposited seaward of the Applicant's Property that could adversely affect aquatic resources, nearshore waters and public enjoyment of the shoreline, must be removed (exhibit 7).

32. Department of Land and Natural Resources, Office of Conservation and Environmental Affairs (OCEA) -- Excavation makai of the certified shoreline, as indicated by the project plans, would be located within the Resource "R" subzone of the Conservation District. As such a CDUA will have to be filed and approved (exhibit 7).

33. Department of Land and Natural Resources, Division of Land Management --

a) The Applicant shall obtain a certified shoreline survey prior to any construction of the rock revetment;

b) All work on this proposed project shall be performed mauka of the certified shoreline;

c) At no time during construction shall any equipment and/or materials be placed makai of the certified shoreline;

d) No contaminants, pollutants, petroleum products, construction materials, etc. shall be allowed to be mixed in the sand and water makai of the certified shoreline;

e) That prior to construction, stakes be placed along the certified shoreline and verified by the department (exhibit 8).

34. Department of Land and Natural Resources, Historic Preservation Division -- A review of records indicates that no known historic sites are present within or near the project area. No historic sites were identified during an inspection of the project area. They therefore believe that the project will have "no effect" on significant historic sites. If the excavation for the revetment penetrates original beach sand, which occurs at an unknown depth below land fill, there may be a possibility of

encountering human skeletal remains. Such remains have been identified a short distance south, at the Honokowai public beach. They request that the following condition be added, should permits be granted:

*"If human skeletal remains or materials indicative of historic deposits are encountered during excavation for the revetment toe, work in the area of the find shall cease and the Maui office of the Historic Preservation Division shall be notified immediately at 243-5169."* (exhibit 9)

35. Department of the Army -- The proposed project will require a DA permit. Further, according to the Federal Emergency Management Agency's Flood Insurance Rate Map, project site is located in Zones V24 (areas inundated by the 100-year flood; with a base flood elevation of 10 feet above mean sea level); Zone A4 (areas inundated by the 100 year flood; with base flood elevation of 10 feet above mean sea level; and Zone C (area of minimal flooding) (exhibit 10).

36. Department of Public Works and Waste Management --

a) The Applicant shall submit more detailed plans for the termini endings on each side of the proposed revetment for review.

b) Alternative means of disposal of grubbed material, rock and concrete shall be utilized other than that disposed of at the County landfills.

c) The development is required to conform to Chapter 19.62 of the Maui County Code, as amended, pertaining to flood hazard areas. An analysis should be provided with supporting calculations that the proposed revetment will not increase potential flood damage to the subject and adjacent properties.

d) The finish grade of the cap wall should not be greater than the finish grade of the existing yard. The lowest grade observed on the existing yard in the vicinity of the revetment is 7.23 feet.

e) The Applicant should consider constructing a revetment with a slope less steep than the proposed so as to better promote sand accumulation.

f) A building permit and certified shoreline survey is required (exhibit 11).

37. Department of Health -- If the project involves activities with discharges into state waters, an NPDES permit is required for each activity. The Applicant should contact the Department of the Army to identify whether Federal permits are required (exhibit 12).

38. Department of Water Supply -- The Applicant is advised to use water-conserving soil preparation, irrigation and mulching in the proposed landscape. The Applicant is further advised of the opportunity to use native shoreline plant species. These plants support the rare natural history of the Honokowai community and also saves on water use (exhibit 13).

#### Analysis

39. SSV: The measures involving work on the foreshore include breakwaters, jetties, groins, and artificial construction and maintenance of sand beaches. Foreshore construction is generally environmentally disruptive and is difficult to permit. Procedures involving placement of movement of sand to replace erosion losses are limited by availability of acceptable sources of sand and the economic feasibility of undertaking beach maintenance in perpetuity. Consequently, shoreline protection measures involving work on the foreshore are not considered reasonable solutions for this site.

40. Shoreline protection measures involving the backshore include seawalls, bulkheads and revetments. As a class, seawalls and bulkheads are vertical structures designed to protect the backshore from further erosion. The major disadvantages of this class of structure are substantially increased scour along the toe, negative impact on maintaining beach sand, and a tendency to be more easily over-topped by waves and spray.

41. No action alternative would provide no impact to coastal processes. However, during periods of high tides and high surf, private property would be unprotected, and existing structures would be prone to damage.

42. Therefore, the proposed revetment is the preferred solution to protect the Property from shoreline erosion. This type of protection has the least impact on the maintenance of a sand beach. Further, the outer slope of the revetment is designed to minimize disruption of existing wave runup and longshore drift patterns while minimizing the impact on usable land. The face of the revetment would be a 2:1 (horizontal: vertical) slope that would provide run-up control and wave energy dissipation.



43. Anticipated long term impacts: Since the revetment would replace a more severe vertical seawall and is generally above the level of natural coastal processes, it would have less impact than currently exists and would not significantly interfere with the natural processes. In addition, as designed, the proposed revetment would mostly lie below the normal beach level. Even during periods of extreme erosion, a revetment of this design would not impede the longshore transport of sand past the revetment. Considering that the adjoining properties are protected by walls that extend well makai of the proposed revetment, there would be no impact.

44. Wave action beyond the ends of a revetment would not initiate further erosion because the shoreline on either side of the existing seawall is already protected. However, because the existing seawall has been in place for many years and the proposed revetment has a more beneficial impact on beach maintenance, the overall effect would be an improvement for encouraging sand buildup during periods of natural accretion in front of the revetment.

45. During periods of severe erosion, there would be little or no sand beach fronting the revetment. It is possible that, during part of the year, the accretion of sand along the shoreline could be greater than without the revetment due to dissipation of wave energy on the open rocky face of the revetment. Some beach sand could return as a result of revetment construction. However, there are no guarantees.

46. Long term stabilization of the beach scarp would be expected to minimize siltation to nearshore waters by reducing the erosion of terrigenous materials from backshore areas. Minimizing siltation should, therefore, be in the best interests of long-range reef maintenance, management, and protection.

47. There is no indication that construction of the proposed rock revetment would pose any additional threat to the nearshore marine habitat than that which it is exposed to from natural events. A rock revetment would provide potential habitat for intertidal and supratidal species, if and when not covered by sand.

48. The proposed shore protection would not alter the existing public access to and along the shoreline fronting the Property. Current recreational use of the beach and nearshore waters is limited by the size and quality of the beach and nearshore submarine surface. The nearest public beach access is located 2 parcels to the south of the Property at Honokowai Beach Park.

49. Short term impacts: Minor siltation of inshore waters could be associated with the construction phase of the revetment. Because most of the excavated soil below tide level consists of relatively clean sand, this problem should be minor. In addition, siltation would represent a short-term event, occurring during construction and for a short period following construction. Because of the proposed shallow total depth of the seawall footing, siltation should be less than at some other shoreline projects on the Island. Prevailing nearshore currents would rapidly dilute and disperse silt plumes and would represent only a minor water quality disturbance. This siltation should be less than flashflood conditions that result in clay soils discoloring the near-shore water for extended periods.

50. The mobilization and movement of heavy equipment, as well as site preparation and construction activities, would generate noise and air pollution which would constitute a short-term nuisance to adjacent property users. Waterfront usage would likely have to be curtailed during the construction phase of the project because of the presence of heavy equipment. Construction activities are, therefore, likely to resist passage along the beach, which is extremely limited at present because of the lack of sand fronting the neighboring properties. After completion, the revetment would not affect public access to and along the beach. Neither would it restrict public views to and along the shoreline. Because construction is estimated to last only a few weeks, the impacts of construction are considered minimal.

51. SMA A proposed action may have a significant adverse effect on the environment when the proposed action:

"(A) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource

The revetment has been designed to protect private property from the effects of shoreline erosion while having minimal adverse impacts to natural coastal processes. The selected alternative should result in little, if any, loss of public beach area.

The Applicant states that there are no known historical or archaeological sites associated with the proposed project site. Therefore, the proposed revetment should have no impact on natural or man-made historic resources on the coastal zone.

According to the Department of Land and Natural Resources, Historic Preservation Division, states that the project will have "no effect" on significant historic sites. If the excavation for the revetment penetrates original beach sand, there may be a possibility of encountering human skeletal remains. Therefore, they request that a mitigative condition be attached should permits be granted

(B) Significantly curtails the range of beneficial uses of the environment;

The proposed action would not significantly impede existing access to and along the shoreline, thus would not curtail public use of the area.

(C) Conflicts with the county's or the state's long-term environmental policies or goals

The purpose of this chapter is to establish a state policy which will encourage productive and enjoyable harmony between man and his environment, promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man, and enrich the understanding of the ecological systems and natural resources important to the people of Hawaii.

The action would not conflict with Chapter 344, HRS. As mentioned earlier, the revetment will help protect private property from shoreline erosion, and have minimal adverse impacts to natural coastal and marine processes. The selected alternative should result in little, if any, loss of public beach area. The revetment is designed to minimize disruption of existing wave runup and longshore drift patterns while minimizing the impact on useable land.

(D) Substantially affects the economic or social welfare of the community, county, or state

The action is limited in scope and would have negligible social or economic affects to the community or state. There will be short term impacts on the economy through employment of construction workers. Beyond that, the subject revetment should have no impact upon population or the local economy.

(E) Involves substantial secondary impacts, such as population changes and increased effects on public facilities, streets, drainage, sewage, and water systems, and pedestrian walkways

Due to the limited and confined scope of the project, it would not result in substantial secondary impacts to population, existing public facilities, streets, drainage, sewage and water systems, and pedestrian walkways.

(F) In itself has no significant adverse effects but cumulatively has considerable effect upon the environment or involves a commitment for larger actions

Shoreline protection structures have the potential to exacerbate erosion on adjacent properties, leading the neighboring property owner no choice but to construct a similar structure. In this situation, the neighboring properties already have shoreline structures that extend approximately 15 feet makai of the proposed revetment. Further, a revetment type structure is a better solution to shoreline protection than the existing vertical seawall in terms of longshore sand transport, sand accumulation, and dissipation of wave energy. Therefore, it is unlikely that the construction of this revetment would involve a commitment for larger actions by adjacent properties.

(G) Substantially affects a rare, threatened or endangered species of animal or plant, or its habitat

There are no known rare, threatened, or endangered species or its habitat within the project area.

(H) Is contrary to the state plan, county's general plan, appropriate community plans, zoning and subdivision ordinances;

The proposed revetment is not contrary to county zoning, the Lahaina Community Plan, and other applicant ordinances, provided that an SSV and SMA Use Permit are obtained.

(I) Detrimentially affects air or water quality or ambient noise levels;

As discussed earlier, construction activities would result in short term nuisance to adjacent property owners and beach goers. There would be no long term impacts to air or water quality.

(J) Affects an environmentally sensitive area such as a flood plain, shoreline, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh waters, or coastal waters.

The Department of Public Works states that the development is required to conform the Flood Hazard District Ordinance. An analysis should be provided with supporting calculations that the proposed revetment will not increase potential flood damage to the subject and adjacent properties. The proposed project will also require a Department of the Army (DA) permit. These requirements will be addressed during the building permit stages of the project.

The proposed action would not substantially affect other environmentally sensitive areas.

(K) Substantially alters natural land forms and existing public views to and along the shoreline; or

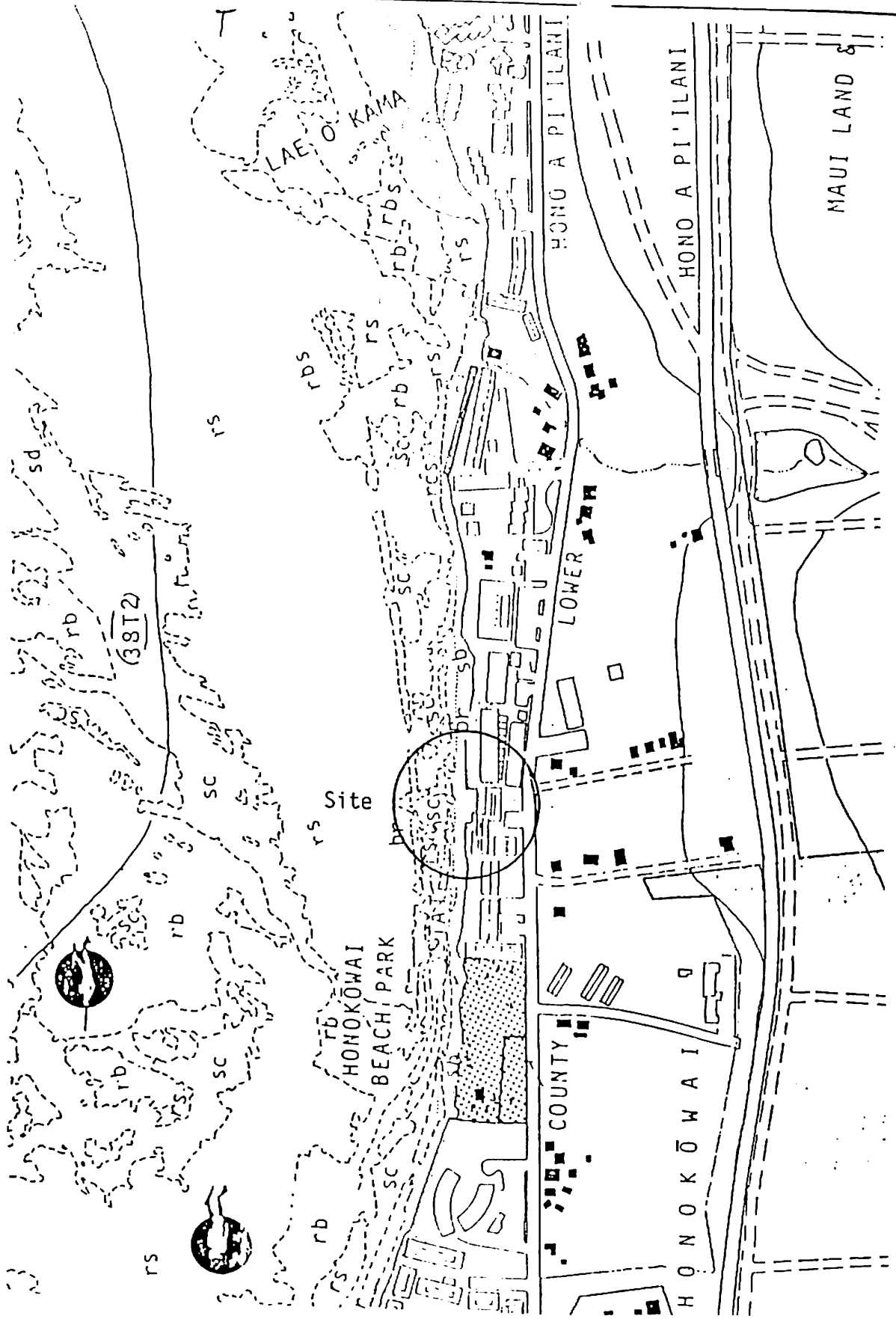
The proposed revetment would not alter any natural land forms. Further, the revetment would not affect public access to and along the beach, neither would it restrict public views to and along the shoreline.

(L) Is contrary to the objectives and policies of HRS Chapter 205A.

The proposed development would not be contrary to the objectives and policies of Chapter 205A, provided that appropriate mitigation measures are incorporated into the project."

APPROVED:

*Brian Miskae*  
BRIAN MISKAE,  
Planning Director



PROJECT No: P 214101  
 PROJECT: The Pikake Apartments  
 Shoreline Restoration  
 LOCATION: Honokowai, Maui

**SRK-ROBINSON INC.**  
 CONSULTING GEOTECHNICAL ENGINEERS

VICINITY MAP

DATE: \_\_\_\_\_ DRAWN BY: \_\_\_\_\_ FIGURE: \_\_\_\_\_

TRUE NORTH

ORIGINAL PROPERTY LINE

EXTENT OF EROSION AND UPSIDENCE  
JANUARY 23, 1993

EXISTING STAIRS;  
TO BE REBUILT IN FUTURE

PROPOSED TOE  
OF REVETMENT  
0'-6" MAKAU  
FROM CERTIFIED  
SHORELINE

EXISTING SEAWALL

WATER LINE  
1:50 P.M.  
3/17/93

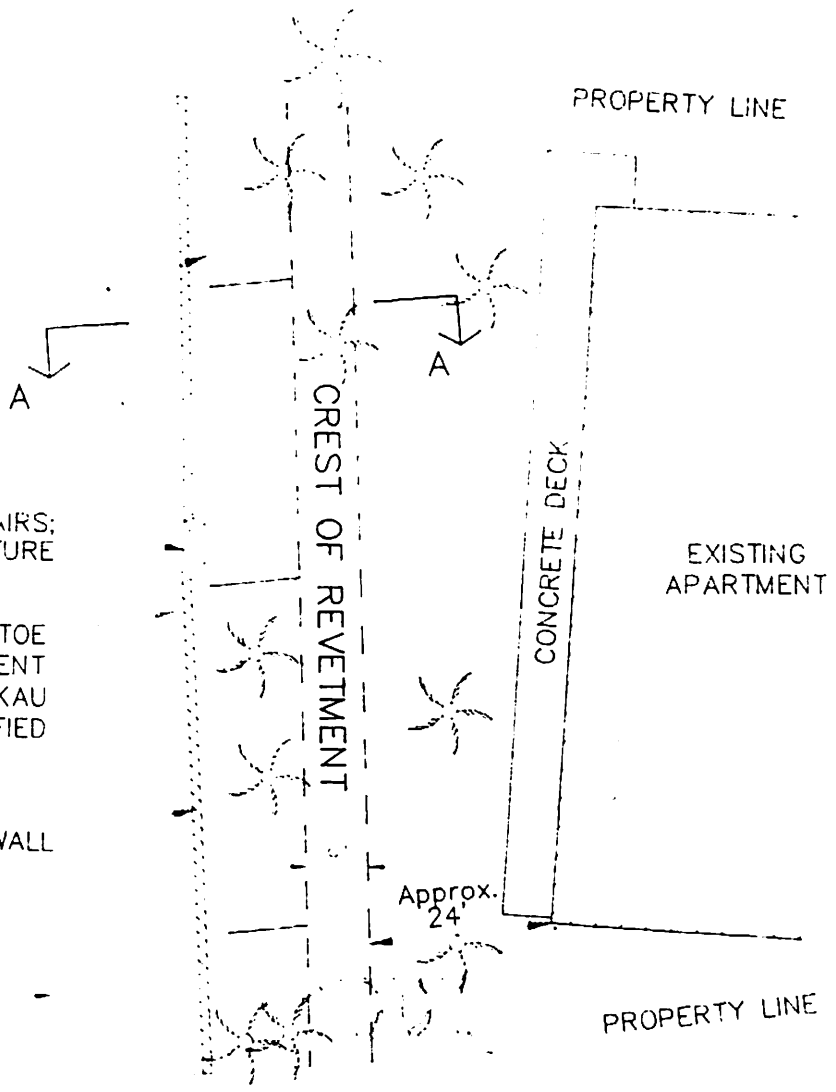
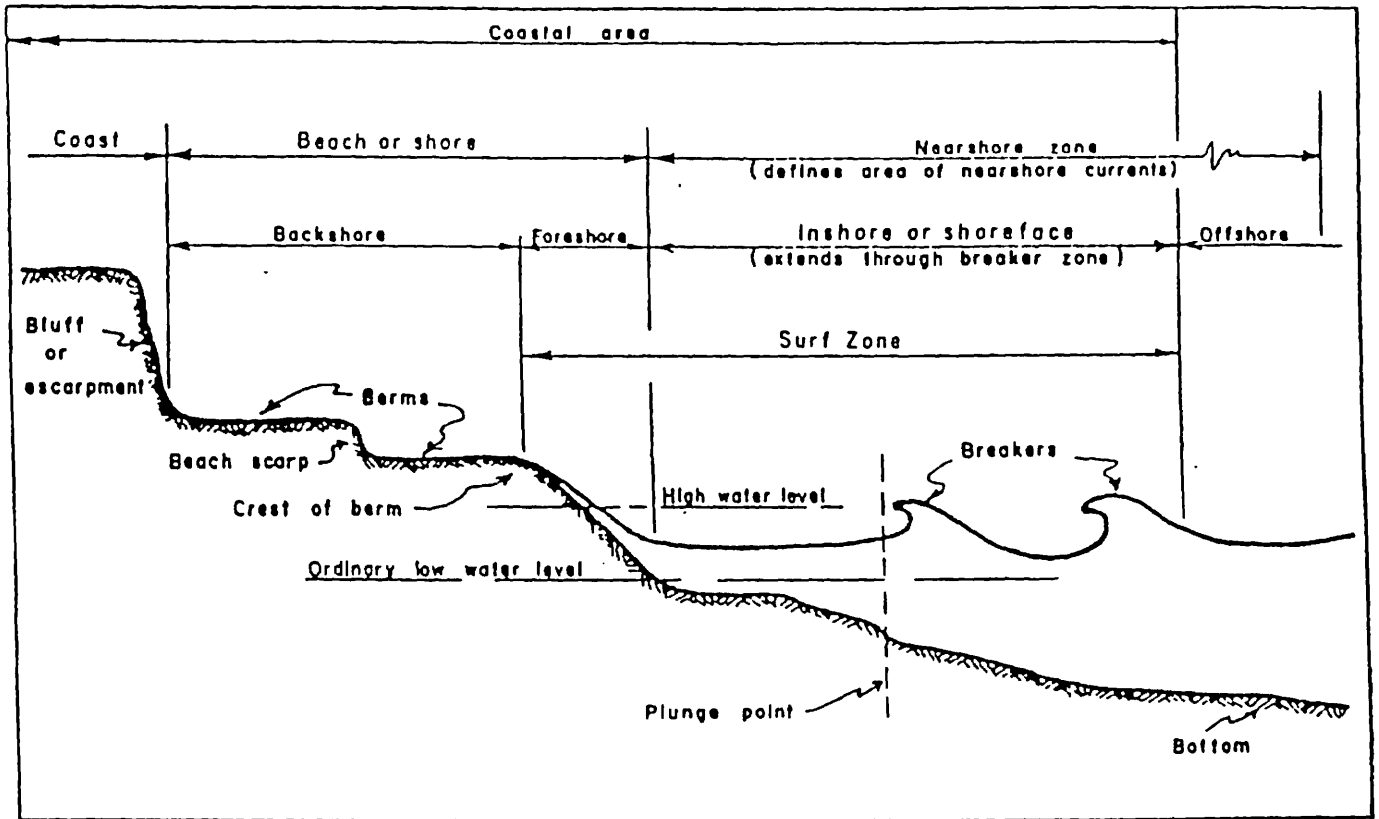


EXHIBIT 2



after Corps of Engineers Shoreline Protection Manual, 1984

EXHIBIT 3

PROJECT No: P 214101  
 PROJECT: The Pikake Apartments  
 Shoreline Restoration  
 LOCATION: Honokowai, Maui

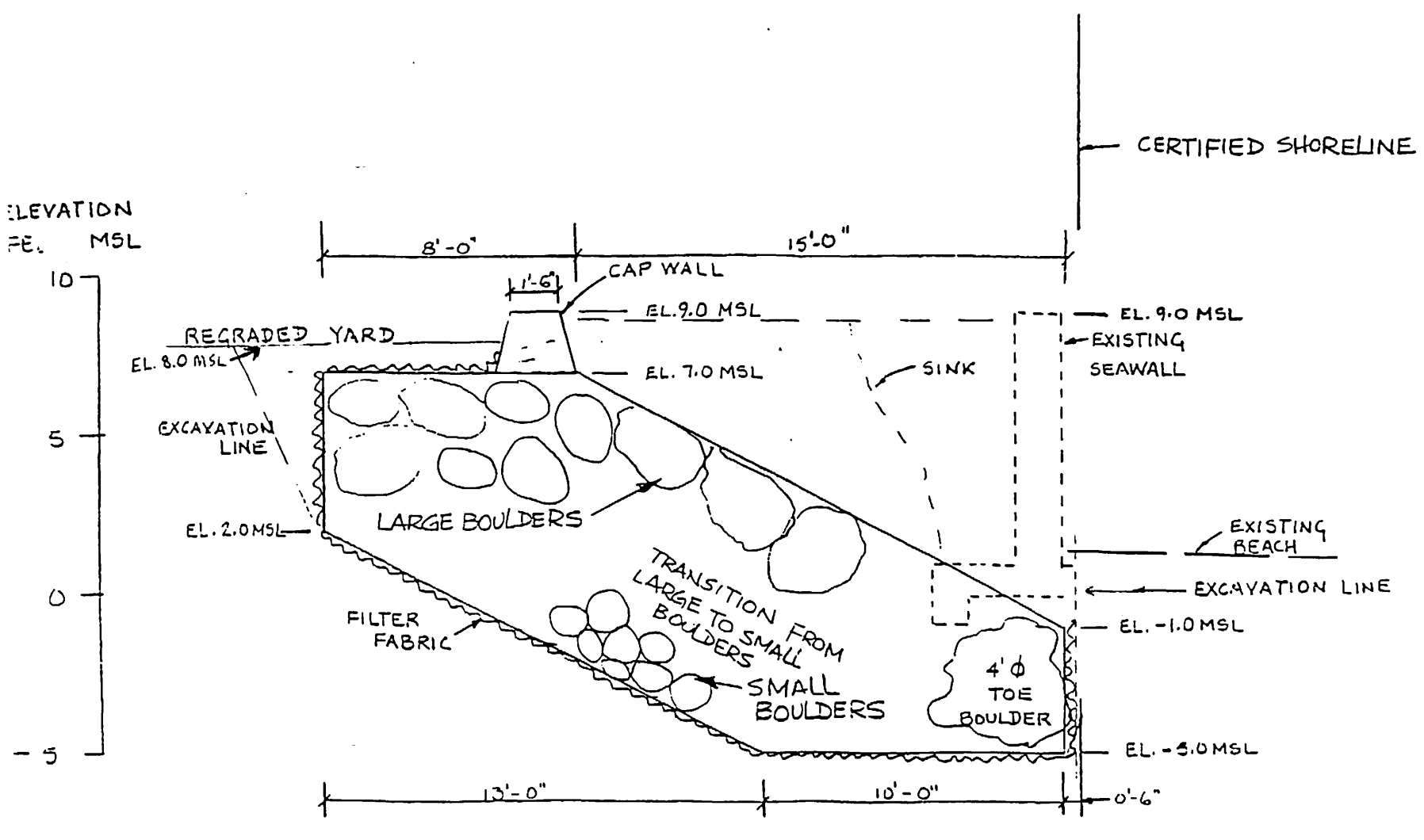
 **SRK-ROBINSON INC.**  
 CONSULTING GEOTECHNICAL ENGINEERS

SHORELINE TERMINOLOGY

DATE: | DRAWN BY: | CHECKED:



EXHIBIT 4



PROJECT No.	P 214 101	
PROJECT	THE PIKAKE APARTMENT SHORELINE RESTORATION	
LOCATION		
SRK-ROBINSON INC.		
REVETMENT DETAIL		
DATE	DRAWN BY	FIGURE No.
June 1994	ME	4

UNITED STATES  
DEPARTMENT OF  
AGRICULTURE

SOIL  
CONSERVATION  
SERVICE

70 S. HIGH STREET, RM. 215  
WAILUKU, HAWAII  
96793

94 APR 19 P3:39

DEPT OF PLANNING  
COUNTY OF MAUI  
RECEIVED

Date: April 18, 1994


Mr. Brian Miskae, Planning Director  
Maui Planning Department  
250 S. High Street  
Wailuku, Hawaii 96793

Dear Brian,

RE: Pikake Condominium, Revetment; TMK: 4-3-06:63  
I.D. No. 94/SSV-004, 94/SM1-07

I totally agree with the applicant's assessment of the  
problem and project plans. I highly recommend other  
condominium owners along the Honokowai coast do the same.

Sincerely,

  
Neal S. Fujiwara  
District Conservationist

4/17/94

EX-117

5

JOHN WAIHEE  
GOVERNOR



ROBERT P. TAKUSH  
HAWAIIAN LANGUAGE CENTER  
COMPTROLLER

'94 APR 19 P2:01

DEPT OF PLANNING  
COUNTY OF MAUI  
RECEIVED

STATE OF HAWAII  
DEPARTMENT OF ACCOUNTING  
AND GENERAL SERVICES

SURVEY DIVISION  
P. O. BOX 119  
HONOLULU, HAWAII 96810

April 18, 1994

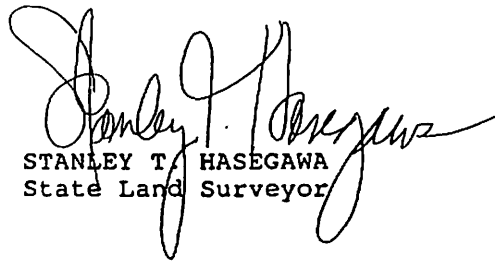
FILE NO. \_\_\_\_\_

TRANSMITTAL

TO: Mr. Brian Miskae, Director  
ATTN.: Mr. Daren Suzuki, Staff Planner  
SUBJECT: I.D. No.: 94/SSV-004, 94/SML-07  
TMK: 4-3-6:63  
Project Name: Pikake Condominium, Revetment  
Applicant: Jack Nelson, President, Pikake AOAO

REMARKS:

The subject proposal has been reviewed and confirmed that no Government Survey Triangulation Stations and Benchmarks are affected. Survey has no objections to the proposed project.

  
STANLEY T. HASEGAWA  
State Land Surveyor

6



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 621  
HONOLULU, HAWAII 96809

REF:OCEA:SKK

DEPT OF PLANNING  
COUNTY OF MAUI  
RECEIVED

AQUACULTURE DEVELOPMENT PROGRAM  
AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
CONSERVATION AND ENVIRONMENTAL AFFAIRS  
CONSERVATION AND RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
LAND MANAGEMENT  
STATE PARKS  
WATER AND LAND DEVELOPMENT

FILE NO.: 94-603  
DOC. NO.: 4436

MAY 10 1994

The Honorable Brian Miskae, Director  
Department of Planning  
County of Maui  
200 South High Street  
Wailuku, Maui, Hawaii 96793

Dear Mr. Miskae:

Subject: Environmental Assessment for a Shoreline Setback Variance and Special Management Area Use Permits (94/SSV-004, 94/SML-07): Shoreline Revetment at the Pikake Condominiums, Honokowai, Maui, TMK: 4-3-06: 63

We have reviewed the EA information for the proposed project transmitted by your memorandum dated April 13, 1994, and have the following comments:

Division of Aquatic Resources

The Division of Aquatic Resources (DAR) comments that no significant long-term impact adverse to aquatic resource values are expected from the activity proposed. However, the revetment should not encroach seaward of the applicant's certified shoreline and public access to and along the shoreline should not be inhibited by the structure.

Precautions should be taken during construction of the revetment to prevent debris, petroleum products and other contaminants from entering the marine environment. Finally all associated debris, litter and remnants of the collapsing seawall that may be deposited seaward of the applicant's property that could adversely affect aquatic resources, nearshore waters and public enjoyment of the shoreline, must be removed.

The Office of Conservation and Environmental Affairs

Office of Conservation and Environmental Affairs (OCEA) comments that excavation west (makai) of the certified shoreline, as is indicated by Figure No. 4, would be located within the Resource "R" subzone of the Conservation District.

1

As such, a Conservation District Use Application (CDUA) will have to be filed with this Department and approved by the Board of Land and Natural Resources, pursuant to Title 13, Chapter 2, Hawaii Administrative Rules and Chapter 183-41, Hawaii Revised Statutes, as amended.

We will forward any historic preservation concerns as they become available.

We have no other comments to offer at this time. Thank you for the opportunity to comment on this matter.

Please feel free to call Steve Tagawa at our Office of Conservation and Environmental Affairs, at 587-0377, should you have any questions.

Very truly yours,

  
KEITH W. AHUE



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

AQUACULTURE DEVELOPMENT PROGRAM  
AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
CONSERVATION AND ENVIRONMENTAL AFFAIRS  
CONSERVATION AND RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
LAND MANAGEMENT  
STATE PARKS  
WATER AND LAND DEVELOPMENT

REF:OCEA:DKP

P. O. BOX 621  
HONOLULU, HAWAII 96809

DEPT. OF PLANNING  
COUNTY OF MAUI  
RECEIVED

FILE NO.: 94-603a  
DOC. NO.: 4506

JUN 1 1994

The Honorable Brian Miskae, Director  
Department of Planning  
County of Maui  
200 South High Street  
Wailuku, Maui, Hawaii 96793

Dear Mr. Miskae:

Subject: Environmental Assessment for a Shoreline Setback Variance and Special Management Area Use Permits (94/SSV-004, 94/SML-07):  
Shoreline Revetment at the Pikake Condominiums, Honokowai,  
Maui, TMK: 4-3-06: 63

The following are our additional comments on the subject project which supplement those forwarded by our previous letter dated May 10, 1994:

Division of Land Management

The Division of Land Management (DLM) comments that the Maui District Land Office has reviewed the subject EA and has the following comments:

1. The applicant shall obtain a certified shoreline survey prior to any construction of the rock revetment;
2. All work on this proposed project shall be performed mauka of the certified shoreline;
3. At no time during construction shall any equipment and/or material be placed makai of the certified shoreline;
4. No contaminants, pollutants, petroleum products, construction material, etc. shall be allowed to be mixed in the sand, rocks and water makai of the certified shoreline; and
5. That prior to construction, stakes be placed along the certified shoreline and verified by the Department of Land and Natural Resources, DLM.

We will forward any historic preservation concerns as they become available.

EX-101

8

Mr. Miskae

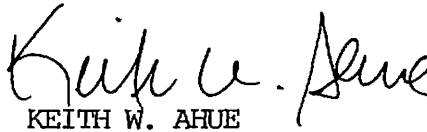
- 2 -

File No.: 94-603a

We have no other comments to offer at this time. Thank you for the opportunity to comment on this matter.

Please feel free to call Steve Tagawa at our Office of Conservation and Environmental Affairs, at 587-0377, should you have any questions.

Very truly yours,

  
KEITH W. AHUE



DEPUTIES

JOHN P. KEPPELER II  
DONA L. HANAIKE

AQUACULTURE DEVELOPMENT  
PROGRAM

AQUATIC RESOURCES  
CONSERVATION AND

ENVIRONMENTAL AFFAIRS  
CONSERVATION AND  
RESOURCES ENFORCEMENT  
CONVEYANCES

FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
DIVISION

LAND MANAGEMENT  
STATE PARKS  
WATER AND LAND DEVELOPMENT

'94 MAY 17 P12:22

DEPT OF PLANNING  
COUNTY OF MAUI  
RECEIVED

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION  
33 SOUTH KING STREET, 6TH FLOOR  
HONOLULU, HAWAII 96813

May 12, 1994

Mr. Brian Miskae, Director  
Maui Planning Department  
250 South High Street  
Wailuku, Maui, Hawaii 96793

LOG NO: 11547 ✓  
DOC NO: 9405K002

Dear Mr. Miskae:

**SUBJECT: County of Maui, Historic Preservation Review of the  
Pikake Condominium Revetment (I.D. No. 94/SSV-004)  
Honokawai, Lahaina, Maui  
TMK: 4-3-06: 63**

Thank you for the opportunity to review the proposed rock revetment, which will replace an existing cinder block seawall at the Pikake condominium. Due to recent erosion at the subject property, the revetment location will be moved inland from the existing seawall.

An inspection of the proposed project area was conducted by Historic Preservation Division staff on April 20, 1994. The exposed face of the recent erosion cut was visible along a considerable portion of the proposed construction area. The soil observed to 1.2 m in depth consisted of fill that had been brought in at the time of original construction and landscaping. The original beach surface was not visible.

A review of our records indicates that no known historic sites are present within or near the project area. No historic sites were identified during an inspection of the project area. We therefore believe that the project will have "no effect" on significant historic sites.

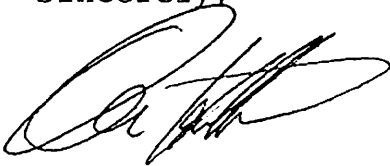
If the excavation for the revetment penetrates original beach sand, which occurs at an unknown depth below land fill, there may be a possibility of encountering human skeletal remains. Such remains have been identified a short distance south, at the Honokawai public beach. We request that the following condition be added, should the Shoreline Setback Variance and SMA permits be granted:



If human skeletal remains or materials indicative of historic deposits are encountered during excavation for the revetment toe, work in the area of the find shall cease and the Maui office of the Historic Preservation Division shall be notified immediately at 243-5169.

Please contact Ms. Theresa Donham at 243-5169 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Don Hibbard", written in a cursive style.

DON HIBBARD, Administrator  
State Historic Preservation Division

c: Roger Evans (File No. 94-603)



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
U. S. ARMY ENGINEER DISTRICT, HONOLULU  
FT SHAFTER, HAWAII 96858-5440

'94 MAY 10 6 21 06  
1994

DEPT OF P. ADMIN  
COMMUNICATIONS  
RECEIVED

Planning Division

Mr. Daren Suzuki  
Staff Planner  
Planning Department  
County of Maui  
250 South High Street  
Wailuku, Maui, Hawaii 96793

Dear Mr. Suzuki:

Thank you for the opportunity to review and comment on the Shoreline Protection and Environmental Assessment for the Pikake Apartments, Lower Honopiilani Highway, Honokowai, Maui, (TMK: 4-3-6:63). The following comments are provided pursuant to Corps of Engineers Authorities to disseminate flood hazard information under the Flood Control Act of 1960 and to issue Department of the Army (DA) permits under the Clean Water Act; the Rivers and Harbors Act of 1899; and the Marine Protection, Research and Sanctuaries Act.

a. A DA permit is required for this project. Please contact the Operations Division at 438-9258, extension 20 for permit application forms and refer to file number P094-046.

b. According to the enclosed Federal Emergency Management Agency's Flood Insurance Rate Maps, panel number 1500033 0151B dated June 1, 1981, the project site is located in Zones V24 (areas inundated by the 100-year flood; with base flood elevation of 10 feet above mean sea level); Zone A4 (areas inundated by the 100-year flood; with base flood elevation of 10 feet above mean sea level) and Zone C (areas of minimal flooding).

Sincerely,

Ray H. Jyo, P.E.  
Director of Engineering

Enclosure

10

KETT LINGLE

Mayor

GEORGE N. KAYA  
Director

LES JENCKS  
Deputy Director

AARON SHINMOTO, P.E.  
Chief Staff Engineer



RALPH NAGAMINE, L.S., P.E.  
Land Use and Codes Administration

EASSIE MILLER, P.E.  
Wastewater Reclamation Division

LLOYD P.C.W. LEE, P.E.  
Engineering Division

DAVID WISSMAR, P.E.  
Solid Waste Division

BRIAN HASHIRO, P.E.  
Highways Division

94 MAY 17 P4:06

COUNTY OF MAUI

DEPARTMENT OF PUBLIC WORKS  
AND WASTE MANAGEMENT

DEPT OF PUBLIC WORKS  
COUNTY OF MAUI  
RECEIVED

LAND USE AND CODES ADMINISTRATION  
250 SOUTH HIGH STREET  
WAILUKU, MAUI, HAWAII 96793

May 17, 1994

MEMO TO: Brian W. Miskae, Planning Director

F R O M: *George N. Kaya* George N. Kaya, Public Works & Waste Management Director

SUBJECT: Special Management Area Permit and Shoreline Setback  
Variance Applications  
PIKAKE CONDOMINIUM, REVETMENT  
TMK: 4-3-6:63  
94/SSV-004, 94/SM1-07

We reviewed the subject application and have the following comments:

1. Comments from the Engineering Division:

- a. Applicant shall submit more detailed plans for the termini endings on each side of proposed wall revetment for review.

The applicant is requested to contact the Engineering Division at 243-7745 for additional information.

2. Comments from the Wastewater Reclamation Division:

This division has reviewed this submittal and has no comments at this time.

3. Comments from the Solid Waste Division:

- a. Alternative means of disposal of grubbed material, rock and concrete shall be utilized other than disposed of at the County landfills.

The applicant is requested to contact the Solid Waste Division at 243-7875 for additional information.

Mr. Brian Miskae  
Page 2 of 2  
May 17, 1994  
94/SSV-004, 94/SM1-07

4. Comments from the Land Use and Codes Administration:
- a. The subject project is located within the Flood Insurance Rate Map (FIRM) zone V-23, 100 year coastal flooding with velocity (wave action), with a base flood elevation at approximately 10 feet mean sea level, as such, the development is required to conform to Chapter 19.62 of the Maui County Code (1993) pertaining to flood hazard areas. An analysis should be provided with supporting calculations that the proposed revetment will not increase potential flood damage to the subject and adjacent properties.
  - b. The finish grade of the cap wall should not be greater than the finish grade of the existing yard. The lowest grade observed on the existing yard in the vicinity of the revetment is 7.23 feet.
  - c. The applicant should consider constructing a revetment with a slope less steep than the proposed so as to better promote sand accumulation.
  - d. A building permit and a certified shoreline setback map is required.

The applicant is requested to contact the Land Use and Codes Administration at 243-7373 for additional information.

RMN:ey  
xc: L.U.C.A.  
Engineering Division  
Solid Waste Division  
Wastewater Reclamation Division

a:pikake

JOHN WAIHEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

'94 JUN -1 P9:28  
STATE OF HAWAII  
DEPARTMENT OF HEALTH  
MAUI DISTRICT HEALTH OFFICE  
54 HIGH STREET  
WAILUKU, MAUI, HAWAII 96793  
DEPT OF PLANNING  
COUNTY OF MAUI  
RECEIVED

Lawrence Hart, M.D., M.P.H.  
DISTRICT HEALTH SERVICES ADMINISTRATOR (H.O.)

May 25, 1994

Mr. Brian Miskae  
Director  
Department of Planning  
County of Maui  
250 S. High Street  
Wailuku, Hawaii 96793

Dear Mr. Miskae:

Subject: 94/SSV-004, 94/SM1-07, Pikake Condominium, Revetment, TMK: 4-3-6: 63,  
Honokowai, Maui, Hawaii

We have reviewed the subject document and have the following comments:

1. If the project involves the following activities with discharges into state waters, an NPDES permit is required for each activity:
  - a. Discharge of storm water runoff associated with construction activities, including clearing, grading, and excavation that result in the disturbance of equal to or greater than five (5) acres of total land area;
  - b. Construction dewatering effluent;
  - c. Non-contact cooling water;
  - d. Hydrotesting water; and
  - e. Treated contaminated groundwater from underground storage tank remedial activity.

Any person wishing to be covered by the NPDES General Permit for any of the above activities should file a Notice of Intent with the Department's Clean Water Branch at least ninety (90) days prior to commencement of any discharge to waters of the State.


EXHIBIT 12

2. The applicant should contact the Army Corps of Engineers (COE) to identify whether a Federal permit (including a Department of Army (DA) permit is required for this project. A Section 401 Water Quality Certification (WQC) is required for "Any applicant for a Federal license or permit to conduct any activity including, but not limited to the construction or operation of facilities, which may result in any discharge into navigable waters....", pursuant to Section 401(a)(1) of the Federal Water Pollution Act commonly known as the "Clean Water Act (CWA)".

Section 11-55-03, Administrative Rules, Department of Health, states; "No person, including any public body, shall use any state waters for the disposal of waste or the discharge of a pollutant, engage in activity which causes state waters to become polluted, except in compliance with a permit or zone of mixing issued by the director." Therefore, an application must be submitted when there exists a possibility of a discharge.

If you have any questions regarding the comments, please contact Arnold Lam, Engineering Section of the Clean Water Branch, at 586-4309 or out toll free number at 1-800-468-4644, ext. 64309.

Sincerely,

  
DAVID H. NAKAGAWA  
Chief Sanitarian, Maui



**BOARD OF WATER SUPPLY  
COUNTY OF MAUI  
P.O. BOX 1109  
WAILUKU, MAUI, HAWAII 96793-7109**

May 6, 1994

Mr. Brian W. Miskae, Director  
Maui Planning Department  
250 South High Street  
Wailuku, Hawaii 96793

Dear Mr. Miskae,

Re: Proposed rock revetment at 3701 Lower Honoapiilani Road, TMK:4-3-6:63, Honokowai; Application for Shoreline Setback Variance No. 94/SSV-04 and Special Management Area Use Permit No. 94/SM1-07 submitted by Mr. Jack Nelson on behalf of Pikake Apartments.

The project site with very-low rainfall and summer droughts warrants water-saving measures. The applicant is advised to use water-conserving soil preparation, irrigation and mulching in the proposed landscape.

The applicant is also advised of the opportunity in this project to use native shoreline plant species. These plants support the rare natural history of the Honokowai community. They also save on water use.

Guidance in drought-tolerant and native seacoast plants may be found in the attached document or in the Maui County Planting Plan.

Sincerely,

David R. Craddick, Director

Enclosure

DDS5/6/94  
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c:\ddsl4-3-6:63

13