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March 9, 2001

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

Ms. Genevive Salmonson, Director
Office of Environmental Quality Control
235 South Beretania Street
Suite 702
Honolulu, HI 96813

Dear Ms. Salmonson:

RE: Finding of No Significant Impact (FONSI) for the Spreckelsville Bikeway
County ROW & TMK (2) 3-8-1:3, 8, 71, 122
Spreckelsville, Maui, Hawaii
Job No. 97-39

The Maui County Department of Public Works and Waste Management has reviewed the comments received during the 30-day public comment period for Phase II of the Northshore Greenway (The Spreckelsville Bikeway). The Department has determined that this project will not have significant environmental effects and has issued a FONSI. Please publish this notice in the 3/23/01 OEQC Environmental Notice.

A completed OEQC publication form will be delivered by email. We enclose 4 copies of the Final EA. Please call myself or Rory Frampton of Chris Hart & Partners at 808-242-1955 if you have any questions.

Respectfully yours,

David Goode, Director
Department of Public Works
and Waste Management

CH&P:ma
(ED01-249)

MAR 23 2001

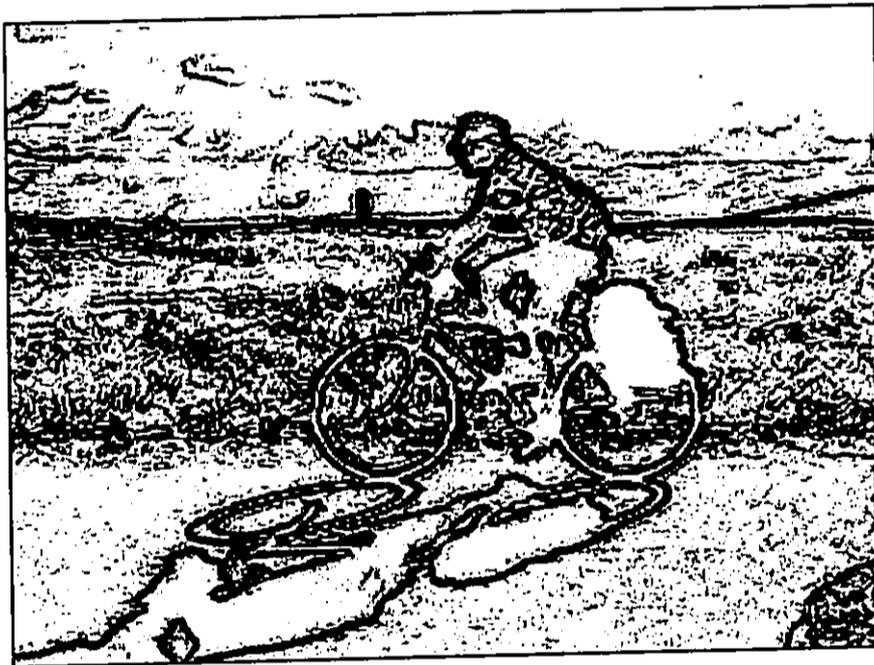
FILE COPY

Final Environmental Assessment

2001-03-23-MA-FEA-

(The Spreckelsville Bikeway)
Phase II of The Northshore Greenway

SPRECKELSVILLE • MAUI • HAWAII



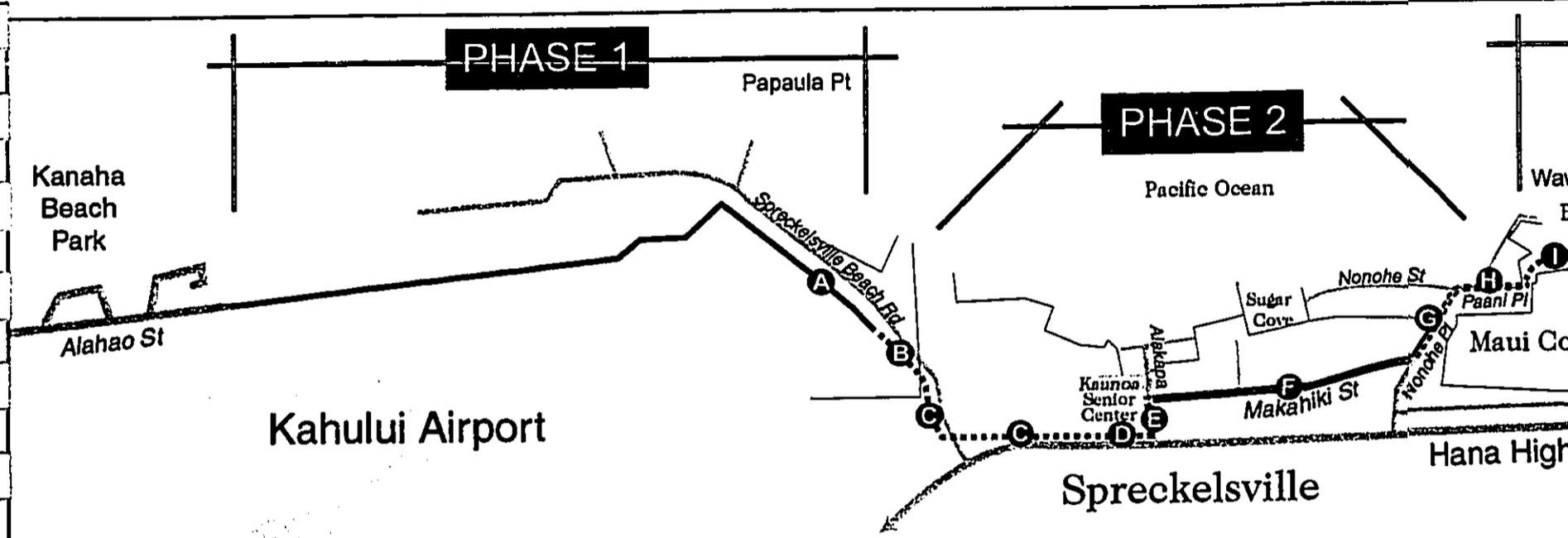
**CHRIS
HART
& PARTNERS**

FEBRUARY 2001

February 2001

**PROJECT UPDATE
CHANGE OF SCOPE**

Phase II of the Northshore Greenway Project has been bifurcated since the December 1998 Draft Environmental Assessment. Please see the map on the following page. Phase II (the Spreckelsville Bikeway) will now be limited to the section of bikeway between Spreckelsville Beach Road and the end of Pa`ani Place (the entrance of the Maui Country Club). The remaining sections, which includes the dune area behind Baldwin Beach, Baldwin Park, and agricultural land near Lower Paia Park are now considered a separate project referred to as Phase III, or the Baldwin Bikeway. Phase III will be addressed under a separate Environmental Assessment.

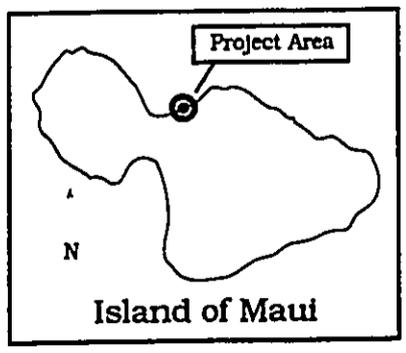
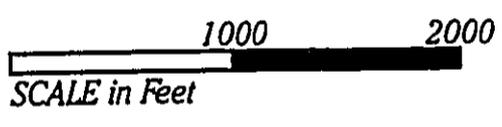


PHASE 1 "Airport Bikeway"

The "airport" section of the Northshore Bikeway is a separated pedestrian/cyclist "pathway" that extends from Kanaha Beach Park and travels makai of the Kahului Airport. The pathway runs along Sreckelsville Beach Road (Stable Road). The "airport" section of the bikeway was constructed in 1996 and is in use today.

PHASE 2 "Sreckelsville Bikeway"

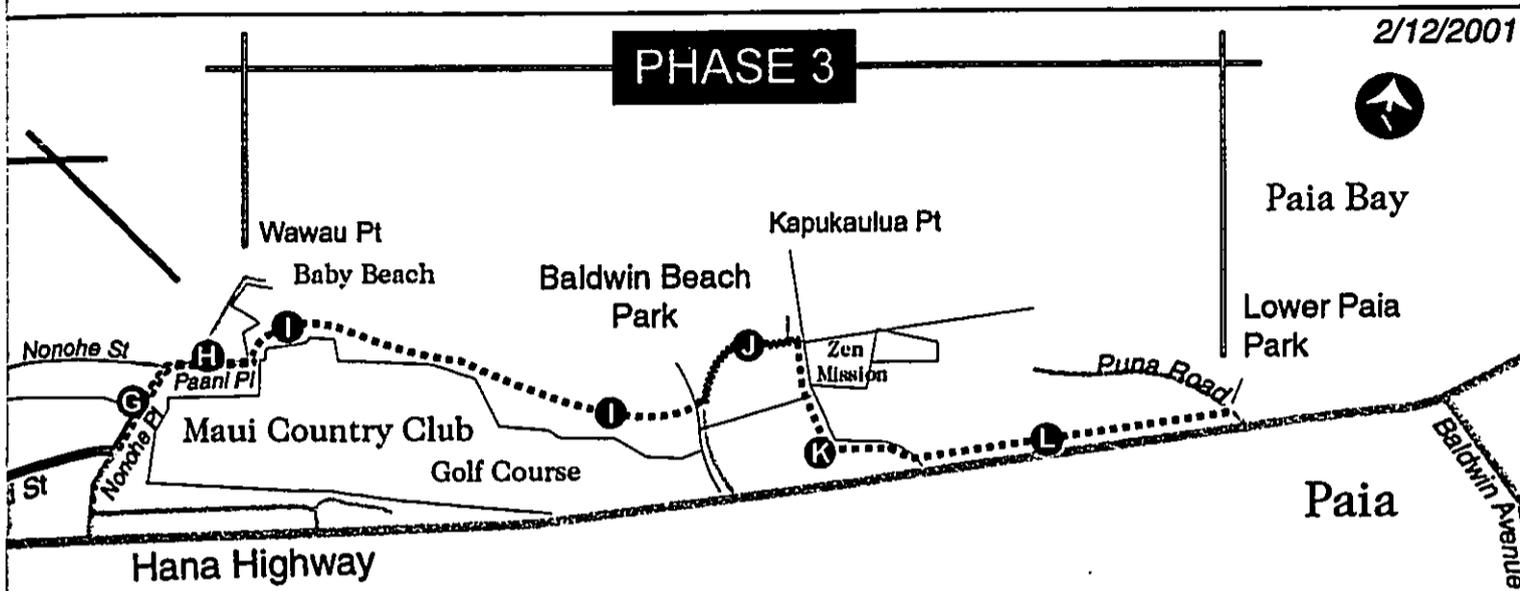
The "Sreckelsville" section of the Northshore Bikeway is a combination of separated bike "paths" and bike "lanes" within existing roadways. Phase II starts from the Phase I terminus along Sreckelsville Beach Road and extends along private and public roadways, finishing at the end of Pa'ani Place (by the Maui Country Club).



DETAILS

- A** End of existing Airport Bikeway. TMK (2) 3-8-1:122
- B** Planned beginning of Sreckelsville Bikeway. TMK
- C** Planned bike path through parcel TMK (2) 3-8-1:3
- D** Planned bike lane through Kaunoa Senior Center, T
- E** Planned bike lane within right of way (ROW) of Alahao St
- F** Existing bike lanes within ROW of Makahiki Street
- G** Existing and planned bike lanes within ROW of Nonoho St
- H** Planned bike lanes within ROW of Paani Place

Phases of the Northshore Bikeway



PHASE 3 "Baldwin Bikeway"

The "Baldwin" section of the Northshore Bikeway includes a scenic bike path through the wooded dune area mauka of Baldwin Beach, bike lanes and a bike paths through Baldwin Beach Park, and a seperated bike path along Hana Highway. Phase III will end at Lower Paia Park.

DETAILS

- ⓘ Planned bike path through parcel TMK (2) 3-8-1:72
- ⓙ Planned bike path through Baldwin Park, TMK (2) 2-5-5:47
- Ⓚ Planned bike path through Baldwin Park, TMK (2) 2-5-5:46
- Ⓛ Planned bike path through parcel TMK (2) 2-5-5:17

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 f way (ROW) of Alakapa Place
 / of Makahiki Street
 s within ROW of Nonohe Place
 / of Paani Place



Table of Contents

I	Overview of Proposed Request	3
II	Property Location, Description, and Proposed Request	5
	A: Introduction	5
	B: Project Area	5
	Location	5
	Land Ownership	6
	C: Project Description	6
	Proposed Improvements	6
	Detailed Routing	6
	D: Costs and Schedule	7
	E: Applicable Government Permits	7
III	Existing Environmental Settings, Potential Impacts, and Mitigation Measures	8
	A: Physical Environment	8
	Surrounding Land Use	8
	Climate	8
	Topography	8
	Soils	9
	Flood and Tsunami Hazard	9
	Flora and Fauna	9
	Air Quality	10
	Noise Characteristics	11
	Visual Resources	11
	Archaeological and Historical Resources	11
	B: Socio-Economic Environment	11
	C: Public Service	12
	D: Infrastructure	12
	Water	12
	Wastewater	12
	Electricity	12
	E: Alternatives	12
	Hana Highway Route Alternative	12
	No Action Alternative	12
IV	Relationship to Governmental Plans, Policies, and Controls	13
	A: Maui County General Plan	13
	B: Community Plans	13
	Wailuku-Kahului Community Plan	14
	C: Other Plans	14
	Bike Plan Hawaii, a State of Hawaii Master Plan	14
	Northshore Greenway Bikeway Component Master Plan	14
	D: Environmental Assessment Significance Criteria	15

E:Special Management Area Objectives and Policies	17
1.Recreational Resources	17
2.Historical/Cultural Resources	18
3.Scenic and Open Space Resources	18
4.Coastal Ecosystems	19
5.Economic Uses	19
6.Coastal Hazards	20
7.Managing Development	20
8.Public Participation	21
9.Beach Protection	21
10.Marine Resources	22
References	23

Figures

Figure 1 - Regional Location Map
Figure 2 - Route Map
Figure 3 - Route Photos 1-6
Figure 4 - Standard Bikeway Cross-Section
Figure 5 - Soils Map
Figure 6 - Flood Map
Figure 7 - Wailuku-Kahului Transportation and Public Facilities Map

Appendices

Agency Comment Letters
Archaeological Reconnaissance Report

I Overview of Proposed Request

Location: Spreckelsville, Maui

Proposed Action: The Northshore Bikeway will be a dedicated bicycle/pedestrian route located in the coastal flatlands makai of the Hana Highway between Kahului Airport and Paia Town. Implementation of the bikeway has been divided into three independent phases. Phase 2, the "Spreckelsville Bikeway" is a combination of bike "lanes" within existing roadways and separated bike "paths". Phase II starts from the Phase I terminus along Spreckelsville Beach Road and extends along private and public roadways. Phase II terminates at the end of Pa'ani Place, near the Maui Country Club. The bikeway will constitute a new recreational outlet, provide additional access to coastal resources, and encourage the use of alternative transportation between the communities of Kahului and Spreckelsville.

Landownership
TMK Landowner (Lessee):

(2) 3-8-1: 122	State of Hawaii (DOT: Airports)
(2) 3-8-1: 3	A&B Hawaii
(2) 3-8-1: 8	State of Hawaii (County of Maui)
(2) 3-8-1: 71	A&B Properties (Maui Country Club)

Public Roadways: Alakapa Place
Makahiki Street
Nonohe Place
Pa'ani Place

Proposing Agency: Department of Public Works & Waste Management
County of Maui
200 S High Street
Wailuku, Hawaii 96793
Contact: Mr. Joe Krueger

Planning Consultant: Chris Hart and Partners
Landscape Architecture and Planning
1955 Main Street, Suite 200
Wailuku, Hawaii 96793
Contact: Mr. Rory Frampton

Land Use Designations:

State Land Use Commission:	Urban, Agricultural
County Zoning:	Interim, Agricultural, R-3, Airport
Kahului-Wailuku	Agriculture, Open Space, Park, Public,
Community Plan:	Quasi-Public, Airport
Other:	Special Management Area

Pre-Consulted Agencies:

Federal: U.S. Army Corps of Engineers
Pacific Ocean Division
State: Department of Land & Natural Resources
Aquatic Resources Division (DLNR)
Maui County: Office of the Mayor
Department of Public Works & Waste Management
Planning Department

II Property Location, Description, and Proposed Request

A: Introduction

The Northshore Greenway is defined as a corridor that extends along the coastal lowlands between Kahului and Paia. In early 1994, a state master plan, Bike Plan Hawaii, identified the Northshore Greenway as a top-priority bikeway location. Later that year, the County of Maui published the Northshore Greenway Bikeway Component Master Plan, which outlined the bikeway's routing and phased construction.

Current planning of the bikeway establishes the following construction phases:

- Phase 1, the "Airport Bikeway" is a separated "pathway" that extends from Kanaha Beach Park and travels along the makai edge of the Kahului Airport. The eastern section of the pathway runs along Spreckelsville Beach Road (Stable Road). The *Airport Bikeway* has been completed and is currently utilized by cyclists, in-line skaters, and pedestrians.
- Phase 2, the "Spreckelsville Bikeway" is a combination of bike "lanes" within existing roadways and separated bike "paths". Phase II starts from the Phase I terminus along Spreckelsville Beach Road and extends along private and public roadways. Phase II terminates at the end of Pa'ani Place, near the Maui Country Club.
- Phase 3, the "Baldwin Bikeway" includes a scenic bike path through the wooded dune area between Baldwin Beach and the Maui Country Club Golf Course. The eastern section of the bikeway will traverse through H.A. Baldwin Park and continue along Hana Highway via a separated path that will terminate at Lower Paia Park.

The Spreckelsville Bikeway component (Phase II) is intended to address the transportation and recreational needs of current and prospective cyclists by providing safe, convenient, and adequate bicycling facilities. By establishing these conditions, the bikeway will provide an alternative mode of transportation for commuters and recreational bicyclists traveling between Kahului and Spreckelsville.

In addition to commuter travel, the bikeway will provide access to popular recreational areas, including Kaunoa Senior Center, "Baby" Beach, and Maui Country Club. By utilizing the bikeway, residents and visitors alike will be able to reduce the frequency of motor vehicle travel to these areas, resulting in a corresponding decrease in overall traffic volume.

B: Project Area

Location

The Phase II project area is located on Maui's north shore between the communities of Kahului and Spreckelsville. The bikeway corridor extends from the eastern edge of Kahului Airport to the Maui Country Club. Figure 1 displays the regional location of the bikeway. A detailed route map is provided in Figure 2. Selected photographs of the bike route are included in Figures 3 and 4.

Land Ownership

The proposed Northshore Greenway Phase II route transverses three properties owned by public and private interests, which are listed below:

TMK	Land Owner	Lessee
(2) 3-8-1: 3	A&B Hawaii	
(2) 3-8-1: 8	State of Hawaii	County of Maui
(2) 3-8-1: 122	State of Hawaii	DOT: Airports
(2) 3-8-1: 71	A&B Properties	Maui Country Club

In addition, the proposed route will utilize designated sections within the county-owned right of way of four public roads.

Public Roadway	Right of Way
Alakapa Place	60 feet
Makahiki Street	44 feet
Nonohe Place	40/48 feet
Pa'ani Place	40 feet

C: Project Description

Proposed Improvements

The proposed improvements consist of paved bikeways with associated signs and striping. The width of the bikeway will vary from 10 to 12 feet for adjacent two-way sections and 4 to 6 feet wide for divided sections abutting existing roadways. A typical bikeway section is shown in Figure 5. At traffic crossings, barriers will be installed to prevent automobiles from using the bikeway.

Detailed Routing

The existing *Airport Bikeway* extends from the east border of Kanaha Beach Park and terminates along Spreckelsville Beach Road (Stable Road) at the east edge of Kahului Airport. The terminus is located in the southeastern corner of TMK parcel (2) 3-8-1: 122, which is owned by the State of Hawaii and leased to the Department of Transportation, Airports Division.

The bikeway will continue the existing 12-foot wide paved bikeway along a path 20-30 feet from Spreckelsville Beach Road. Construction preparations along Spreckelsville Beach Road include the clearing of brush with minor grade and fill.

Approaching Hana Highway, the bikeway will enter TMK parcel (2) 3-8-1: 3 owned by A&B Hawaii. As the bikeway nears the highway, it will cross over Spreckelsville Beach Road and continue eastward, just mauka (south) of the line of monkey pod trees that line the parcel's southern border along Hana Highway. The route crosses to the makai (north) side of the monkey pod trees after approximately 330 feet. An existing hogwire fence along this border will be removed and relocated to the north.

Continuing eastward, the bikeway will enter the Kaunoa Senior Center, TMK parcel (2) 3-8-1: 8 owned by the State of Hawaii and leased to the County of Maui. An existing road running along the southern border of the parcel will be resurfaced to accommodate the bikeway.

At Kaunoa Senior Center's east boundary, the west edge of Alakapa Place will be widened to accommodate a 10-foot wide two-way bike lane. The new section will be located within the County owned right-of-way.

At the intersection of Alakapa Place and Makahiki Street, the bikeway will continue east in two 5-foot lanes that run along both sides of Makahiki Street. These lanes have been constructed as part of the subdivision and are located within the County owned right-of-way.

Reaching Nonohe Place, the bikeway will continue northward in two designated 5-foot wide bike lanes. Both of Nonohe Place's shoulders will be widened approximately 5 feet to accommodate the new lanes. A portion of the west side of Nonohe Place was recently improved as part of the adjacent subdivision and includes an existing 5 foot bike lane. All new improvements fall within the County owned right of way.

At the intersection with Pa'ani Place, both lanes would continue eastward in two designated 5-foot wide bike lanes. Pa'ani Place's current 20-foot width will be widened to 30 feet to accommodate the new bike lanes. The majority of the pavement widening will occur on the makai (north) side of Pa'ani Place. All new sections fall within the County owned right of way (40 feet). This Phase of the bikeway will terminate at the end of Pa'ani Place, within the entrance of the Maui Country Club.

D: Costs and Schedule

Total estimated construction costs are \$400,000.

Funding for Phase II of the Northshore Greenway will be provided through a combination of County and Federal monies. The (Federal) Transportation Equity Act for the 21st Century (TEA21) provides funding in an 80/20 percent Federal to local cost sharing basis. Bike and pedestrian pathways qualify for this funding under TEA21's Surface Transportation Program (STP) (Section 1007). Ten percent of each state's annual STP funds are available exclusively for "Transportation Enhancement" Activities (TEAs), which can be used for bikeways built for transportation purposes.

Construction would likely initiate in the summer of 2001. The duration of construction activity is not expected to be longer than six months.

E: Applicable Government Permits

County:

Special Management Area Permit
Construction Permits (Building/Grading/work in ROW)
Flood Zone related permits

III Existing Environmental Settings, Potential Impacts, and Mitigation Measures

A: Physical Environment

Surrounding Land Use

Land uses in the vicinity of the project route include low-intensity ranching, a 2-acre agricultural subdivision, single family residential dwellings, the Maui Country Club and Golf Course, and vacant lands adjacent to the Kahului Airport. The proposed bikeway is not expected to affect these existing land uses.

Undeveloped Land

The combination of the bikeway's non-obstructive construction and its quiet, non-polluting nature of use make it compatible with undeveloped lands along route. No night lighting fixtures are included in the bikeway plan.

Residential Areas

The route is located within existing public rights of way while crossing through residential areas. The subject roadways are currently used to gain access to various recreational resources along the shoreline. Motorists and cyclists accessing Baby Beach and Maui Country Club currently utilize Nonohe and Pa'ani Place. Windsurfers frequent Alakapa Place and Spreckelsville Beach Road. Makahiki Street is already striped with bike lanes. Thus, the bikeway does not represent the introduction of a new use, however it could lead to an increase of non-motorized traffic in these areas.

Highways

The proposed route does not cross Hana Highway. Bikeway sections in the vicinity of the highway use existing barriers (tree-lines, dirt berms) where practical and are sighted significantly away from the highway.

Climate

The project site is located near the northern shoreline on the central isthmus of the island of Maui and subject to the tradewinds that occur on all the Hawaiian Islands. Annual median rainfall is approximately 20 inches per year. The moderate climate makes it ideal for bikeway use as a transportation and recreation outlet.

Tradewinds along this section of Maui's coastline can make biking difficult along unprotected travelways. Where possible the bikeway is located near existing sheltering vegetation in order to lessen the effects of tradewinds on cyclists.

Topography

The Northshore Greenway Phase II corridor is surrounded by coastal lowlands and is characterized by generally level terrain conducive to bicycle travel. The majority of the

proposed route is between 10 and 20 feet mean sea level (MSL), with a high of 35 feet (Nonohe Place) and a low of 9 feet (MSL) (near Kahului Airport).

The route's minimal grade and contour changes allow the bikeway construction to generally follow existing topography. The constructed bikeway contains no structures that would impede scenic viewplanes.

Soils

According to the "Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai," US Department of Agriculture, Soil Conservation Service, August 1972, the Soil within the proposed bikeway is classified as Dune Land (DL), Jaucus Sand (JaC, JcC), and Molokai Silty Clay Loam (MuA, MuB). Soil distributions are provided in Figure 6.

Dune Land (DL) is defined as of windblown sand particles accumulating and forming hills and ridges. However, the "dune land" in the project corridor is currently developed as part of the Maui Country Club residential subdivision. The project corridor within "dune land" is limited within the ROW along Nonohe Place and Pa'ani Place. Jaucus Sand (JaC, JcC) occurs as narrow strips on coastal plains adjacent to the ocean and were developed in wind and water deposited sand from coral and seashells. Molokai Silty Clay Loam (MuA, MuB) is typified as an excessively well drained soil. This soil is formed from material weathered basic igneous rock.

Considering the area's light rainfall and well-drained soils, natural runoff from the bikeway will not impact the underlying or adjacent soils.

Flood and Tsunami Hazard

According to the Federal Insurance Rate Maps (FIRM) generated by the Federal Emergency Management Agency (FEMA), the majority of Phase II is in zone "C", an area of little or no flooding. A small portion of the Phase II (the terminus of Pa'ani Place) is in Flood Zone A4. A flood map diagram is illustrated in Figure 7.

The bikeway will have a minimum impact to flooding since the project will generally follow the existing ground surface. The flat terrain allows for minimum grade and contour changes within flood zones. The bikeway will not alter existing drainage patterns in existing rights of ways. Through undeveloped areas, the bikeway will be sloped or crowned to locally dissipate storm runoff. This minimizes the potential for runoff accumulation and allows for dissipation of the minor increase in runoff over a large area. The nature of the project itself will present no barriers or structures to impede tsunami and flood inundation action. Therefore the proposed project will have no significant impact upon the existing flood or tsunami areas and it will not negatively impact adjacent or nearby properties. A Civil Defense siren system is located along the coastline to warn bikeway users of potential tsunami hazard.

Flora and Fauna

The proposed bikeway corridor consists of new separated bike "paths" generally parallel to Spreckelsville Beach Road and Hana Highway, and (on shoulder) bike lanes along existing roadways. The off road sections are generally characterized as being

weedy with common trees such as Kiawe, Koa-haole, Coconut Palm, Christmas berry, and various shrubs and grasses. The portion along Hana Highway contains a row of mature Monkeypod trees. The proposed bikeway will not require the removal of the Monkeypod trees.

The Hawaii Natural Heritage Program, which maintains databases of endangered species throughout Hawaii, verified three endangered species that are found the northshore area. They include a native variant of an endangered grass (*Panicum fauriei* var. *carteri*) which has been observed on the coastal headlands on both sides of Maliko Bay, a turtle (*Lepidochelys olivacea*) seen in Paia Bay, and the Blackburn Sphinx Moth (*Mandica blackburni*) which has been observed in Spreckelsville.

The only species known in close proximity of the project is the Blackburn Sphinx Moth (listed 1997). Populations live on the Big Island (Kona), Kahoolawe, and on Maui (Haleakala lava-fields & Spreckelsville). Communities in Spreckelsville and Kahoolawe depend on a non-native host plant, a shrub commonly called wild tobacco (*Nicotiana glauca*). Populations in the Haleakala lava-fields and in Kona also host on the endemic tree "Aiea" (*Nothocestrum longifolium*). The moth's primary habitat is one where there is an abundance of the host plant and a soil type in which the moth may bury itself.

A site inspection of the bikeway corridor was conducted to determine the locations of wild tobacco communities and investigate the soil within the proposed corridor. Communities of wild tobacco were discovered on the berm between Spreckelsville Beach Road and the existing Airport Bikeway. Communities were more abundant towards the ocean and diminished as the roadway traveled inland. The most mauka occurrences of the tree tobacco were two trees located near a navigational equipment building located at the east end of Kahului Airport. The location is approximately 1000 feet from the beginning of the proposed "Spreckelsville Bikeway" corridor. Walkthrough investigations of the proposed corridor did not reveal any individuals or communities of wild tobacco or soft/sandy soils.

Since the project area does not appear to contain communities of the host species (*Nicotiana glauca*) or contain soft/sandy soils, it is unlikely that that the project will affect the endangered species (*Mandica blackburni*). No other rare, endangered, or threatened species or their habitats are known to occupy the corridor.

Air Quality

Emissions from trucks and equipment with diesel engines could be cause for short-term air pollution impacts during construction.

Impacts from dust generated by construction activities such as clearing and grubbing operations and by the movement of construction equipment and construction vehicles can be mitigated through frequent watering of the site.

Use of the bikeway by pedestrians and bicyclists is not expected to have a negative impact on air quality. Use of the bikeway may correspond with reductions in motor vehicle use, which will reduce non-point air emissions.

Noise Characteristics

Background noise in the area consists of natural noises such as wind and surf, and urban noises generated by automobiles and aircraft.

Noises due to use that are anticipated along the bikeway include those generated by pedestrians and bicyclists. These noises are anticipated to diminish after daylight hours for the corridor will not be lighted for nighttime use.

There is a potential for noise impacts during the construction phase. Using mufflers on construction equipment, together with restricting construction activities to standard working hours will mitigate noise impacts to nearby residences. All operations will be in compliance with the State Department of Health's rules and regulations.

Visual Resources

The construction of the bikeway does not include any obstacles to the visual plain nor will it subtract from existing aesthetic resources. The project aims to leave vegetation intact to the extent practical and to maintain natural aesthetics.

Archaeological and Historical Resources

An archaeological inventory survey was conducted along the proposed bike route in August of 1998. The surveying firm, Scientific Consultant Services, found no surface cultural features and noted that no known significant sites are located within the project corridor. The original archaeological report is included in Appendix A.

The Spreckelsville Bikeway (Phase II) is a combination of bike "lanes" within existing roadways and separated bike "paths" parallel to existing roadways. A detailed description of the routing is included in section II of this report.

The road shoulders and proposed parallel pathways were visually surveyed and no indications of surface sites were found in the area. Within the bike "path" to be created along Spreckelsville Beach Road, there are two sections where excavation of up to two feet is required. Archaeological monitoring during construction is proposed for these areas to mitigate the effects of sub-surface disturbances.

B: Socio-Economic Environment

Short-term construction-related impacts to the local economy will result due to the increase in construction-related employment and revenues generated by the purchase of materials, equipment and supplies.

Long-term effects include the social impact relative to the availability of alternative transportation corridors, additional access to recreational sites, and the addition of a new recreational outlet.

C: Public Service

The project will not impact fire and medical services. Signage and pavement markings will be used to control bicycle traffic. The bikeway will not be open to public vehicular traffic. The bikeway will be self-policing with users reporting to the County police any disruptions, violations and unauthorized use of the bikeway. There should be no significant impacts to public service.

D: Infrastructure

Water

Water will be used for dust control during the construction of the project. Using non-potable water for dust control will mitigate the impact on county water resources. Phase II does not include any features that use county or private water supply.

Wastewater

The bikeway will add no wastewater load to the existing County waste water system.

Electricity

There will be no long-term impact upon electrical services. The bikeway will be a daylight route with no streetlights or other electrical devices to require the use of electrical power

E: Alternatives

Hana Highway Route Alternative

A prospective route along or mauka of Hana Highway was considered, however it was judged that it did not encourage bicycle or pedestrian traffic. The route would place cyclists and pedestrians within the immediate vicinity and/or require the crossing of a high-speed motorway (Hana Highway). This alternative was deemed not to provide a safe facility for all classes of cyclists and pedestrians. Additionally, the proposed route was regarded a more sheltered and scenic route, offering superior access to the region's coastal resources.

No Action Alternative

Currently, there is no designated bicycle/pedestrian route connecting Kahului and Paia. Residents inclined to walk or bike must use the undesignated shoulders of Hana Highway.

The no action alternative does not provide a safe, adequate, or attractive facility that would encourage the use of alternative, non-polluting transportation. The no action alternative upholds the public's reliance upon motor vehicles for transportation within the Kahului - Spreckelsville corridor.

IV Relationship to Governmental Plans, Policies, and Controls

A: Maui County General Plan

The Maui County General Plan (1990 Update) sets forth broad objectives and policies to help guide the long-range development of the County. As stated in the Maui County Charter, "The purpose of the General Plan is to recognize and state the major problems and opportunities concerning the needs and the development of the County and the social, economic and environmental effects of such development and set forth the desired sequence, patterns and characteristics of future development."

The proposed project is in keeping with the following General Plan Objectives and Policies:

Objective:

To use the land within the County for the social and economic benefit of all the County's residents.

Policy:

Encourage land use patterns that foster a pedestrian oriented environment to include such amenities as bike paths, linear parks, landscaped buffer areas, and mini-parks

Objective:

To use the County's land-based physical and ocean-related coastal resources in a manner consistent with sound environmental planning practice.

Policy:

Preserve, enhance and establish traditional and new environmentally sensitive access opportunities for mountain and ocean resources.

Objective:

To support an advanced and environmentally sensitive transportation system which will enable people and goods to move safely, efficiently and economically.

Policy:

Support the development of a county-wide network of bikeways and pedestrian paths.

B: Community Plans

The proposed project is located in the Wailuku/Kahului community, which is one of the nine Community Plan regions established in the County of Maui. Planning for each region is guided by the respective Community Plans, which are designed to implement the Maui County General Plan. Each Community Plan contains recommendations and

standards that guide the sequencing, patterns and characteristics of future development in the region.

Wailuku-Kahului Community Plan

The proposed project is in keeping with the following Wailuku-Kahului Community Plan recommendations. The Plan's "Transportation and Public Facilities" map is included as Figure 8 and illustrates a bikeway generally along the same route as the proposed project.

Section:

Support Systems: Transportation & Utilities, Transportation

Recommendation:

Provide bikeway and walkway systems in the Wailuku-Kahului area which offer safe and pleasant means of access, particularly along routes accessing school sites. This would continue efforts to implement the Department of Transportation Bikeway Master Plan and provide pedestrian connections between residential districts and schools, major community facilities and activity centers.

Section:

Support Systems: Human Systems, Recreation and Culture

Recommendation:

Ensure adequate public access to shoreline recreation resources by pursuing access ways identified by the County and shown on the Transportation and Public Facilities map...

C: Other Plans

Bike Plan Hawaii, a State of Hawaii Master Plan

Bike Plan Hawaii, prepared for the State Department of Transportation, is a comprehensive plan, detailing bicycle use and safety studies, bikeway master planning, program recommendations, and implementation guidelines.

Within Bike Plan Hawaii, the Northshore Greenway Bikeway is recognized as deserving top priority concerning implementation..

Northshore Greenway Bikeway Component Master Plan

Prepared for the County of Maui, the Northshore Greenway Bikeway Component Master Plan outlines the first stage in developing the Northshore Greenway, which will ultimately provide an open space, recreational and transportation link between Wailuku-Kahului and Paia Town.

Phase I of the plan, referred to as the "Airport Bikeway" planned a bicycle/pedestrian route between Kahului and Spreckelsville road. Phase II, currently referred to as the "Spreckelsville Bikeway" extends the project through the Spreckelsville area, connecting open space, recreational resources, and establishing a usable corridor between the towns of Kahului and Spreckelsville.

D: Environmental Assessment Significance Criteria

Processing of this EA has been recently completed pursuant to Chapter 343 of the Hawaii Revised Statutes. A Finding of No Significant Impact (FONSI) has been issued for the project. This determination has been made in accordance with the following significance criteria, which are outlined in section §11-200-12 of the Department of Health's rules and regulations relating to environmental impact statements.

- 1) *Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;*

As documented, the construction and use of the proposed is not anticipated to significantly impact the natural environment or cultural resources.

- 2) *Curtail the range of beneficial uses of the environment;*

The project is expected to expand the beneficial uses the environment by providing alternative transportation to resources along the Northshore Greenway such as beaches and public parks. In itself, the bikeway is a recreational resource which will expand the public's ability to enjoy the scenic open spaces along the Northshore Greenway.

- 3) *Conflict with the State's long term goals or guidelines as expressed in Chapter 344, HRS, and any revision thereof and amendments thereto, court decisions, or executive orders;*

The Northshore Bikeway Phase II project provides a recreational outlet, creates a safe corridor that encourages alternative, non-polluting transportation, and facilitates access to existing environmental resources. The project is not anticipated to have negative impacts on the environment. Therefore the project supports the long term goals and guidelines in Chapter 344 HRS.

- 4) *Substantially affect the economic or social welfare of the community or state;*

A small short-term positive economic impact will result due to the increase in construction-related employment and revenues generated by the purchase of materials, equipment and supplies.

Long-term positive impacts are expected in regards to alternative transportation, better access to recreational sites, as well as the recreational value of the bikeway itself.

- 5) *Substantially affect public health;*

As documented, minor short-term impacts to air quality and noise are expected during construction of the project, however they can be mitigated through adherence to standard construction mitigative measures. No significant long-term impacts are expected regarding air quality, water quality, or noise.

- 6) *Involve substantial secondary effects, such as population changes or effects on public facilities;*

No substantial secondary effects are anticipated. It is hoped that use of the bikeway for transportation would result in a reduction in automobile traffic between Kahului and Spreckelsville.

- 7) *Involves a substantial degradation of environmental quality;*

As documented, construction and use of the bikeway are not expected to have a significant impact upon natural resources. No significant impacts towards water quality, air quality or noise levels are anticipated.

- 8) *Is individually limited but cumulatively has considerable effect on the environment, or involves a commitment to larger actions;*

Each of the three phases of the Northshore Bikeway has individual merit and can serve as an individual project. Each phase of the bikeway provides a valuable (yet regional) resource without being linked to the other phases. Therefore, construction of any one phase does not require the completion of any other phase, nor does it involve a commitment to larger actions.

It is reasonable to expect that a cumulative effect of constructing phase II is greater use of both Phases I and II than warranted in their individual capacity. Increased use of the bikeways will generate positive direct effects such as greater pedestrian/cyclist safety, and better access to recreational resources. Positive secondary effects are anticipated due to the greater use of non-polluting transportation between the communities of Kahului and Spreckelsville.

Any optional phases that will be considered (such as Phase 3) will similarly address the cumulative effect of Phases 1&2, and how it may affect common or unique impacts.

- 9) *Substantially affects a rare, threatened or endangered species or its habitat.*

No rare, threatened, or endangered species are known within the project corridor. The project is not anticipated to substantially affect any rare, threatened, or endangered species within the northshore area..

- 10) *Detrimentially affects air or water quality or ambient noise levels;*

As documented, temporary and insignificant air and noise impacts are expected and will be mitigated during the construction of the bikeway.

- 11) *Affects or is likely to suffer damage by being located in an environmentally sensitive area such as flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;*

According to the Federal Insurance Rate Maps (FIRM) generated by the Federal Emergency Management Agency (FEMA), the majority of Phase II is in zone "C", an area of little or no flooding. A small portion of the Phase II (the

terminus of Pa'ani Place) is in Flood Zone A4. A flood map diagram is illustrated in Figure 7.

The bikeway will have a minimum impact to flooding and tsunami inundation since the project will generally follow the existing ground surface. The flat terrain allows for minimum grade and contour changes within the tsunami and flood zones. The bikeway will be crowned for sheet drainage during storm or tsunami. The nature of the project itself will present no barriers or structures to impede tsunami and flood inundation action.

- 12) *Substantially affects scenic vistas and viewplanes identified in county or state plans or studies;*

No scenic vistas or viewplanes are identified within the project boundary. The bikeway generally conforms to the topography of the corridor and includes no significant structures that would impair viewplanes.

- 13) *Requires substantial energy consumption*

No streetlights or electrical devices are planned for the bikeway. The project calls for no energy consumption beyond initial construction.

E: Special Management Area Objectives and Policies

1. Recreational Resources

Objectives:

Provide coastal recreational resources accessible to the public.

Policies:

- a. Improve coordination and funding of coastal recreation planning and management; and*
- b. Provide adequate, accessible and diverse recreational opportunities in the coastal zone management area by:*
 - 1. Protecting coastal resources uniquely suited for recreation activities that cannot be provided in other areas;*
 - 2. Requiring replacement of coastal resources having significant recreational value, including, but not limited to, surfing sites and sandy beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;*
 - 3. Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;*
 - 4. Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;*
 - 5. Encouraging expanding public recreational use of county, state and federally owned or controlled shoreline lands and waters having recreational value;*

6. *Adopting water quality standards and regulating point and non-point sources of pollution to protect and, where feasible, restore the recreational value of coastal waters; and*
7. *Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits, and crediting such dedication against the requirements of Section 46-6 of the Hawaii Revised Statutes.*

Response:

The Project is consistent with SMA recreational resources objectives and policies in the following ways. First, the bikeway expands public access to shoreline resources by providing a safe, convenient and adequate corridor for pedestrians, cyclists and others utilizing self-powered transportation. Second, use of the bikeway will lead to additional use of several coastal recreational areas including Kanaha Beach Park, Kooks Beach, and Baby Beach. Lastly, the bikeway itself provides an additional coastal recreational outlet.

2. Historical/Cultural Resources

Objectives:

Protect, preserve and where desirable, restore those natural and man-made historic and prehistoric resources in the coastal zone management areas that are significant in Hawaiian and American history and culture.

Policies:

- a. *Identify and analyze significant archaeological resources;*
- b. *Maximize information retention through preservation of remains and artifacts or salvage operation; and*
- c. *Support state goals for protection, restoration, interpretation and display of historic resources.*

Response:

As documented, no significant impacts to historical or cultural resources are anticipated. While the project does not require any extensive subsurface preparations, archaeological monitoring is proposed as a mitigation measure in areas where minor cutting will occur.

3. Scenic and Open Space Resources

Objectives:

Protect, preserve and, where desirable restore or improve the quality of the coastal scenic and open space resources.

Policies:

- a. *Identify valued scenic resources in the coastal zone management area;*
- b. *Insure that new developments are compatible with their visual environment by designing an location such developments to minimize the alteration of the natural land forms and existing public views to and along the shoreline;*
- c. *Preserve, maintain and, where desirable, improve and restore shoreline open space and scenic resources; and*

- d. *Encourage those developments which are not coastal dependent to locate in inland areas.*

Response:

The Project is consistent with SMA scenic and open space resources objectives and policies in the following ways. First, the proposed bikeway will be consistent with its visual environment, for it will have minimal impact upon scenic resources. The construction will be limited to near ground-level and the facility will contain no structures that would obstruct scenic views. Additionally, the bikeway improves recreational resources.

4. Coastal Ecosystems

Objectives

Protect valuable coastal ecosystems from disruption and minimize adverse impacts on all coastal ecosystems

Policies:

- a. *improve the technical basis for mature resource management;*
- b. *Preserve valuable coastal ecosystems of significant biological or economic importance;*
- c. *Minimize disruption and degradation of coastal water ecosystems by effective regulation of stream diversions, channelization and similar land and water uses, recognizing competing water needs; and*
- d. *Promote water quantity and quality planning and management practices which reflect the tolerance of fresh water and marine ecosystems and prohibit land water uses which violate state water quality standards.*

Response:

The Phase II corridor is located significantly inland of the ocean, beaches, and coastal features. Proposed bike paths along Spreckelsville Beach Road and Hana Highway are not in areas recognized as valuable or sensitive coastal ecosystems.

5. Economic Uses

Objectives:

Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

- a. *Concentration in appropriate areas the location of coastal dependent development necessary to the state's economy;*
- b. *Insure that coastal dependent development such as harbors and ports, visitor facilities, and energy-generation facilities are located, designed, and constructed to minimize adverse social, visual and environmental impacts in the coastal zone management area; and*
- c. *Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:*
 - 1. *Utilization of presently designated locations is not feasible,*
 - 2. *Adverse environmental effects are minimized, and*

3. *The development is important to the State's economy.*

Response:

The Phase II corridor is located significantly inland of the ocean, beaches, and coastal features. The proposed location minimizes environmental impacts while providing a safe, adequate, and attractive alternative transportation route and recreational outlet.

6. **Coastal Hazards**

Objectives:

Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion and subsidence.

Policies:

- a. *Develop and communicate adequate information on storm wave, tsunami, flood, erosion and subsidence hazard;*
- b. *Control development in areas subject to storm wave, tsunami, flood, erosion and subsidence hazard;*
- c. *Ensure that development comply with requirements of the Federal Flood Insurance Program; and*
- d. *Prevent coastal flooding from inland projects*

Response:

According to the Federal Insurance Rate Maps (FIRM) generated by the Federal Emergency Management Agency (FEMA), the majority of Phase II is in zone "C", an area of little or no flooding. A small portion of the Phase II (the terminus of Pa'ani Place) is in Flood Zone A4. A flood map diagram is illustrated in Figure 7.

The bikeway will have a minimum impact to flooding and tsunami inundation since the project will generally follow the existing ground surface. The flat terrain allows for minimum grade and contour changes within the tsunami and flood zones. The bikeway shall be sloped or crowned for sheet drainage during storm or tsunami. The nature of the project itself will present no barriers or structures to impede tsunami and flood inundation action.

7. **Managing Development**

Objectives:

Improve the development review process, communication, and public participation in the management of coastal resources and hazard.

Policies:

- a. *Effectively utilize and implement existing law to the maximum extent possible in managing present and future coastal zone development;*
- b. *Facilitate timely processing of the application for development permits and resolve overlapping of conflicting permit requirements; and*
- c. *Communicate the potential short and long-term impacts of proposed significant coastal developments early in their lifecycle and in terms*

understandable to the general public to facilitate public participation in the planning and review process.

Response:

The development of the proposed bikeway is being conducted in accordance with applicable State and County requirements. Opportunity for review of the proposed action is provided the County's Special Management Area (SMA) permitting process.

8. Public Participation

Objectives:

Stimulate public awareness, education and participation in coastal management.

Policies:

- a. Maintain a public advisory body to identify coastal management problems and to provide policy advice and assistance to the coastal zone management program;*
- b. Disseminate information on coastal management issues by means of educational materials, published reports, staff contact and public workshops for persons and organizations concerned with coastal related issues, development, and government activities; and*
- c. Organize workshops, policy dialogues, and site specific mediations to respond to coastal issues and conflict.*

Response:

The public will have ample opportunity to review and comment on the proposed project. A "Notice of Public Hearing" will be sent to the surrounding landowners and lessees within 500 feet of the subject property at least 30 days prior the SMA permit's public hearing. In addition, a Notice of Application and public hearing dates along with location maps will also be published in the Maui News. The public will be allowed to participate in the public hearing portion of the Maui Planning Commission review process.

9. Beach Protection

Objectives:

Protect beaches for public use and recreation.

Policies:

- a. Locate new structures inland from the shoreline setback to conserve open space and to minimize loss of improvements due to erosion;*
- b. Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions of erosion at the sites and do not interfere with existing recreational and waterline activities; and*
- c. Minimize the construction of public erosion-protection structures seaward of the shoreline*

Response:

Phase II, includes no structures or work near the ocean, beach or coastal features.

10. Marine Resources

Objectives:

Implement the State's ocean resource management plan.

Policies:

- a. Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;*
- b. Assure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;*
- c. Coordinate the management of marine and coastal resources and activities management to improve effectiveness and efficiency;*
- d. Assert and articulate the interest of the state as a partner with federal agencies in the sound management of the ocean resources within the United States exclusive economic zone;*
- e. Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon the ocean and coastal resources; and*
- f. Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.*

Response:

The project is located significantly inland and will have no direct impact on the region's coastal or marine resources, and with the incorporation of mitigation measures during construction there will be no adverse impact to nearshore waters from point and non-point sources of pollution. Therefore the subject property will not have a significant negative impact upon any coastal or marine resources.

References

County of Maui, Maui Planning Department. *The General Plan of the County of Maui*. 1990.

County of Maui. *Northshore Greenway Bikeway Component Master Plan*. August 1994.

County of Maui. *Wailuku-Kahului Community Plan*. 1987.

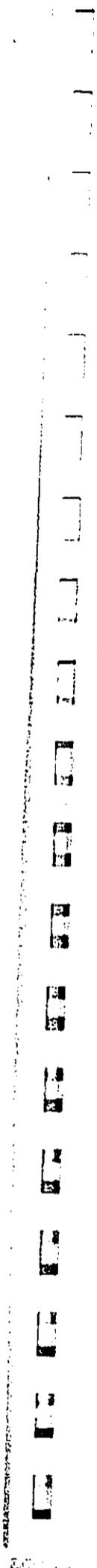
Federal Emergency Management Agency, *FIRM Flood Insurance Rate Map: Maui County, Hawaii*.

Community-Panel Number 15003 0190C. Revised September 6, 1989

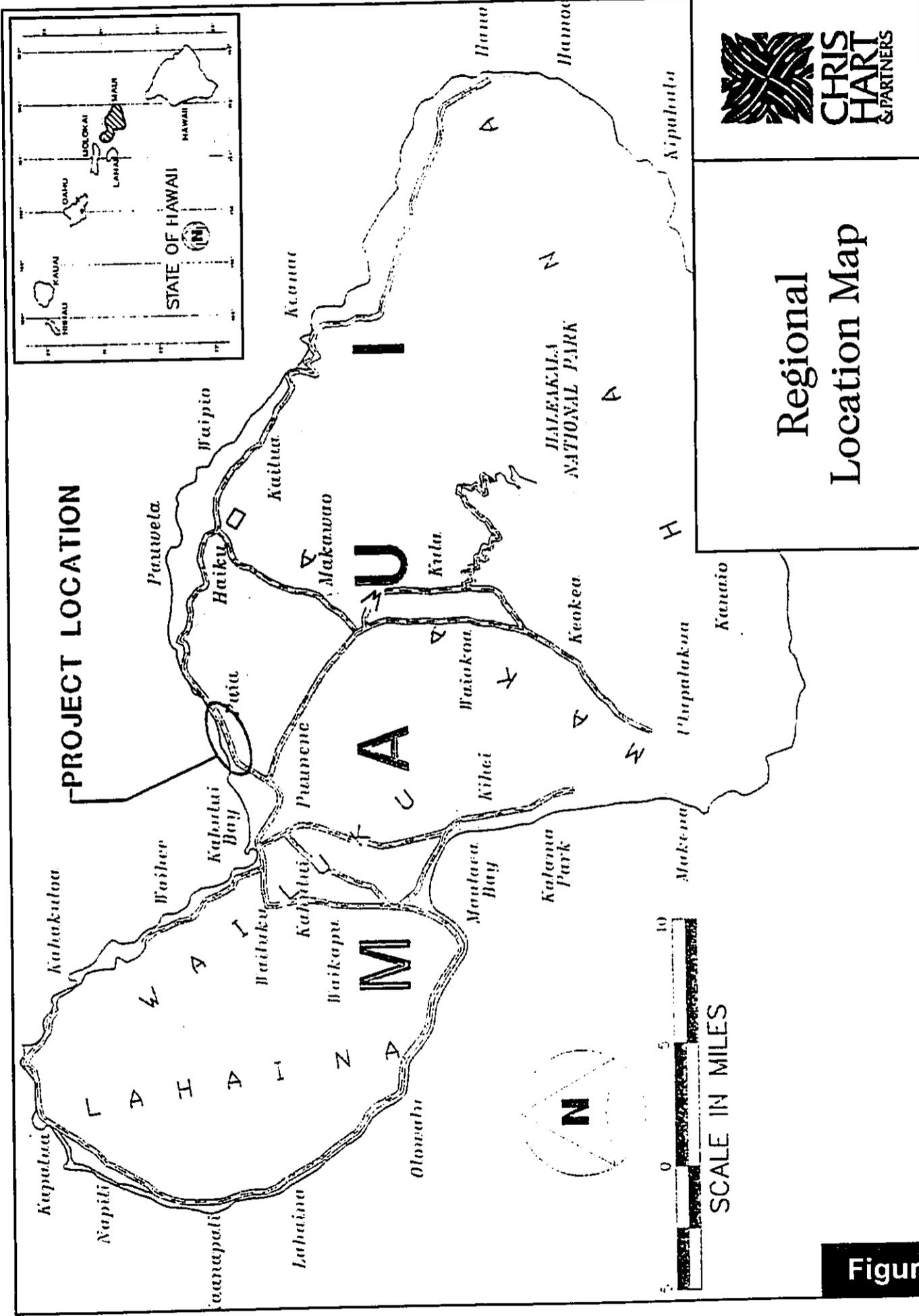
Community-Panel Number 15003 0195C. Revised March 16, 1995

State of Hawaii, Department of Transportation, Highways Division. *Bike Plan Hawaii, A State of Hawaii Master Plan*. April 1994.

US Department of Agriculture, Soil Conservation Service. *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai*. August 1972.



FIGURES



**Regional
Location Map**

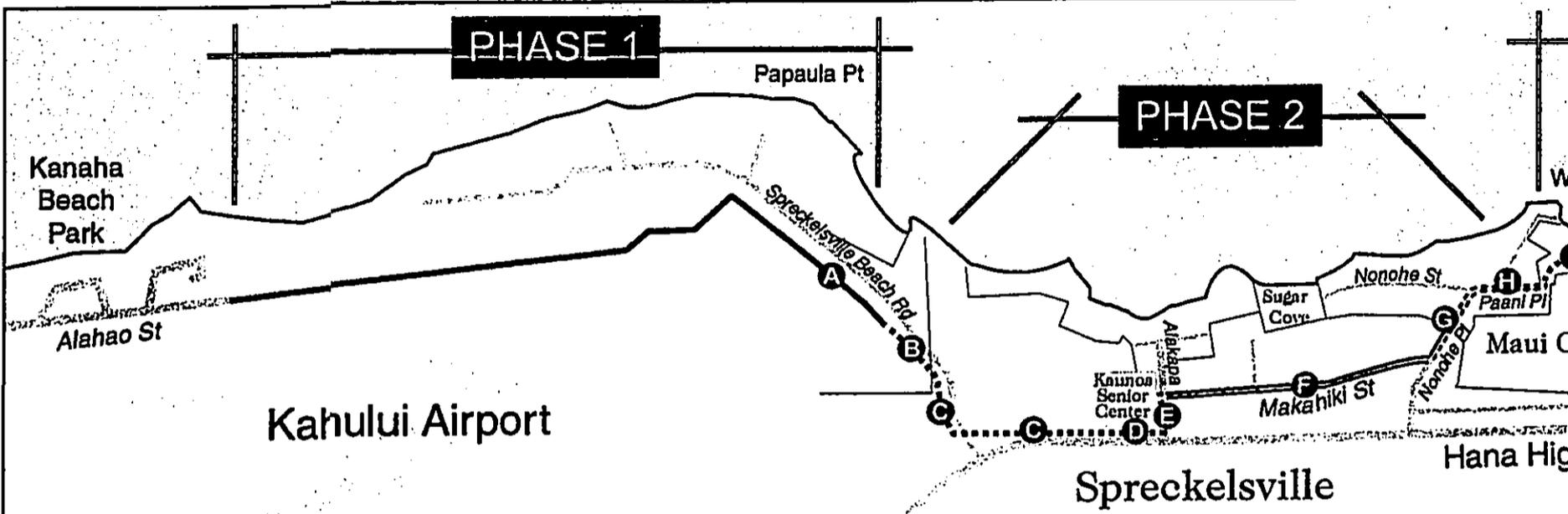


Figure 1

NORTHSHORE GREENWAY PHASE II

Source: Bikeway Plans prepared by RT Tanaka Engineers, Inc

Figure 1

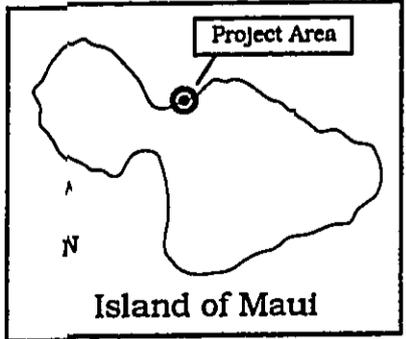
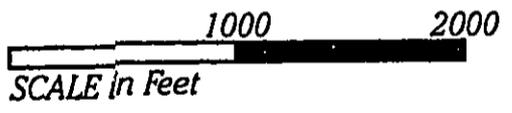


PHASE 1 "Airport Bikeway"

The "airport" section of the Northshore Bikeway is a separated pedestrian/cyclist "pathway" that extends from Kanaha Beach Park and travels makai of the Kahului Airport. The pathway runs along Spreckelsville Beach Road (Stable Road). The "airport" section of the bikeway was constructed in 1996 and is in use today.

PHASE 2 "Spreckelsville Bikeway"

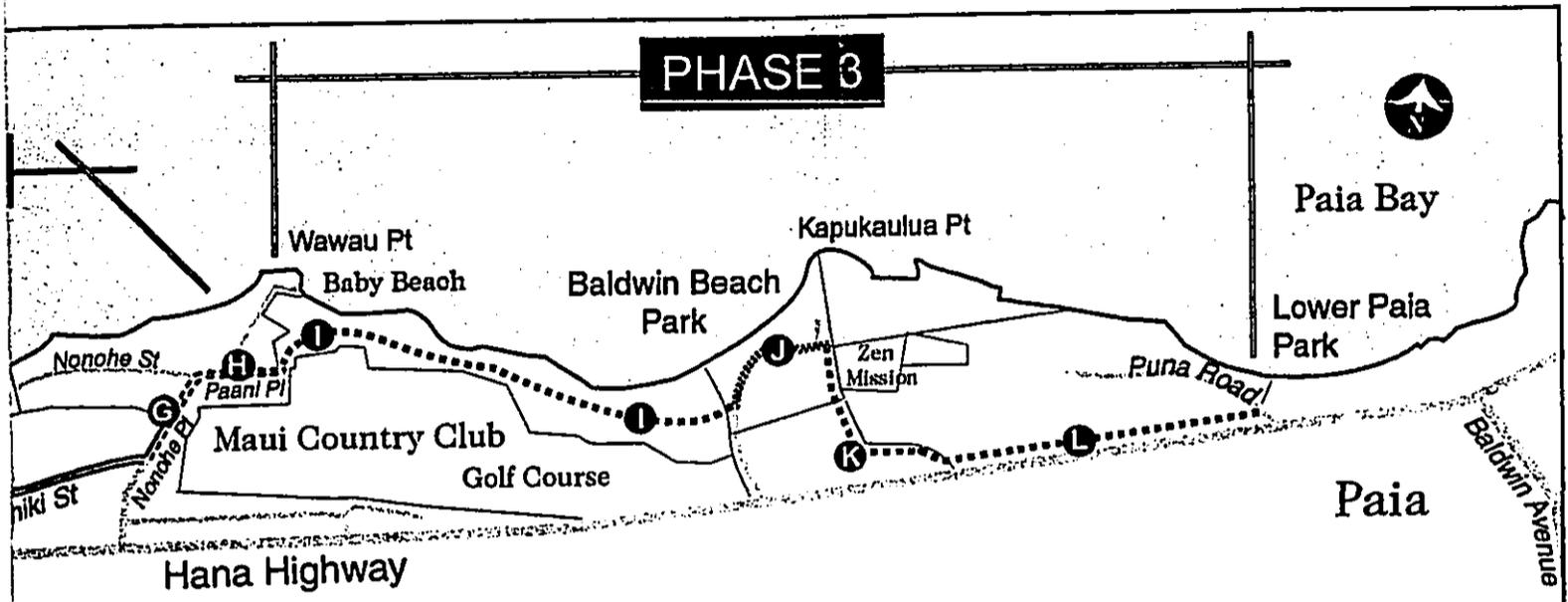
The "Spreckelsville" section of the Northshore Bikeway is a combination of separated bike "paths" and bike "lanes" within existing roadways. Phase II starts from the Phase I terminus along Spreckelsville Beach Road and extends along private and public roadways, finishing at the end of Pa'ani Place (by the Maui Country Club).



DETAILS

- A** End of existing Airport Bikeway. TMK (2) 3-8-1:122
- B** Planned beginning of Spreckelsville Bikeway. TMK
- C** Planned bike path through parcel TMK (2) 3-8-1:3
- D** Planned bike lane through Kaunoa Senior Center,
- E** Planned bike lane within right of way (ROW) of Ala
- F** Existing bike lanes within ROW of Makahiki Street
- G** Existing and planned bike lanes within ROW of No
- H** Planned bike lanes within ROW of Paani Place

Phases of the Northshore Bikeway



PHASE 3 "Baldwin Bikeway"

The "Baldwin" section of the Northshore Bikeway includes a scenic bike path through the wooded dune area mauka of Baldwin Beach, bike lanes and a bike paths through Baldwin Beach Park, and a seperated bike path along Hana Highway. Phase III will end at Lower Paia Park.

DETAILS

- I Planned bike path through parcel TMK (2) 3-8-1:72
- J Planned bike path through Baldwin Park, TMK (2) 2-5-5:47
- K Planned bike path through Baldwin Park, TMK (2) 2-5-5:46
- L Planned bike path through parcel TMK (2) 2-5-5:17

Bikeway"
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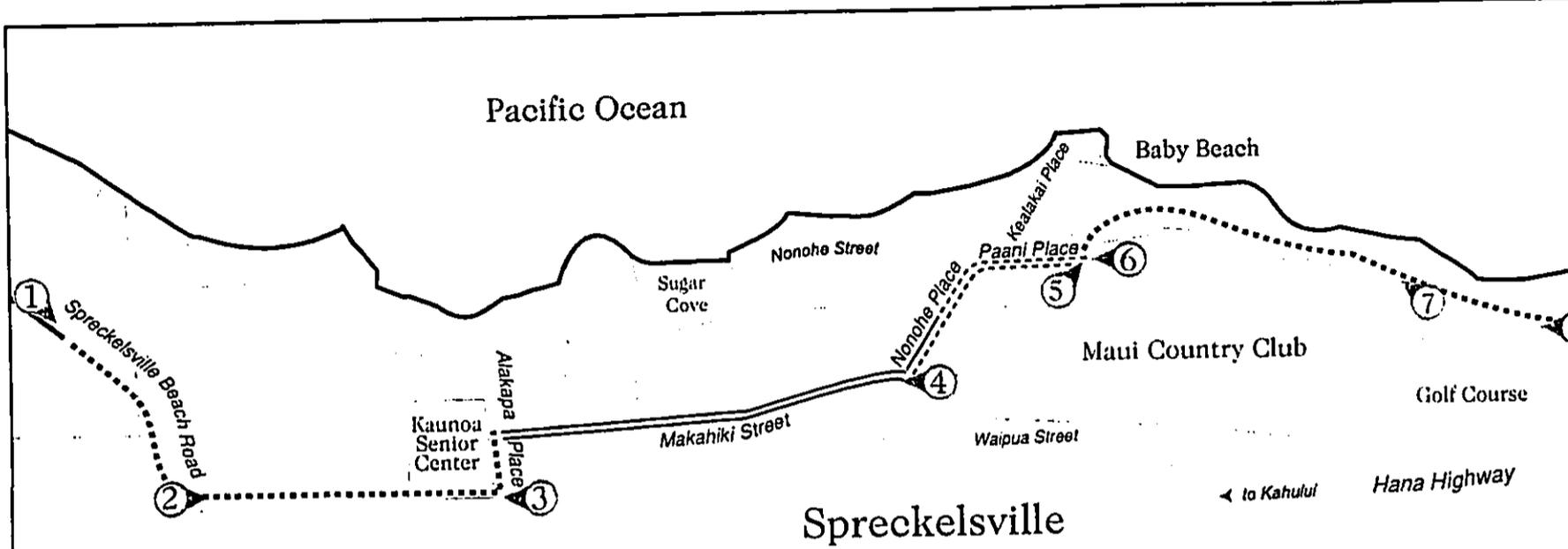
ay. TMK (2) 3-8-1:122
elsville Bikeway. TMK (2) 3-8-1:122
rcel TMK (2) 3-8-1:3
unoa Senior Center, TMK (2) 3-8-1:8
of way (ROW) of Alakapa Place
W of Makahiki Street
es within ROW of Nonohe Place
W of Paani Place

Route Map

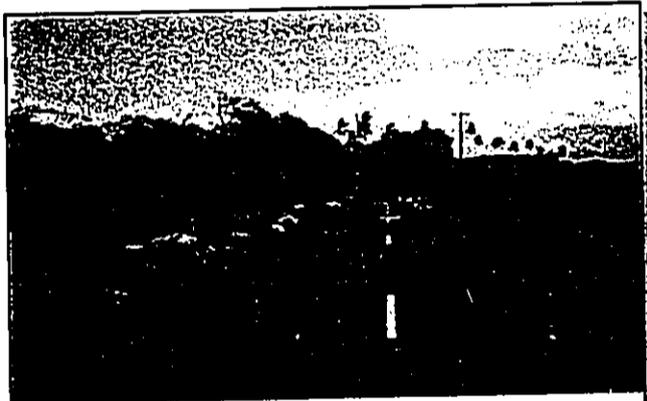


SPRECKELSVILLE BIKEWAY

Figure 2



Spreckelsville



1 End of the existing Airport Bikeway (center) and Spreckelsville Beach Road (left)



2 Row of Monkeypod trees running along Hana Highway



3 Existing road view



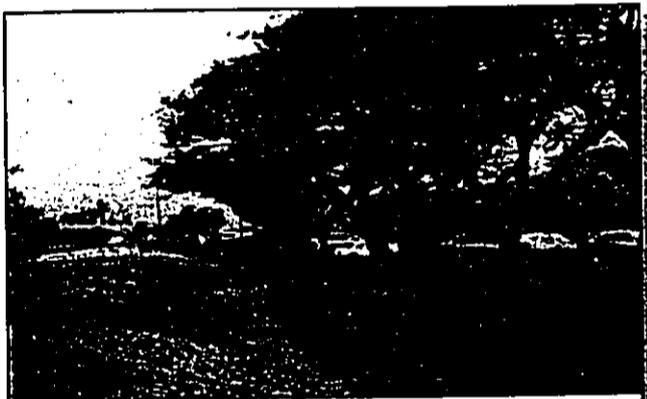
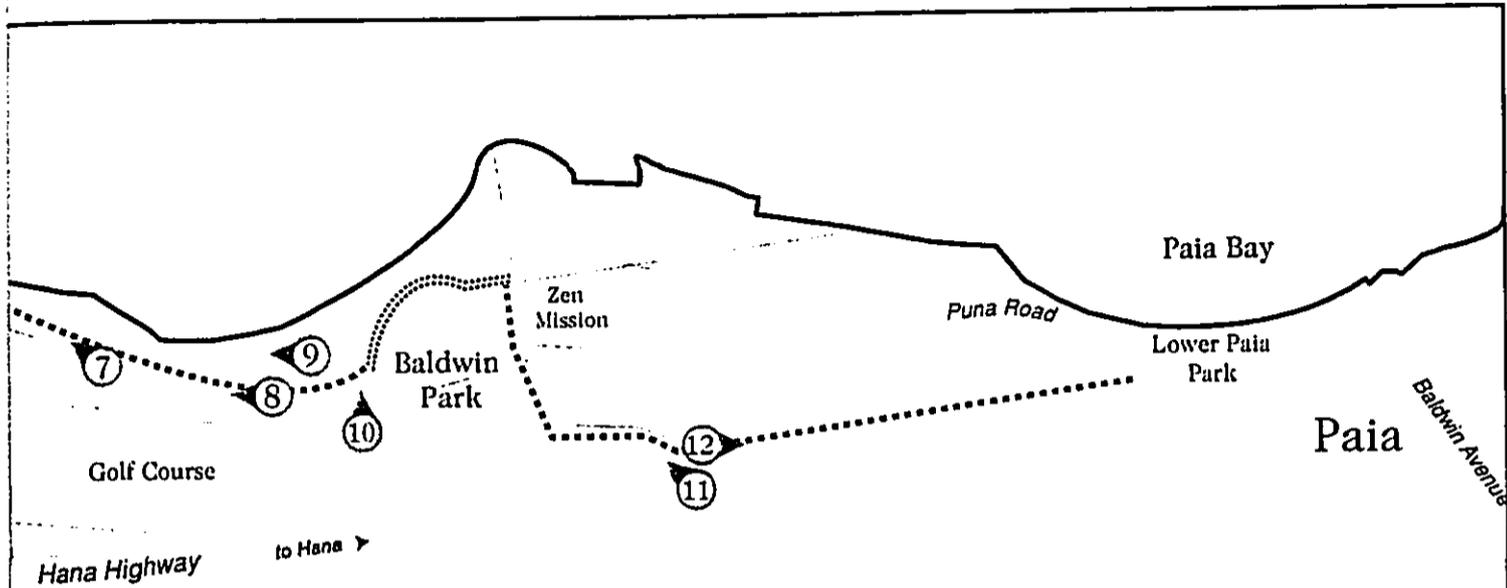
5 Wooded area behind caretaker residence of Maui Country Club



6 Paani Place



I



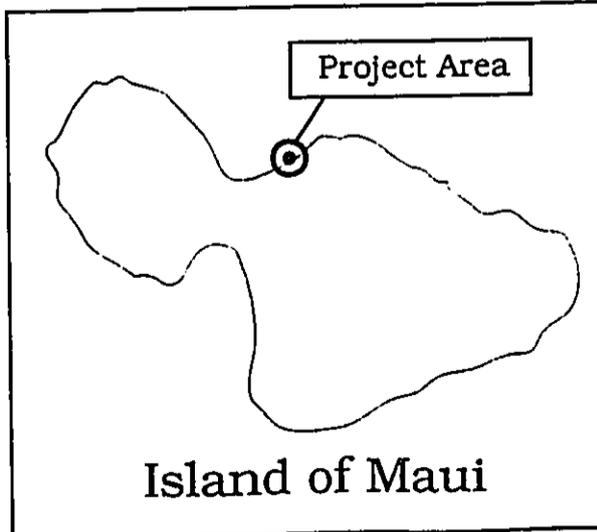
3

Existing access road along Kaunoa Senior Center



4

Makahiki Street with existing bike lanes



Island of Maui



1000 2000
SCALE in Feet

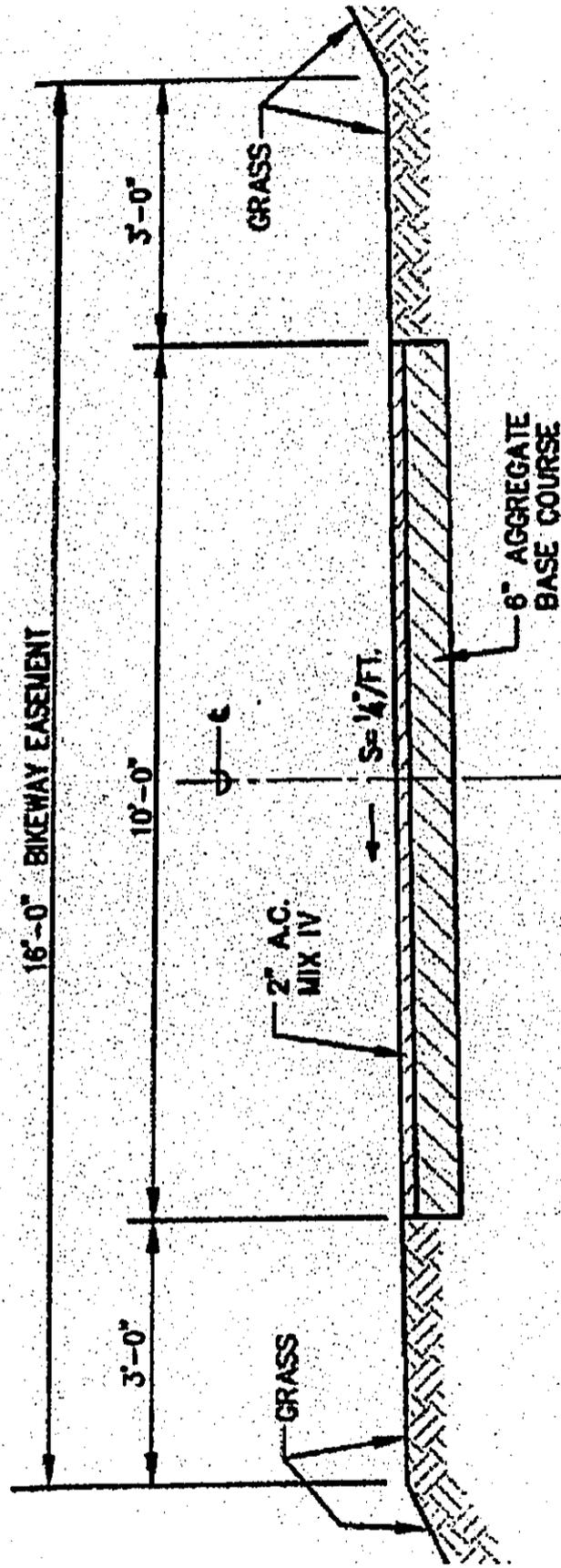
Route Photos
1-6



CHRIS
HART
& PARTNERS

NORTHSHORE GREENWAY PHASE II

Figure 3



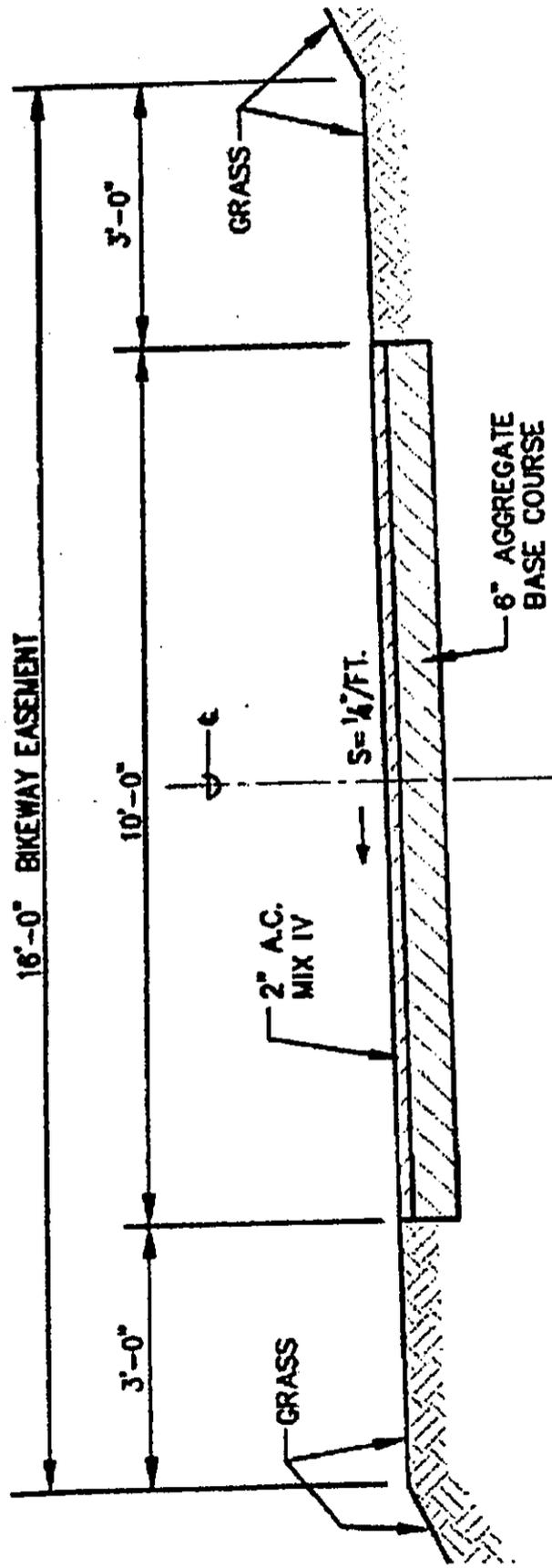
Standard Bikeway
Cross-Section

Figure 4

NORTHSHORE GREENWAY/PHASE II

Source: Bikeway Plans prepared by RT Tanaka Engineers, Inc

Figure 4



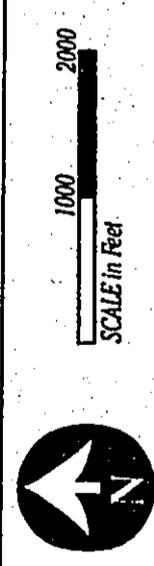
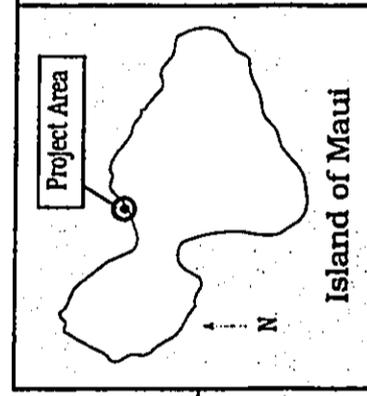
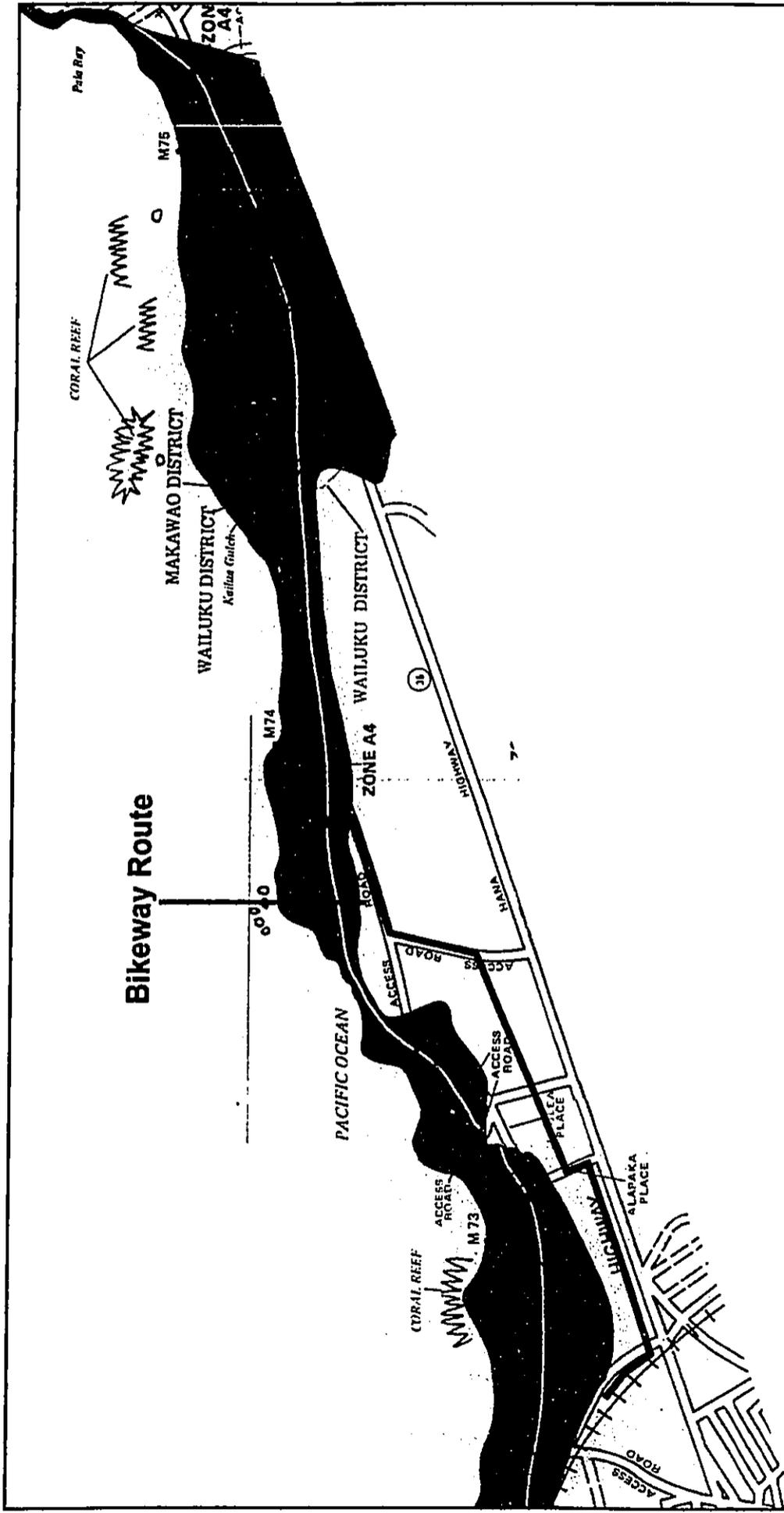
Standard Bikeway
Cross-Section

Figure 4

NORTHSHORE GREENWAY PHASE II

Source: Bikeway Plans prepared by RT Tanaka Engineers, Inc

Figure 4



CHRIS HART & PARTNERS

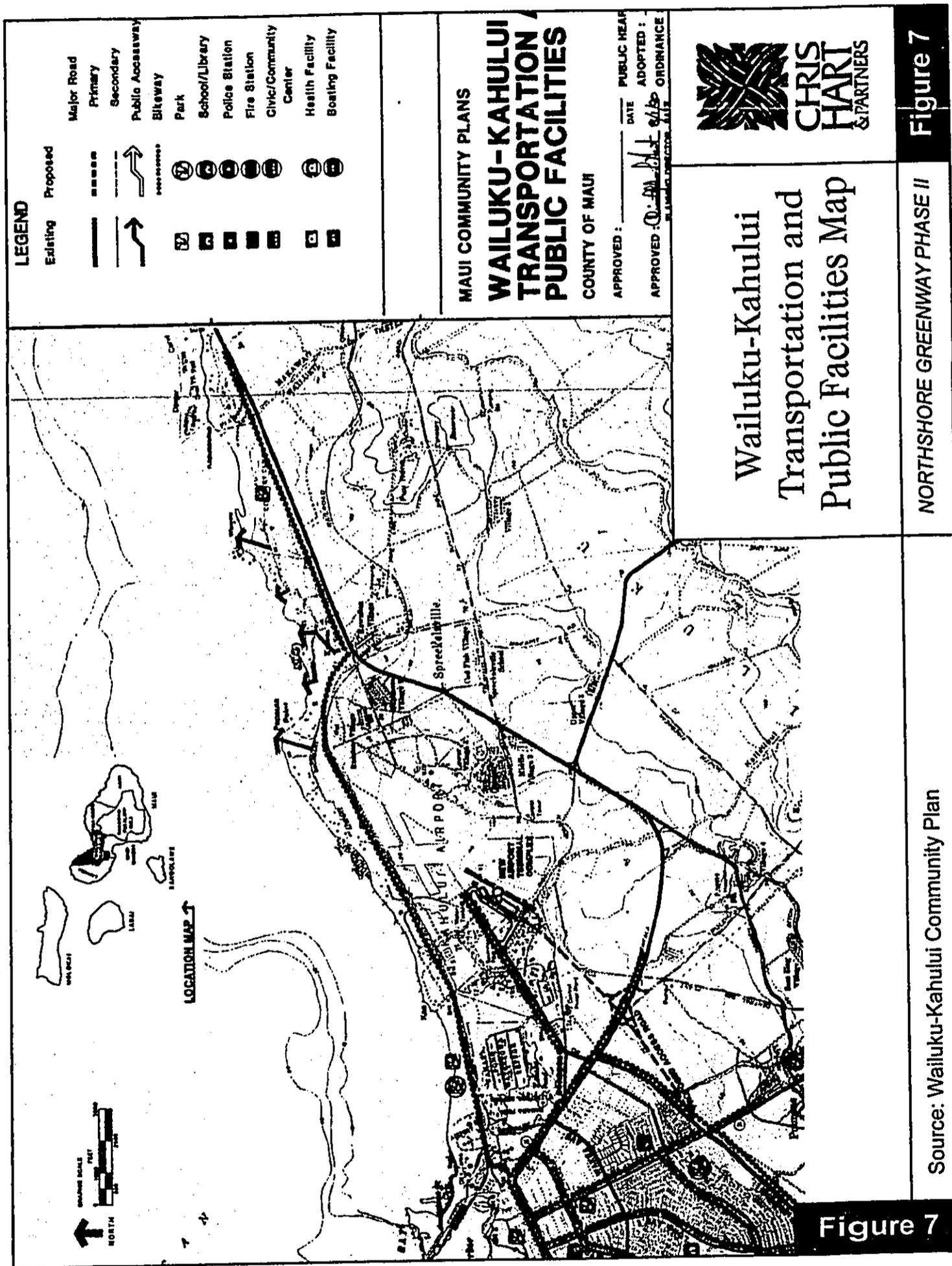
Flood Map

Figure 6

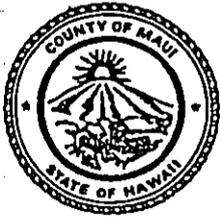
NORTHSHORE GREENWAY PHASE II

Source: FEMA Flood Insurance Rate Maps

Figure 6



AGENCY COMMENT LETTERS



DEPARTMENT OF
PARKS AND RECREATION
COUNTY OF MAUI

1580-C KAAHUMANU AVENUE WAILUKU, HAWAII 96799 JAN 29 P2:35

JAMES 'KIMO' APANA
Mayor

FLOYD S. MIYAZONO
Director

ELIZABETH D. MENOR
Deputy Director

(808) 243-7230
FAX (808) 243-7934

RECEIVED
DEPT OF PARKS & RECREATION
JAN 27 1999

MEMO TO: John E. Minn, Planning Director

Floyd S. Miyazono
FROM: FLOYD S. MIYAZONO, Director

SUBJECT: Northshore Greenway - Phase II
TMK: 2-5-005;; 3-8-001: (Multiple Plats)

We have reviewed the subject application and have no comments or objections to the proposed action.

Thank you for the opportunity to review and comment. Should you have any questions, please contact me or Patrick T. Matsui, Chief-Planning and Development, at 243-7931.

c: Patrick T. Matsui, Chief of Planning and Development

s:\planning\ptm\greenway.wpd

JAMES "KIMO" APANA
Mayor

DAVID C. GOODE
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director

TEL. (808) 270-7745
FAX (808) 270-7975



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
ENGINEERING DIVISION
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

March 9, 2001

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

RONALD R. RISKI, P.E.
Wastewater Reclamation Division

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

ANDREW M. HIROSE
Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

TO: Mr. Floyd Miyazono, Director
County Department of Parks and Recreation
1580-C Kaahumanu Avenue
Wailuku HI 96793

Dear Mr. Miyazono,

RE: Northshore Bikeway - Phase II
Spreckelsville, Maui, Hawaii
County ROW & TMK (2) 3-8-1:3, 8, 71, 122
SM1 98-0025

We are in receipt of your agency comments Dated January 27, 1999, offering "no comments or objections" with respect to the Draft Environmental Assessment of (phase II) of the Northshore Bikeway. Thank you for your response and cooperation.

Respectfully yours,


David Goode, Director
Department of Public Works and Waste Management



'99 JAN 28 P12:56

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVE

January 27, 1999

Mr. John E. Min
Planning Director
County of Maui
Maui Planning Department
250 So. High Street
Wailuku, HI 96793

Dear Mr. Min:

Subject: Northshore Greenway - Phase II
SM1 980025
TMK: 2-5-005;; 3-8-001: (Multiple Plats), Paia, Maui

Thank you for allowing us to comment on the subject project.

In reviewing the information transmitted and our records, Maui Electric Company (MECO) at this time has no objections to the proposed project.

If you have any questions or concerns, please call Fred Oshiro at 872-3202.

Sincerely,

Edward Reinhardt
Manager, Engineering

FO:lh

JAMES "KIMO" APANA
Mayor

DAVID C. GOODE ;
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director

TEL. (808) 270-7745
FAX (808) 270-7975



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
ENGINEERING DIVISION
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

March 9, 2001

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

RONALD R. RISK, P.E.
Wastewater Reclamation Division

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Engineering Division

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Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

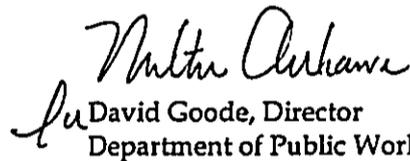
TO: Mr. Edward Reinhardt
Manager, Engineering
Maui Electric Company Ltd.
PO Box 398
Kahului, HI 96733-6898

Dear Mr. Reinhardt,

RE: Northshore Bikeway - Phase II
Spreckelsville, Maui, Hawaii
County ROW & TMK (2) 3-8-1:3, 8, 71, 122
SM1 98-0025

We are in receipt of your agency comments Dated January 27, 1999, offering "no objections" with respect to the Draft Environmental Assessment of (phase II) of the Northshore Bikeway. Thank you for your response and cooperation.

Respectfully yours,


David Goode, Director
Department of Public Works and Waste Management

107

BENJAMIN J. CAYETANO
GOVERNOR



'99 FEB -1 P3:03

RAYMOND H. SATO
COMPTROLLER

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING
AND GENERAL SERVICES
SURVEY DIVISION
P. O. BOX 119
HONOLULU, HAWAII 96810

RESPONSE REFER TO:

FILE NO. _____

January 28, 1999

MEMORANDUM

TO: Mr. John E. Min, Planning Director
Maui County Planning Department

ATTN.: Mr. Simone Bosco, Staff Planner

FROM: Randall M. Hashimoto, State Land Surveyor

SUBJECT: SM1 980025
TMK: 2-5-005;; 3-8-001:(Multiple Plats)
PROJ. NAME: Northshore Greenway - Phase II
Located at Paia, Maui, Island
Applicant: Chris Hart & Partners

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

Randall M. Hashimoto
RANDALL M. HASHIMOTO
State Land Surveyor

JAMES "KIMO" APANA
Mayor

DAVID C. GOODE
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director

TEL. (808) 270-7745
FAX (808) 270-7975



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
ENGINEERING DIVISION

200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

March 9, 2001

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

RONALD R. RISKA, P.E.
Wastewater Reclamation Division

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

ANDREW M. HIROSE
Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

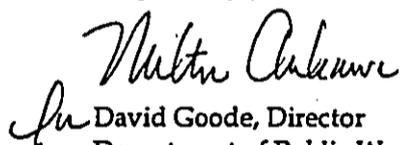
TO: Mr. Randall M. Hashimoto
State Land Surveyor
State Department of Accounting and General Services
Survey Division
PO Box 119
Honolulu HI 96810

Dear Mr. Hashimoto,

RE: Northshore Bikeway - Phase II
Spreckelsville, Maui, Hawaii
County ROW & TMK (2) 3-8-1:3, 8, 71, 122
SM1 98-0025

We are in receipt of your agency comments Dated January 28, 1999, offering "no Government Survey Triangulation Stations and Benchmarks are affected" with respect to the Draft Environmental Assessment of (phase II) of the Northshore Bikeway. Thank you for your response and cooperation.

Respectfully yours,


David Goode, Director
Department of Public Works and Waste Management

JAMES "KIMO" APANA
MAYOR



CLAYTON T. ISHIKAWA
CHIEF
FRANK E. FERNANDEZ, JR.
DEPUTY CHIEF

COUNTY OF MAUI
DEPARTMENT OF FIRE CONTROL

200 DAIRY ROAD
KAHULUI, MAUI, HAWAII 96732
(808) 243-7561
FAX (808) 243-7919

'99 FEB -1 P3:06

DEPT. OF FIRE CONTROL
RECEIVED

January 29, 1999

Ms Simone Bosco, Staff Planner
County of Maui, Department of Planning
250 South High Street
Wailuku, HI 96793

RE: Northshore Greenway-Phase II; TMK: 2-5-05;; 3-8-01:Multiple
Plats; SM1 980025

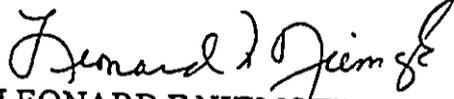
Dear Ms Bosco,

Thank you for the opportunity to comment on the Northshore Greenway-Phase II
special management area application.

The Department of Fire Control has no objection to granting the SMA permit.

If you have any questions, you may contact me at extension 7566.

Sincerely,


LEONARD F NIEMOZYK
Captain, Fire Prevention Bureau

cc: Inspector L. Montalvo

MFD-SMA 980025 (01.99)

JAMES "KIMO" APANA
Mayor

DAVID C. GOODE
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director

TEL. (808) 270-7745
FAX (808) 270-7975



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
ENGINEERING DIVISION
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

March 9, 2001

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

RONALD R. RISK, P.E.
Wastewater Reclamation Division

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

ANDREW M. HIROSE
Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

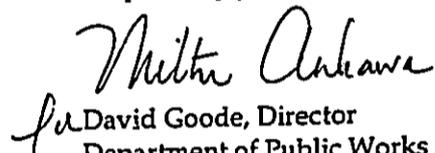
TO: Mr. Leonard F Niemczyk
County Department of Fire Control
200 Dairy Road
Kahului HI 96732

Dear Mr. Niemczyk,

RE: Northshore Bikeway - Phase II
Spreckelsville, Maui, Hawaii
County ROW & TMK (2) 3-8-1:3, 8, 71, 122
SM1 98-0025

We are in receipt of your agency comments Dated January 29, 1999, offering "no objections" with respect to the Draft Environmental Assessment of (phase II) of the Northshore Bikeway. Thank you for your response and cooperation.

Respectfully yours,


for David Goode, Director
Department of Public Works and Waste Management

BENJAMIN J. CAYETANO
GOVERNOR



ESTHER UEDA
EXECUTIVE OFFICER

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
LAND USE COMMISSION

P.O. Box 2359
Honolulu, HI 96804-2359
Telephone: 808-587-3822
Fax: 808-587-3827

January 29, 1999

'99 FEB -1 P1:08

Mr. John E. Min
Director of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Min:

Subject: Application for a Special Management Area Permit (SM1 980025), Phase II of The Northshore Greenway, Spreckelsville, Maui, TMK 2-5-05: 17, 46, 47; 3-8-01: 3, 8, 72, 122

We have reviewed the application for the subject project forwarded by your transmittal dated January 20, 1999, and have the following comments:

- 1) We confirm that the project area, as represented on the Route Map (Figure 2), is designated within the State Land Use Urban and Agricultural Districts. We note that the application incorrectly refers to the latter district as the "Agriculture" District.
- 2) We note that the project area is located immediately makai (north) of the approximately 212 acres currently proposed for reclassification from the Agricultural District to the Urban District for residential units, 9-hole golf course, and a park (LUC Docket No. A98-725/A&B Properties, Inc.).

We have no further comments to offer at this time. We appreciate the opportunity to comment on the subject application.

Should you have any questions, please feel free to call me or Bert Saruwatari of our office at 587-3822.

Sincerely,

A handwritten signature in cursive script, appearing to read "Esther Ueda".

ESTHER UEDA
Executive Officer

EU:th

JAMES "KIMO" APANA
Mayor

DAVID C. GOODE
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director

TEL. (808) 270-7745
FAX (808) 270-7975



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
ENGINEERING DIVISION
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

March 9, 2001

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

RONALD R. RISK, P.E.
Wastewater Reclamation Division

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

ANDREW M. HIROSE
Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

TO: Mr. Esther Ueda, Executive Officer
State Department of Business, Economic Development, and Tourism
Land Use Commission
PO Box 2359
Honolulu HI 96804-2359

Dear Mr. Ueda,

RE: Northshore Bikeway - Phase II
Spreckelsville, Maui, Hawaii
County ROW & TMK (2) 3-8-1:3, 8, 71, 122
SM1 98-0025

We are in receipt of your agency comments Dated January 29, 1999 which confirm that the project is "designated within the State Land Use Urban and Agricultural Districts" with respect to the Draft Environmental Assessment of (phase II) of the Northshore Bikeway. Thank you for your response and cooperation.

Respectfully yours,

A handwritten signature in cursive script, appearing to read "David Goode".

David Goode, Director
Department of Public Works and Waste Management



United States
Department of
Agriculture

Natural
Resources
Conservation
Service

10 Imi Kala St.
Suite 209
Wailuku, HI
96793-2100

Our People... Our Islands... In Harmony

95 FEB -4 P 2:15

DATE: February 3, 1999

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

Dear Mr. Min.

SUBJECT: Northshore Greenway - Phase II; TMK: 2-5-005: i
I.D. SM1 980025

The existing earthen crossing at Kailua Gulch should be addressed. This gulch is the only drainage outlet within the Spreckelsville area and drains acres of agricultural and urban areas throughout HC&S sugarcane fields and the town of Makawao and above. Future urban developments within the watershed should be noted.

Thank you for the opportunity to comment.

Sincerely,

Neal S. Fujiwara
District Conservationist

JAMES "KIMO" APANA
Mayor

DAVID C. GOODE
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director

TEL. (808) 270-7745
FAX (808) 270-7975



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
ENGINEERING DIVISION

200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

March 9, 2001

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

RONALD R. RISKA, P.E.
Wastewater Reclamation Division

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

ANDREW M. HIROSE
Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

TO: Mr. Neal S. Fujiwara
District Conservationist
United States Department of Agriculture
Natural Resource Conservation Service
210 Imi Kala Street, Suite 209
Wailuku HI 96793-2100

Dear Mr. Fujiwara,

RE: Northshore Bikeway - Phase II
Spreckelsville, Maui, Hawaii
County ROW & TMK (2) 3-8-1:3, 8, 71, 122
SM1 98-0025

We are in receipt of your agency comments Dated February 3, 1999, which state that "the existing earthen crossing at Kailua Gulch should be addressed" with respect to the Draft Environmental Assessment of (phase II) of the Northshore Bikeway.

We first wish to note that Phase II of the project has been bifurcated since the December 1998 Draft EA. The section of the bikeway that includes Kailua Gulch is now designated as Phase III of the Northshore Greenway, and will be evaluated under a separate Environmental Assessment. (Please see the attached diagram)

Second, the planned crossing for Kailua Gulch does not require work below the ordinary high water mark. The Department of Army has confirmed that the project will not require a DA permit

Thank you for your response and cooperation.

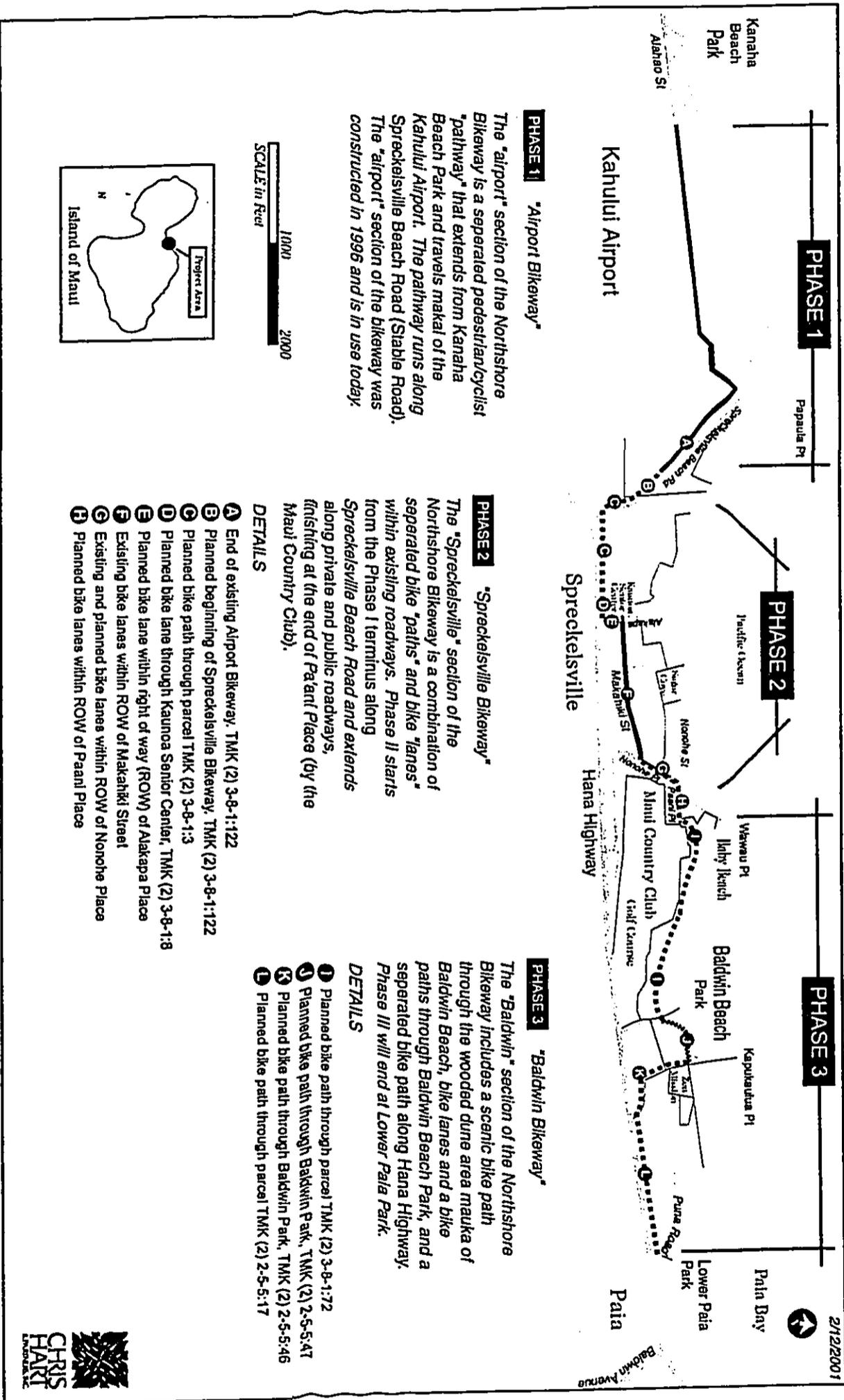
Respectfully yours,

A handwritten signature in cursive script, appearing to read "David Goode".

for David Goode, Director
Department of Public Works and Waste Management

Attachment (Map)

Phases of the Northshore Bikeway





'99 MAR 22 P2:40

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1109
WAILUKU, MAUI, HAWAII 96793-7109
Telephone (808) 243-7816 • Fax (808) 243-7833

2/4/99

Mr. John E. Min, Director
County of Maui
Planning Department
250 South High Street
Wailuku, Maui, Hawaii 96793

Re: I.D.: SM1 980025
TMK: 2-5-5:, 3-8-1: (multiple plats)
PROJECT NAME: North Shore Greenway - Phase II

Dear Mr. Min,

Thank you for the opportunity to review this application. The Department of Water Supply has the following comments.

We have no objection to the approval of the SM1 application. However, the applicants should be made aware of the DWS transmission lines in the area of the project. In construction of the bikeways, please make sure that where ever applicable our existing water valve covers in the area are adjusted to match the bikeways' final grade. Attached are the sections of our fire protection maps showing the alignments of our waterlines in the project area.

We ask that the applicants assist in water conservation by using non-potable water, where possible, for dust control during the construction process.

We are pleased to note that the applicant will select climate-adapted native plants for revegetation and landscaping. Native salt-tolerant plants conserve water and further protect the watershed from degradation due to invasive alien species. The project site is located in "Maui County Planting Plan" - Plant Zones 3 and 5. Please refer to the "Maui County Planting Plan", and to the attached documents, "XERISCAPE: Water Conservation Through Creative Landscaping" and "Some of Maui's Native and Polynesian Plants."

The project overlies the Kahului and Paia aquifers. In order to protect groundwater and surface water resources, DWS recommends that the applicant utilize Best Management Practices (BMPs) designed to minimize infiltration and runoff from all construction and vehicle operations. We have attached sample BMPs for principle operations and a list of references. Additional information is available from the State Department of Health.

If you need more information, please contact our Water Resources and Planning Division anytime at 243-7199.

Sincerely,



David Craddick
Director
emb

cc: engineering division
applicant w/attachments:

Maui County Planting Plan
Invasive Plant list

"XERISCAPE - Water Conservation through Creative Landscaping"

References for Further Reading from "The Megamanual - Nonpoint Source Management Manual".
Commonwealth of Massachusetts

Selected BMPs from "Guidance Specifying Management Measures for Sources of Nonpoint
Pollution In Coastal Waters".

JAMES "KIMO" APANA
Mayor

DAVID C. GOODE
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director

TEL. (808) 270-7745
FAX (808) 270-7975



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
ENGINEERING DIVISION
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

March 9, 2001

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

RONALD R. RISKA, P.E.
Wastewater Reclamation Division

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

ANDREW M. HIROSE
Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

TO: Mr. David Craddick, Director
County Department of Water Supply
PO Box 1109
Wailuku HI 96793-7109

Dear Mr. Craddick,

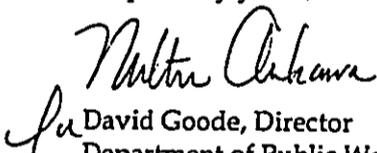
RE: Northshore Bikeway - Phase II
Spreckelsville, Maui, Hawaii
County ROW & TMK (2) 3-8-1:3, 8, 71, 122
SM1 98-0025

We are in receipt of your agency comments Dated February 4, 1999, offering "no objection" with respect to the Draft Environmental Assessment of (phase II) of the Northshore Bikeway.

We confirm that existing water valve covers will be adjusted to match the bikeway's final grade. To protect air and water resources, dust and erosion controls will be implemented. This will include watering of graded areas and prompt re-vegetation of disturbed soils. Water for the dust control will utilize non-potable sources.

Thank you for your response and cooperation.

Respectfully yours,


David Goode, Director
Department of Public Works and Waste Management



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

REPLY TO
ATTENTION OF

February 8, 1999

'99 FEB -8 12:14

Civil Works Branch

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

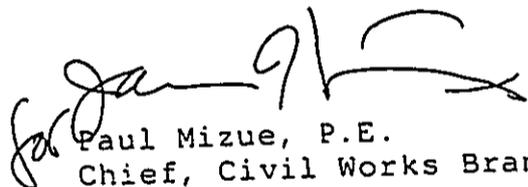
Dear Mr. Bosco:

Thank you for the opportunity to review and comment on the Special Management Area Application and Draft Environmental Assessment (DEA) for the Northshore Greenway Phase III, Sprecklesville, Maui, Hawaii (TMKs 2-5-5 and 3-8-1). The following comments are provided in accordance with U.S. Army Corps of Engineers authorities to provide flood hazard information and to issue Department of the Army (DA) permits.

a. Page 13 of the document indicates that all work at the Kailua Gulch crossing will be above the ordinary high water mark. Based on this understanding, a DA permit will not be required for the project.

b. The flood hazard information provided on page 11 of the DEA is correct.

Sincerely,


Paul Mizue, P.E.
Chief, Civil Works Branch

JAMES "KIMO" APANA
Mayor

DAVID C. GOODE
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director

TEL. (808) 270-7745
FAX (808) 270-7975



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
ENGINEERING DIVISION

200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

March 9, 2001

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

RONALD R. RISK, P.E.
Wastewater Reclamation Division

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

ANDREW M. HIROSE
Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

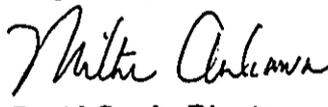
TO: Mr. Paul Mizue, Chief
Civil Works Branch
US Department of the Army
US Army Engineer District, Honolulu
Ft. Shafter HI 96858-5440

Dear Mr. Mizue,

RE: Northshore Bikeway - Phase II
Spreckelsville, Maui, Hawaii
County ROW & TMK (2) 3-8-1:3, 8, 71, 122
SM1 98-0025

We are in receipt of your agency comments Dated February 8, 1999, which confirm the flood hazard information and DA permit requirement with respect to the Draft Environmental Assessment of (phase II) of the Northshore Bikeway. Thank you for your response and cooperation.

Respectfully yours,


David Goode, Director
Department of Public Works and Waste Management



JAMES "KIMO" APANA
MAYOR

OUR REFERENCE
at
YOUR REFERENCE

POLICE DEPARTMENT
COUNTY OF MAUI

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
FAX (808) 244-6411

'99 FEB 12 MCH THOMAS M. PHILLIPS
CHIEF OF POLICE

CHARLES H.P. HALL
DEPUTY CHIEF OF POLICE

February 11, 1999

MEMORANDUM

TO : DIRECTOR, PLANNING DEPARTMENT
FROM : THOMAS M. PHILLIPS, CHIEF OF POLICE
SUBJECT : I.D.: SM1 980025
TMK: 2-5-005;; 3-8-001:(Multiple Plats)
Project Name: Northshore Greenway - Phase II
Located at Paia, Maui, Island
Applicant: Chris Hart & Partners

No recommendation or special condition is necessary or desired.
 Refer to attachment(s).


Assistant Chief Robert Tam Ho
For: THOMAS M. PHILLIPS
Chief of Police

DOCUMENT CAPTURED AS RECEIVED

TO: CHIEF TOM PHILLIPS, MAUI POLICE DEPARTMENT
VIA: CHANNELS *AC [Signature] 2/10/99*
FROM: K. DIXON, MAKAWAO COMMUNITY POLICE OFFICER
SUBJECT: PHASE II, NORTSHORE GREENWAY

On 1/26/99 I was assigned to give input on the proposed phase II of the Northshore Greenway.

The proposed bikeway would be compatible with the undeveloped land and residential areas it will cross. It will allow non-motorized vehicles safe access to recreational areas, and other points between Kahului and Paia.

According to the application, it will not affect archaeological or historical areas; and except for construction disturbance, will create no changes in noise or air quality. It will have little visual affect on its surroundings, and will require no power.

This route was favored over others for its scenic value, safety, and low impact on terrain. The proposal is in compliance with the County General Plan, and Community Plans.

As far as traffic safety, a greenway would contribute to the safety of bikers, skateboarders, etc., as they would no longer be travelling along a narrow, windy, heavily used highway.

Possible hazards would be at intersections with motorized traffic, and the fact that it will not be lighted at night. Appropriate signs, and marking on the pavement should decrease intersection problems.

Respectfully submitted by

*Noted
2-10-99
6020
Sgt. [Signature]
noted / concn.
To J. [Signature] 8467
02/10/99 0810KIR*

[Signature]
Kristina DIXON 8447
2/9/99 1430 hrs.

*SAFETY MAY BE A CONCERN FOR WOODED AREAS & BACK ROAD AREAS. SUGGEST SHRUBS CLOSE TO GREENWAY BE CUT BACK & KEPT LOW. PROPER LIGHTING WOULD ALSO BE A BENEFIT (POSSIBLY UTILIZING SOLAR LIGHTS). IF THE COMMUNITY WISHES, COULD COORDINATE A GREENWAY PATROL, ETC.
[Signature] 8447
2/6/99*

JAMES "KIMO" APANA
Mayor

DAVID C. GOODE
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director



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

RONALD R. RISKI, P.E.
Wastewater Reclamation Division

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

ANDREW M. HIROSE
Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

TEL. (808) 270-7745
FAX (808) 270-7975

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
ENGINEERING DIVISION
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793
March 9, 2001

TO: Mr. Thomas M. Phillips, Chief
County Police Department
55 Mahalani Street
Wailuku HI 96793

Dear Mr. Phillips,

RE: Northshore Bikeway - Phase II
Spreckelsville, Maui, Hawaii
County ROW & TMK (2) 3-8-1:3, 8, 71, 122
SM1 98-0025

We are in receipt of your agency comments Dated February 11, 1999, with respect to the Draft Environmental Assessment of (phase II) of the Northshore Bikeway.

We note your concern for safety in "back road and wooded areas". We wish to note that Phase II of the project has been bifurcated since the December 1998 Draft EA. (Please see the attached map). Phase III, which includes the majority of "wooded areas" (Baldwin Beach) will be addressed under a separate Environmental Assessment.

We appreciate your willingness to partner with the community if they so desire to coordinate a "Greenway Patrol".

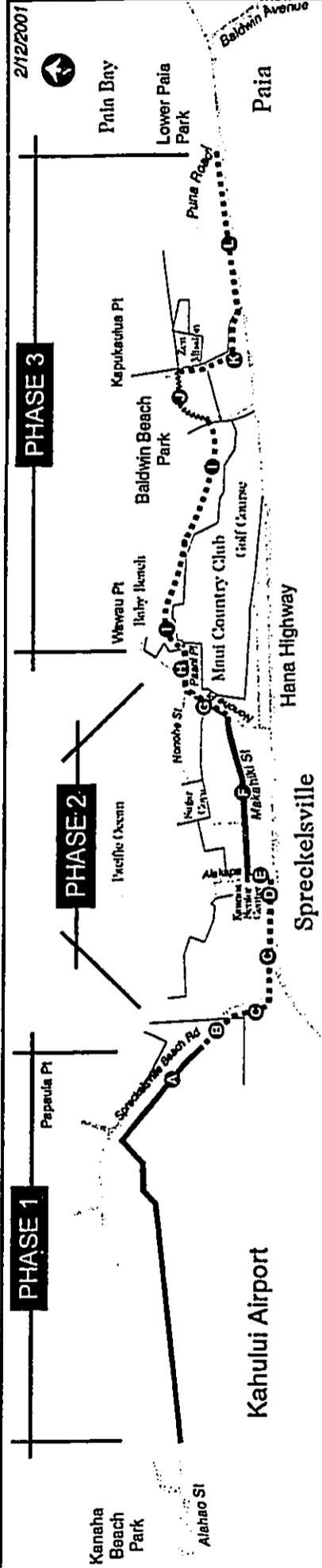
Thank you for your response and cooperation.

Respectfully yours,


for David Goode, Director
Department of Public Works and Waste Management

Attachment (Map)

Phases of the Northshore Bikeway



2/12/2001

PHASE 1 "Airport Bikeway"

The "airport" section of the Northshore Bikeway is a separated pedestrian/cyclist "pathway" that extends from Kanaha Beach Park and travels makai of the Kahului Airport. The pathway runs along Spreckelsville Beach Road (Stable Road). The "airport" section of the bikeway was constructed in 1996 and is in use today.

PHASE 2 "Spreckelsville Bikeway"

The "Spreckelsville" section of the Northshore Bikeway is a combination of separated bike "paths" and bike "lanes" within existing roadways. Phase II starts from the Phase I terminus along Spreckelsville Beach Road and extends along private and public roadways, finishing at the end of Paani Place (by the Maui Country Club).

PHASE 3 "Baldwin Bikeway"

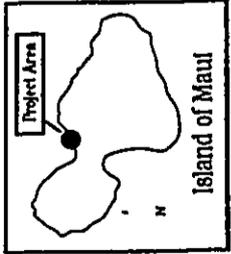
The "Baldwin" section of the Northshore Bikeway includes a scenic bike path through the wooded dune area mauka of Baldwin Beach, bike lanes and a bike paths through Baldwin Beach Park, and a separated bike path along Hana Highway. Phase III will end at Lower Paia Park.

DETAILS

- 1 Planned bike path through parcel TMK (2) 3-8-1:72
- 2 Planned bike path through Baldwin Park, TMK (2) 2-5-5:47
- 3 Planned bike path through Baldwin Park, TMK (2) 2-5-5:46
- 4 Planned bike path through parcel TMK (2) 2-5-5:17

DETAILS

- A End of existing Airport Bikeway, TMK (2) 3-8-1:122
- B Planned beginning of Spreckelsville Bikeway, TMK (2) 3-8-1:122
- C Planned bike path through parcel TMK (2) 3-8-1:3
- D Planned bike lane through Kaunoa Senior Center, TMK (2) 3-8-1:8
- E Planned bike lane within right of way (ROW) of Alakapa Place
- F Existing bike lanes within ROW of Makahiki Street
- G Existing and planned bike lanes within ROW of Nonoho Place
- H Planned bike lanes within ROW of Paani Place





United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Ecoregion
300 Ala Moana Blvd., Room 3-122
P.O. Box 50088
Honolulu, Hawaii 96850

'99 FEB 25 4:43
DEF
MIG

FEB 24 1999

In reply refer to: DH

Simone Basco
Staff Planner
Dept. Planning
Maui County
250 S. High St.
Wailuku, HI 96793

Re: Special Management Area Permit Application, Phase II of Northshore Greenway, Maui

Dear Ms. Basco:

The U.S. Fish and Wildlife Service (Service) has reviewed the Special Management Area Permit Application and Draft Environmental Assessment for Phase II of the Northshore Greenway project (DEA). The project sponsor is the State of Hawaii Department of Planning (DOP). The proposed project is to construct a bikeway corridor of approximately 2.5 miles from the eastern edge of Kahului Airport to Paia Park. The Northshore Greenway Project is part of the 1994 State of Hawaii Master Plan. The Service offers the following comments for your consideration.

Based on our review of information contained in our files, including maps prepared by the Hawaii Natural Heritage Program of The Nature Conservancy (HINHP), there are no federally endangered, threatened, or candidate species directly within the proposed project site. However, the endangered grass *Panicum fauriei* var. *carteri*, is recorded as being present in areas adjacent to the proposed project. The Service recommends that a thorough survey of the proposed bikeway route be conducted and the results of this survey be provided in the final environmental assessment. In particular, these surveys should thoroughly search the proposed bikeway path, areas adjacent to the proposed bikeway, and any areas that will be affected by construction activities of the proposed project. The surveys should be directed at locating any rare or endangered plants including, but not limited to, *Panicum fauriei* var. *carteri*.

Finally, the DEA states that proposed improvements will include "moderate landscaping including planting of shrubs..." The Service recommends that any landscaping or revegetation to be conducted for this project be done with native Hawaiian plants.

Special Management Area Permit Application and DEA
Phase II of Northshore Greenway, Maui, Hawaii

The Service encourages the early review of proposed projects and we appreciate the opportunity to provide early input on this proposal. We hope our comments will assist you in the completion of the Final Environmental Assessment and look forward to receiving a copy when it is completed. If you have questions regarding our comments, please contact Fish and Wildlife Biologist David Hopper by phone at (808) 541-3441 or by facsimile transmission at (808) 541-3470.

Sincerely,



Robert P. Smith
Pacific Islands Manager

cc: DOFAW, Hawaii
CZM, Hawaii

JAMES "KIMO" APANA
Mayor

DAVID C. GOODE
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
ENGINEERING DIVISION
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

March 9, 2001

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

RONALD R. RISKA, P.E.
Wastewater Reclamation Division

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

ANDREW M. HIROSE
Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

TEL. (808) 270-7745
FAX (808) 270-7975

TO: Mr. Robert P. Smith
Pacific Islands Manager
US Department of the Interior
Fish and Wildlife Service
PO Box 50088
Honolulu HI 96850

Dear Mr. Smith,

RE: Northshore Bikeway - Phase II
Spreckelsville, Maui, Hawaii
County ROW & TMK (2) 3-8-1:3, 8, 71, 122
SM1 98-0025
"DH"

We are in receipt of your agency comments Dated February 24, 1999 with respect to the Draft Environmental Assessment of (phase II) of the Northshore Bikeway. In your comments, you noted that available information shows that there are no federally endangered, threatened, or candidate species directly within the proposed project site. You also noted that an endangered grass (*Panicum fauriei* var. *carteri*) is recorded in adjacent areas and recommend that a thorough search of the proposed bikeway corridor be performed to ascertain the presence of such grass.

We consulted the Hawaii Natural Heritage Program, which verified three endangered species that are found the northshore area. They include the native variant of an endangered grass (*Panicum fauriei* var. *carteri*) which has been observed on the coastal headlands on both sides of Maliko Bay, a turtle (*Lepidochelys olivacea*) seen in Paia Bay, and the Blackburn Sphinx Moth (*Manduca blackburni*) which has been observed in Spreckelsville.

We wish to note that Phase II of the project has been bifurcated since the December 1998 Draft EA. (Please see the attached diagram). Phase III, which includes the dune area behind Baldwin Beach will be addressed under a separate Environmental Assessment. That assessment will include a survey of the dune area for *Panicum fauriei* var. *carteri*.

The only species that is known to be in close proximity of the phase II is the Blackburn Sphinx Moth (listed 1997). We have coordinated with Mr. Art Medeiros, a research biologist with the U.S. Geological Survey Service, to evaluate the potential impact on the moth. Mr. Medeiros has recently (1998) conducted research studies of the moth in conjunction with the University of Hawaii and the U.S. Fish and Wildlife Service.

According to Mr. Medeiros, populations of the moth live on the Big Island (Kona), Kahoolawe, and on Maui (Haleakala lava-fields & Spreckelsville). Communities in Spreckelsville and Kahoolawe depend on a non-native host plant, a shrub commonly called wild tobacco (*Nicotiana glauca*). Populations in the Haleakala lava-fields and in Kona also host on the endemic tree "Aiea" (*Nothocestrum longifolium*). The moth's primary habitat is one where there is an abundance of the host plant and a soil type in which the larvae of the moth may bury itself and pupate.

A site inspection of the bikeway corridor was conducted to determine the locations of wild tobacco communities and investigate the soil within the proposed corridor. Populations of wild tobacco were discovered on the berm between Spreckelsville Beach Road and the existing Airport Bikeway. Populations were more abundant towards the ocean and diminished as the roadway traveled inland. The most mauka occurrences of the tree tobacco were two trees located near a navigational equipment building located at the east end of Kahului Airport. The location is approximately 1000 feet from the beginning of the proposed "Spreckelsville Bikeway" corridor. Walkthrough investigations of the proposed corridor did not reveal any individuals or populations of wild tobacco or soft/sandy soils. Please see the attached map and photos.

Since the project corridor does not appear to contain populations of the required host plant (*Nicotiana glauca*) and established populations are some distance away (> 1000') we anticipate no significant impacts to the species *Manduca blackburni*. In addition, the compacted soils of the project corridor do not allow for adequate digging by the larvae, which would make it an unlikely site for pupation.

Thank you for your response.

Respectfully yours,



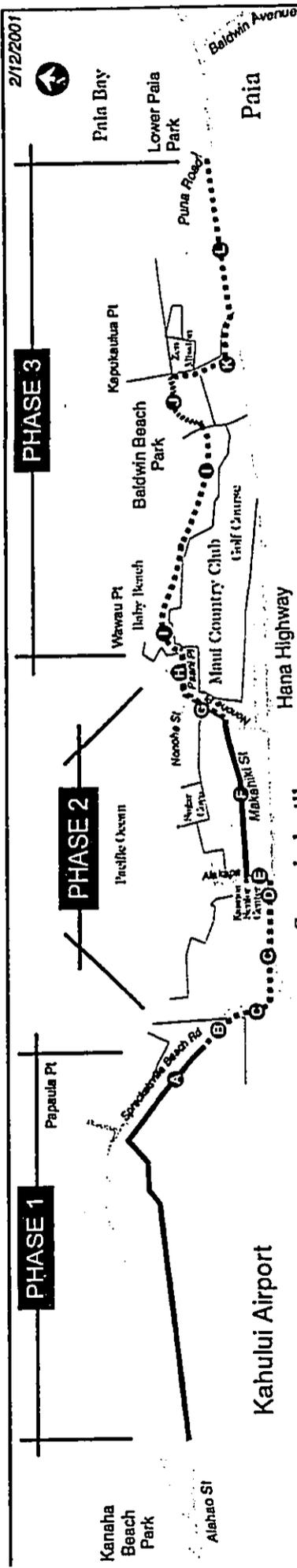
David Goode, Director

Department of Public Works and Waste Management

CC: Art Medeiros, U.S.G.S.
Robb Cole, CH&P

Attachment (Map)
Attachment (Photos)

Phases of the Northshore Bikeway



PHASE 1 "Airport Bikeway"

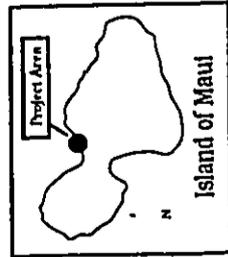
The "airport" section of the Northshore Bikeway is a separated pedestrian/cyclist "pathway" that extends from Kanaha Beach Park and travels makai of the Kahului Airport. The pathway runs along Spreckelsville Beach Road (Stable Road). The "airport" section of the bikeway was constructed in 1996 and is in use today.

PHASE 2 "Spreckelsville Bikeway"

The "Spreckelsville" section of the Northshore Bikeway is a combination of separated bike "paths" and bike "lanes" within existing roadways. Phase II starts from the Phase I terminus along Spreckelsville Beach Road and extends along private and public roadways, finishing at the end of Pa'ani Place (by the Maui Country Club).

DETAILS

- A End of existing Airport Bikeway, TMK (2) 3-8-1:122
- B Planned beginning of Spreckelsville Bikeway, TMK (2) 3-8-1:122
- C Planned bike path through parcel TMK (2) 3-8-1:3
- D Planned bike lane through Kaunoa Senior Center, TMK (2) 3-8-1:8
- E Planned bike lane within right of way (ROW) of Alakapa Place
- F Existing bike lanes within ROW of Makahiki Street
- G Existing and planned bike lanes within ROW of Nonoha Place
- H Planned bike lanes within ROW of Paani Place



SCALE in Feet

1000 2000

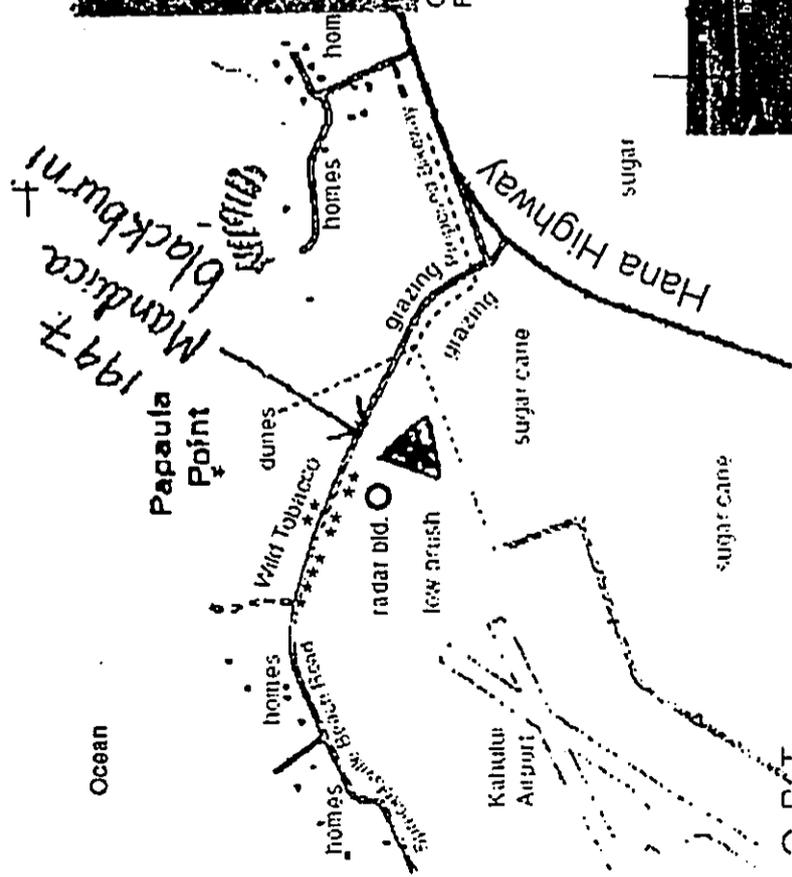
PHASE 3 "Baldwin Bikeway"

The "Baldwin" section of the Northshore Bikeway includes a scenic bike path through the wooded dune area mauka of Baldwin Beach, bike lanes and a bike paths through Baldwin Beach Park, and a separated bike path along Hana Highway. Phase III will end at Lower Paia Park.

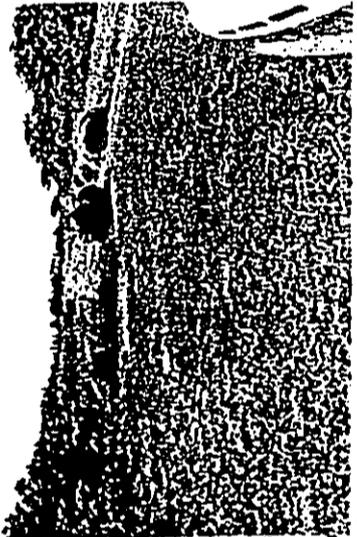
DETAILS

- I Planned bike path through parcel TMK (2) 3-8-1:72
- J Planned bike path through Baldwin Park, TMK (2) 2-5-5:47
- K Planned bike path through Baldwin Park, TMK (2) 2-5-5:46
- L Planned bike path through parcel TMK (2) 2-5-5:17





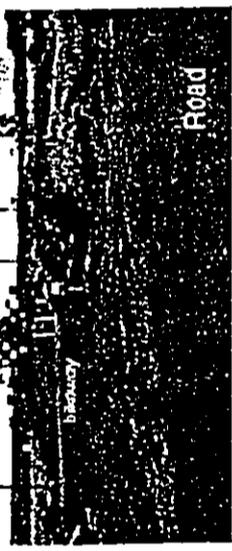
Grazing land in corridor along Spreckelsville Beach Road



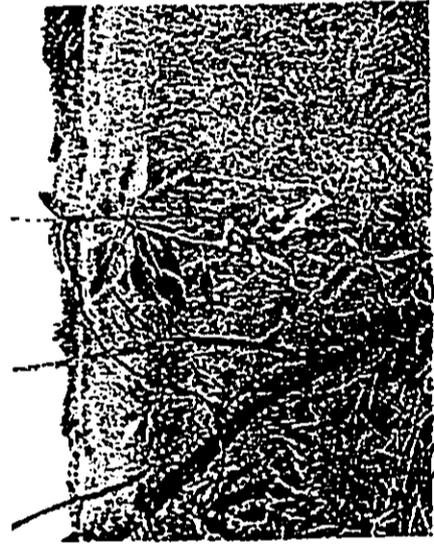
Current terminus of the bikeway. Spreckelsville Beach Road on the right.



Bikeway corridor along manatees near Hana Hwy



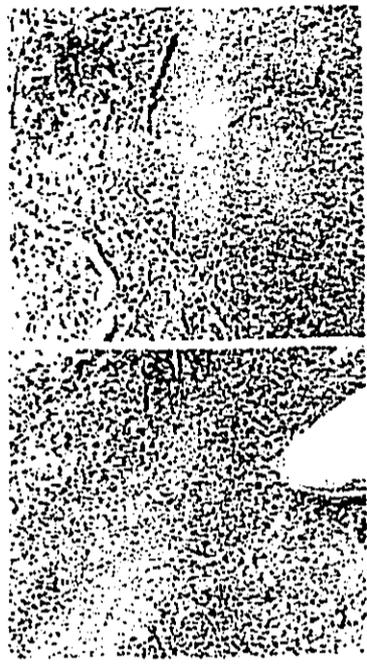
Locations of two wild tobacco plants near the airport's navigational facility. The plants were the most mauka of the community found along Spreckelsville Beach Road, approx. 1000 feet from the bikeway terminus.



flowering wild tobacco trees near a root cellar building



edge like concentration of wild tobacco growing on the berm between the existing bikeway and Spreckelsville Beach Road



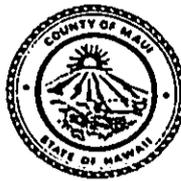
The soil at the weedy and grazing areas along Spreckelsville Beach Road where Phase II of the bikeway will occur. Hand soils were observed under a surface of earth and dunes.

JAMES "KIMO" APANA
Mayor

CHARLES JENCKS
Director

DAVID C. GOODE
Deputy Director

Telephone: (808) 243-7845
Fax: (808) 243-7955



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

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

Wastewater Reclamation Division

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

BRYAN HASHIRO, P.E.
Highways Division

ANDREW M. HIROSE
Solid Waste Division

February 25, 1999

MEMO TO: JOHN E. MIN, DIRECTOR OF PLANNING

FROM: CHARLES JENCKS, DIRECTOR OF PUBLIC WORKS AND WASTE
MANAGEMENT *Charles Jencks*

SUBJECT: SPECIAL MANAGEMENT AREA PERMIT
NORTHSHORE GREENWAY - PHASE II
TMK: (2) 2-5-005;; 3-8-001:(MULTIPLE PLATS)
SM1 98/025

We reviewed the subject submittal and have no comment.

If you have any questions, please call David Goode at 243-7845.

DG:co/mt
S:\LUCA\ICZM\NORTHSHO.WPD



STATE OF HAWAII -1 P:2:26
DEPARTMENT OF LAND AND NATURAL RESOURCES

LAND DIVISION
P.O. BOX 621
HONOLULU, HAWAII 96809

FEB 25 1999

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

Ref: PS:EH

Mr. John Min, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Maui, HI 96793

Dear Mr. Min:

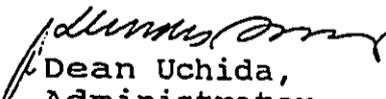
Subject: Northshore Greenway-Phase II Special Permit
Application

We have reviewed the subject application and recommend that the proposed project be implemented according to Chapter 19.62 Flood Hazard Areas of the Maui County Code.

We confirm that a portion of the bikeway is located in Flood Zone A4, an area within the 100-year flood plain with base flood elevations and flood hazard factors determined. We can only confirm that a portion of the project site is located in Zone V23, an area within the 100-year flood plain with velocity, and base flood elevations and flood hazards determined. The Maui County, Department of Planning would be able to determine whether the project site is located in a tsunami zone. The eastern end of the project is not located in Zone C, an area of minimal flooding. It is the western end of the project that is located in Zone C.

Thank you for the opportunity to review this matter.

Very truly yours,


Dean Uchida,
Administrator

c.c. MDLO
Engineering Branch

JAMES "KIMO" APANA
Mayor

DAVID C. GOODE
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
ENGINEERING DIVISION
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

March 9, 2001

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

RONALD R. RISKA, P.E.
Wastewater Reclamation Division

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

ANDREW M. HIROSE
Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

TEL. (808) 270-7745
FAX (808) 270-7975

TO: Mr. Dean Uchida, Administrator
State Department of Land and Natural Resources
Land Division
PO Box 621
Honolulu HI 96809

Dear Mr. Uchida,

RE: Northshore Bikeway - Phase II
Spreckelsville, Maui, Hawaii
County ROW & TMK (2) 3-8-1:3, 8, 71, 122
SM1 98-0025

We are in receipt of your agency comments Dated February 25, 1999, which confirm flood hazard areas with respect to the Draft Environmental Assessment of (phase II) of the Northshore Bikeway.

The project will conform with Chapter 19.62 MCC pertaining to Flood Hazard Areas.
Thank you for your response and cooperation.

Respectfully yours,


David Goode, Director
Department of Public Works and Waste Management

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



BRUCE S. ANDERSON, Ph.D., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 3378
HONOLULU, HAWAII 96801

99 MAR 10 12:10

In reply, please refer to:

March 5, 1999

99-012/epo

Mr. John E. Min, Director
Planning Department
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Min:

Subject: Application for a Special Management Area Permit
(SM1 980025)
Phase II of the Northshore Greenway
Spreckelsville to Paia
Maui, Hawaii
TMK: 2-5-5

Thank you for allowing us to review and comment on the subject permit application. We have the following comments to offer:

Polluted Runoff Control

Proper planning, design and use of erosion control measures and management practices will substantially reduce the total volume of runoff and limit the potential impact to the coastal waters from polluted runoff. Please refer to the *Hawaii's Coastal Nonpoint Source Control Plan*, pages III-117 to III-119 for guidance on these management measures and practices for specific project activities. To inquire about receiving a copy of this plan, please call the Coastal Zone Management Program in the Planning Office of the Department of Business, Economic Development and Tourism at 587-2877.

The following practices are suggested to minimize erosion during construction activities:

1. Conduct grubbing and grading activities during the low rainfall months (minimum erosion potential).
2. Clear only areas essential for construction.

3. Locate potential nonpoint pollutant sources away from steep slopes, water bodies, and critical areas.
4. Protect natural vegetation with fencing, tree armoring, and retaining walls or tree wells.
5. Cover or stabilize topsoil stockpiles.
6. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drain.
7. On long or steep slopes, construct benches, terraces, or ditches at regular intervals to intercept runoff.
8. Protect areas that provide important water quality benefits and/or are environmentally sensitive ecosystems.
9. Protect water bodies and natural drainage systems by establishing streamside buffers.
10. Minimize the amount of construction time spent in any stream bed.
11. Properly dispose of sediment and debris from construction activities.
12. Replant or cover bare areas as soon as grading or construction is completed. New plantings will require soil amendments, fertilizers and temporary irrigation to become established. Use high planting and/or seeding rates to ensure rapid stand establishment. Use seeding and mulch/mats. Sodding is an alternative.

The following practices are suggested to remove solids and associated pollutants in runoff during and after heavy rains and/or wind:

1. Sediment basins.
2. Sediment traps.
3. Fabric filter fences.
4. Straw bale barriers.
5. Vegetative filter strips.

Mr. John E. Min
March 5, 1999
Page 3

99-012/epo

Any questions regarding these matters should be directed to the
Polluted Runoff Control Program in the Clean Water Branch at
586-4309.

Sincerely,



GARY GILL
Deputy Director for
Environmental Health

c: CWB

BENJAMIN J. CAYETANO
GOVERNOR



BRUCE S. ANDERSON, Ph.D.
DIRECTOR OF HEALTH

ALFRED M. ARENSDORF, M.D.
DISTRICT HEALTH OFFICER

STATE OF HAWAII
DEPARTMENT OF HEALTH
MAUI DISTRICT HEALTH OFFICE
54 HIGH STREET
WAILUKU, MAUI, HAWAII 96793

'99 FEB -2 P4:06

January 29, 1999

Mr. John E. Min
Director
Planning Department
County of Maui
250 South High Street
Wailuku, Hawai'i 96793

Dear Mr. Min:

Subject: Northshore Greenway - Phase II
TMK: (2) 2-5-005, 3-8-001
SM1 980025

Thank you for the opportunity to comment on the Special Management Area Permit application. Comments from this office were transmitted to our Honolulu Office. A coordinated response is forthcoming.

Should you have any questions, please call me at 984-8230.

Sincerely,

A handwritten signature in black ink, appearing to read "H. Matsubayashi".

HERBERT S. MATSUBAYASHI
District Environmental Health Program Chief

c: Art Bauckham

JAMES "KIMO" APANA
Mayor

DAVID C. GOODE
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director

TEL. (808) 270-7745
FAX (808) 270-7975



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
ENGINEERING DIVISION
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

March 9, 2001

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

RONALD R. RISK, P.E.
Wastewater Reclamation Division

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

ANDREW M. HIROSE
Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

TO: Mr. Gary Gill
Deputy Director of Environmental Health
State Department of Health
PO Box 3378
Honolulu HI 96801

Dear Mr. Gill,

RE: Northshore Bikeway - Phase II
Spreckelsville, Maui, Hawaii
County ROW & TMK (2) 3-8-1:3, 8, 71, 122
SM1 98-0025

We are in receipt of your agency comments Dated January 28 and March 5, 1999, which recommend resources and measures in which we may minimize erosion during construction activities with respect to the Draft Environmental Assessment of (phase II) of the Northshore Bikeway. To protect air and water resources, dust and erosion controls will be implemented. This will include watering of graded areas and prompt re-vegetation of disturbed soils. Thank you for your response and cooperation.

Respectfully yours,

for David Goode, Director
Department of Public Works and Waste Management

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



TIMOTHY E. JOHNS, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES
JANET E. KAWELO

STATE OF HAWAII
'99 MAR 29 12:25
DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
Kakuihewa Building, Room 555
601 Kamehaha Boulevard
Kapolei, Hawaii 96707

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND RESOURCES
ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
STATE PARKS
WATER RESOURCE MANAGEMENT

March 18, 1999

Ms. Simone Bosco
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

LOG NO: 23113 ✓
DOC NO: 9903CD12

Dear Ms. Bosco:

**SUBJECT: Chapter 6E-42 Historic Preservation Review of an Application for a Special Management Area Permit for Phase II of the Proposed Northshore Greenway Project
Paia, Makawao District, Island of Maui
TMK: 2-5-05:017, 046, and 047; 3-8-01:003, 008, 072, and 122**

Thank you for the opportunity to comment on this project. Our comments are late and we apologize for any inconvenience this may cause you. Our review is based on reports, maps and aerial photographs maintained at the State Historic Preservation Office; no field inspection was made of the subject property.

The proposed project area has undergone an acceptable archaeological inventory survey (McGerty and Spear 1998) with limited subsurface testing conducted in the intact section of the sand dune. This investigation yielded negative results; no historic sites were identified. Therefore we believe that this project will have "no effect" on significant historic sites.

In the event that historic remains (i.e. artifacts, human skeletal remains, etc.) are inadvertently encountered during construction, all work should cease in the immediate vicinity of the find and the find should be protected from further damage. The Contractor needs to immediately contact the State Historic Preservation Office at 243-5169 on Maui or 692-8023 on O'ahu. The Division will assess the significance of the find and recommend mitigation measures, if necessary.

Please call Cathleen Dagher at 692-8023 if you have any questions.

Aloha,

A handwritten signature in black ink, appearing to read "Don Hibbard".

Don Hibbard, Administrator
State Historic Preservation Division

CD:jen

DOCUMENT CAPTURED AS RECEIVED

RUSH

RECEIVED
COUNTY OF MAUI

Maui/Lana'i Islands Burial Council
c/o 2087 Wells Street
Wailuku, Maui, Hawaii 96793

'99 OCT 13 P1:22

COUNTY OF MAUI
PUBLIC WORKS

October 12, 1999

Via Facsimile and U.S. Mail
(808) 692-8020

Don Hibbard, Administrator
State Historic Preservation Division
Department of Land and Natural Resources
555 Kakuhewea Building
601 Kamokila Boulevard
Kapolei, Hawaii 96707

DEPT. OF PUBLIC WORKS	INFO	ACTION	SEE ME	COMMENTS	COPY	FILE
DIRECTOR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DEP. DIR	<input type="checkbox"/>	<input type="checkbox"/>				
PLNS.	<input type="checkbox"/>	<input type="checkbox"/>				
STAFF CE	<input type="checkbox"/>	<input type="checkbox"/>				
LICA	<input type="checkbox"/>	<input type="checkbox"/>				
VEH. RECD.	<input type="checkbox"/>	<input type="checkbox"/>				
SCH. MA.	<input type="checkbox"/>	<input type="checkbox"/>				
ENGR.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
INS. OF	<input type="checkbox"/>	<input type="checkbox"/>				
SECT.	<input type="checkbox"/>	<input type="checkbox"/>				

Re: Comments and Recommendations of the Maui/Lana'i Islands
Burial Council on Phase II of the Northshore Greenway

Dear Don Hibbard:

The Maui/Lana'i Islands Burial Council discussed Phase II of the Northshore Greenway, at its September 30, 1998 meeting, and voted unanimously to authorize that a letter be sent to you detailing the Council's concerns and recommendations related to this project. The Council's primary concern involves the potential disturbance of Native Hawaiian burial sites as a result of construction and landscaping activities associated with the development of the proposed Northshore Greenway bicycle and pedestrian route.

I. Location of the Project in a Sensitive Sand Dune Area

Phase II of the Northshore Greenway project is a corridor, about 2.5 miles in length, linking Kanaha Beach Park in Kahului with Lower Paia Beach Park. Of particular concern is an approximately 10,000 foot long portion of the project, which traverses a parcel - TMK: (2) 3-8-1:72 - consisting of sand dune lands owned by A&B Properties, Inc., and located between the Maui Country Club golf course and the ocean.

In the past, pre-contact burials have been exposed along the shoreline that parallels the proposed bikeway including, among others, Site 1171 - the Baldwin Beach burials. The nearby area is descriptively named Keonekapo'o and a more recent name is "Skull Beach." It is not known, at this time, how far inland burial and other subsurface cultural sites may extend, especially for those portions of the project which involve sandy soils.

DOCUMENT CAPTURED AS RECEIVED

II. Description of the Project's Ground Disturbing Components

Bikeway construction is anticipated to "generally follow existing topography," according to the Special Management Area permit ("SMA") application for the project (emphasis added). However, a Notice to Bidders for sealed proposals for the Spreckelsville Bikeway, Spreckelsville Beach Road to the Makai End of Nonohe Place, Project No. 97-39 -- an increment of the Northshore Greenway Phase II -- published in The Maui News on September 9 and 12, 1999, contains the following details:

The project includes clearing and grubbing; earthwork; cold planing; leveling and resurfacing the existing pavement and shoulders; installing culverts; constructing concrete headwalls; installing fences; relocating and installing highway and non-highway facilities; constructing new bikeway pavement; and installing pavement markings and signs.

The SMA permit application further states on page 6 that:

A section within TMK (2) 3-8-1:72 will include moderate landscaping including planting of shrubs and the installation of an irrigation system. The landscaping planting will provide a buffer and defining edge between the bikeway and the Maui Country Club. Long-term maintenance of the system will be provided by Maui Country Club, lessee of the bordering parcel, TMK (2) 3-8-1:71. (Emphasis added.)

At a minimum, clearing, grubbing and landscaping activities can potentially disturb burial and other subsurface historic sites. The Archaeological Inventory Survey Report, dated October 1998, by Scientific Consultant Services, Inc. and attached to the SMA permit application as an exhibit, incompletely notes that:

Vegetation was present in the sand dune section and included *kiawe* (*Prosopis pallida*) trees and introduced grasses Ironwood (*Casuarina equisetifolia*) and coconut (*Cocos nucifera*) trees were growing in small groves in the vicinity of the proposed bikepath. (p. 5).

In fact, kou (*Cordia subcordata*) and milo (*Thespesia populnea*) trees, beach heliotrope, the succulent 'akulikuli and 'aki'aki grass are also found on Parcel 72.

The removal of the Polynesian-introduced vegetation would negatively affect the native character of this coastal dune area and the uprooting of trees (particularly well established kiawe and ironwoods), to facilitate construction of the bikeway, will cause considerable ground disturbance. Figure 5 of the SMA permit application, a standard bikeway cross-section, depicts a 15 foot wide bikeway easement with a 6 inch aggregate base course and 2 inches of

asphalt pavement. This would indicate a minimum disturbance of at least 8 inches in places where the ground surface is essentially level. In places where grading/cutting of dune lands is required to create a more uniform topography, the depth of disturbance will be greater.

III. Inadequate Archaeological Inventory Survey/Recommendation that Supplemental Survey be Conducted

Subsurface excavations conducted by Scientific Consultant Services, Inc. consisted of only 9 shovel test probes -- all of which were less than one meter in depth, even though extensive sand dune soils are found in the affected area. In addition, the shovel probes were clustered along the western end of Parcel 72. Given the presence of previously identified burials in the vicinity of the project area, which is supported by the kama'aina testimony of Rene Sylva, Leslie Kulololo and others, the Council strongly recommends that additional subsurface archaeological testing be conducted to more accurately assess whether burials may or may not be present in the proposed bikeway corridor.

It is unclear whether the exact corridor for the proposed bikepath was subjected to an archaeological inventory survey. The SMA Permit application discusses the findings of the inventory survey as follows:

A large portion of the project area extended along previously constructed roadways or developed areas. Sections of the project area traversed beach dunes which had been extensively altered by nearby development, sand mining, and grading activities. One small section of the beach dune appeared intact and nine shovel probes were placed there. Although the potential for cultural deposits and/or human remains was present, no cultural material was excavated. No significant historic sites were identified and no further work is recommended. (p. 12).

While it is true that portions of the project lands have been affected by prior development, sand mining and grading -- burial sites have been found with some frequency even in fairly disturbed sand areas. Furthermore, the above-characterization of the project area is especially inaccurate with respect to Parcel 72, which encompasses relatively intact sand dune lands.

IV. Recommendation for a Site Visit by the Council

The Council also recommended that a site visit be scheduled for October 28, 1999, commencing at 8:30 a.m. at the Baldwin Beach parking lot. (Following the site visit, the Council will convene its regular monthly meeting at 10:00 a.m. in Wailuku.) Representatives of the County of Maui, the project developer, and A&B, the owner of Parcel 72 and other properties affected by the project, will be asked to attend.

The Council will be especially interested in inspecting the actual alignment of the bikeway route, particularly in relation to the sand dunes.

After the site visit, the Council may make further recommendations at its regularly scheduled meeting.

In the meantime, please consider the contents of this letter as part of any 6E-8 review by the Department of any component of or permit approval for Phase II of the Northshore Greenway. Please also take these comments -- and the recommendation that a supplemental archaeological survey be required -- into consideration when the Department reviews for approval and acceptance the Archaeological Inventory Survey Report prepared by Scientific Consultant Services, Inc. for this project.

Thank you for your attention to these matters. If you have any questions, please do not hesitate to contact me or Council Chair Charles Maxwell.

Sincerely,

Dana Naone Hall

Dana Naone Hall, Vice Chair
Maui/Lana'i Islands Burial Council

DNH/sn

cc: Maui/Lana'i Islands Burial Council
Ka'iana Markell (via facsimile)
Ross Cordy (via facsimile)
Cathleen Dagher (via facsimile)

dnb/lethsbard

BENJAMIN J. CAVETANO
GOVERNOR OF HAWAII



TIMOTHY E. JOHNS, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES
JANET E. KAWILO

STATE OF HAWAII
COUNTY OF MAUI
DEPARTMENT OF LAND AND NATURAL RESOURCES
HISTORIC PRESERVATION DIVISION
Kaulahewa Building, Room 555
801 Kaulahewa Drive, Apt. 555
Honolulu, Hawaii 96813

RUSH

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
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HISTORIC PRESERVATION
LAND
STATE PARKS
WATER RESOURCE MANAGEMENT

00 JAN 14 8 58

COUNTY OF MAUI
PUBLIC WORKS

January 06, 2000

Dr. Robert Spear
SCS
711 Kapiolani Boulevard, Suite 777
Honolulu, Hawaii 96813

DIRECTOR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DEP. DIR.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERS.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
STAFF CE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LUCA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WW RECL.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SOLID W.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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SECTY.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

LOG NO: 24630 ✓
DOC NO: 9912RC39

Return to _____ Due _____

Ref. No. _____

By: _____ Date: _____

Dear Dr. Spear:

**SUBJECT: Review of Archaeological Inventory Survey -- Spreckelsville-Baldwin Park Bikeway
Wailuku, Wailuku District, Maui
TMK: 2-5-05; 3-8-01**

This letter reviews this report which was submitted over a year ago (Oct. 16, 1998)(McGerty & Spear 1998. Archaeological Inventory Survey Report for Spreckelsville-Baldwin Park Bikeway ... SCS ms.). This report was preliminarily reviewed by our Maui Archaeologist last March, and we have only just now had staff time to finalize the review. The project seems to still be active, since we received an October 13, 1999 fax on this project from Dana Hall of our Maui Island Burial Council which indicated that the Council had concerns with the project.

The project covers a linear corridor from Kanaha Beach Park to Lower Paia Beach Park. As will be seen from our review, we are not quite certain what the nature of construction will be in this project.

Unfortunately, the report has a number of problems that need revision before we can evaluate whether the project area has been adequately checked for significant sites. Please see the attachment for details.

Among the revisions needed are (1) more information on the project area's current condition and the extent of planned construction for the project (see Project Area, attachment), (2) improvements to the background section (identifying clearly the ahupua'a involved, clearly locating nearby subsurface burial and habitation sites, and including a better summary of the settlement pattern of the ahupua'a and the likely site patterns within the project area), and (3) improving the methods section (with a

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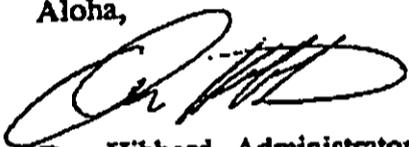
P. 2

clarification of the extent of surface searches for artifacts and skeletal remains, a clarification of the rationale for testing and an evaluation of its representativeness, and a clear argument that no intact subsurface sites are likely to survive in untested project areas).

Last there needs to be a discussion whether monitoring is needed to handle possible inadvertent finds of burials or remnants of burials. In this regard, the extent of land alteration by the project needs to be discussed. Are some areas going to have surface paving on top of road shoulders with no ground disturbance? Clearly, these would probably not need monitoring. But what about project sections going through dune areas? Dana Hall's fax suggests a fair amount of landscaping may occur in some areas.

We will await a revised report. As always, if you disagree with our concerns or have questions, please contact our review staff as soon as possible to resolve the concerns. Ross Cordy, our Branch Chief for Archaeology, is our contact on this project (692-8025).

Aloha,



Don Hibbard, Administrator
State Historic Preservation Division

RC:ah

Attachment

c: Planning Department, County of Maui
Public Works Department, County of Maui
Dana Hall, Maui Island Burial Council

ATTACHMENT**NEEDED REVISIONS
SPRECKELSVILLE-BALDWIN PARK BIKEWAY SURVEY****SCS**

Project Area

1. p. 1, last para. Figure 2 indicates the road goes from Spreckelsville Beach Road in the west to Puna Road in the east -- not south-north. Please check and revise text accordingly.
2. Figure 2. This figure is not clear. Please make the project alignment a bit bolder. Also, some key roads in the text have tiny labels, and need to have larger, more noticeable labels (e.g., Puna Road, Nonohe Place, Alakapa Place, Alawai Road).
3. p. 4, Soils. You need another map like Figure 2 which shows key streets and the project location and which identifies the following: intact dune lands (with hills and ridges of sand), sand areas extensively altered by urbanization, sand areas extensively sand-mined, etc. Also, discuss this in the text. This enables the reader to see and evaluate which areas have been extensively disturbed, and thus may no longer contain intact historic sites.

Background Review

1. Please identify right at the start which ahupua'a are within this project area. Clearly, Wailuku ahupua'a occupies much of the project, but are ahupua'a within Hamakuapoko also within the project area? We recommend that you include a figure showing the ahupua'a borders.
2. pp. 6-7. Locate these archaeological projects on a map which also shows the project area. Show the sites mentioned in the text -- particularly the burial sites. This is very important. [Note: Dana Hall stated in her letter to our office that site 1171, the Baldwin Beach burials, are on the shoreline and Keonekapo'o ("Skull Beach") is nearby.]
3. p. 7, para. 4. Fornander uses 30 years per royal generation, but most researchers today use 20 or 25 years. Does your firm consider Fornander's estimate reliable? If not, please revise the dates and indicate the estimate that you have used. The same thing holds true on page 8, para 3, for Kanaha and Mau'oni fishponds. Kiha dates to 1600-1620 using 20 years per generation.

4. p. 7, para 4, last sentence. Clearly, the project area is not in Moali'i ahupua'a in Lahaina district. It looks like you copied this paragraph from another report and did not change this. Please revise.
5. p. 8, para 4. Is this description quoted from a 1700s observation or is it a magazine writer's re-creation in 1900? Please clarify. Also, it is not describing Wailuku ahupua'a rather the area from Waihe'e through Wailuku -- correct?
6. p. 8, last para. Where were these heiau -- none near the project area?
7. p. 9, para 4. When was this battle fought and between which sons? Include a reference.
8. p. 9, 1st quote. Two quotes are given here. The first applies to the sandhills near Kalua (an 'ili of Wailuku) well away from the project area. The second has no lead-in text, and it refers to Kalani'opu'u's departure from Maui -- not a battle. Please separate the quotes and include lead-in text for the second.
9. You need a map in this section locating key places mentioned in the text, so the reader can locate these places.
10. pp. 11, para 1, last line. It might be useful to note, however, that large numbers of houselots and taro lo'i were awarded along Iao Stream in the Mahele and that this might indicate relative population size in your project's area -- low population?
11. p. 11, para 3. When are you claiming that sandmining occurred and what is your source for information?
12. p. 11, last para. Were military support areas within your project area? Clarify.
13. p. 12, para 1. You have not truly documented alterations within the project's beach area. You seem to be speculating that cane, trash and WW II impacts may have occurred. Can you document alterations? What did the original landscape look like? How was it altered? Para 2 mentions that some military structures are still present; so here is some supportive information.
14. p. 12, para 3. This is not an acceptable summary. You need to revise it. You need to first summarize the settlement patterns of the ahupua'a in the project area. For example, for Wailuku, most of the population resided along Iao Stream with lo'i on the floodplains and some fishponds near the shore, with houses (and associated burials) along the edge of the dunes and near today's Wailuku town, and scattered into the upper valley. Other burials were scattered or in clusters in the higher dunes inland and towards Kahului. Large heiau were in or along the lower valley of Iao Stream. Small numbers of coastal houses appear to have been to the east, as well as Kanaha fishpond. You had a major coastal trail and major trails up each side of Iao's lower valley along

the base of the dunes (Lower Main Street closely matches one of those trails). Once you cover the ahupua'a patterns, then you need to summarize your project area's expectations. Do you really have information from early historic or oral historic accounts? Can you claim houses were those of "fishermen" and not those of households who also farmed in Iao? Paragraph 4 seems to conclude that the houses were only campsites. What is your evidence that shrines were present, and what kind of shrines? Did known battles occur in your project area -- para 5? You seem to have 3 time periods -- (1) pre contact-mid 1800s, (2) cane and (3) WWII -- and predictive information is needed relative to each period, and a solid statement on what is likely to have survived due to later disturbances.

15. p. 13, last para and p. 13, paras 1 and 2. What is the point of this discussion? Are you claiming that tsunamis have destroyed sites in this area? Are you claiming that the area has accreted beaches and if so where do you expect the old beach to be?

Methods

1. p. 5. Move this section to page 13. It should be presented after the background and before the fieldwork.
 2. p. 5. Why was surface inspection done -- to document which areas had intact dunes, mildly disturbed dunes, severely disturbed land surfaces? To inspect the surface for artifacts and skeletal fragments? Please clarify.
 3. p. 5. Be sure to clearly document earlier in the report which areas were extensively altered, and approximately when.
 4. p. 5. Explain the rationale and sampling in your shovel probe testing to ensure representative testing. On page 13, para 3, it says only one dune section appeared likely to have an archaeological deposit. Was this section entirely tested? The map shows testing in only the area at the west end of the Maui County Club frontage. Clarify. Also, can you confidently claim that other altered dune lands do not have subsurface deposits without conducting some testing?
 5. Please show a larger scale map showing shovel probe locations.
 6. Why were shovel probes only dug down to 70 cm or so? Archaeological deposits are often quite a bit deeper in dune areas. It must be clear that testing truly evaluated whether subsurface deposits are likely to be present.
-

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JAMES "KIMO" APANA
Mayor

DAVID C. GOEDE
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director

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COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
ENGINEERING DIVISION
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

March 9, 2001

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

RONALD R. RISKI, P.E.
Wastewater Reclamation Division

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

ANDREW M. HIROSE
Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

TO: Mr. Don Hibbard, Administrator
State Department of Land and Natural Resources
Historic Preservation Division
Kakuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei HI 96707

Dear Mr. Hibbard:

Re: Historic Preservation Review of an Application for a Special
Management Area Permit for Phase II of the Proposed Northshore Greenway
Project, Paia, Makawao District, Island of Maui
County ROW & TMK (2) 3-8-1:3, 8, 71, 122
SM1 98-0025

This letter responds to your review letter dated January 6, 2000 to Mr. Robert Spear, Scientific Consultant Services. Your letter also referenced a letter received by Ms. Dana Naone Hall, Vice Chair of the Maui/Lana'i Islands Burial Council, dated October 12, 1999. Both letters were primarily concerned with archaeological related issues in the dune area located along Baldwin Beach, between the Maui Country Club and Baldwin Beach Park.

For your information, the Northshore Bikeway project has been bifurcated since the December 1998 Draft Environmental Assessment. Please see enclosed map. Phase II (Spreckelsville Bikeway) will now be limited to the section between Spreckelsville Beach Road and the end of Pa'ani Place (the entrance of the Maui County Club). The remaining section, which includes the dune area behind Baldwin Beach, will be a separate project referred to as Phase III, or the Baldwin Bikeway. Phase I, the Airport Bikeway was constructed in 1996 and is in use today.

Due to the complexity of issues within the Phase III project area and the lack of issues and concerns regarding Phase II, we are seeking to proceed in an expedited manner with the Phase II project.

The comments contained in yours and Ms. Hall's letters will be addressed within an amended archaeological inventory report that will be submitted along with a new Draft Environmental Assessment for the Phase III project (Baldwin Bikeway). The amended archaeological inventory report will involve performing additional archaeological testing in the area of the sand dunes. As previously discussed with Ms. Hall, we will meet with her and the Burial Council prior to initiation of the additional archaeological testing in order to discuss the proposed methodology.

The Spreckelsville Bikeway (Phase II) is a combination of bike "lanes" within existing roadways and separated bike "paths" parallel to existing roadways. A detailed description of the routing is enclosed herewith.

The road shoulders and proposed parallel pathways were visually surveyed by SCS and no indications of surface sites were found in the area. There will be two sections where excavation of up to two feet will take place. It is proposed that archaeological monitoring will occur in the sections where excavation will occur.

The purpose of this letter is to request your concurrence that monitoring during construction is an acceptable mitigation measure for the Phase II portion of the project. As discussed above, additional testing as well as a revised inventory survey report will be submitted for the Phase III portion of work.

Thank you for your concerns regarding this project, if you have any questions please do not hesitate to contact myself or Mr. Rory Frampton of Chris Hart & Partners.

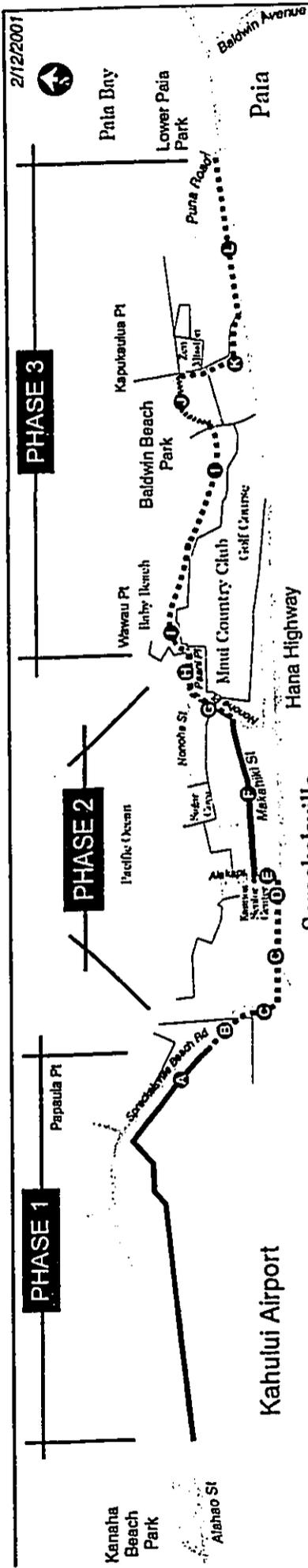
Respectfully yours,


David Goode, Director
Department of Public Works and Waste Management

cc: John Min, Maui County Planning Director
Dana Hall, Vice Chair, Maui/Lana'i Islands Burial Council
Rory Frampton, CH&P
Robert Spear, SCS

Attachment (Map)
Attachment (Appendix A)

Phases of the Northshore Bikeway



2/12/2001

PHASE 1 "Airport Bikeway"

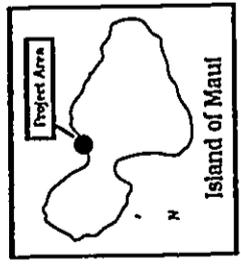
The "airport" section of the Northshore Bikeway is a separated pedestrian/cyclist "pathway" that extends from Kanaha Beach Park and travels makai of the Kahului Airport. The pathway runs along Spreckelsville Beach Road (Stable Road). The "airport" section of the bikeway was constructed in 1996 and is in use today.

PHASE 2 "Spreckelsville Bikeway"

The "Spreckelsville" section of the Northshore Bikeway is a combination of separated bike "paths" and bike "lanes" within existing roadways. Phase II starts from the Phase I terminus along Spreckelsville Beach Road and extends along private and public roadways, finishing at the end of Pa'ani Place (by the Mauk Country Club).

PHASE 3 "Baldwin Bikeway"

The "Baldwin" section of the Northshore Bikeway includes a scenic bike path through the wooded dune area mauka of Baldwin Beach, bike lanes and a bike paths through Baldwin Beach Park, and a separated bike path along Hana Highway. Phase III will end at Lower Paia Park.



- DETAILS**
- A End of existing Airport Bikeway, TMK (2) 3-8-1:122
 - B Planned beginning of Spreckelsville Bikeway, TMK (2) 3-8-1:122
 - C Planned bike path through parcel TMK (2) 3-8-1:3
 - D Planned bike lane through Kaunoa Senior Center, TMK (2) 3-8-1:8
 - E Planned bike lane within right of way (ROW) of Alakapa Place
 - F Existing bike lanes within ROW of Makahiki Street
 - G Existing and planned bike lanes within ROW of Nonoho Place
 - H Planned bike lanes within ROW of Paani Place

- DETAILS**
- I Planned bike path through parcel TMK (2) 3-8-1:72
 - J Planned bike path through Baldwin Park, TMK (2) 2-5-5:47
 - K Planned bike path through Baldwin Park, TMK (2) 2-5-5:46
 - L Planned bike path through parcel TMK (2) 2-5-5:17



Appendix A Detailed Routing of Phase II

The existing Airport Bikeway extends from the east border of Kanaha Beach Park and terminates along Spreckelsville Beach Road (Stable Road) at the east edge of Kahului Airport. The terminus is located in the southeastern corner of TMK parcel (2) 3-8-1: 122, which is owned by the State of Hawaii and leased to the Department of Transportation, Airports Division.

The bikeway will continue the existing 12-foot wide paved bikeway along a path 20-30 feet from Spreckelsville Beach Road. Construction preparations along Spreckelsville Beach Road include the clearing of brush with minor grade and fill.

Approaching Hana Highway, the bikeway will enter TMK parcel (2) 3-8-1: 3 owned by A&B Hawaii. As the bikeway nears the highway, it will cross over Spreckelsville Beach Road and continue eastward, just mauka (south) of the line of monkey pod trees that line the parcel's southern border along Hana Highway. The route crosses to the makai (north) side of the monkey pod trees after approximately 330 feet. An existing hogwire fence along this border will be removed and relocated to the north.

Continuing eastward, the bikeway will enter the Kaunoha Senior Center, TMK parcel (2) 3-8-1: 8 owned by the State of Hawaii and leased to the County of Maui. An existing road running along the southern border of the parcel will be resurfaced to accommodate the bikeway.

At Kaunoha Senior Center's east boundary, the west edge of Alakapa Place will be widened to accommodate a 10-foot wide two-way bike lane. The new section will be located within the County owned right-of-way.

At the intersection of Alakapa Place and Makahiki Street, the bikeway will continue east in two 5-foot lanes that run along both sides of Makahiki Street. These lanes have been constructed as part of the subdivision and are located within the County owned right-of-way.

Reaching Nonohe Place, the bikeway will continue northward in two designated 5-foot wide bike lanes. Both of Nonohe Place's shoulders will be widened approximately 5 feet to accommodate the new lanes. A portion of the west side of Nonohe Place was recently improved as part of the adjacent subdivision and includes an existing 5 foot bike lane. All new improvements fall within the County owned right of way.

At the intersection with Pa'ani Place, both lanes would continue eastward in two designated 5-foot wide bike lanes. Pa'ani Place's current 20-foot width will be widened to 30 feet to accommodate the new bike lanes. The majority of the pavement widening will occur on the makai (north) side of Pa'ani Place. All new sections fall within the County owned right of way (40 feet). This Phase of the bikeway will terminate at the end of Pa'ani Place, within the entrance of the Maui Country Club.

BENJAMIN J. CAYETANO
GOVERNOR



KAZU HAYASHIDA
DIRECTOR
DEPUTY DIRECTORS
BRIAN K. MINAAI
GLENN M. OKIMOTO

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

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IN REPLY REFER TO:
HWY-PS
2.3082

MAR 24 1999

Mr. John Min, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Min:

Subject: I.D. No.: SMI 980025, TMK: 2-5-005:, 3-8-001: (Multiple Plats),
Project Name: Northshore Greenway-Phase II, Located at Paiea, Maui,
Applicant: Chris Hart & Partners

Thank you for your transmittal regarding the above subject document.

The proposed Northshore Greenway, Phase II project will not adversely impact our State highway facilities. Please note that if this project uses federal funds, the applicant must comply with applicable federal guidelines and procedures.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Kazu Hayashida".

KAZU HAYASHIDA
Director of Transportation

JAMES "KIMO" APANA
Mayor

DAVID C. GOODE
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
ENGINEERING DIVISION
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

March 9, 2001

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

RONALD R. RISKA, P.E.
Wastewater Reclamation Division

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

ANDREW M. HIROSE
Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

TEL. (808) 270-7745
FAX (808) 270-7975

TO: Mr. Kazu Hayashida, Director
State Department of Transportation
869 Punchbowl Street
Honolulu HI 96813-5097

Dear Mr. Hayashida,

RE: Northshore Bikeway - Phase II
Spreckelsville, Maui, Hawaii
County ROW & TMK (2) 3-8-1:3, 8, 71, 122
SM1 98-0025

We are in receipt of your agency comments Dated March 24, 1999, offering that the project will have "not adversely impact our State highway facilities" with respect to the Draft Environmental Assessment of (phase II) of the Northshore Bikeway.

The project will comply with applicable federal guidelines and procedures.
Thank you for your response and cooperation.

Respectfully yours,


David Goode, Director
Department of Public Works and Waste Management

ARCHAEOLOGICAL ASSESSMENT

SCS Project Number 142-1

**ARCHAEOLOGICAL INVENTORY SURVEY REPORT
FOR
THE SPRECKELSVILLE-BALDWIN PARK BIKEWAY
WAILUKU AND MAKAWAO, MAUI, HAWAII
[TMK 2-5-05, 3-8-01]**

Prepared By:
Leann McGerty
and
Robert L. Spear, Ph.D.
October 1998

Prepared for:
Chris Hart and Partners
1955 Main St., Suite 200
Wailuku, Maui, Hawai'i.

SCIENTIFIC CONSULTANT SERVICES Inc.

711 Kapiolani Blvd. Suite 777 Honolulu, Hawai'i 96813

ABSTRACT

An archaeological inventory survey was conducted of the Spreckelsville-Baldwin Park Bikeway in August of 1998. Large portions of the proposed project area extended along previously constructed roadways. Sections of the Baldwin Park path traversed a beach dune area, much of which had been extensively altered by sand-mining and grading activities. Nine shovel probes were placed in the dunes along the *makai* edge of the Maui Country Club. No significant historic sites were identified during excavation or surface survey. No additional archaeological work is required for this project.

TABLE OF CONTENTS

ABSTRACT i

TABLE OF CONTENTS ii

LIST OF FIGURES iii

INTRODUCTION 1

PHYSICAL SETTING 1

PROJECT AREA 1

 SOILS 4

 VEGETATION 5

METHODOLOGY 5

 FIELD METHODS 5

 LABORATORY METHODS 5

PREVIOUS ARCHAEOLOGY 6

TRADITIONAL AND HISTORIC SETTING 7

 PRE-CONTACT 7

 1778 TO MID 1800s 10

 MID-1800s TO 1900s 10

SETTLEMENT PATTERNS 12

FIELDWORK RESULTS 13

 EXCAVATIONS 13

DISCUSSION 19

REFERENCES CITED 21

LIST OF FIGURES

Figure 1: USGS Paia Quadrangle Showing Project Area	2
Figure 2: Planview of the Project Area.	3
Figure 3: Baldwin Park and the Cane Fields Beyond. View to East.	4
Figure 4: General View of Dune Land in the Project Area. View to East.	5
Figure 5: General View of Vegetation in the Project Area. View to East.	6
Figure 6: Location of Shovel Probe 1. View to North.	14
Figure 7: South Wall Profile of SP-1.	14
Figure 8: Shovel Probe 2 Base of Excavation (BOE). View to South.	15
Figure 9: South Wall Profile of SP-2.	15
Figure 10: West Wall Profile of SP-3.	16
Figure 11: South Wall Profile of SP-4.	17
Figure 12: East Wall Profile of SP-5.	17
Figure 13: Shovel Probe 6 Base of Excavation. View to North.	17
Figure 14: East Wall Profile of SP-6.	18
Figure 15: East Wall Profile of SP-7.	18
Figure 16: South Wall Profile of SP-8.	18
Figure 17: Shovel Probe 9 Base of Excavation. View to South.	19
Figure 18: South Wall Profile of SP-9.	20

INTRODUCTION

At the request of Chris Hart and Partners, Inc., Scientific Consultant Services, Inc. (SCS) conducted an archaeological inventory survey of the Spreckelsville-Baldwin Park Bikeway (TMK 2-5-5 and 3-8-01). The project area was located within the Wailuku and Hamakuapoko Districts, Island of Maui (Figure 1).

Fieldwork was conducted in August of 1998 by Amy E. Dunn and Berdena Burgett. Dr. Robert L. Spear provided overall direction for the project.

PHYSICAL SETTING

The project area was located in the northern coastal region, on the isthmus between the East and West Maui. Presently, the district of Wailuku is extensive and includes the fertile valleys along the eastern flank of the West Maui mountains, most of the land forming the isthmus, and both the northern and southern coastal regions. A separate land division within the district (*ahupua`a*) was also named Wailuku.

The mean annual rainfall at Kahului Airport is 475 mm per year, occurring most frequently from November to April (Armstrong 1973). The wind patterns are typical for the Hawaiian Island which are predominately from the northeast. The majority of the project area was located within this section of the district, in the dry, coastal environment. A very small portion extended into the Makawao District to the south.

PROJECT AREA

The project area originated at the Spreckelsville Beach Road on the Hana Highway and extended to the south, ending at Puna Road by Lower Pa`ia Park (Figure 2). On the *makai* side of the proposed bikeway (east to west) was the Kaunoa Senior Center. The proposed bikeway turns left (north/northeast) at Alakapa Place and follows the subdivision road until it joins to

P A C I F I C O C E A N

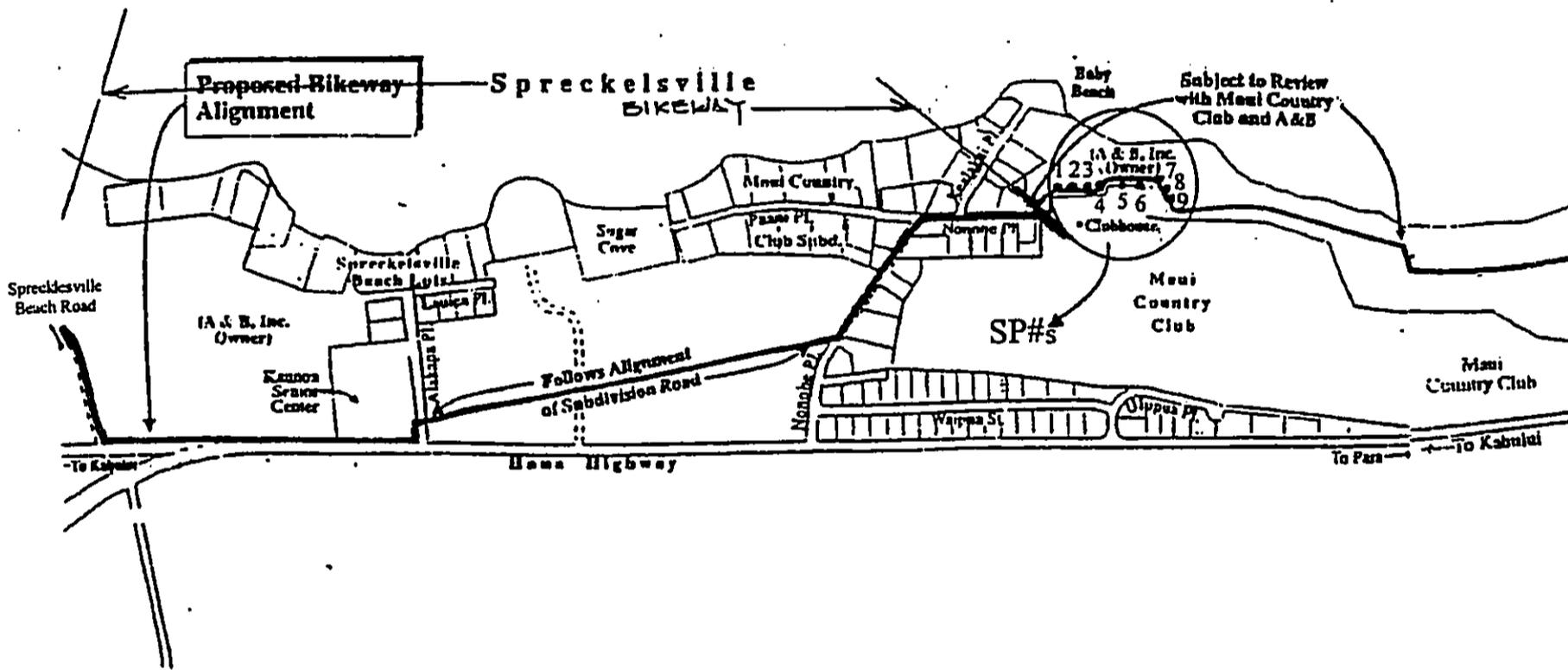
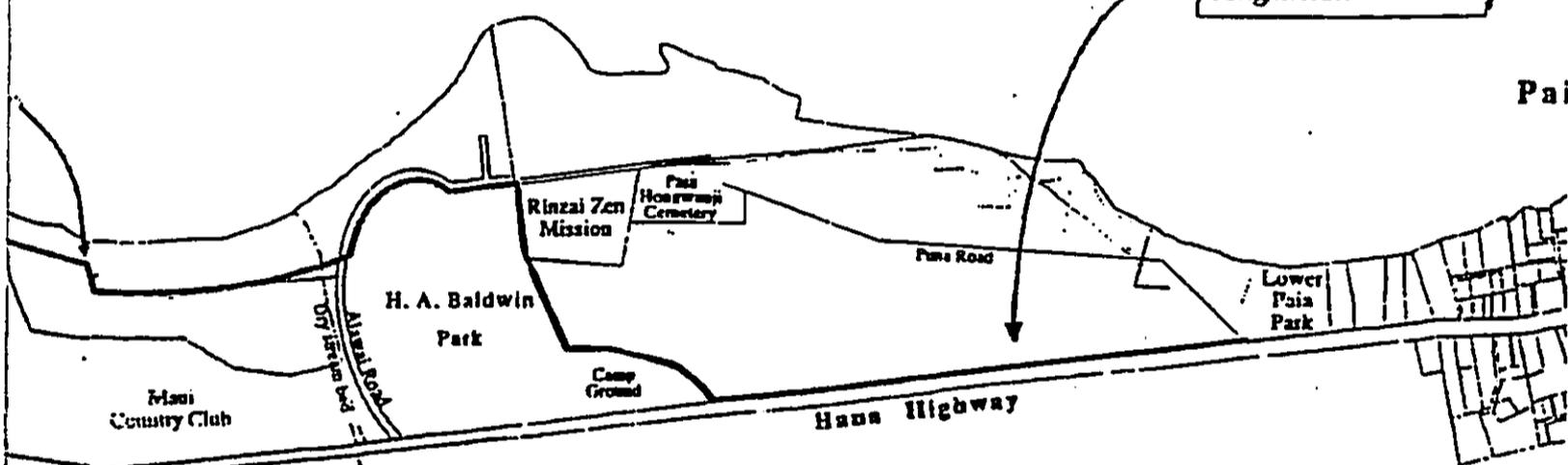


Figure 2: Planview of the Project Area.

P A C I F I C O C E A N

Proposed Bikeway Alignment

Pai



Maui Country Club

H. A. Baldwin Park

Rinzai Zen Mission

Paia Hoanwan Cemetery

Lower Paia Park

Hana Highway

To Paia ← ← To Kahului

BALDWIN PARK BIKEWAY

Northshore Greenway Bikeway Plan
Maui Country Club to Paia



Nonohe Place. Subdivision lots abut Nonohe Place on both sides of the road. The proposed bikeway then extends through beach sands, on the *makai* side of the Maui Country Club until it joins Alawai Road at Baldwin Park (Figure 3). The project area continues along Alawai Road and then turns south (*mauka*) at the eastern edge of the park, extending back to the Hana Highway. The last section of the project area follows the Hana Highway until Puna Road in Lower Pa'ia for a total length of approximately 6,600 feet.



Figure 3: Baldwin Park and the Cane Fields Beyond. View to East.

SOILS

Soils in the project area fall into the Pulehu-Ewa-Jaucas association (Foote *et al.* 1972:Map Sheet 103-104). This type of soil is typical of Central Maui and has developed from alluvium weathered from basalt and/or calcareous material. The soil is well-drained and has moderately textured to coarse textured subsoil on underlying material (*ibid.*:8).

A large portion of the project area extends through Dune Lands (DL) consisting of hills and ridges of sand drifted and piled by the wind (Figure 4). The dunes are actively shifting or are so recently fixed or stabilized that no soil horizons have developed. The dune matrix is derived from coral and seashells (*ibid.*:29).



Figure 4: General View of Dune Land in the Project Area. View to East.

VEGETATION

Vegetation was present in the sand dune section and included *kiawe* (*Prosopis pallida*) trees and introduced grasses (Figure 5). Ironwood (*Casuarina equisetifolia*) and coconut (*Cocos nucifera*) trees were growing in small groves in the vicinity of the proposed bikepath.

METHODOLOGY

FIELD METHODS

The entire length of the proposed bikeway was pedestrian surveyed by archaeologists and shovel probe testing was conducted in the only dune section that had not been extensively altered by previous sand mining and construction activities.

LABORATORY METHODS

Analysis of any collected material was to be conducted at the SCS O'ahu laboratory facilities. Artifacts are catalogued and assigned specific sequential accession numbers. All project materials and records are stored at the O'ahu office of SCS in Honolulu, Hawai'i.



Figure 5: General View of Vegetation in the Project Area. View to East.

PREVIOUS ARCHAEOLOGY

Early studies conducted on Maui included the recording of *heiau* in 1909 and 1916 by Thrum and Stokes and an island-wide site survey in 1928 conducted by Winslow Walker (Walker 1931). There were no identified sites in the vicinity of the project area.

A more recent study conducted along the northern shoreline of the isthmus resulted in the identification of sites associated with Hawaiian fishing and habitation (Clark and Toenjes 1987). Burials were also present. Radiocarbon dates place coastal occupation in the 13th century.

A study conducted at Kanahā beach park, located on the coast to the west of the project area (Welch 1991), resulted in the identification of no cultural material. On the isthmus land to the south of the airport in land previously planted in cane, reconnaissance and subsurface testing also resulted in no cultural material being identified (Fredericksen and Fredericksen 1988).

An expansion of the present airport to the east and north was conducted in 1990 (Folk and Hammatt 1991). No surface archaeological sites or buried prehistoric cultural layers were

identified during the survey. The lack of cultural evidence was attributed to historic activity originating with the construction of the Kahului Railroad in the late 1800s.

Subsurface testing conducted in 1991 on either side of the middle portion of Spreckelsville Beach Road, uncovered cultural deposits throughout the excavation (Toenjes *et al.* 1991). Radiocarbon dates from the cultural layers yielded ranges from A.D. 1230 to A.D. 1765. One radiocarbon sample from the shoreline resulted in an early date of A.D. 410 to A.D. 615 (*ibid.*)

In 1993, subsurface archaeological testing conducted on a section of land located between Spreckelsville Beach Road and the north eastern end of Kahului Airport resulted in the identification of no cultural material (Folk and Hammatt 1993).

TRADITIONAL AND HISTORIC SETTING

PRE-CONTACT

Traditionally, it was reported that the division of Maui's lands into districts (*moku*) and subdistricts was performed by a *kahuna* named Kalaiha`ōhia, during the time of the *ali`i*, Kaka`alaneo (Beckwith 1940:383; Fornander places Kaka`alaneo at the end of the 15th century or the beginning of the 16th century [Fornander 1916/17, Vol. 6:248]). Further land divisions within the *moku* were *ahupua`a* which ideally incorporated all the natural resources necessary for traditional subsistence strategies. The ancient subdivisions of the *ahupua`a* were said to have been established approximately 500 years ago and have remained unchanged to the present, although land tenure itself has gone through radical changes (Sterling 1998:3). The project area was located in the *ahupua`a* of Moali`i in the Lāhainā District.

The Hawaiian economy was based on agricultural production and marine exploitation, as well as raising livestock, and wild plant and bird collecting. Extended household groups settled in various *ahupua`a*. Here, they were able to harvest from both the land and the sea. Ideally, this allowed each *ahupua`a* to be self-sufficient by supplying needed resources for survival from many different environmental zones (Kirch 1985).

Much of the knowledge of traditional land use patterns is based on what was recorded at the time of, and shortly after, western Contact. Early records (such as journals kept by explorers, travelers and missionaries), Hawaiian traditions that survived long enough to be written down, and archaeological investigations have assisted in understanding the past.

Wailuku and Lāhainā were the main population centers on Maui (Kirch 1985). They were also both associated with the *ali`i* and chiefly power (Sterling 1998:74-93; Kolb 1991:326). The valleys at the base of the West Maui Mountains in Wailuku were extremely fertile containing permanent streams and supporting extensive farming. Agricultural terraces spilled over onto the slopes at the entrances of the valleys (where the upper section of Wailuku city is now built) and the *kalo* was fed by mountain rains (Handy 1940:108). *Kihapai* (small gardens) spread throughout Wailuku Valley and royal residences were located nearby at Pihana and Kalanihale.

Fishponds and marshy areas were located on the coast in the relatively dry eastern portion of the *ahupua`a* furnishing fresh fish to the chiefs and their entourage. Two in particular (Kanaḥā and Mau`oni), were located to the west, adjacent to the project area and were reportedly built in the 16th century (based on Fornander) by Kiha-a-pi`ilani (Kamakau 1961:42). The *Alaloa*, or 'round-the-island road built by the same Kiha-a-pi`ilani, extended along the coastal region from Wai`ehu to Ha`iku and included the beach section near the proposed bikeway (Handy and Handy 1972).

A description of Wailuku from the late 1700s reports:

The district was called Nawaieha (the four streams) and was famous throughout the group, not only for the magnificence of Kahekili's court but for the vastness of its products. The shores of Kahului harbor from Waihe`e Point to Haiku, were surrounded with the grass huts of the fishermen and of those connected with the innumerable war canoes of the King. Myriads of coconut trees lined the beach from Kahauloa to Wailuku, the trunks of many of which are found in the marshes at Wailuku at this day, the trees having been destroyed by a conquering army from Hawaii (Paradise of the Pacific, Sept. 1900).

Many religious sites associated with the powerful paramount chiefs were located in Wailuku and included the *heiau* of Keahuku, Olokua, Olopio, Malena, Pohakuokahi, Leimako,

Kawelowelo, Kaulupala, Palamaihiki, Oloolokalani, Kaluli, Pihana, and Haleki'i (Walker in Sterling 1998:79). 'Iao Valley was where the burial caves of the chiefs of Maui (and other islands) were located and where their bodies were prepared for concealment (Sterling 1998:79).

Surfing activities enjoyed by the chiefs could be found at Kehu and Ka'akau (Kamakau 1961:82). At Kauahea, located southeast of 'Iao Stream at the *makai* end, warriors were trained and boxing contests were arranged for the amusement of the *ali'i* (Sterling 1998:89).

During the frequent periods of inter-island warfare and disagreements as to chiefly succession, Wailuku often supplied the battle ground. Indeed, its very name may refer to such an episode: Wailuku, Water-of-Destruction (Sterling 1998:74).

The last battle between the sons of Kekaulike, a powerful Maui chief in the 1700s, was fought on the dry plains of Wailuku at Pu'unene near the project area.

During the wars between Maui and Hawai'i Island in the 1700s, many battles occurred on the coastal sands of Wailuku, as well as in the valleys. In the sand dunes between Wailuku and Pu'unene, Kalaniopu'u's most prized Alapa guard was slaughtered by Kahekili's troops (Sterling 1998:88).

... They slew the Alapa on the sandhills at the southeast of Kalua. There the dead lay in heaps strewn like *kukui* branches; the corpses lay heaped in death; they were slain like fish enclosed in a net ... (Kamakau 1961:85,87,89). On the day of Kalaniopu'u's departure from Maui, it was said his war canoes covered the sands from Kahului to Pa'ia (Ti 1959:11).

Nothing specific could be found pertaining to the pre-Contact coastal region in the *ahupua'a* of Hamakuapoko except a description in 1851 of an area near Spreckelsville:

In returning from Makawao to Wailuku ... you will ride over fine white sand-hills, as pure and crinkled as a drift of new-fallen snow... One sand-hill in that vicinity has been an old burying-ground or battle-place, now laid bare by the winds. Skulls, having jaws in perfect preservation, will thirty-four teeth sound ... and all the bones of the human body, some of them of gigantic size, lie bleaching all around (Cheever in Sterling 1998:97).

1778 TO MID 1800s

Western descriptions of Maui were given by Capt. Cook and his men who were the first Europeans to record their impressions of the island, on November 26, 1778 (Beaglehole 1967: Part I, Vol. III). After returning from Alaska, they spotted Maui and sailed down a portion of the east side of the island. David Samwell, a surgeon on the Discovery, reported "...the ships lay to all day about 3 miles off shore, trading with the Natives who came off in their canoes in great number..." (Samwell 1967:1151).

It had been a time of war between Kalaniopu'u, ruler of Hawai'i Island, and Kahekili, chief of Maui and Moloka'i. During this season of the year (*Makahiki*), however, the fighting was temporarily suspended and the great chief of Maui, Kahekili, was free to visit the foreign ships. Samwell describes the King and the windward slopes calling Kahekili "...a middle aged man ... rather of a mean appearance..." and the land as "...mountainous, the sides of the hills are covered with trees...large open plains on which stand their houses & where they have their plantations of sweet potatoes, taro & c. ..." (ibid.).

MID-1800s TO 1900s

In the 1840s a drastic change in the traditional land tenure resulted in a division of island lands and a system of private ownership based on western law.

While it is a complex issue, many scholars believe that in order to protect Hawaiian sovereignty from foreign powers, Kamehameha III was forced to establish laws changing the traditional Hawaiian society to that of a market economy (Daws 1968:111; Kuykendall Vol. I, 1938:145 footnote 47, 152, 165-6, 170; Kame'eleihiwa 1992:169-70, 176).

Among other things, the foreigners demanded private ownership of land to insure their investments (Kuykendall Vol. I, 1938:138, 145, 178, 184, 202, 206, 271; Kame'eleihiwa 1992:178; Kelly 1998:4). Once lands were made available and private ownership was instituted, native Hawaiians including the *maka`ānana* (commoners) were able to claim the plots they were cultivating and living on, if they had been made aware of the foreign procedures (*kuleana* lands, LCAs). This land division, or *Māhele*, occurred in 1848. The awarded parcels were called Land Commission Awards (LCA). If occupation could be established through the testimony of witnesses, the petitioners were issued a Royal Patent number and could then take possession of

the property. Commoners claiming houselots in Honolulu, Hilo, and Lāhainā were required to pay commutation to the government before obtaining a Royal Patent on their awards (Chinen 1961:16). No LCAs were located near the present project area.

During the Māhele in 1848, the majority of the *ahupua`a* of Wailuku, known as the Ka`a lands or Wailuku Commons, was awarded as Crown Lands to Kauikeaouli (Kamehameha III). Ruth Ke`elikolani became the owner of a portion of land in the flat isthmus of Wailuku and Victoria Kamamalū received a 390 acre parcel of land in Wailuku (LCA 7713:13). In the 1860s future sugar lands around Pu`unene were described as:

... a complete desert, a great, barren stretch of sand and dust spread from Wailuku to Paia, except for a little cattle grazing land around the present location of Spreckelsville. (Burns 1991:72).

Sugar cane became a major industry in the 1800s with the Hawaiian Commercial Company owned, by Claus Spreckels, developing most of the flat lands of central and eastern Maui along with Alexander and Baldwin Company. By 1880, Spreckels had obtained in fee-simple title, of the entire *ahupua`a* of Wailuku (approximately 40,000 acres, Grant 3343), including the Wailuku Commons that had been Crown Lands. In the 19th and 20th centuries, sand mining occurred for various plantation needs. Sand dunes near the project area would have been a likely source. Alexander and Baldwin became owners of Spreckels' sugar company in 1926.

The growth of the sugar industry was augmented by the importation of labor from foreign lands. Thirteen camp communities were situated throughout the sugar lands and towns appeared at Pu`unene and Spreckelsville (USGS 1922 Paia and KĪHEI Quads. Railroads, established by the sugar company, facilitated communication between the camps and the hauling of cane. Remnants of the railroad track bed are still evident along the project area on Spreckelsville Beach road and near the eastern end of the proposed bikepath at Puna Road.

With the outbreak of WW II, 3,800 acres of the sugar lands at Pu`unene and Kahului were annexed by the military for the Kahului Naval Air Station. Several Marshy areas were filled during the construction of runways, most likely utilizing the sand from the nearby beach area (Welch 1991). Support facilities including naval housing, fortifications, and an officer's club were built along the coastal region, north of the airport. After the war, the Naval Air Station evolved into the Kahului Airport.

Modern activities have greatly altered the beach area. Possible grading for sugar cane agriculture in the 1800s, a trash dump, modifications made during WW II, and the continued expansion of the airport have impacted this area leaving very little of the natural landscape intact.

Presently, the proposed bikeway path extends along paved streets, through a housing development, the Maui Country Club, the H. A. Baldwin Park, and the main Hana Highway. Coastal sections adjacent to the project area on the north have been impacted by human activities altering the natural environment. Military structures are still evident in the area and vehicular access roads onto the beach for windsurfing have altered the coastal region.

SETTLEMENT PATTERNS

The project area is entirely within the coastal environmental zone. Ethnographic information describes the houses of fishermen and groves of coconut trees lining the coast. The canoes of the *ali'i* filled the bay and fishponds had been constructed on the marshy shore to provide a steady food source. Agricultural crops were easily cultivated inland in the lush valleys and along permanent streams of West Maui.

Two previous archaeological studies have established pre-Contact cultural deposits along the coastline and on either side of the Spreckelsville Beach Road (Clark and Toenjes 1987, Toenjes 1991). It would be expected to find features in the coastal sand dunes representing traditional fishing camps, temporary habitation, and burials. These features might include cultural deposits, fire features, and human burials. Remnants of religious shrines in the form of stacked rocks representing cairns or *ahu*, may have survived.

Ethnographic information suggests the use of the coastal zone and some inland areas near the vicinity of the project for Hawaiian military activities. This might result in the identification of artifacts associated with war as well as buried human remains. Evidence of modern Military construction activities are likely to be identified, as well.

Natural disasters and events affecting the coastal region must be taken into consideration in predicting cultural remnants. In recent times, several *tsunami* have caused damage throughout Hawai'i. In 1923 a *tsunami* destroyed the wharf at Kahului. In 1946 a more destructive tidal

wave inundated the windward coasts of Maui and Hawai'i Island. More recently, in 1952 and again in 1957, smaller *tsunami* have arrived in the islands. These events, in addition to unknown pre-historic occurrences, have undoubtedly altered the coastal region.

Long term accretion of the sandy coast may have relocated ancient sites inland (Welch 1991, Folk and Hammatt 1993). In the vicinity of the airport, the pre-Contact cultural layer appeared to be located on a former beach now several hundred meters inland from the sea. This is due to coastal progradation as a result of rapid beach accretion and dune development (Kennedy 1993).

FIELDWORK RESULTS

The project area was located above the coastal beach and either side of the proposed bikeway had either been already developed or had been impacted by sand mining and/or vehicular activities. The entire project area was pedestrian surveyed and no surface features were identified. Only one section of dune appeared to have the potential for an intact cultural deposit. Nine shovel probes (SP) were placed in the intact dune.

EXCAVATIONS

Shovel Probe 1 (SP-1) as located on the south side of an artificial berm behind Maui Country Club (Figure 6). It measured 0.60 by 0.60 by 0.70 m in depth. Layer I (0-15 cmbs) was a light brownish gray (10YR 6/3) very fine sand containing no cultural material (Figure 7). Layer II (15-70 cmbs) was a very pale brown (10YR 8/3) very fine sand containing no cultural material.

Shovel Probes 2 through 8 consisted of the same soil layers as SP-1 (Figure 8). Shovel Probe 2 measured 0.40 by 0.40 by 0.74 m in depth (Figure 9). Layer I extended from 0 to 18 cmbs and Layer II extended from 18 to 74 cmbs. No cultural material was identified in either layer.

Shovel Probe 3 measured 0.50 by 0.30 by 0.47 cmbs. Layer I extended from 0 to 27 cmbs and Layer II extended from 27 to 47 cmbs (Figure 10). No cultural material was identified in either layer.



Figure 6: Location of Shovel Probe 1. View to North.

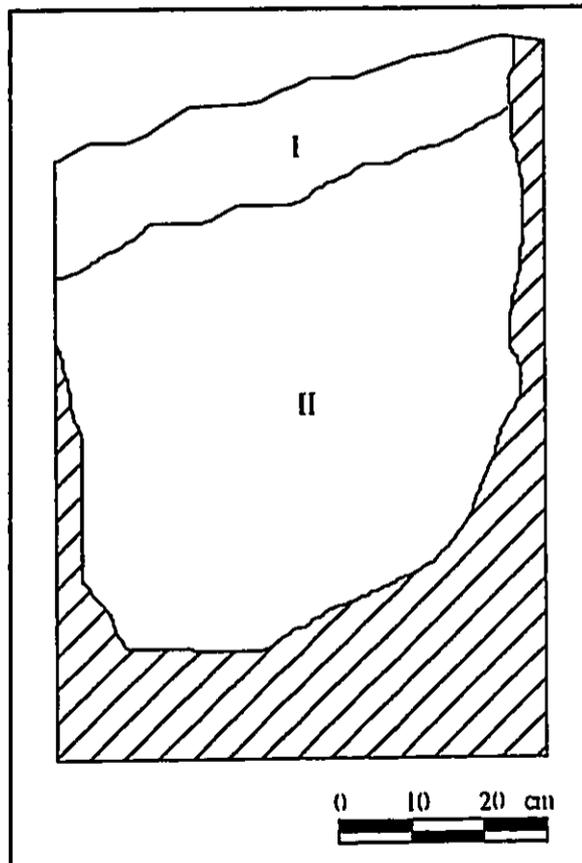


Figure 7: South Wall Profile of SP-1.



Figure 8: Shovel Probe 2 Base of Excavation (BOE). View to South.

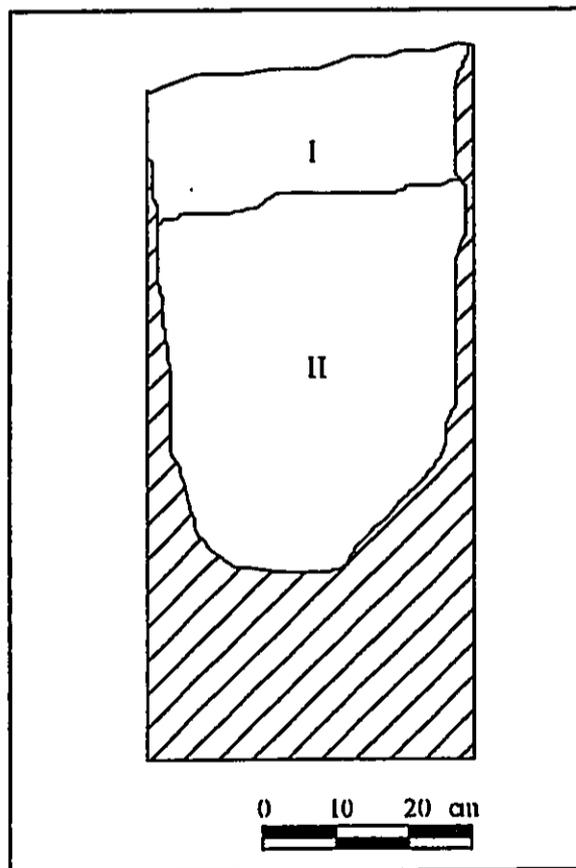


Figure 9: South Wall Profile of SP-2.

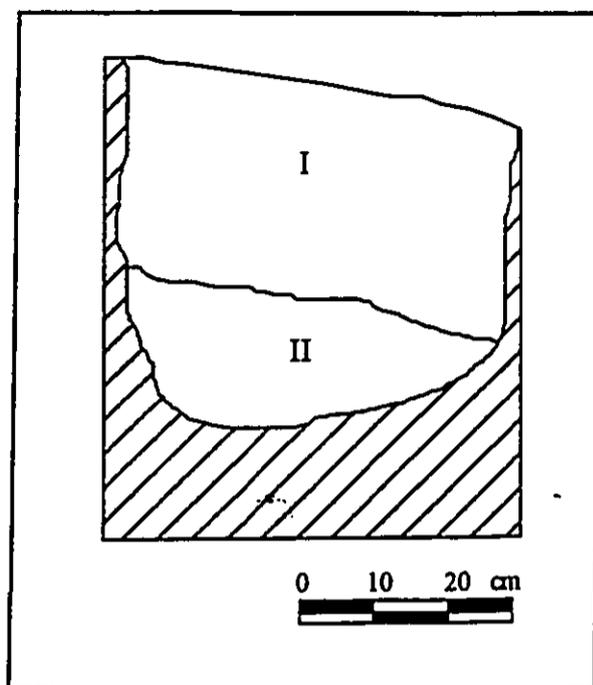


Figure 10: West Wall Profile of SP-3.

Shovel Probe 4 measured 0.50 by 0.38 by 0.76 cmbs. Layer I extended from 0 to 35 cmbs and Layer II extended from 35 to 76 cmbs (Figure 11). A modern metal bottle cap was identified in Layer II.

Shovel Probe 5 measured 0.55 by 0.50 by 0.67 cmbs. Layer I extended from 0 to 35 cmbs and Layer II extended from 35 to 67 cmbs (Figure 12). No cultural material was identified in either layer.

Shovel Probe 6 measured 0.50 by 0.50 by 0.65 cmbs (Figure 13). Layer I extended from 0 to 12 cmbs and Layer II extended from 12 to 65 cmbs (Figure 14). No cultural material was identified in either layer.

Shovel Probe 7 measured 0.50 by 0.40 by 70 cmbs. Layer I extended from 0 to 12 cmbs and Layer II extended from 12 to 70 cmbs (Figure 15). No cultural material was identified in either layer.

Shovel Probe 8 measured 0.45 by 0.40 by 0.70. Layer I extended from 0 to 18 cmbs and Layer II extended from 18 to 70 cmbs (Figure 16). No cultural material was identified in either layer.

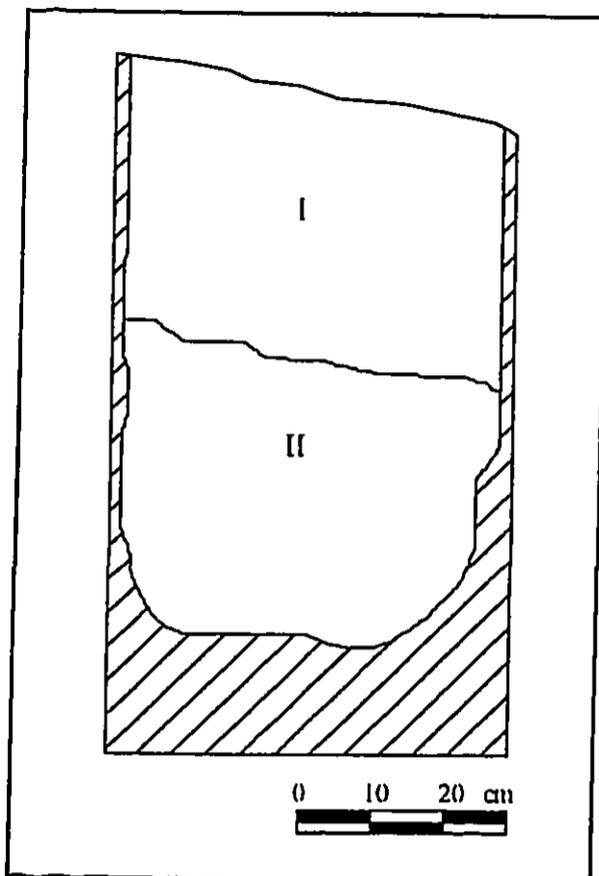


Figure 11: South Wall Profile of SP-4.

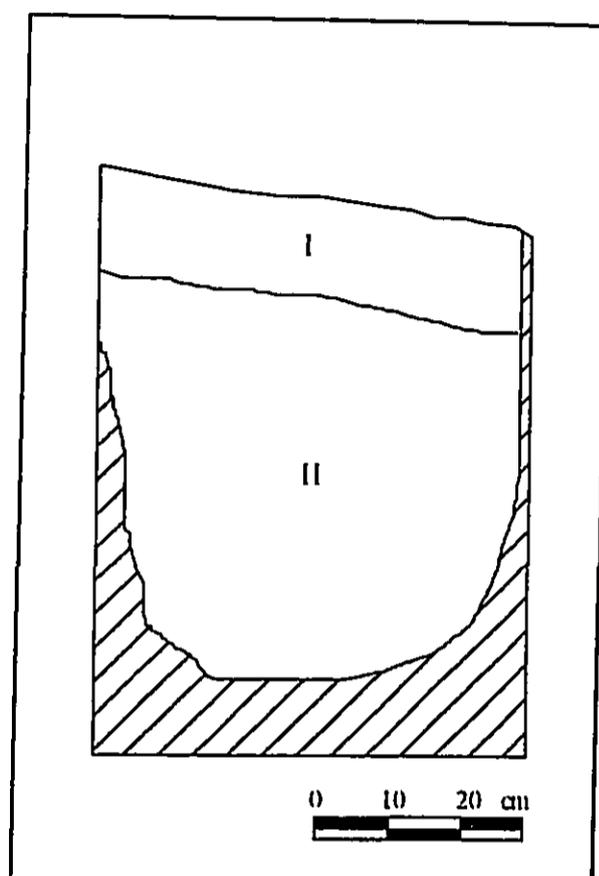


Figure 12: East Wall Profile of SP-5.



Figure 13: Shovel Probe 6 Base of Excavation. View to North.

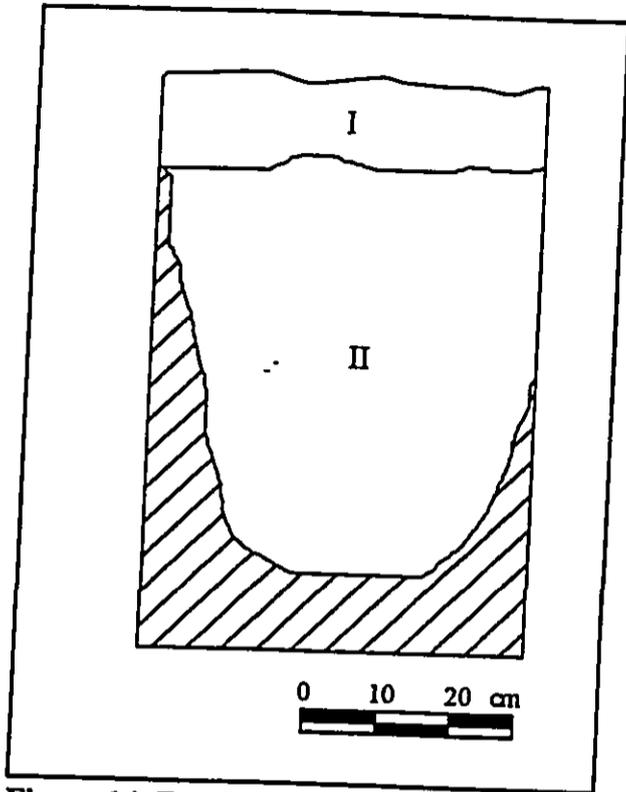


Figure 14: East Wall Profile of SP-6.

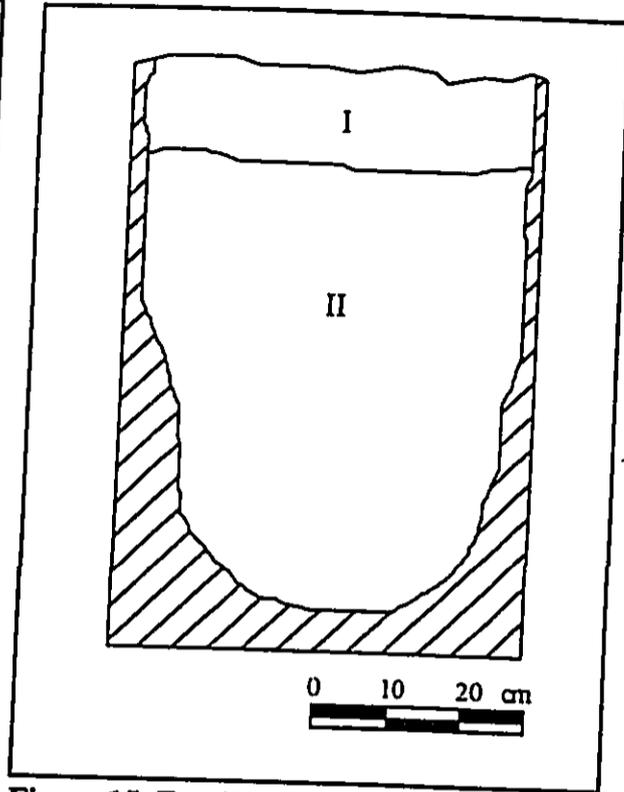


Figure 15: East Wall Profile of SP-7.

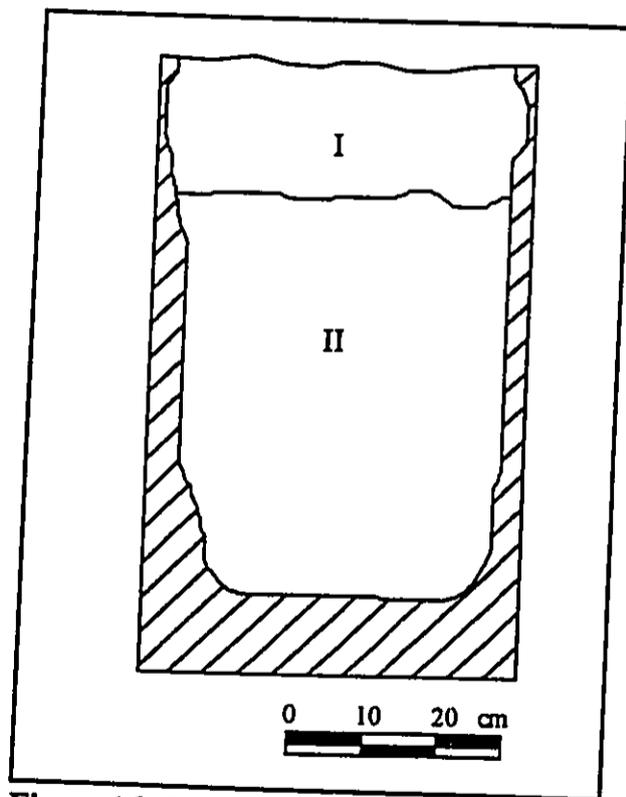


Figure 16: South Wall Profile of SP-8.

Shovel Probe 9 measured 0.50 by 0.40 by 0.63 cmbs (Figure 18). Layer I extended from 0 to 7cmbs and was the same as Layer I in SP-1. Layer II (7 to 32) consisted of a yellowish brown (10YR 5/4) fine sand fill and contained a piece of plastic. Layer III extended from 32 to 63 cmbs and was the same as Layer II in SP-1 (Figure 19). No cultural material was identified in Layer I or Layer III.

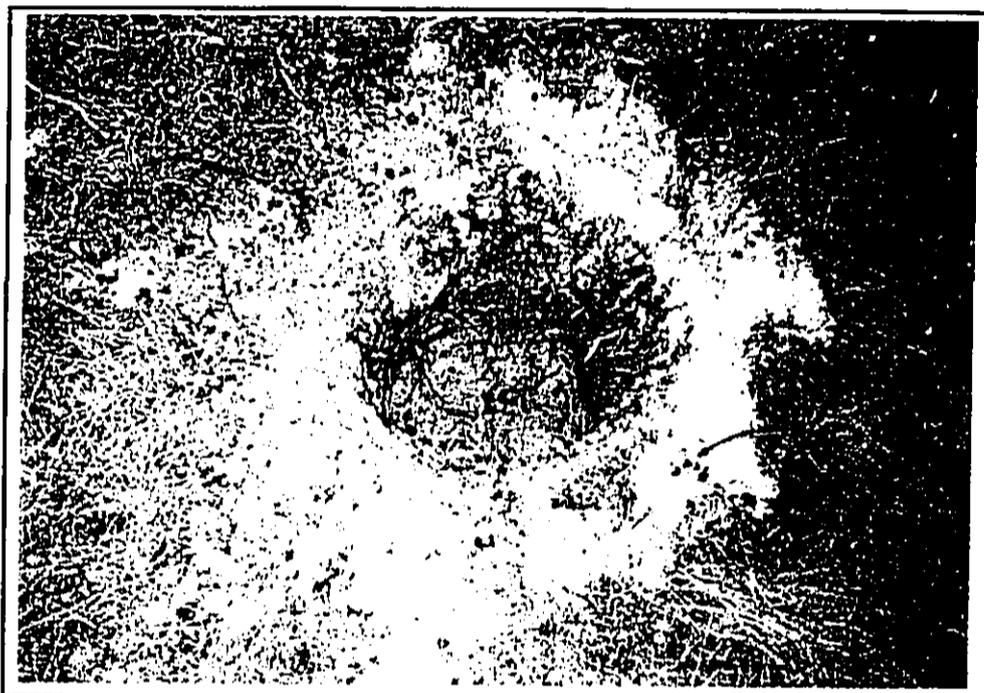


Figure 17: Shovel Probe 9 Base of Excavation. View to South.

Shovel Probes 1, 2, 3, 5, 6, 7, and 8 contained no cultural material. Shovel Probes 4 and 9 contained one modern artifact each.

DISCUSSION

A large portion of the project area extended along previously constructed roadways or developed areas. Sections of the project area traversed beach dunes which had been extensively altered by nearby development, sand mining, and grading activities. One small section of beach dune appeared intact and nine shovel probes were placed there. Although the potential for

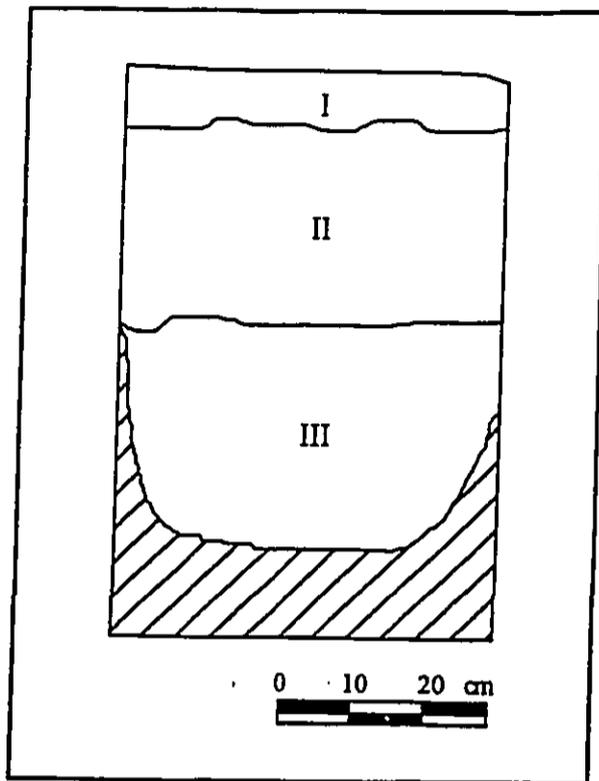


Figure 18: South Wall Profile of SP-9.

cultural deposits and/or human remains was present, no cultural material was excavated. No significant historic sites were identified and no further work is recommended.

Although no significant sites are believed to be in the project corridor, should any human remains be uncovered during development, all work at that location must be stopped and the State Historic Preservation Division be contacted.

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