

- What are the transportation needs of the public that Alternative 1 satisfies that Alternate 2 or 3 does not satisfy?
- Does Alternative 1, including the Shore Path, enhance transportation as contemplated by the federal government? If so, in what way?
- Are there any **potential impacts on the human and natural environment** contemplated by Alternative 1, including the Shore Path? If yes, what potential impacts are there on the human and natural environment? If not, specifically, why not?

The FHWA TECHNICAL ADVISORY, T 6640.8A, dated October 30, 1987, provides guidance to Federal Highway Administration (FHWA) field offices and to **project applicants** (e.g. the County of Kaua'i) on the preparation and processing of environmental and Section 4(f) documents pursuant to NEPA and 23 U.S.C. 138 [Section 4(f) of the DOT Act] and the reporting requirements of 23 U.S.C. 128. With regard to Alternative 1, including the Shore Path, these guidelines require responses to the following questions:

- How does Alternative 1 serve the purposes of the Act to encourage productive and enjoyable harmony between man and his environment?
With regard to this purpose, the response must refer to key issues and pertinent information received from the public and government agencies, and list the agencies and, as appropriate, members of the public consulted.
- How does Alternative 1 serve the purposes of the Act to promote efforts which will prevent or eliminate damage to the environment and biosphere

and stimulate the health and welfare of man? With regard to this purpose, the response must refer to key issues and pertinent information received from the public and government agencies, and list the agencies and, as appropriate, members of the public consulted.

- How does Alternative 1 serve the purposes of the Act to enrich the understanding of the ecological systems and natural resources important to the Nation? With regard to this question, the response must refer to key issues and pertinent information received from the public and government agencies, and list the agencies and, as appropriate, members of the public consulted
- What social impacts are uncertain for Alternative 1? The response must include a level of analysis sufficient to adequately identify the potential social impacts and appropriate mitigation measures, and address known and foreseeable public and agency concerns. The response must describe why these impacts are considered not significant.
- What economic impacts are uncertain for the Alternative 1? The response must include a level of analysis sufficient to adequately identify the potential economic impacts and appropriate mitigation measures, and address known and foreseeable public and agency concerns. The response must describe why these impacts are considered not significant.
- What environmental impacts are uncertain for the Alternative 1? The response must include a level of analysis sufficient to adequately identify the potential environmental impacts and appropriate mitigation measures,

and address known and foreseeable public and agency concerns. The response must describe why these impacts are considered not significant.

PUBLIC TRUST DOCTRINE

When Hawai'i became a state in 1959, it instantly owned in trust the ocean from the high tide line three miles out to sea. Hawai'i owns this under what has been called the "Public Trust Doctrine." The Public Trust Doctrine is based on both Roman and Common Law from England. Consistent with this doctrine, in 1978, the Hawai'i Supreme Court expanded the high tidal water line to the high wash of waves, noting that the "Public Trust" responsibilities of the state were so powerful that they could and did trump legislation that was inconsistent with them. That same year, the Hawai'i Constitutional Convention made the "Public Trust Doctrine" a part of the Hawai'i Constitution. Article XI, Section 1, Conservation and Development of Resources, provides:

"For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawai'i's natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people. [Add Const Con 1978 and election Nov 7, 1978].

Further, Article XI, Section 9. Environmental Rights, provides as follows:

"Each person has the right to a clean and healthful environment, as defined by laws relating to environmental quality, including control of pollution and conservation, protection and enhancement of natural

resources. Any person may enforce this right against any party, public or private, through appropriate legal proceedings, subject to reasonable limitations and regulation as provided by law. [Add Const Con 1978 and election Nov 7, 1978].

The public trust doctrine provides principled guidelines to leaders balancing development and preservation and balancing the rights of native Hawaiians and non-indigenous peoples. (See: In Re Water Use Permit Applications, 94 Hawai'i 97 (2000) wherein the Hawai'i Supreme Court expounded on the scope and the substance of a public trust regarding the State's water resources and the duties of the State as trustee). To paraphrase a proverb credited to the Lakota Sioux: "We didn't inherit the earth from our ancestors; we borrow it from our children." The public trust doctrine is the legal embodiment of this principle.

With regard to the public trust doctrine as it applies to burial sites (See detailed discussion, *infra*), the highly publicized Hokulua case describes the rights of citizens to pursue justice when state and county government fail to do so. The Hokulua case, in part, dealt with the violation of HRS chapter 6E, the state burials law, and subsequent desecration of gravesites. (Emphasis added).

In the Hokulua case, Third Circuit Court Judge Ronald Ibarra focused on the core of the problem by stating: "The public trust is a state constitutional doctrine and as other state constitutional guarantees, the ultimate authority to interpret and defend the public trust in Hawai'i vests with the courts of this state. The beneficiaries of the public trust are not just present generations but those to come. When Judge Ibarra issued his final judgment, he also handed down a

significant recognition of the public's ability to protect natural resources when government fails or refuses to enforce the laws.

Because the land seaward of the upper reaches of the wash of the waves, including the beach, is a public trust resource, state and local governments must not engage in activities that damage the resource. Adverse cultural, environmental and ecological impact caused by the Shore Path would be a violation of the Public Trust Doctrine. For example, armorning the shoreline with seawalls or revetments where beaches are undergoing long-term retreat eventually leads to beach narrowing, followed by beach loss. Among many adverse impacts caused by the Shore Path, erosion and beach loss is guaranteed and in violation of the Public Trust Doctrine.

HAWAI'I ENVIRONMENTAL POLICY ACT ("HEPA")

Adopted in 1974, and patterned after the NEPA, HEPA (State Environmental Impact Statements Law, HRS Chapter 343) provides the statutory basis for developing and processing environmental assessments and environmental impact statements. This law requires that systematic consideration be given to the environmental and social consequences (in addition to the economic consequences) of proposed state, county, or private actions. (*Emphasis added*).

"Environmentally sensitive areas include . . . beaches and coastal areas." The state EIS program is administered by the Office of Environmental Quality Control in the Department of Health. Chapter 343, requires the preparation of an environmental assessment for any action which:

- proposes the use of state or county lands or funds. . . .

- proposes any use within a defined shoreline or special management area.
- proposes use of a registered historic site. . . .

The Draft EA fails to meet the requirements of Chapter 343 as discussed in this response, *infra*. The Draft EA violates HEPA in a number of important ways. It fails to provide an environmental assessment of the adverse impacts of Alternative 1 and specifically the Shore Path. Further, it fails to meet the HEPA requirement to analyze impacts at the earliest possible point in the decision process. The decision maker must cease from taking any steps towards the implementation of Alternative 1, with its Shore Path, until the County of Kaua'i provides necessary consideration of all significant environmental, cultural and ecological effects in compliance with the HEPA. These significant effects are further discussed later in this response.

COASTLINE AND SHORELINE PROTECTION

COASTAL ZONE MANAGEMENT PROGRAM GOALS.

The State legislature has found that special controls on developments within an area along the shoreline are necessary to avoid permanent losses of valuable resources and the foreclosure of management options. The legislature has found that it is the state policy to preserve, protect, and where possible, to restore the natural resources of the coastal zone of Hawai'i. (HRS §205A-21). Chapter 205A defines Coastal Zone Management (CZM) goals, objectives, and policies; authorizes Special Management Areas (SMAs) for county jurisdiction in coastal areas; sets guidelines for the statewide CZM program; and establishes shoreline setbacks. The CZM program is administered by the state Office of Planning.

Development within the Special Management Area (SMA) requires a permit. Since the bike/pedestrian path has a development cost exceeding \$125,000, it will require a Major Special Management Area Use Permit. (Draft EA, page 5-11). The permitting process provides a heightened level of government and public scrutiny to ensure consistency with SMA objectives. Given the location of the Shore Path it is extremely unlikely that such a permit will be issued.

The Shore Path is in direct contradiction to and violates the policy of the State of Hawai'i under HRS Chapter 205A to discourage all shoreline hardening that may affect access to, or the configuration of, our island beaches. (See Guidebook, Shoreline Hardening Policy and Environmental Assessment Guidelines, beginning at page 53, Guidelines for Assessing Shoreline Alteration and Hardening Projects, discussed, *infra*). Pursuant to these Guidelines the Draft EA fails to establish appropriate justification and detailed studies for the Shore Path, including, but not limited to, the following which are required by law (See: Guidebook, beginning at page 55, *infra*).

- Historical shoreline analysis of coastal erosion and accretion rates.
 - Why does the Draft EA not include a description of all movements of the neighboring shoreline over at least the past 30 years? This analysis should be based, at least in part, on aerial photographs available through government agencies and private vendors.
 - Why does the Draft EA not provide a detailed history of erosion and accretion patterns using all available evidence?

- Why does the Draft EA not include descriptions of shoreline erosion rates, a map (with scale, north arrow, and title) showing past positions of the shoreline in the projected area, and an analysis of the cause of erosion? It is especially important to describe if the Shore Path will mitigate the causes(s) of erosion. Also, it is especially important to describe how the Shore Path will avoid exacerbating erosion on the shoreline, where the seawall or boardwalk will be constructed, as well as adjacent shoreline.
- Beach Profiles. Why does the Draft EA not include the required beach profiles that extend offshore at appropriate intervals along the beach indicating the width and slope of both the submerged and dry portion of the beach and showing major features of the beach?
- Coastal Hazard History. Why does the Draft EA not include the required coastal hazard analysis for the area in question? This analysis should include any relevant coastal processes such as hazardous currents and seasonal wave patterns, including a description of the recent incidence of damaging high waves, high winds or water levels from storms, vulnerability to tsunami, and the best estimate of Base Flood Elevations and flood zone designation as mapped by the FEMA Flood Insurance Rate maps.
- Waves and Currents. Why does the Draft EA not contain the required description of the wave and current regime acting along the shoreline makai of the condominium resorts along Papaloa Road? This description

must include a wave refraction analysis (one simple form of this analysis is to describe wave crest patterns as shown in an aerial photograph), a description of littoral currents and their seasonal patterns and the impact of the Shore Path, its construction and construction staging areas on these patterns?

- **Sediment Movement.** The Shore Path requires a substantial seawall or a boardwalk upon substantial pilings. These structures may interfere with the normal pattern of sediment transport along the coast and may alter the morphology of the shoreline of the resident sand volume. Consequently, given the potential for such effect why does the Draft EA fail to include the required description of these alterations and their impact on shoreline processes including an estimate of the annual volume of sediment in transport and seasonal patterns of transport, and whether these impacts may have any deleterious effects on neighboring shoreline segments?
- **Thirty-year Erosion Hazard.** Why does the Draft EA fail to include the required analysis that uses annual erosion rate data to project the location of the 30-yr erosion hazard zone as measured from the certified shoreline or vegetation line in the absence of any shoreline stabilization structures? This information should be provided in the form of a mapped line or zone, and accompany text description.

- **Photographs.** Why does the Draft EA fail to include the required eye-level photos of the area for the Shore Path that illustrates past and present condition and to locate the proposed structures? In part, this is necessary

for the public to evaluate the structure's locations to judge the aesthetics and whether views of the ocean will be obstructed.

- **P.E. Seal.** Why does the Draft EA not include the required technical plans for the shoreline hardening structures? This is required to assist the public in evaluating the structures and the potential impact on the environment. These technical plans must contain the required seal of a Professional Engineer with experience in the area of coastal engineering which is required when hardening structures are to be constructed in the coastal area.

The Shore Path is a "development" which would require grading within a special management area. Therefore, the Shore Path requires answers to the following questions before the Shore Path can go forward. [HRS §205A-22(2)].

- Will the County of Kauai... alter any bay...?
- Will the Shore Path reduce the size of (any) beach or other area usable for public recreation?
- Will the Shore Path, reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams within the special management areas and the mean high tide line where there is no beach?
- Will the Shore Path substantially interfere with or detract from the line of sight toward the sea from the state highway nearest the coast? At Page 3-12 of the Draft EA it is stated that "construction of the (Shore Path in front

of the Kapa'a Sands condominiums) will require elevating the path above the slope.

o Does this elevation interfere or detract from the line of sight toward the sea?

- Will the Shore Path adversely affect . . . wildlife habitats . . . (e.g. ecology)? [HRS §205A-26(3)].

In deciding where to place the bike/pedestrian path the potentially irreversible environmental concerns and current Coastal Management Zone goals must be addressed:

- Scenic and Open Space Resources. The Shore Path does not serve the purpose of protecting, preserving, and where desirable, restoring or improving the quality of coastal scenic and open space resources. In the decision process of whether to select the Shore Path the EA and the County of Kaua'i must address and answer the following questions:

- o Is the Shore Path conducive to the value of scenic resources in the coastal zone management area?
- o Is the Shore Path compatible with the visual environment?
- o Does the Shore Path cause the alteration of natural land forms (i.e. the pristine beach and shoreline)?
- o Does the Shore Path serve the goal to preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources?

- o Does the Shore Path serve the goal to encourage developments that are not coastal dependent to locate in inland areas?

- Ecosystems. Placement of the Shore Path must satisfy the goal to protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

- o The Shore Path does not satisfy the State's expressed goal of exercising an overall conservation ethic and practicing stewardship in the protection, use, and development of marine and coastal resources; and
- o The Shore Path does not satisfy the State's expressed goal of preserving valuable coastal ecosystems.

See further ecology discussion, *infra*.

The Shore Path will require substantial construction effort on the coastline makai of the condominium resorts along Papalooa Road. Such construction effort includes the grading of and cutting into the shoreline resulting in the destruction and impairment of a portion of the shoreline. In addition, substantial shore hardening structures for a distance of at least several hundred yards will be required to support the Shore Path. For example, the Draft EA, at page 3-12 clearly identifies the construction effort as follows:

"Going north, there is a 400-foot stretch (e.g. over 130 yards) of beach in front of the Wailua Bay View Condominiums that is narrow and steep. An 18-foot escarpment rises from the beach to the condominium property at an approximate elevation of +27 feet mean sea level (MSL). The slope

is heavily vegetated with naupaka. A fence and hibiscus hedge are found near the top of the escarpment and ground cover stabilizes the area between a hibiscus hedge and the condominium lawn. *In some locations fronting the Seashell Restaurant and the Wailua Bay View Condominiums, it may be difficult to accommodate the full 12-foot width of the bike path without overhanging and possibly cutting into (of) the steep escarpment that rises from the beach.* (Emphasis added).

In addition, the Draft EA, at pages 3-12, 3-13 and 3-14, describes two design options for the slope conditions from Wailua Bay View condominiums to Kapa'a Sands condominiums (e.g. over several hundred yards) as follows:

"There are two design options for the slope conditions. One is a mechanically stabilized earth (MSE) wall that consists of a wall facing and reinforced earth fill (see Figure 10). The new path would be constructed at the top of the MSE wall. The path would either be at grade or up to four feet below the top of the bluff. *This option provides a usable path width of 5 feet.*

The second alternative is a *boardwalk supported on drilled shafts or driven piles* (see figure 11). The circular drilled shafts would be composed of concrete and reinforcing steel bars. The width of the boardwalk is variable and can be as wide as 12 feet with appropriate placement of support shafts. Alternatively, the boardwalk could also be designed as two 5-foot wide paths and terraced on the slope." (Emphasis added). (Draft EA, page 3-12).

To conclude that these two options are minimal improvements ignores reality and is akin to the proverbial ostrich with his head in the sand. Adverse consequences of such cutting and grading and shore hardening structures will cause the irreversible modification of natural forces that formed and currently

affect the shoreline makai of the resorts along Papaloa Road. These options consist of a 10 foot concrete path on top of an approximate 10 foot high mechanically stabilized earth (MSE) seawall or, alternatively, an elevated boardwalk, supported by substantial pilings driven or drilled into the shoreline. These shore hardening structures will exceed 200 yards in length along the Shore Path. The designs additionally show substantial shore hardening measures such as revetments, and/ or rip rap, etc.

Also, it is clear that substantial modification, including the removal of ironwood trees, must be made to the rocky promontory in front of the Wailua Bay View condominiums and the rocky shoreline along the makai side of the unimproved real property owned by Blair and Paula Gay. Also, substantial modification of the shoreline makai of the Hale Awapuhi and Kapa'a Sands condominiums, including the removal of ironwood trees, would likely be required. (See Draft EA, page 7-4, Paragraph 11). These extensive and lengthy shore hardening options are clearly substantial (See Conceptual Design, Figure 10, page 3-13 and Conceptual Design Figure 11, page 3-14).

As recognized by the Draft EA, erosion is a common end-effect caused by vertical seawalls. (Draft EA, page 4-23). The Office Of Environmental Quality Control, State of Hawai'i, has stated that a seawall, revetment or other shoreline hardening devices (presumably, including a boardwalk supported on pilings driven or drilled into the shoreline) will cause irreversible adverse environmental changes, including erosion of beach and shoreline. It is well known that sea

walls, revetments, bulkheads and/ or rip rap cause and accelerate irreversible erosion of the beach sand and cause irreversible instability of a sea bluff.

The significance of the shore hardening options has been recently supported by Mr. Randal Ashley, K-A Associates, an environmental & marine consultant company. The results of their study is contained in a letter, dated June 24, which is attached to these comments. In Mr. Ashley's letter he states:

"(We) are in disagreement in the conclusions regarding the coastal zone along this stretch of the shoreline stated on pages 6-1, 7-1 and 7-4 of the Draft EA. While the proposed Alternative 1 path is outside the current active beach zone, the path's presence would certainly impact the oceanographic and geological processes now creating the set of parameters that result in current beach stability. Beach equilibrium is a very delicate physical state. A slight change in physical parameters such as the potential bike path designs proposed for this area would upset existing conditions and likely result in erosion and retreat of the active beach zone. It is very possible that if the bike path were to be constructed through this area, beach instability would occur and protection of the adjacent coastal bluffs and properties would be required through artificial beach sand nourishment or construction of a revetment."

The Draft EA clearly recognizes erosion concerns along the Shore Path but inexplicably maintains a recommendation of FONSI for the Shore Path. This position is taken even though it may not be acceptable to State regulating agencies. The Draft EA, at page 4-40, clearly states the problems as follows:

"Areas of erosion concern were identified along the proposed bike path fronting the Lanikai Condominiums. While these are generally small areas and the erosion is not severe, the path route passes quite close to the vegetation line and could be subject to wave action during extreme

events. . . . The use of seawalls and revetments to protect the bike/pedestrian path in the event of continued erosion in these areas may not be acceptable by the State regulating agencies.

"Beach nourishment along these straight sections of coast would also not be feasible because it would entail continual re-nourishment as the sand washes away, or the construction of beach stabilization structures." (Draft EA, page 4-40).

- Given the fact that the Shore Path may not be acceptable by State regulating agencies, on what basis or bases does the Draft EA continue to include the Shore Path in Alternative 1 and anticipate a FONSI regarding same?

- If the Shore Path is constructed, how will beach instability and erosion to adjacent coastal bluffs be prevented?

Grading and path construction for the Shore Path will require modification of the shoreline and sea bluff, thereby altering the equilibrium of the sea and beach. To build and protect the Shore Path will require sea walls, revetments, bulkheads and/ or rip rap, etc. It is well known that sea walls, revetments, bulkheads and/ or rip rap cause (Draft EA, page 4-40) and accelerate irreversible erosion of beach sand and cause irreversible instability of sea bluffs. Obviously, only the Inland Roadways route (Alternative 2) and the Canal Path route (Alternative 3) will avoid these consequences. Therefore, the following questions must be answered:

- What is the effect of the Shore Path upon the normal process of beach erosion, and bank stability?
- Will shoreline armoring such as sea walls, revetments, bulkheads or rip rap be necessary to support the bike/pedestrian path to avoid erosion? If

so, how will such permanent structures be designed and constructed to not remove sand from the beach and not cause irreversible damage?

- Will construction and grading permanently modify the shoreline irreversibly altering the equilibrium balance of the sea and shoreline?
- What costs will be involved in constructing a Shore Path substantial enough (if possible) to withstand the forces of the sea and damage from logs and other substantial debris washed into the support system of the Shore Path?

- What are the environmental effects to the beach and to the wild life in constructing a Shore Path substantial enough to withstand the forces of the sea and damage from logs and other substantial debris washed into the support system of the Shore Path?

Erosion likely to be caused by shoreline hardening along the Shore Path is particularly alarming. Erosion by coastal forces already exists. For example, the Draft EA recognizes that erosion by coastal forces already exists in the area of the proposed Shore Path:

- Midway toward the Kukui Heiau, in front of the Lanikai, the naupaka slope transitions into a low elevation lawn and the proposed path continues from the slope onto the lawn. The path would initially pass mauka of the tree line, then close to the vegetation line past an area where there are signs of coastal erosion, including exposed tree roots and escarpments. (Draft EA, page 3-12, page 4-19).

- o If there are already signs of coastal erosion and the Shore Path will include an approximate 10 foot high seawall for over several hundred yards or a substantial boardwalk supported by substantial pilings driven of drilled into the shoreline for over several hundred yards and erosion is a "common end-effect caused by vertical seawalls" (Draft EA, page 4-23), on what basis or bases does the Draft EA conclude a FONSI is appropriate for the Shore Path?
- The beach in front of Kapa'a Sands condominiums and the beach in front of Lanikai condominiums experience cyclical erosion and accretion. Transect 23 in Figure 23 shows that the beach alternatively eroded, accreted, and eroded 10 feet between 1950 and 1988. (Draft EA, page 4-19).

- o Given the foregoing and the Shore Path will include an approximate 10 foot high seawall for over several hundred yards or a substantial boardwalk supported by substantial pilings driven or drilled into the shoreline for over several hundred yards and erosion is a "common end-effect caused by vertical seawalls" (Draft EA, page 4-23), on what basis or bases does the Draft EA conclude a FONSI is appropriate for the Shore Path?

- The area in front of the Lanikai condominiums is particularly vulnerable to coastal flooding. The *Kaua'i Island Hurricane Vulnerability Study* (Sea Engineering, Inc., 2000) showed that flooding due to the model hurricane

would reach elevations exceeding 10 feet in this area and extend inland over 100 feet. (Draft EA, page 4-19).

- o If the area in front of the Lanikai condominiums is particularly vulnerable to such coastal flooding and the Shore Path will be constructed in the area affected by such coastal flooding on what basis or bases does the Draft EA conclude a FONSI is appropriate for the Shore Path?
- The Draft EA analysis regarding the beach from Kaua'i Sands Hotel to Mokihana of Kaua'i contained the following comparison to the erosion seen near Kukui Heiau reported in Section 3.3.2 of the Draft EA. The Draft EA reported that "there is a small area of eroding shoreline (Photo 18, Figure 27) adjacent to the Mokihana on the south, characterized by an escarpment at the vegetation line. This is similar to the erosion seen near Kukui Heiau reported in Section 3.3.2. Erosion is a "common end-effect caused by vertical seawalls." (Draft EA, page 4-23).
 - o If Kaua'i Sands Hotel to Mokihana of Kaua'i contains the erosion seen near Kukui Heiau, which is erosion that is a "common end-effect caused by vertical seawalls" on what basis or bases does the Draft EA conclude a FONSI is appropriate for the Shore Path?
- The Draft EA analysis regarding the beach area from Mokihana of Kaua'i and Bull Shed Restaurant contains the following statements (Draft EA, page 4-28).

- o The seawall shows obvious signs of settling and buckling (Photos 19 and 20).
 - If the Shore Path will include an approximate 10 foot high seawall, on what basis does the Draft EA conclude a FONSI is appropriate where there is the potential for settling and buckling of a seawall as experienced elsewhere along the Alternative 1 route?
- o The lack of sand fronting the seawall is most likely due to the presence of the groins on either side of the Uhelekawawa Canal, **as well as the reflective nature of the vertical seawall. . . The reflected waves from the seawall prevent the sand from migrating to shore.** (Draft EA, page 4-28).
 - On what basis does the Draft EA conclude a FONSI is appropriate where there is the potential for removing sand from the beach makai of the seawall by reflected waves preventing the sand from migrating to shore?
 - Won't seasonal wave patterns impact the seawall, including the recent incidence of damaging high waves, high winds, water levels from storms, tsunamis, and flooding sea heights, and cause a loss of the beach makai of the seawall as experienced elsewhere along the Alternative 1 route? (Draft EA, page 4-28).

- If not, upon what basis or bases would there not be a loss of beach makai of the seawall?

Given the fact that erosion is a "**common end-effect caused by vertical seawalls**" (Draft EA, page 4-23) (**Emphasis added**), amazingly, the Draft EA maintains a FONSI and continues to propose a Shore Path to be constructed on the shoreline as a concrete path on top of an approximate 10 foot high seawall or an elevated boardwalk, supported by substantial pilings driven or drilled into the shoreline. At Paragraph III., Response to application for seawalls, groins and revetments, first subparagraph, page 54, of the Guidebook (see below Environmental Guidebook discussion) it is clearly stated that "**all decision makers should discourage the construction of seawalls, revetments or other shoreline hardening devices that have the potential to lead to beach loss . . .**" (**Emphasis added**).

It is obvious that significant environmental, archeological and ecological issues and ADA accessibility issues can be avoided by selecting either the Inland Roadways route (Alternative 2) or the Canal Path route (Alternative 3). Both of these alternatives would be least damaging to the environment, archeology and ecology and more feasible and considerably less expensive.

THE ENVIRONMENTAL GUIDEBOOK. In addition to the content requirements for environmental assessments, which are set out in HAR §§§§ 11-200-10 and 16 through 18, the Draft EA fails to include the following required by The Office of Environmental Quality Control, State of Hawaii": Shoreline

Hardening Policy and Environmental Assessment Guidelines (June, 2004) (hereinafter "Guidebook").

The Draft EA is deficient when compared to the Guidebook. A hardened structure tends to shift the focus of erosion from the land to the beach fronting the seawall. Seawalls and revetments are not a cure for the cause of erosion, but rather a defensive mechanism to mitigate land loss without regard for resulting impacts to adjacent environments such as the beach or the laterally adjacent shoreline. (See Guidebook, page 53). The Guidebook, at page 53, clearly sets forth State policy regarding hardening of the shoreline. The general policy states that **hardening of the shoreline should be considered the . . . option of last resort**, and its use should be avoided if other options are available. (**Emphasis added**). In addition, development in coastal hazard zones, including erosion hazard zones and coastal flood zones should be avoided in order to:

- Prevent the . . . expenditure of public funds that accompany the occurrence of coastal hazards on developed shorelines.
 - What analysis if any, has been conducted to calculate the future expenditures required of the County of Kaua'i to remedy damage to the Shore Path occasioned by coastal hazards, such as hurricanes, tsunami, high wave impacts and other coastal hazards? If an analysis has been conducted, what expenditures have been forecasted and over what period of time to remedy such damage?

- o If no analysis has been performed, an EIS must be prepared to include such analyses and the public be given additional time to comment on the EIS.
- Prevent the inevitable need to harden the shoreline where there is chronic erosion and the resulting loss of public beaches, lateral shoreline access, open space and view corridors, and littoral sand due to sediment impoundment behind walls.
 - o With an approximate 10 foot high seawall, (over several hundred yards long) a boardwalk constructed on substantial pilings (over several hundred yards long), what measures are proposed to avoid chronic erosion and the resulting loss of public beaches, lateral shoreline access, open space and view corridors, and littoral sand due to sediment impoundment behind walls?

- o The area in front of the Lanikai condominiums is particularly vulnerable to coastal flooding. The *Kaua'i Island Hurricane*

Vulnerability Study (Sea Engineering, Inc., 2000) showed that

flooding due to the model hurricane would reach elevations exceeding 10 feet in this area and extend inland over 100 feet. (Draft EA, page 4-19). Is it not true that such flooding will damage the Shore Path and cause erosion?

- o Is it not true that coastal hazards, such as hurricanes, tsunamis, high wave impacts and other coastal hazards will cause erosion along the makai side of the Shore Path?

Any Draft EA and subsequent application should include the information requested in the Guidebook for assessing shoreline alteration and hardening. The Draft EA fails to provide the details of the "evaluation of the coastal environment . . . performed for the bike path along the coastline from Wailua River to Waikā'ea. (Draft EA, page 4-40).

- As required by the Guidebook, what evaluation was conducted and what were the detailed results?
- Will details of the background information on the wind and wave environments be provided as referenced at page 4-40 of the Draft EA.
- Will the results of a field investigation be provided as referenced at page 4-40 of the Draft EA.
- According to the Draft EA, ". . . to protect the (Shore Path) path from wave and erosion damage may be difficult to achieve." (Draft EA, page 4-40, First Paragraph). Given this fact, why is the Shore Path a part of Alternative 1?

The Draft EA is incomplete and does not meet the goals and requirements of applicable law. The Draft EA must address the concerns of the Office of State Environmental Quality Control, State of Hawai'i, to assure that the Shore Path is consistent with all applicable laws, rules and regulations regarding impact of projects on the environment and the cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups.

In furtherance of the foregoing, the decision makers in their analysis must also answer the following:

- Given the clear mandate of the Office of State Environmental Quality Control, State of Hawai'i, that *all decision makers should discourage the construction of seawalls, revetments or other shoreline hardening devices that have the potential to lead to beach loss* why is the Shore Path considered an alternative?
- Does the Shore Path with its seawall or boardwalk on pilings *have the 'potential' to lead to beach loss*? If so, why is the Shore Path considered an alternative? If not, what formal study or evaluation does the decision maker rely on that clearly establishes that the Shore Path as planned in the Draft EA does not have the potential of beach loss?
- Given the clear mandate of the Office of State Environmental Quality Control, State of Hawai'i, that all decision makers should discourage the construction of seawalls, revetments or other shoreline hardening devices, on what basis or bases does the Draft EA contain a Shore Path utilizing a seawall on the shoreline to support the Shore Path?
- Given the clear mandate of the Office of State Environmental Quality Control, State of Hawai'i, that all decision makers should discourage the construction of seawalls, revetments or other shoreline hardening devices, on what basis or bases does the Draft EA recommend the use of a boardwalk on substantial support pilings?
- Why does the Draft EA provide for a Shore Path when the clear policy of the Office of State Environmental Quality Control, State of Hawai'i is to place structures away from the shoreline as a means of mitigating the

effects of erosion (See Guideline, Paragraph III. *Response to applications for seawalls, groins and revetments*, third paragraph, page 54)?

- The Guidebook state that *clear and convincing evidence* must be found that the impact of seawalls, revetments or other shoreline hardening devices will be negligible. What analysis or study has been conducted that establishes with clear and convincing evidence that erosion impact caused by a seawall or boardwalk on substantial pilings will be negligible? (See Paragraph III. *Response to applications for seawalls, groins and revetments*, third paragraph, page 54).
- Permits and/or variances from applicable government agencies will be needed to construct the Shore Path. The Guideline states that "in general, a variance should be viewed as an extraordinary exception which should be granted sparingly. The reasons to justify approval must be substantial, serious and compelling. [R.R. Powell 5A Powell on Real Property 66.01 [2] (1994)].
 - o What substantial, serious and compelling reasons exist to support the Shore Path?
- Consistent with applicable law, the Draft EA at page 4-40, first paragraph, states that "in today's regulatory environment, permits for shoreline hardening in beach areas are typically *not* granted unless the applicant can show extreme hardship." (Emphasis added).

- o Given the fact that the Shore Path remains a portion of Alternative 1 and permits/variances will be required, what "extreme hardship" do the decision makers assert will support the Shore Path route?
- o If decision makers assert "extreme hardship" as a reason for the Shore Path are there other alternatives to the Shore Path that will be less environmentally damaging? If so, on what basis or bases will the Shore Path continue to be favored?
- o Does the decision maker consider the Shore Path as an extraordinary exception requiring a permit/variance? If so, on what basis or bases does the decision maker conclude that the need for the Shore Path is extraordinary?
- o What substantial reason or reasons will the decision maker rely on to seek a permit/variance for the Shore Path as contemplated in the Draft EA?
- o What serious justification will the decision maker rely on to seek a permit/variance for the Shore Path as contemplated in the Draft EA?
- o What compelling justification will the decision maker rely on to seek a permit/variance for the Shore Path as contemplated in the Draft EA?

COUNTY OF KAUAI LAND USE REGULATIONS, COUNTY GENERAL

PLAN, COASTAL LANDS POLICIES. The Shore Path is clearly in violation of land use and coastal land use policies set forth in the County of Kauai's General

Plan. If the Shore Path is selected, clear and succinct answers must be provided to the following questions. As correctly stated at page 5-4 of the Draft EA,

policies of the County of Kauai's General Plan regarding coastal lands provide:

- "When developing public facilities or granting zoning, land use permits, or subdivision for development along the coast, the first priority shall be to preserve and protect sand beaches." How does the Shore Path serve the policy to preserve and protect sand beaches?
- "Strips of land along the shoreline that have been placed in the State Conservation District or in the County Open zoning district are intended to serve as a buffer from coastal erosion. Structures should be sited inland of these coastal buffers on lands that are appropriately zoned. How does the Shore Path serve the policy to provide a buffer from coastal erosion?"
- "When development is proposed along a sandy beach, hazards of long-term coastal erosion should be assessed and used to determine appropriate setbacks."
 - o What particular assessments have been made to specifically determine the appropriate setback of hardening structures at and along the entire Shore Path?
 - o Can the Shore Path ever be constructed with hardening devices at any location along the sand beach to prevent erosion? If so, specifically how?

- "For coastal areas suffering erosion, promote and provide for beach nourishment in conjunction with property owners and the State Department of Land and Natural Resources. . . ."
- o Given the stated County of Kaua'i policy for coastal areas suffering erosion to promote and provide for beach nourishment in conjunction with property owners and the State Department of Land and Natural Resources, if the Shore Path is selected, what steps will be taken to promote and **provide for beach nourishment in conjunction with property owners?** (Emphasis added).
- o How and when will the County of Kaua'i, ***in conjunction with property owners***, promote and provide for beach nourishment?
- o Along the Shore Path how will the nourishment policy of the County of Kaua'i be accomplished when the Draft EA declares that "***beach nourishment along these straight sections of coast would also not be feasible*** because it would entail continual re-nourishment as the sand washes away, or the construction of beach stabilization structures." (Draft EA, page 4-40)? (***Emphasis added***).
- "Discourage the construction of shore line protection structures (seawalls, revetments)."
- o Given the County of Kaua'i's policy to discourage the construction of shore line protection structures (seawalls, revetments), on what basis or bases does the Draft EA propose a seawall or boardwalk

- and revetments along the Shore Path in direct contravention with this established County of Kaua'i coastal lands policy?
- "Provide a permanent path way laterally along the coast, located in the buffer zone mauka of the shoreline (e.g. Waipouli Resort pathway)."
- o Given the County of Kaua'i's policy to provide a permanent path way laterally along the coast to be located in the buffer zone mauka of the shoreline on what bases on what basis does the Draft EA propose the Shore Path with a seawall or boardwalk and revetments in direct contravention with this established County of Kaua'i coastal lands policy?

COASTAL SET BACK REQUIREMENTS. The planned path of the Shore

Path will traverse through the Shore District which is the coastal setback requirement under state and local law, including "The Comprehensive Zoning Ordinance for the County of Kaua'i" whose purpose is to regulate development or alterations to shore and water areas which have unique physical and ecological conditions in order to protect and maintain physical, biologic and scenic resources of particular value to the public. Sec. 8-13.1 (Ord. No. 164, August 17, 1972; Sec. 8-13.1, R.C.O. 1976).

Consequently, a Shoreline Setback Variance (SSV) will be required. Given the policies of the State of Hawai'i and County of Kaua'i, it is unlikely that such a variance will ever be granted for the Shore Path. By law, The Shore District includes the greater of the following shoreline areas (land and water):

- "Provide that area where the County Planning Director determines that there is significant interrelationship between the physical, biologic, or ecologic forms or systems characteristic of the shore area. (With regard to the Shore Path what determination has been made?);
- From the low water mark to forty (40) feet inland from the upper reaches of the wash of waves other than storm or tidal waves (or twenty (20) feet in those cases as are provided for by the rules of the State Land Use Commission implementing Chapter 205, H.I.R.S.). (Ord. No. 164, August 17, 1972; Sec. 8-13.2, R.C.O. 1976).

Local law provides that no zoning, building or use permit shall be issued, nor shall any use requiring the development, grading or alteration of any portion of the Shore District be permitted, unless the applicant establishes conformity with the requirements of the law. For example, private applicants are required to obtain a Class IV Zoning Permit for any construction, development, use or activity proposed to be carried out within forty (40) feet of the upper reaches of the wash of waves other than storm or tidal waves, or within the shoreline setback area as established by the State Land Use Commission pursuant to Chapter 205, H.I.R.S., whichever is the lesser. The Planning Commission cannot issue a permit/variance unless the requirements of Chapter 205, H.I.R.S. and the Comprehensive Zoning Ordinance for the County of Kaua'i have been met.

- What steps have or will be taken to assure that development, grading and alternation required for placement of the Shore Path will conform to the requirements of these laws?

- As required of private applicants for permits, at what point will the County furnish an "Information Report" prepared by a person or firm qualified by training and experience to have expert knowledge of the subject?
 - o In that regard, will the County of Kaua'i Planning Director determine the adequacy of the report and require the submission of further information where necessary?
 - o Will the report provide information regarding the existing ocean conditions and the probable effects of the proposed structures, development, or alterations, as follows:
 - With respect to existing conditions, the configuration of the shore?
 - The nature, magnitude, and periodicity of Shore District forces such as wind, waves and currents, as they affect the Shore District?
 - The origin, nature and volume of materials composing the shoreline?
 - The physical and biologic characteristics and the rate of Shore District change over time under both natural and proposed artificial conditions?
- o As required of private applicants for permits when will the County of Kaua'i:

- Define a design wave (usually the mean height and period of the highest one-third (1/3) of the waves of a given wave group, including storm surge and tsunami)?
- The design water level of the ocean?
- The foundation conditions, and the construction materials?
- State how the proposed design and construction operations will minimize disruption of the natural system?
- With respect to assessing the quality of the proposed construction, pursuant to local law what steps have been or will be taken to consider alternatives to the proposed construction and why each was rejected, in terms of environmental quality and economic feasibility, including as one alternative the choice of no construction?
- As required of private parties, when will governmental authorities establish that the proposed alteration, construction or activity will not cause significant harm to:
 - The water quality of the ocean, including but not limited to its clarity, temperature, color, taste and odor?
 - Fish and aquatic habitats?
 - The natural beauty of the area?
 - Navigation, safety or health? Or
- Would not substantially interfere with public use of the ocean waters or underlying lands . . . ?

ECOSYSTEMS. The Draft EA must address the various alternative path routes and conclude which of them best satisfy the forgoing goals and minimize adverse disruption or degradation of coastal water ecosystems and conclude which of them best satisfy applicable goals and minimize adverse disruption or degradation of coastal water ecosystems.

The Draft EA is incomplete and misleading regarding Alternative 1 and its impact on living species. In particular, The draft EA is woefully lacking in accurately assessing the Shore Path's impact on species such as the monk seal, sea turtle and, in particular, the shearwater bird. It appears that the Shore Path may constitute an illegal taking of endangered species, in violation of the Endangered Species Act, 16 U.S.C., Section 1538 (a) (1) (B).

Monk Seal. No mention was made regarding the endangered monk seal and the Shore Path. A monk seal stayed for a time on the Kapa'a Sands' beach earlier this year. The Draft EA at page 4-60 misplaces comment on the monk seal in discussion entitled "Aquatic Fauna." In addition, the Draft EA misstates fact by asserting as follows:

"It is unlikely that the development of a bike/pedestrian path as proposed in Alternative 1 would have a deleterious impact on this species (monk seal). The area proposed or the pathway is already in relatively constant use as a pedestrian byway, and it appears that the aforementioned protection programs have been effective in protecting seals in this area."

There may be pathways in other locations contained in Alternative 1, however, there is no existing pathway along the Shore Path. The Draft EA fails to

address the Shore Path impact on the monk seal. This is particularly disturbing because at page 4-61 a photograph of a monk seal is shown. It is known that monk seals beach themselves along the beach in front of Lanikae and Lae nani. The monk seal shown in the photograph is located on the beach at Lae nani. Are the drafters of the Draft EA suggesting that there is a pathway in close proximity to the area shown in the photograph? There is no pathway there.

In any event, the Draft EA is not specific as to what protection programs could be effective in protecting seals in the area of the Shore Path. The Shore Path will be built immediately adjacent to the area where the monk seals beach themselves. There will be little or no room for any protection programs to work. The Draft EA is silent and needs to address the monk seal in relation to the area along the Shore Path.

Hawaiian Green Sea Turtle. The Draft EA is incomplete and extremely misleading regarding the adverse impact that the Shore Path will have on the feeding grounds of the threatened green sea turtle. There is absolutely no analysis of the impact of the Shore Path on the known feeding grounds of the green sea turtle. This is disturbing because everyday there are numerous green sea turtles feeding on the reef and outcroppings in the surf area along the shoreline of the Shore Path.

The Shore Path and its construction will have an adverse effect on the feeding grounds of these turtles. For example, staging areas for construction will be on and about the reef and outcroppings. These matters have not been addressed in the Draft EA and need to be. To fail to mention the impact of these

feeding grounds caused by the Shore Path and its construction is a serious flaw in the Draft EA's ecology analysis.

The Draft EA misleadingly mentions only the potential of impact on the nesting of the green sea turtle. The Draft EA amazingly implies that there will be no adverse impact in that there are many turtles and there are protective measures in place. For example, the potential that nesting sites may be affected is stated as follows:

"There is a chance that the threatened green sea turtle occasionally hauls out in the intertidal zone and on the beach along this section of the coastline. They even may nest on the beach in this area. There are similar comprehensive outreach and protection programs in place to protect this species and its nests. (Draft EA, page 4-60).

- What are the comprehensive outreach and protection programs in place to protect this species and its nests?
- Will these outreach and protection programs protect the feeding grounds of the green sea turtle? If so, how?

The Draft EA disturbingly implies that it is acceptable to adversely impact the green sea turtle's occasional nesting site because there are increased numbers of them. The following quote from the Draft EA is totally at odds with the fact that the green sea turtle is listed as a threatened species and protected in Hawai'i under state law, the federal Endangered Species Act, and listed under the Convention on International Trade of Endangered Species (CITES). The Draft EA states that:

"It should be noted that the occasional use of the shoreline and beach by . . . green turtles does not indicate that this area is unique, but rather that both species are showing significant increases in their populations,

and are much more frequently seen in the main islands that they have in the past 30-40 years. (Draft EA, page 4-61).

Wedge-tailed Shearwater. The Draft EA fails to mention the more common wedge-tailed Shearwater in the analysis of Alternative 1. This bird is the predominant Shearwater species in Hawai'i and large numbers nest on Kaua'i. At least one active common Shearwater nest has been found in the naupaka vegetation along the beach north of Kapa'a Sands condominiums. At Kilauea Point they can be seen from early March when they return from sea to nest in burrows or under bushes. During the summer young downy birds in all stages of growth can be seen along the footpath and under vegetation just a few feet away.

Although, a wedged-tailed Shearwater nest has been found in the naupaka vegetation along the beach north of Kapa'a Sands condominiums the wedged-tailed Shearwater is not discussed at all in the Draft EA. The Shore Path will be constructed on the area currently used by the wedge-tailed Shearwater for nesting. The only mention of a Shearwater in the Draft EA is at the analysis of the "Canal Area Mauka of Kuhio Highway" (Draft EA, page 4-59). The threatened endemic sub-species of the Newell's Shearwater is mentioned. (Draft EA, page 4-61, 4-62, 4-100). However, this sub-species typically nests inland and not on the shore as does the more common wedged-tailed Shearwater.

- What price will the wedge-tailed Shearwater have to pay for a bike/pedestrian path on top of its current nesting area?

Debris and trash will undoubtedly be discarded from the Shore Path onto the beach. This debris and trash will be blown or washed into Wailua Bay, potentially fouling the water of Wailua Bay and adversely affecting its dependant living species.

- What measures will be taken by the County of Kaua'i to assure that debris and trash will not be blown or washed into Wailua Bay?

In addition to cleanup issues, there may be pollution runoff and erosion caused by the structures themselves supporting the Shore Path.

- What measures will be taken by the County of Kaua'i to assure that there will be no pollution runoff and erosion caused by the structures themselves supporting the Shore Path?

With regard to the effect of each path alternative on indigenous, threatened and endangered wildlife and plants there are various statutes that must be complied with, namely, the Hawai'i Revised Statutes ch. 195D and Hawai'i Administrative Rule title 13 ch. 124 and the Endangered Species Act, 16 USC §1531. The environmental analysis must expressly address the impact, if any, that each path alternative has on these State and Federal laws. As currently drafted the Draft EA fails to identify all adverse impact on the ecology along the Shore Path.

CULTURAL IMPACTS

It is the policy of the State of Hawai'i under HEPA, to alert decision makers, through the environmental assessment process, about adverse environmental impacts which may result from the implementation of certain actions, including

cultural impact. It is also the policy of the County of Kaua'i to preserve important archaeological and historic sites and provide a buffer area between the site and adjacent uses. (Draft EA, Affected Environment, Impacts, & Mitigation, page 4-100).

An environmental assessment of cultural impacts gathers information about cultural practices and cultural features that may be affected by actions subject to HEPA, and promotes responsible decision making. As of April 26, 2000, a cultural impact assessment is required under HEPA. HEPA also requires environmental assessment of cultural resources, in determining the significance of a proposed project. Articles IX and XII of the State Constitution, other state laws, and the courts of the state require government agencies to promote and preserve cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups.

With regard to the Shore Path, the Guidelines, at page 48, dictate that the following must be expressly added to an EIS and time allowed for public comment:

- A discussion of the methods applied and results of consultation with individuals and organizations identified by the preparer as being familiar with cultural practices and features associated with the Shore Path, including any constraints or limitations which might have affected the quality of the information obtained.

- A description of methods adopted by the preparer to identify, locate, and select the persons interviewed, including a discussion of the level of effort undertaken.
- Ethnographic and oral history interview procedures, including the circumstances under which the interviews were conducted, and any constraints or limitations which might have affected the quality of the information obtained.
- Biographical information concerning the individuals and organizations consulted, their particular expertise, and their historical and genealogical relationship to the Shore Path area, as well as information concerning the persons submitting information or interviewed, their particular knowledge and cultural expertise, if any, and their historical and genealogical relationship to the Shore Path area.
- A discussion concerning historical and cultural source materials consulted, the institutions and repositories searched, and the level of effort undertaken. This discussion should include, if appropriate the particular perspective of the authors, any opposing views, and any other relevant constraints, limitation or biases.
- A discussion concerning the cultural resources, practices and beliefs identified, and, for resources and practices, their location with the broad geographical area in which the Shore Path is located, as well as their direct or indirect significance or connection the Shore Path site.

- A discussion concerning the nature of the cultural practices and beliefs, and the significance of the cultural resources within Shore Path area, affected directly or indirectly by the Shore Path.
- An explanation of confidential information that has been withheld from public disclosure in the assessment.
- A discussion concerning any conflicting information in regard to identified cultural resources, practices and beliefs.
- An analysis of the *potential effect* of any proposed physical alteration on cultural resources, practices or beliefs; the potential of the proposed action to isolate cultural resources, practices or beliefs from their setting; and the potential of the proposed action to introduce elements which may alter the setting in which cultural practices take place. The foregoing is especially important to the public for comment because the mitigating measures to arrive at the FONSI were not set forth.
- A bibliography of references, and attached records of interviews which were allowed to be disclosed.

The Draft EA does not include a "Cultural Impact Assessment" in form and substance as required by applicable law. This deficiency is magnified by a Finding of No Significant Impact concerning the Shore Path and its adverse impact on a Historic Landmark (Kukui Heiau).

The Draft EA does provide some information regarding the archaeological, historical, and cultural sites in the vicinity of the three alternative paths. However, there is a serious lack of citations of original source materials used for

archaeological site information within the paragraphs containing this information. Having citations of source materials is necessary to enable reviewers to visit the original sources to check the accuracy of the information provided, and to obtain further information if desired. The lack of such citations limits the ability of reviewers to fully evaluate the Draft EA.

An EIS must be completed to include such citations and a thorough Cultural Impact Assessment must be included regarding the environs at and around the Kukui Heiau and along the Shore Path to assure that the Shore Path will not interfere with or adversely affect ancient cultural artifacts, including the Kukui Heiau and shore burials. This is especially true in light of the importance of the heiau system including the Kukui Heiau in the Wailua area. (See Draft EA Section 4.3.1, page 4-65-4-68). Notwithstanding the conclusion of a FONSI for the Shore Path, at page 4-68 of the Draft EA it states that "of particular concern is Kukui Heiau located right on the coast of central South Oloheua at Alakukui Point."

It is clear that the Shore Path as proposed in the Draft EA has a potentially significant impact on the Kukui Heiau. This finding cannot be ignored by suggesting potential alternative routings for which no comparable evaluation has been performed. (See attached Pacific Consulting Services, Inc. letter, dated June 18, 2004, page 3 of 4). The Kukui Heiau is formally listed in the National Register of Historic Places, and thus is an "historic property". Therefore, because Federal agency (FHWA) funding is involved, a consultation process mandated by Section 106 of the National Historic Preservation Act, 16 U.S.C. Section 470, et

seq. (NHPA) and 36 CFR Part 800 ("Protection of Historic Properties") is required. Section 106 seeks to accommodate historic preservation concerns with the needs of Federal undertakings through consultation among agency officials and other parties with an interest in the effects of the undertaking on historic properties, commencing at the early stages of project planning. NEPA also requires that its environmental review process be coordinated with studies required by the NHPA (40 CFR Section 1502.25).

At page 4-68 the Draft EA states that "the Kukui Heiau was placed on the Hawai'i Register of Historic Places on June 13, 1986 and was placed on the National Register on May 18, 1987. . . . While these routes (Alternative 1) offer access to the heiau and interpretive opportunities, this would constitute an adverse impact to a national Historic site and would require consideration of mitigation measures. (Emphasis added)."

The primary concern regarding the Shore Path is its potential adverse impact to the Kukui Heiau (Site 108). The concerns involve both primary and secondary adverse impacts. Sites listed on both the Hawai'i and National Register of Historic Places are given the highest status of cultural heritage and are to be afforded a high level of protection. It is the responsibility of the community members and their elected officials to support the preservation and physical integrity of such sites. (See attached Pacific Consulting Services, Inc. letter, dated, June 18, 2004, page 2 of 4).

In the Draft EA, 3rd paragraph, on page 4-66, the meaning of the last sentence, beginning with "The designation of these properties for the National

Register/National Historic Landmark listing is five circles..." is unclear. Is there a map reference missing? (See attached Pacific Consulting Services, Inc. letter, dated June 18, 2004, page 2 of 4).

The Kukui Heiau is, by all measures, an exemplary example of a Hawaiian culture that exists into modern times through diligent preservation and protection measures. The intent of placing sites on the State and National Registers has been to preserve a variety of cultural heritage sites for all of us, for our children, and for future generations. Across the U.S. mainland and its outlier states and territories, only the most significant, well preserved, and cherished sites, are listed on State, Territorial, and National Registers. These include indigenous sites (Native American, Native Hawaiian, Native Alaskan, Chamorro, etc.) as well as early Euro-American and American sites that have local, State, and/or National significance. In Hawai'i, these sites stand out as exemplary types, and include those that are important in understanding, preserving, and maintaining the indigenous Hawaiian culture, and those that help us understand the transitions that occurred in Hawai'i resulting from initial cultural contact with European, American, and Asian peoples. (See attached letter from Pacific Consulting, Inc., page 2 of 4).

The proposed action, as described in the Draft EA, has the potential to cause irreparable and irretrievable damage to the integrity of the Kukui Heiau.

- How is a FONSI arrived at if the Shore Path "would constitute an adverse impact to a national Historic site and would require consideration of mitigation measures"?

- o What specific mitigating measures are being considered?
- o If mitigating measures are being considered, with regard to each mitigating measure how is it consistent with the policy and desires of applicable state agencies as reflected in each of the following letters attached to the Draft EA:
 - May 4, 2004 Letter from Peter T. Young, State Historic Preservation Officer, State Historic Preservation Division (SHPD), Department of Land and Natural Resources (DLNR) TMK (4) 3 & 4, wherein Mr. Young states that "the proposed bike and pedestrian path (e.g. Shore Path) will have an adverse effect on significant historic sites."
 - What specific mitigating measure or measures satisfy the concerns of Mr. Young?
 - April 12, 2004 letter from Daniel Quinn, State Parks Administrator, Division of State Parks, Department of Land and Natural Resources, wherein Mr. Quinn stated that "(we) would suggest that an open space buffer be maintained around Kukui Heiau. While this heiau is not included within Wailua State Park, a portion of the heiau is within the jurisdiction of DLNR. ***In this situation the alternative route that utilizes***

Papaloa Road might be considered to protect the integrity of this cultural site."

- What mitigating measure or measures mitigate the request of Mr. Young?
- To accommodate the request of Mr. Young why would Alternative 2 not be the preferred route since it "utilizes Papaloa Road . . . to protect the integrity of the Kukui Heiau?"
 - April 13, 2004 letter from Thomas O'i, District Land Agent, Land Division, DNLR, Kaua'i to Dierdre Mamiya, Administrator, Land Division, DNLR, wherein Mr. O'i stated that "the alignment fronting the Sea Shell Restaurant to the Kukui Heiau along the ocean (e.g. Shore Path) should be deleted and the Papaloa Road alignment should be used. (Emphasis added). ***The alignment along the ocean (e.g. Shore Path) will affect the Kukui Heiau, which is a sensitive area among the community, and the different Cultural Groups." (Emphasis added).***
 - Will the Shore Path be deleted at the request of Mr. Young?
 - April 23, 2004 letter to Glen Kimura from Clyde W. Namu'o, Administrator, Office of Hawaiian Affairs,

State of Hawaii'i, wherein Mr. Namu'o stated that "because burials in sand deposits that extended inland from the coast were a traditional Hawaiian practice, and because the proposed project follows the coastline, the possibility of encountering traditional Hawaiian burials and cultural deposits is large."

- Given the fact that the Shore Path will be constructed on the shoreline, what mitigating measure or measures satisfy the concerns of Mr. Namu'o that the Shore Path may

encounter traditional Hawaiian burials and cultural deposits?

- April 23, 2004 letter to Glen Kimura from Clyde W. Namu'o, Administrator, Office of Hawaiian Affairs, State of Hawaii'i, wherein Mr. Namu'o stated that ***"the environmental assessment should include an archeological inventory along all of the proposed alignments of the bike and pedestrian path to ensure that the chosen path does not disturb any historical and cultural sites.***

- Given Mr. Namu'o's position why does the Draft EA not include any archaeological inventory survey?

- Will the Draft EA be amended to include the requested archeological inventory survey?

- o Do the mitigating measures conform to applicable law and meet the objectives of state agencies? If so, how do the mitigating measures so conform?
- o In light of the Draft EA statement that there will be an "adverse effect on a significant historic site" on what specific basis or bases does the Draft EA maintain a FONSI regarding the Shore Path?

- o In light of the Draft EA statement that there will be an

"adverse effect on a significant historic site" why does the Draft EA at page 3-16 list the following alternatives:

- Continuation of a boardwalk for pedestrians only around the heiau?
- Continuation of a bike/pedestrian path around the heiau?
- Improved beach access between Lae nani condominiums and Kaua'i Sands Hotel, with a spur around the heiau, terminating in a viewing platform facing Wailua Bay?

As described above, the Draft EA identifies re-routing of the Shore Path around the Kukui Heiau as a mitigation measure. For several reasons, this

approach to addressing the issue does not resolve or eliminate the potentially serious impacts of the Shore Path on the Kukui Heiau:

- The alternative routing suggested in the Draft EA is not described in sufficient detail to determine what impact it would have on the Kukui Heiau (See attached Pacific Consulting Services, Inc. letter, dated June 18, 2004, pages 2 and 3 of 4);
- Identifying a mitigation measure in a Draft EA does not constitute a binding commitment to implement the mitigation measure, hence it does not preclude routing the path through the Kukui Heiau. (See attached Pacific Consulting Services, Inc. letter, dated June 18, 2004, pages 2 and 3 of 4); and
- On page 4-66 of the Draft EA the first sentence of the 5th paragraph states "such an alignment is appropriate." The alignment being referred to as appropriate is difficult to identify. The previous paragraph twice refers to "All of the proposed alignments" and mentions a path that crosses the Wailua River in one of two places. With so many options, more clarity is needed to avoid confusion. . (See attached Pacific Consulting Services, Inc. letter, dated June 18, 2004, page 4).

Further, there is serious concern that labeling the re-routing of the Shore Path around the Kukui Heiau as a "mitigation measure" removes it from the environmental evaluation afforded to other routes. Any mitigating measure must be clearly identified with specificity to allow the public to assess whether the measure is in compliance with applicable law.

A related concern not addressed in the Draft EA involves potential secondary impacts of routing a path next to a heiau. Even if the path is placed on adjacent property, it can be expected to increase the potential for visitors to the Kukui Heiau. Such increased visitation can result in serious, cumulative damage to the site, both inadvertent and intentional. An assessment of such secondary impacts is needed to properly evaluate the Shoreline Path alternative. The Draft EA does not contain an assessment of such secondary impacts.

As early as 1977, the significance of the Kukui Heiau has been known and the fact that cultural deposits are interspersed in its environ. For example, at the request of Ventura Investments, LLC, test excavations were conducted in 1977 by Bertell D. Davis and Richard M. Bordner. The archeology study disclosed cultural evidence in and around the Kukui Heiau, including bone and midden. In addition to a 100' set back, a buffer zone of 50' (from the mauka side of the foundation wall) was created to preclude equipment, etc. in the development of the Lae nani Resort. (See: *Archaeological Investigation At Kukui Heiau, South Oloheua, Puna, Kaua'i Island*, by Archaeological Research Center Hawaii'i, Inc., May 1977; Bertell D. Davis and Richard M. Bordner).

The Davis-Bordner report concluded as follows:

"Because of the presence of cultural deposits at the edge of the lawn, it is most strongly recommended that construction and all related activities observe a 50-foot buffer zone along the inland wall of the heiau . . . The buffer zone is important since the deposits are at the surface and are readily exposed to potential disturbance."

The Draft EA at page 3-16 wrongly states that "a path could be constructed without intruding upon Kukui Heiau. The Draft EA misstates the position of the SHPD by quoting Mr. Young out of context as follows:

"routing people off and away from the [heiau] site is a better plan than current conditions at the site." The Draft EA failed to complete SHPD's position.

The May 4, 2004 Letter from Peter T. Young, State Historic Preservation Officer, SHPD, Department of Land and Natural Resources (DLNR) TMK (4) 3 & 4, stated just the opposite of the position taken by the Draft EA. Mr. Young further stated that:

"the proposed bike and pedestrian path (e.g. Shore Path) will have an adverse effect on significant historic sites." (Emphasis added).

Consequently,

- Why was SHPD's position that *"the proposed bike and pedestrian path (e.g. Shore Path) will have an adverse effect on significant historic sites"* excluded from the body of the Draft EA?
- Why was the SHPD's position not heeded in the Draft EA?
- In light of SHPD's position that there will be an adverse effect on significant historic sites why does the Draft EA maintain that the Shore Path presents no significant impact?
- Given Mr. Young's comments why does the Draft EA at page 3-16 list the following alternatives:
 - Continuation of a boardwalk for pedestrians only around the heiau?

- Continuation of a bike/pedestrian path around the heiau?
- Improved beach access between Lae nani condominiums and Kaua'i Sands Hotel, with a spur around the heiau, terminating in a viewing platform facing Wailua Bay?

Further, in an April 12, 2004 letter from Daniel Quinn, State Parks

Administrator, Division of State Parks, Department of Land and Natural

Resources, Mr. Quinn stated that "(we) would suggest that an open space buffer be maintained around Kukui Heiau. While this heiau is not included within Wailua State Park, a portion of the heiau is within the jurisdiction of DLNR. In this

situation the alternative route that utilizes Papaloa Road might be considered to protect the integrity of this cultural site." (Emphasis added). A copy of this letter was sent to Nancy McMahon, State Historic Preservation District. Consequently,

- Why does the Draft EA insist that the Shore Path does not adversely affect the integrity of the cultural site?
- For what reason(s) would the Shore Path be ultimately preferred over a path along Papaloa Road?
- In addition, given Mr. Quinn's comments why does the Draft EA at page 3-16 list the following inconsistent alternatives:
 - Continuation of a boardwalk for pedestrians only around the heiau?
 - Continuation of a bike/pedestrian path around the heiau?