

LINDA LINGLE
Mayor
CHARLES JENCKS
Director
DAVID C. GOODE
Deputy Director



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

October 22, 1998

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

EASSIE MILLER, P.E.
Wastewater Reclamation Division

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

Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

OCT 26 P2:35

DEPARTMENT OF
PUBLIC WORKS

Mr. Gary Gill, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

SUBJECT: FINDING OF NO SIGNIFICANT IMPACT (FONSI) for
PULEHU ROAD IMPROVEMENTS, TMK 2-3-2 & 2-5-1
OMAOPIO, MAUI, HAWAII
JOB NO. 97-74

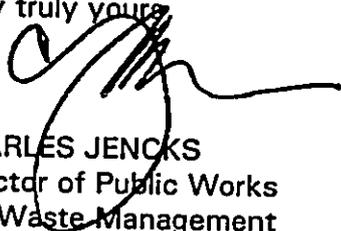
Dear Mr. Gill:

The Department of Public Works and Waste Management, has reviewed the comments received during the 30-day public comment period which began on August 23, 1998.

We have determined that this project will not have significant environmental effects and has issued a FONSI. Please publish this notice in the November 8, 1998 OEQC Environmental Notice.

We have enclosed, a completed OEQC Publication Form and four copies of the final EA. If you have any questions, please call Charlene Shibuya at (808) 243-7437.

Very truly yours,


CHARLES JENCKS
Director of Public Works
and Waste Management

CSS:c(ED98-1412)
JOB 97-74.OEQ

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1998-11-08-MA-FEA-Pulehu Road

NOV 8 1998

FILE COPY

Improvements

CHAPTER 343, Hawaii Revised Statutes (HRS)

**FINAL ENVIRONMENTAL ASSESSMENT
FINDING OF NO SIGNIFICANT IMPACT**

for the

**PULEHU ROAD IMPROVEMENTS
OMAOPIO, MAUI, HAWAII
TMK: (2) 2-3-2 & 2-5-1**

**PROPOSED BY:
DEPARTMENT OF PUBLIC WORKS AND WASTE MANAGEMENT
COUNTY OF MAUI**

**PREPARED BY:
C. TAKUMI ENGINEERING, INC.
18 CENTRAL AVENUE
WAILUKU, HAWAII 96793**

OCTOBER 1998

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**FINAL ENVIRONMENTAL ASSESSMENT
FOR
PULEHU ROAD IMPROVEMENTS
OMAOPIO, MAUI, HAWAII
TMK: (2) 2-3-2 & 2-5-1**

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**FINAL ENVIRONMENTAL ASSESSMENT
FOR
PULEHU ROAD IMPROVEMENTS
OMAOPIO, MAUI, HAWAII
TMK: (2) 2-3-2 & 2-5-1**

1. SUMMARY

APPLICANT/PROPOSING AGENCY:

Department of Public Works and Waste Management
County of Maui
200 S. High Street
Wailuku, Hawaii 96793

APPROVING AGENCY:

Department of Public Works and Waste Management
County of Maui
200 S. High Street
Wailuku, Hawaii 96793

PROJECT DESCRIPTION:

The proposed project is located in Omaopio, Maui, Hawaii. This project consists of improving approximately four miles of existing roadway along Pulehu Road from Omaopio Road to Holopuni Road. The project will provide for a comfortable two-lane roadway, which will include road widening to approximately 24 feet, paved shoulders (3 feet where practical), drainage improvements, warning and regulatory signs, guardrails, and other related work.

LOCATION:

Omaopio, Maui, Hawaii
TMK: (2) 2-3-2 & 2-5-1

LAND USE DESIGNATION:

State Land Use:	Agriculture
County Community Plan Designation:	Agriculture
County Zoning:	Interim

NAME AND ADDRESS OF CONTACT PERSON:

Carl K. Takumi
C. Takumi Engineering, Inc.
18 Central Avenue
Wailuku, Hawaii 96793
Phone: (808) 249-0411
Fax: (808) 249-0311

AGENCIES CONSULTED:

Federal:

Natural Resources Conservation Service
U.S. Army Corps of Engineers

State of Hawaii:

State Historic Preservation Division
Department of Transportation
Department of Health - Environmental Planning
Commission on Water Resources Management

County of Maui:

Department of Fire Control
Department of Planning
Department of Water Supply
Police Department
Office of Economic Development (Kula Agricultural Park)

Private, Others:

Maui Electric Company
Haleakala Ranch Company
Maui Pineapple Company
Hawaii Commercial & Sugar Company (HC&S)
Kula Community Association
A & B Properties
A & B, Inc.
Wailuku Public Library

2. PROJECT DESCRIPTION

2.1 Introduction.

The Pulehu Road Improvements, extending from Omaopio Road to Holopuni Road, will include widening the existing road, improving drainage, and improving sight distances. The proposed project will improve hazardous driving conditions existing as a result of a narrow roadway, poor drainage, and limited sight distances.

The project involves improvements within the existing road right-of-way along the four-mile section of Pulehu Road from Omaopio Road to Holopuni Road, for a comfortable two-lane (24 foot wide lanes + 3-foot wide shoulders where practical) roadway. The project will include road widening and paved shoulders, drainage improvements (small culverts where practical and paved shoulder swales with "turn-outs" into natural drainage ways), warning and regulatory signs, guardrails where necessary, and other related work.

2.2 Location of Project.

The project is located on the western slopes of Haleakala in Maui, Hawaii, in the community of Omaopio, as shown in *Figure 1*. The new roadway will be constructed over the existing Pulehu Road from Omaopio Road to Holopuni Road. The location of the existing roadway is within the Puu O Kali Quadrangle shown in *Figure 2*, and the designated Tax Map Key numbers for the Project are (2) 2-3-2 & 2-5-1.

2.3 Land Ownership.

The Project consists mainly of road widening and will be constructed over the existing roadway, Pulehu Road, owned by the County of Maui. Land acquisitions or easements may be necessary for improvements along sections of roadway that are privately owned.

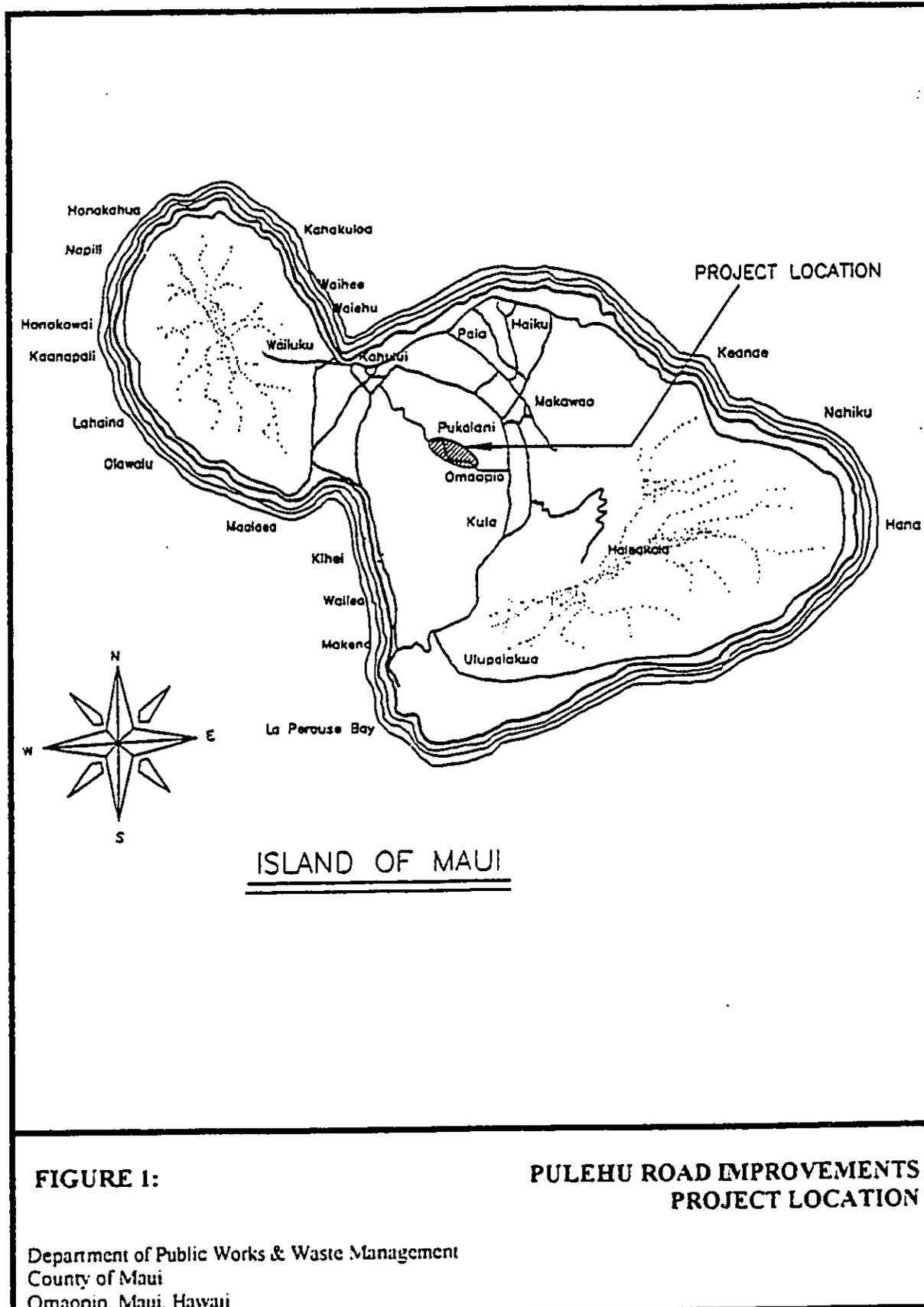
2.4 Land Use.

The project route is through county-owned lands and is surrounded by privately-owned lands. The proposed road improvements route is located over existing roadway. The project involves the existing Pulehu Road from Omaopio Road to Holopuni Road. The land uses surrounding the project site are agriculture, consisting of sugar cane fields, pineapple fields, pastureland, and Kula Agricultural Park. Vegetation along the roadway consists mainly of haole koa, kiawe, cactus, and grasses.

2.5 Applicable Government Permits.

State Permits:

Department of Health NPDES Permit



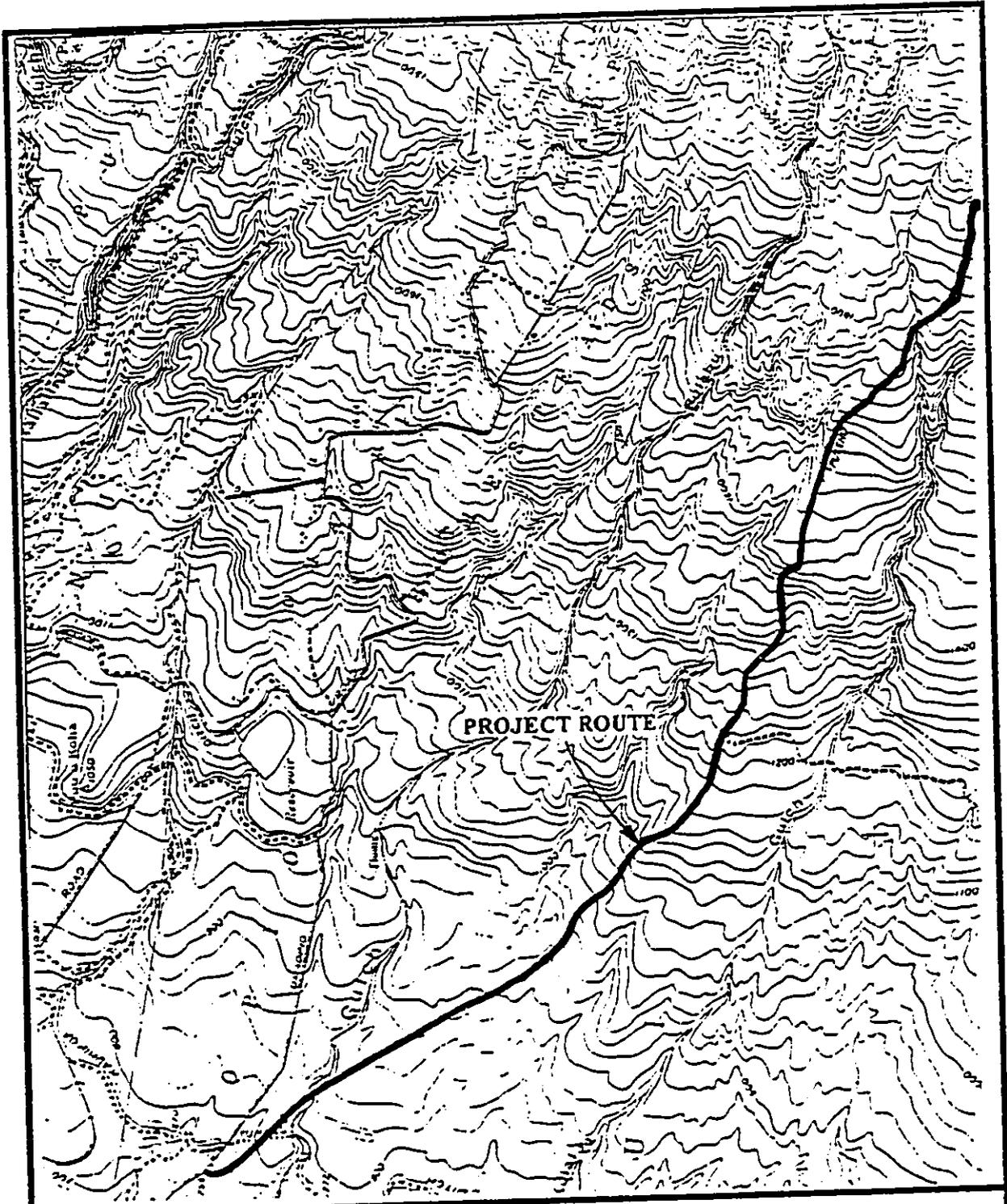


FIGURE 2:

**PULEHU ROAD IMPROVEMENTS
VICINITY MAP
(USGS PUU O KALI QUADRANGLE)**

Department of Public Works & Waste Management
County of Maui
Omaoio, Maui, Hawaii

County Permits:

Grading Permit
Work to Perform on County Highway Permit

A Department of the Army 404 Permit and the related Department of Health 401 Permit will not be required. A Stream Alteration Permit is also not required. Letters from the Department of the Army and the Commission on Water Resource Management stating this determination are included in Appendix C.

2.6 Proposed Improvements.

The Pulehu Road Improvements, extending from the intersection of Omaopio and Pulehu Roads to the intersection of Holopuni and Pulehu Roads, will consist of improvements along the existing roadway. The Project consists of road improvements for approximately four miles along Pulehu Road in the community of Omaopio, Maui, Hawaii.

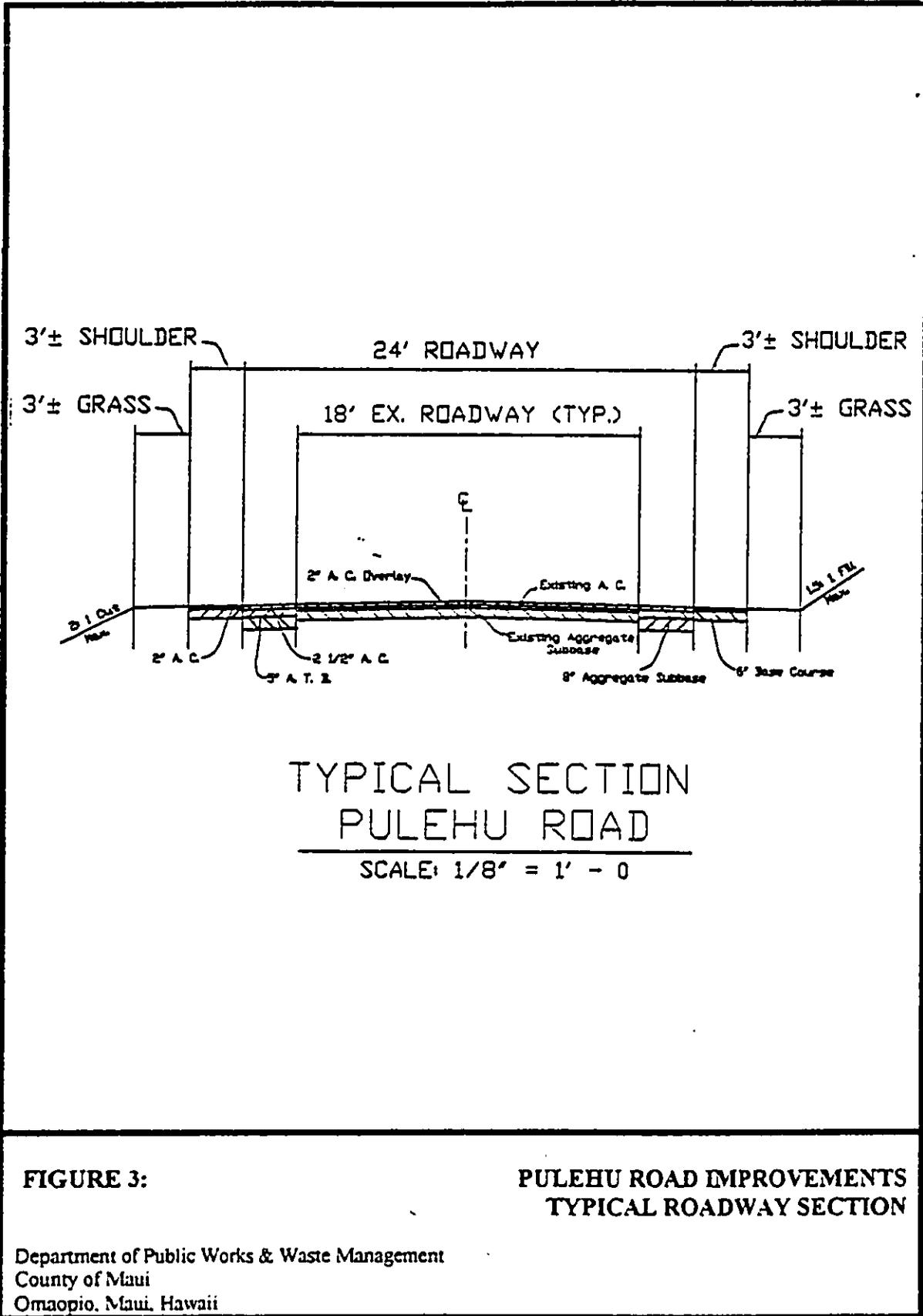
The proposed improvements consist of widening the existing roadway to a major agricultural collector road (24-foot wide lanes + 3-foot wide shoulders and 3-foot wide grass shoulders where practical). The work includes widening the existing road and adding paved shoulders, minimal drainage improvements (small culverts where practical and paved shoulder swales with "turn-outs" into natural drainage ways), warning and regulatory signs, guardrails, and other related work. A typical roadway section is shown in *Figure 3*.

2.7 Development Schedule and Cost.

It is anticipated that the project will begin construction in 1999. Sufficient funding may not be available for the entire project; therefore, the Pulehu Road Improvements may be phased as funds become available. The construction phase is expected to last six to eight months, which may or may not be consecutive due to the availability of funding. The estimated construction cost of the project is approximately \$2,844,000.

2.8 Need for the Project.

The existing roadway is narrow with no paved shoulders and has poor drainage and limited sight distance. The road is presently not wide enough to accommodate two-way traffic when larger trucks are used to haul produce along Pulehu Road. Road improvements made on Pulehu Road, from Omaopio Road to Holopuni Road, will greatly improve driving conditions and will allow two-way traffic to comfortably traverse along the Project route.



3. EXISTING CONDITIONS

3.1 Topography.

The elevation along the proposed project route ranges from approximately 750 feet mean sea level (MSL) to approximately 1900 feet MSL. The slopes along the existing road are moderate. They range from 3% in the first mile of the roadway to 8% in the last mile of the proposed project route.

3.2 Drainage.

Pulehu Gulch is a major gulch that crosses Pulehu Road along the proposed project route. The anticipated flow for Pulehu Gulch for a 100-year, 24-hour storm is 3,893 cfs. Four other gulches exist along the proposed project route. The anticipated flows for these gulches for a 100-year 24-hour storm range from 73 cfs to 2576 cfs. A Department of the Army 404 Permit, a State Department of Health 401 Permit, and a Stream Alteration Permit are not needed for any of the gulches, as the gulches are intermittent. More detailed letters are provided in Appendix C, Determination of Permits Required Response Letters.

There are no perennial streams or other bodies of water in the vicinity of Pulehu Road.

Generally, existing storm runoff mauka of Pulehu Road sheet flows across the road. Longitudinal drainage will consist of roadside swales which will outlet at existing drainage ways leading away from the road. Culverts will be placed at certain gulches and larger drainage ways. Runoff from roadside swales will be considered during the design phase of the Project.

3.3 Soils.

According to the *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai*, U.S. Department of Agriculture, Soil Conservation Service, August 1972, most of the soil within and around the project site is classified as Keahua Cobbly Silty Clay Loam (KnaC), Keahua Silty Clay Loam (KnB), or Keahua Cobbly Silty Clay (KnhC). There is also approximately 500 feet of Rock Land (rRK). The proposed road improvement route is shown in *Figure 4* along with the soil classification. A description of the soil classification along the roadway is as follows:

The Keahua series, including Keahua Cobbly Silty Clay Loam (KnaC), Keahua Silty Clay Loam (KnB), and Keahua Cobbly Silty Clay (KnhC), consists of well-drained soils on uplands on the island of Maui. The soils developed in material weathered from basic igneous rock. Elevation ranges from 600 to 1,500 feet and the annual rainfall amounts to 15 to 25 inches. This land type is used for sugarcane, pasture, and wildlife habitat.

The soils profile for the Keahua series consists of a surface layer that is dark reddish-brown silty clay loam about 10 inches thick. The subsoil is about 50 inches thick and is dark reddish-brown silty clay loam and very dark gray clay loam that has subangular blocky structure. The substratum is soft, weathered basic igneous rock. KnaC has slow to medium runoff, and the erosion hazard is

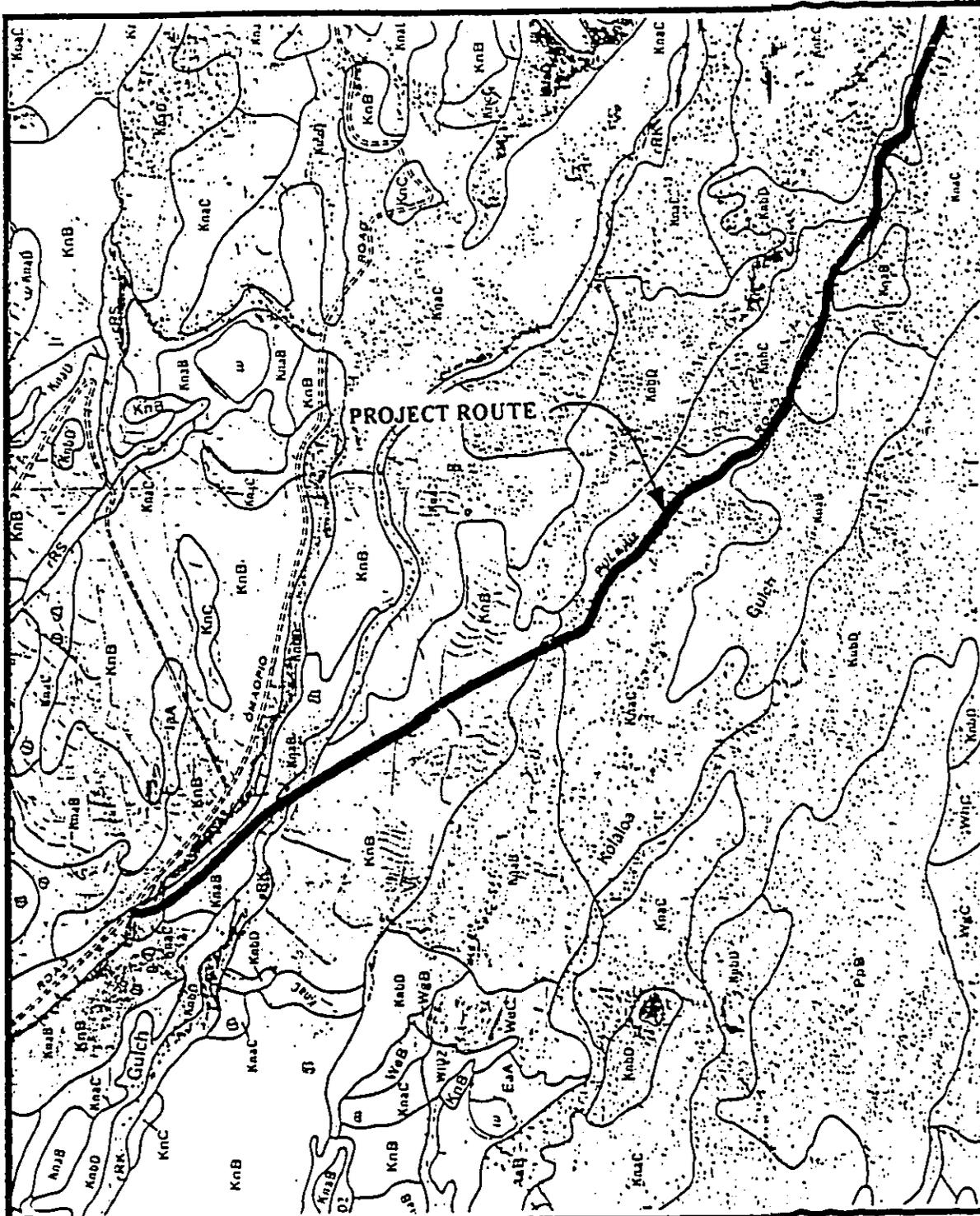


FIGURE 4:

PULEHU ROAD IMPROVEMENTS
SOILS CLASSIFICATION

Department of Public Works & Waste Management
County of Maui
Omaoio, Maui, Hawaii

slight to moderate. KnB has moderate permeability, runoff is slow, and the erosion hazard is slight. KnhC has slow to medium runoff and erosion hazard is slight to moderate.

Rock Land (rRK) is made up of areas where exposed rock covers 25 to 90 percent of the surface. Rock outcrops and very shallow soils are the main characteristics. Elevation ranges from nearly sea level to more than 6,000 feet, and the annual rainfall amounts to 15 to 60 inches.

Rock Land is used for pasture, wildlife habitat, and water supply. The natural vegetation at the lower elevation consists mainly of kiawe, klu, piligrass, Japanese tea, and koa haole. This land type is also used for urban development.

3.4 Climate.

The project site is located on the western slopes of Haleakala in Omaopio, Maui, Hawaii. Annual median rainfall is between 15 and 20 inches per year.

3.5 Flood Hazard.

According to the Federal Insurance Rate Maps generated by the Federal Emergency Management Agency (FEMA), the roadway is specified Zone C, as shown in *Figure 5*. The zone designation, Zone C, stands for areas of minimal flooding.

3.6 Surrounding Land Use.

The Project begins at the intersection of Pulehu and Omaopio Roads and ends at the intersection of Pulehu and Holopuni Roads. The proposed roadway improvement project is located over an existing roadway, mostly through sugar cane fields, pineapple fields, and undeveloped pasture lands and is designated agriculture by the state and county. To the east of the proposed route is Kula Agricultural Park. Maui Electric Company transmission lines exist along the roadway but should not be affected by the widening of Pulehu Road.

3.7 Flora and Fauna.

The vegetation consists mostly of haole koa, kiawe, cactus, and grassy areas along the proposed location of the project. Hawaiian owls have been noticed flying over the project area, but no nesting sites were observed along the project route. No other signs of native species of wildlife were observed or heard.

3.8 Archeology.

In July 1998, a reconnaissance survey was conducted on the subject area. The project survey was accomplished by Scientific Consultant Services, Inc. along a portion of Pulehu Road. Survey revealed two archaeological features, both being walls considered historic period walls. Of the two walls, one will be disturbed during road widening, as it exists approximately one meter from the road.

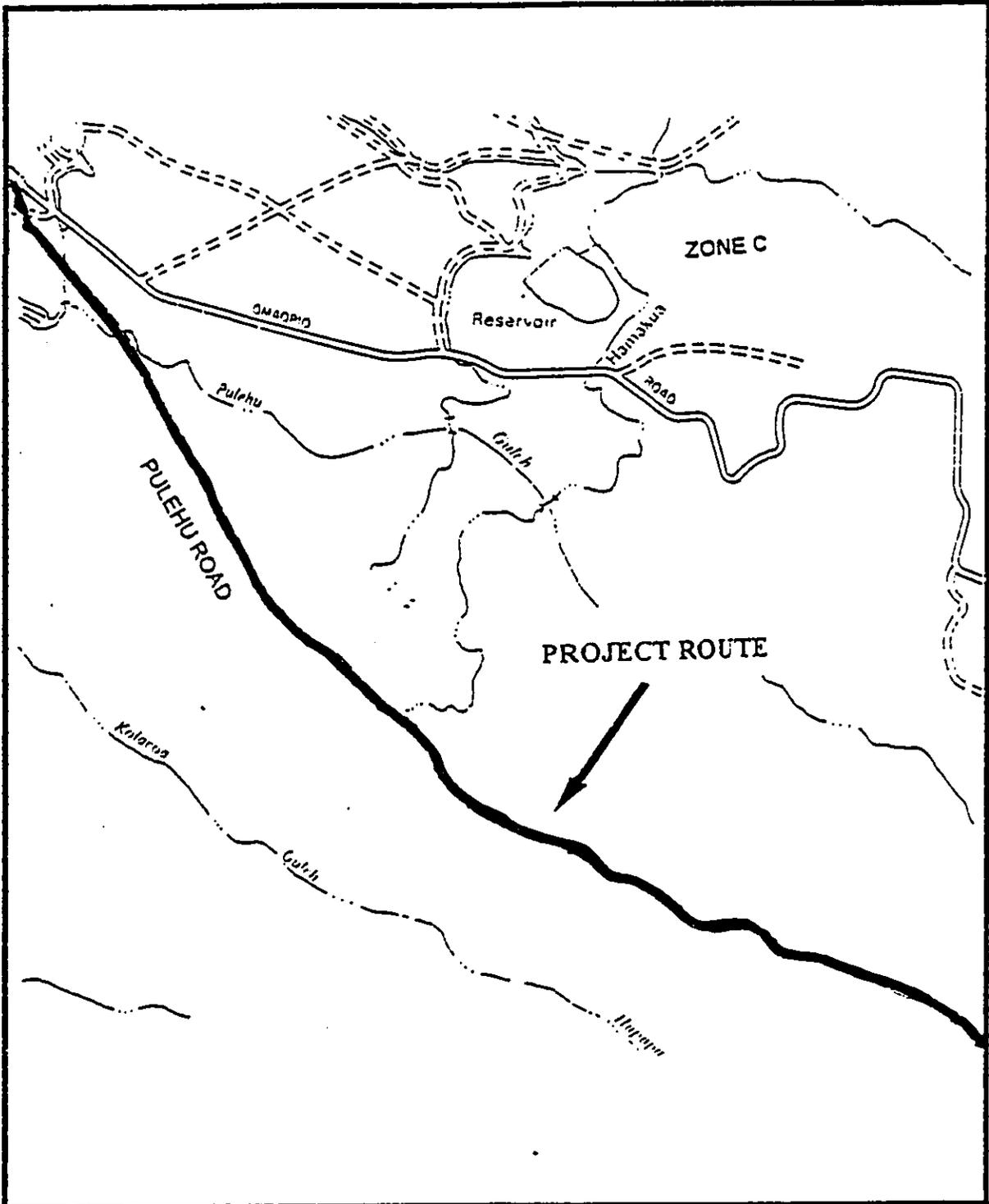


FIGURE 5:

**PULEHU ROAD IMPROVEMENTS
FLOOD INUNDATION MAP**

Department of Public Works & Waste Management
County of Maui
Omaoio, Maui, Hawaii

According to the State Historic Preservation, the project improvements will have "no effect" due to lack of archaeological sites in the area and low potential of presence of archaeological resources in the area. The project area is considered within a "low sensitivity" zone regarding the presence of archaeological sites. It is recommended that on-call or intermittent monitoring by a qualified archaeologist be conducted during this road improvement project. A complete archaeological review is included in Appendix A.

4. ENVIRONMENTAL IMPACTS

The environmental impacts of the proposed project include the effects of construction activities, the impacts on public facilities, and the impacts on socio-economic activities.

4.1 Construction Impacts.

The proposed project will generate short-term impacts that are typical of site preparation and construction activities. These impacts include air quality, water quality, noise, and potential impacts to vehicular traffic along Pulehu Road. The impacts are short-term and usually temporary conditions that occur only during the construction period. Most of the impacts are mitigated through compliance with the applicable state and county regulations.

4.1.1 Air Quality.

Emissions from trucks and construction equipment with diesel engines could be cause for short-term air pollution impacts. These emissions are expected to be insignificant.

Dust generated from construction activities such as clearing and grubbing operations, excavation and vehicle movement is expected to be minimal and can be reduced by watering the construction site. Water will be needed during construction of the roadway to control dust. The contractor shall be responsible for providing water for dust control. The contractor may obtain water for dust control from the County Kahului Wastewater facility or may make arrangements to use irrigation water from private sources.

4.1.2 Noise Impacts.

Noise impacts are associated with construction equipment working on the project. Most of the noise will take place only during actual construction. All of these sources will cease upon construction completion. The contractor shall be required to obtain a Noise Permit, if necessary.

4.1.3 Discharge.

No discharge from construction dewatering or hydro testing procedures is expected. No perennial streams or other bodies of water exist along the project route; therefore, construction runoff will not have a significant effect on bodies of water. The total project will disturb more than five

acres, thus an NPDES Permit will be required. A Dust Management Practice Plan will have to be prepared and implemented to further reduce non-point source pollution from reaching state water.

4.1.4 Traffic.

Traffic along the proposed project route consists mainly of commuters and farm trucks. Commuters using Pulehu Road as an alternate route from Kula Highway to Hana Highway can use Haleakala Highway. Traffic that uses Pulehu Road, such as those traveling to and from Kula Agricultural Park and other adjacent properties, will be allowed access and controlled through appropriate signage and other traffic control measures.

4.2 Impacts on Public Facilities.

4.2.1 Water and Wastewater.

There will be no long-term impact on water and wastewater services. No wastewater load will be added to the existing County wastewater system.

4.2.2 Electricity.

There will be no long-term impact upon electrical services. Maui Electric Company transmission lines that exist along the roadway should not be affected. The distance between the edge of road and the transmission lines will be approximately eight feet. Where poles already exist within the eight feet, the road will be widened in the opposite direction. This will further be considered in the design phase, and poles will be moved only if necessary.

4.2.3 Fire, Police, and Medical Services.

The Kula Fire Station is located within two miles southeast of the project site. The main police station is located in Kula, approximately two miles from the project site. There are two hospitals almost equidistant from the project route: Kula San in Kula, and Maui Memorial Hospital in Wailuku.

The project will not impact fire and medical services. Signage and pavement markings will be used to control vehicular traffic, and at least one lane of traffic will be open at all times.

4.3 Socio-Economic Conditions.

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.

No long-term socio-economic impacts are anticipated since this project will be improving the road to the designated major agricultural collector assigned to Pulehu Road by the Department of Public Works and Waste Management and improving driving safety of the road.

5. ALTERNATIVES TO THE PROPOSED PLAN

5.1 No-Action Alternative

A no-action alternative will not be beneficial for motorists and the community. The roadway improvements will present a higher level of service for motorists choosing this alternative route upcountry via Pulehu Road between Omaopio Road and Holopuni Road. The proposed improvements will provide a more navigable route for agricultural vehicles traveling along Pulehu Road to the distribution center of Kahului. If the no-action alternative is chosen, poor driving conditions will continue to exist and possibly increase.

6. MITIGATIVE MEASURES

MITIGATIVE MEASURES FOR SHORT-TERM IMPACTS

Short-term impacts will occur mainly during construction. Mitigative and environmental measures to be implemented during the design, construction, and post-construction phases of the project to minimize short-term impacts are as follows:

The use of mufflers on construction equipment, together with restricting construction activities to standard working hours, will help mitigate noise impacts. All operations will be in compliance with the State Department of Health's rules and regulations, including the need for a Noise Permit, if necessary.

Impacts from dust created by the movement of construction equipment and construction vehicles and excavation can be mitigated through frequent watering of the site. Watering will occur through the weekend, on holidays, and on other non-working days to reduce the impacts from dust and to limit the potential of a fire hazard.

7. FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Based on the findings listed below, an environmental impact statement will not be required for the proposed Pulehu Road Improvements. This determination has been made in accordance with the Hawaii Revised Statutes (HRS), Chapter 343. The project does not:

- (1) **Involve a loss or destruction of any natural or cultural resource;**

The proposed project will not impact scenic views of the ocean. The visual character of the area will not significantly change because improvements are being made to an existing roadway. Improvements on drainage systems will follow established design standards to ensure the safe transport and discharge of storm runoff.

As noted in Section 3.8, the project will have "no effect" on significant archaeological or historical sites. If any archaeologically significant artifacts or other indicators of activity

be uncovered during the construction phases of development, their treatment will be conducted in strict compliance with the requirements of the Department of Land and Natural Resources.

(2) Curtail the range of beneficial uses of the environment;

The Project involves improvements on an existing roadway, and the scope of improvements will not significantly affect the existing uses of the environment.

(3) Conflict with the State's long-term goals or guidelines as expressed in Chapter 343, HRS;

The proposed improvements do not conflict with the Environmental Policies established in Chapter 344, HRS, and the National Environmental Policy Act.

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

The Project will not significantly or negatively affect existing residential areas near the Project route. The Pulehu Road Improvement project in itself is not contributing to new population growth. The road improvements will provide an easier access between the agricultural areas along Pulehu Road and the marketing and distribution center of Kahului.

(5) Substantially affect public health;

Once the Project is completed, impacts from air, noise, and water quality impacts will be insignificant or not detectable. Overall, the improvements will be positive as compared to the "no-action" alternative.

(6) Involve substantial secondary effects, such as population changes or infrastructure demands;

The proposed project will not in itself generate new population growth, but it will provide needed improvements to the infrastructure for the present population and the Makawao-Pukalani-Kula Community Plan anticipated growth of the area. The area will remain an agricultural area.

(7) Cumulatively have a considerable effect on the environment or involve a commitment to larger actions;

The proposed project involves improvements to an existing roadway, thus, substantial effects on the environment will not occur. Pulehu Road is presently designated as an agricultural collector road and will remain the same after the improvements are completed; therefore, a commitment to larger actions does not exist.

(8) Substantially affect a rare, threatened, or endangered species or its habitat;

No endangered plant or animal species was observed within the highway corridor.

(9) Detrimentially affect air or water quality or ambient noise levels;

No streams or other bodies of water exist within or near the Project area. Air and water quality will comply with the State Department of Health noise and clean water regulations.

(10) Affect an environmentally sensitive area, such as a flood plain, tsunami zone, erosion prone area, geologically hazardous land, estuary, freshwater area, or coastal waters;

There are no environmentally sensitive areas within the Project route. The physical character of the proposed improvements has previously been disturbed by agricultural uses and the existing roadway, thus, the area no longer reflects a "natural environment."

(11) Substantially affect any scenic vista or viewplane;

Due to topographical characteristics of the area, no scenic vistas or viewplanes exist within the proposed project area. The proposed improvements will not be anymore visible than the existing roadway already is.

(12) Require substantial energy consumption.

The proposed project will not require any energy consumption once the Project has been completed.

8. REFERENCES

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

FIRM Flood Insurance Rate Map, Maui County, Hawaii (Panel 260), March 16, 1995, Federal Emergency Agency.

Atlas of Hawaii (Second Edition). Department of Geography, University of Hawaii, University Hawaii Press, Honolulu, 1983.

An Archaeological Monitoring Plan for Pulehu Road Improvement Project, Omaopio Road Junction to Holopuni Road, Maui Island, Hawaii, Michael F. Dega, M.A. Scientific Consultant Services, Inc. August 1998.

Makawao-Pukalani-Kula Community Plan, County of Maui, July 1996.

9. APPENDIX A: ARCHAEOLOGICAL REVIEW

SCS Project Number 140-Mon

**AN ARCHAEOLOGICAL MONITORING PLAN FOR
PULEHU ROAD IMPROVEMENT PROJECT,
OMAOPIO ROAD JUNCTION TO HOLOPUNI ROAD,
MAUI ISLAND, HAWAII
TMK 2-3-02 TO 2-5-01**

By
Michael F. Dega, M.A.
August, 1998

Prepared for:
C. Takumi Engineering, Inc.

SCIENTIFIC CONSULTANT SERVICES Inc.



711 Kapiolani Blvd. Suite 777 Honolulu, Hawaii 96813

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INTRODUCTION

At the request of C. Takumi Engineering, Inc., Scientific Consultant Services, Inc. (SCS) was contracted to provide reconnaissance survey and propose a monitoring plan associated with the Pulehu Road Improvement Project. The construction project consists of improvements within the existing road right-of-way along the section of Pulehu Road from Omaopio Road junction to Holopuni Road, Kula District, Island of Maui, Hawai'i (Figures 1, 2, and 3). Work includes road widening and the paving of road shoulders, some vertical and horizontal realignment, and some minimal drainage improvements, among other activities. It is expected that only on-call or intermittent monitoring is required for this project.

Several areas of an archaeological nature are included in the present document: (1) findings of the reconnaissance survey will be described; (2) Land Commission Awards (LCA's) and other documents pertaining to the project area will be discussed; (3) recommendations by the State Historic Preservation Division (SHPD) will be noted, and; (4) a monitoring plan will be forwarded, the plan following SHPD Rules Governing Minimal Standards for Archaeological Monitoring Studies and Reports (Draft 1996).

Based on project area maps, the Pulehu Road Improvement project extends near several recorded LCA's (see Figures 2 and 3). Contrarily, no archaeological projects have occurred along the project area. Essentially, given the planned use of existing roadways and road construction extensions into ranch lands, the potential of identifying intact surface archaeological features is considered minimal. Monitoring, it is suggested, should be implemented on an on-call or intermittent basis, to ensure that cultural resources, if present within the project area, are sufficiently recorded by a qualified archaeologist(s).

Archaeological monitoring typically occurs as a mitigation measure when an undertaking is highly likely to uncover significant historical remains. Because the current project will occur in an archaeologically enigmatic area and due to the previous documentation of two walls along the roadway, it appears possible that other such remains may occur within the project area during the course of the road improvement work. As defined by the Department of Land and Natural Resources and the State Historic Preservation Division (DLNR/SHPD):

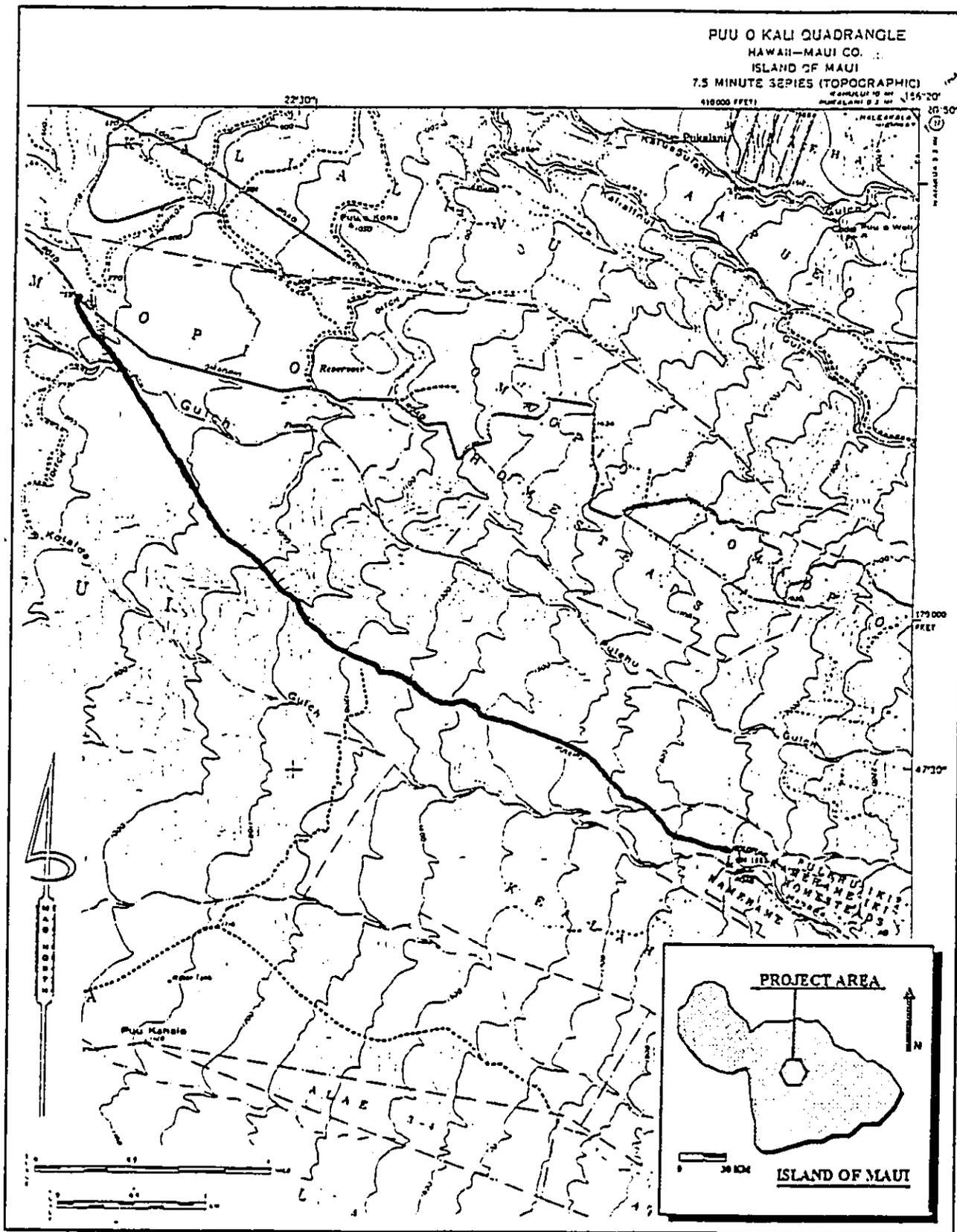


Figure 1: USGS Puu O Kali Quadrangle Showing General Project Area Within Kula District.

"Significant historical remains means any structure, building, archaeological site, district area, object, and traditional cultural place that is significant in the history, architecture, archaeology, or culture of this State, its communities or the nation and which is over fifty years old. 'Traditional cultural place' means any historic property associated with the cultural practices, beliefs, events, or oral accounts of an ethnic group of the state, with the property's association being over 50 years in age. Such properties include some types of archaeological sites (e.g., religious structures); burials; and places associated with cultural practices (e.g., medicinal gathering place); or events (e.g., battlefield). . ." (SHPD 1994:Draft Rules).

Cultural remains, including some evidence of structures related to agricultural use of the area may be encountered during project work. It is not anticipated, however, that much evidence for other classes of archaeological resources will be recovered during monitoring. This potential is based upon the aforementioned criteria and listed below.

RECONNAISSANCE SURVEY

On Friday, July 3, 1998, a reconnaissance survey was conducted on the subject area. The project survey, accomplished by Bee Burgett of SCS, Inc., was accomplished along a portion of Pulehu Road that extends from the Omaopio-Palehu Junction to Holopuni Road, a distance of 4.1 miles (Figure 4). A majority of the area fronting the road is covered with variable vegetation, including *kiawe* trees, cactus (*panini*), grass, and some pastureland. Sugarcane and pineapple fields also occur along the roadway.

Survey revealed two archaeological features, these both being walls that extend parallel to the road and are very likely historic in age. Wall #1 runs parallel (and slightly perpendicular at one edge) to the existing road and occurs approximately 0.1 miles from the upslope end of Holopuni Road on the southern side of the road. The wall is composed of stacked, basalt cobbles and cement pieces and averages 1.40 m in height (at six courses) and is c. 0.76 m wide (Figure 5). Morphologically, the wall occurs in a distorted L-shape and is 1.10 m wide at its downslope end. The wall is somewhat removed from the existing roadway and could be avoided during road straightening or widening. Wall #1 is considered an historic feature with modern concrete blocks placed near its downslope flank indicating more recent feature modifications.



Figure 4: Photograph of Portion of Road for Palehu Road Improvement Project. View to Northeast.



Figure 5: Photograph of Archaeological Feature: Wall # 1 Historic-Period Stacked Wall. View to Northwest.

The second feature, Wall #2, occurs on the northern side of the project road and lies approximately .5 miles northwest (downslope) of Holopuni Road. This wall was noticed in a disturbed state, as though having been aligned during previous road work, and is approximately perpendicular to Pulehu Road. Wall #2 is composed of large basalt cobbles and boulders stacked 5-6 courses high (average 0.80-1.10 m high)(Figure 6). The wall is 1.09 m wide and lies upon boulder foundation stones in several locations along its several meter length. A wire fence crosses the northwest end of the partially truncated wall. Wall # 2 is also considered a historic feature and it appears that it would be difficult to avoid the wall during road widening. This difficulty is due to the drastic change in terrain, the slope falling sharply toward the bottom of a gulch near the wall's edge. As the wall occurs c. 1.2 m from the existing road, impact to the wall will depend upon the degree of road widening or improvements.



Figure 6: Archaeological Feature: Wall # 2 Historic-Period Stacked Wall. View to West.

Reconnaissance survey has thus revealed only two archaeological features along the c. 4.1 mile project area, two walls thought to be historic in origin and related to ranching activities. Only one of the walls appears to be prone to impact if road widening at the segment is required.

ARCHIVAL RESEARCH

Project area maps list the presence of one Land Commission Award (LCA) within the project area. LCA 5330, awarded to the Haleakala Ranch Co., borders the southeastern portion of the road improvement project (see Figure 2). This LCA is presumably related to cattle ranching and agricultural uses of the some 1,087 acres awarded for this LCA parcel. Numerous land grants and land court applications occur abutting the road as well, most being large parcels also presumably associated with ranching or pineapple/sugarcane cultivation activities.

PREVIOUSLY IDENTIFIED SITES WITHIN AND NEAR PROJECT AREA

Sterling (1998) has compiled a fairly thorough synthesis of archaeological sites across Maui utilizing many resources, including Walker's (1931) study of Maui sites. Several of these sites are mentioned as occurring near, but not within, the current project area, most being *heiau*. Walker, like many early archaeologists in Hawaii, focused on recording/noting large temple complexes at the expense of other features. Below is a list of Hawaiian temples purportedly occurring within Pulehunui and Omaopio Ahupua'a, a majority of the project falling within these land sections:

Halekane Heiau (Walker Site 221)
Nininiwai Heiau (Walker Site 222 and 223; destroyed)
Moomoku (?) Heiau (Walker Site 224)
Mana Heiau (Walker Site 225)
Mahia (?) Heiau (Walker Site 226)
Poohinahale Heiau (Walker Site 227)

One agricultural shrine also occurs within Omaopio Ahupua'a, near Omaopio Road.

Sterling (1998:242), in discussing land utilization within the Kula District of Maui, further discusses the presence of petroglyphs and pictographs across the landscape. In addition, it is noted that sweet potato cultivation was an important cultigen in this arid area. Accompanied with sweet potato cultivation may be evidence of agricultural mounds and/or alignments. Thus far, none have been recorded within the project area.

At present, no archaeological studies have been identified within the present project area. The only archaeological features thus far documented are two historic-period walls, discovered during reconnaissance, and listed above.

STATE HISTORIC PRESERVATION RECOMMENDATIONS

One project previously occurred near the current project area. The project was conducted on a small-scale by a local landowner and was ruled as "no effect" by SHPD personnel due to the lack of archaeological sites in the area and the low potential of the presence of archaeological resources in the area. After a detailed conversation as to the archaeological monitoring and feasibility of recording additional sites within the present project area with an SHPD representative, it was determined that it is unlikely that other archaeological resources will be present in the project area and thus, there will be no impact on archaeological sites in the area. SHPD suggested only on-call or intermittent monitoring, by a qualified archaeologist, be required for this project.

RECOMMENDATIONS

Reconnaissance survey, archival research and a review of previous archaeological studies have shown that the area in which the current project is to occur is not a hugely significant archaeological area. The project area is considered within a "low sensitivity" zone regarding the presence of archaeological sites. Given the project boundaries and location, additional surface structures and/or artifacts are not expected to be recovered during work operations. Based upon the significance of the area and previous findings, the main concern is in more fully documenting the two presumably historic-period walls and in the intermittent monitoring of construction activities at various times.

It is recommended that only on-call or intermittent monitoring, by a qualified archaeologist, be conducted during this road improvement project. Monitoring should meet standards set by the SHPD governing rules (SHPD Rules Governing Minimal Standards for Archaeological Monitoring Studies and Reports Draft 1996).

The following monitoring plan has been outlined in accordance with DLNR/SHDP rules governing standards for archaeological monitoring:

1. The presence of a qualified archaeologist will be required to monitor construction activities throughout the project parcel at intermittent times.
2. When cultural materials or isolated features are identified, excavation will cease in the area of the find so that the monitoring archaeologist can be called and then record all necessary information. Documentation will include profile maps, photos, artifact and sample collections, and locational mapping. In the event that recording has not been completed by the end of the work shift, the area will be temporarily non-accessible until recording is complete.
3. If an archaeological site, or multiple features indicating a site, are encountered within the project corridor, the monitoring archaeologist will consult with the Maui SHPD officer to determine the necessary course of action. If extensive recording or other intensive tasks are required, additional archaeologists will be brought in to expedite the work.
4. If additional archaeological field personnel are required, SCS will notify the appropriate representatives before the additional field personnel are brought to the project.
5. If human burials are encountered/disturbed, albeit considered unlikely, work will cease in the vicinity and the area will be secured from further activity. The Maui SHPD office will be immediately notified and procedures from Hawaii Revised Statutes (HRS), Chapter 6e, Section 43 shall be followed. HRS 6.E-43.6, Procedures Relating to Inadvertent Discoveries, will be followed if the remains are to be removed. If a burial is disturbed during trench excavations, materials excavated from the area will be manually screened to recover any displaced skeletal material. The burial location will be identified and marked.
6. To ensure that the construction crew is aware of the monitoring plan, a coordination meeting should be held with the construction team and monitoring archaeologist prior to initiation of the project.
7. SCS will provide all coordination with the contractor, SHPD, and any other agencies involved in the project.
8. As necessary, verbal reports will be made to SHPD and any other agencies requested.

All samples, photographs, and monitoring notes gathered from the project will undergo analysis and be catalogued, respectively, at the SCS laboratory in Honolulu, Hawai'i. A report documenting the project findings, following SHPD guidelines, will be prepared after completion of field work.

REFERENCES

DLNR/SHPD

- 1994 *State Historic Preservation Division Rules Governing Minimal Standards for Archaeological Monitoring Studies and Reports. Draft of Hawaii Administrative Rules, DLNR/SHPD Rules, Chapter 150.*

DLNR/SHPD

- 1996 *Hawaii Administrative Rules Title 13 DLNR, Subtitle 13 SHPD Rules Chapter 279 Rules Governing Minimal Standards for Archaeological Monitoring Studies and Reports.*

Sterling, E.P.

- 1998 *Sites of Maui.* Bishop Museum Press, Honolulu, Hawai'i.

Walker, W.

- 1931 *Archaeology of Maui.* MS. on file at SHPD, Honolulu, Hawai'i.

10. APPENDIX B: PRE-CONSULTATION LETTERS

Natural Resources Conservation Service

Department of Health

State Historic Preservation Division
Department of Land and Natural Resources

Department of the Army

Department of Transportation (No Response)

Department of Fire Control (No Response)

Department of Planning (No Response)

Department of Water Supply (No Response)

Maui Electric Company, Ltd. (No Response)



United States
Department of
Agriculture

Natural
Resources
Conservation
Service

21 Iimi Kala St.
Suite 209
Wailuku, HI
96793-2100

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

July 27, 1998

Ms. Lenna J. Pritchett
C. Takumi Engineering, Inc.
18 Central Avenue
Wailuku, Hawaii 96793

Dear Ms. Pritchett,

Subject: Pulehu Road Improvements

One major recommendation in improving Pulehu Road is to consider taking runoff from the road to safe and stable outlets. Much of the runoff presently enter agricultural land causing damages during storms.

Informing farmers or farmer groups (Kula Ag Park) as well as HC&S and Maui Pineapple Company of the proposed improvements will provide you with specific problems within the area.

Thank you for the opportunity to comment.

Sincerely,

Neal S. Fujiwara
Neal S. Fujiwara
District Conservationist

BENJAMIN J. CAYETANO
GOVERNOR



LAWRENCE MIKE
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

July 28, 1998

Lenna J. Pritchett
C. Takumi Engineering, Inc.
18 Central Avenue
Wailuku, Hawaii 96793

Subject: Pulehu Road Improvements
TMK: (2) 2-3-2 & 2-5-1

Thank you for the opportunity to provide early comments on the proposed Pulehu Road improvements. It is not anticipated that we will have any adverse comments on the draft Environmental Assessment.

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

BENJAMIN J. CAYetano
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 5TH FLOOR
HONOLULU, HAWAII 96813

MICHAEL D. WILSON, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES

GREAT COLOMA-AGARAN

AQUACULTURE DEVELOPMENT PROGRAM

AQUATIC RESOURCES CONSERVATION AND

RESOURCES DIVERSITY

CONVEYANCE

FORESTRY AND WILDLIFE

HISTORIC PRESERVATION

DIVISION

LAND DIVISION

STATE PARKS

WATER AND LAND DEVELOPMENT

February 9, 1998

Mr. Loren Lau
Saro and Associates, Inc.
2046 South King Street
Honolulu, Hawaii 96826

LOG NO: 20980
DOC NO: 9801BD73

Dear Mr. Lau:

SUBJECT: Chapter 6E-8 Historic Preservation Review of Proposed Pulehu
Road Improvements
Oma'oplo Ahupua'a, Makawao District, Island of Maui
TMK2-5-01

This letter is a Historic Preservation review of proposed Pulehu Road improvements in Oma'oplo Ahupua'a. Our review is based on reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field check was conducted of the subject properties.

The subject properties seem likely to have once been the location of pre-Contact agricultural fields and perhaps scattered housing. Twentieth century agriculture has since altered the landscape, making it unlikely that any historic sites remain intact. We therefore find the proposed construction projects to have "no effect" on historic sites.

As a contingency, in the event that unrecorded historic remains (i.e. subsurface pavings, artifacts, or human skeletal remains) are inadvertently uncovered during construction, all work should cease in the vicinity and the contractor should immediately contact the State Historic Preservation Division.

If you have any questions please contact Boyd Dixon at 243-5169.

Aloha,

DON HIBBARD, Administrator
State Historic Preservation Division

BD:jen

cc. Ralph Nagamine, Maui County Department of Public Works (fax: 243-7972)
David Blane, Maui County Planning Department (fax: 243-7634)

FEB 13 1998

CORRECTION

THE PRECEDING DOCUMENT(S) HAS
BEEN-REPHOTOGRAPHED TO ASSURE
LEGIBILITY
SEE FRAME(S)
IMMEDIATELY FOLLOWING

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

MICHAEL D. WILSON, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES

GREAT COLOMA-AQAAH

AQUACULTURE DEVELOPMENT
PROGRAM

AQUATIC RESOURCES
CONSERVATION AND
RESOURCES DIVISION

CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION

DIVISION
LAND DIVISION
STATE PARKS
WATER AND LAND DEVELOPMENT

February 9, 1998

Mr. Loren Lau
Sato and Associates, Inc.
2046 South King Street
Honolulu, Hawaii 96826

LOG NO: 20980
DOC NO: 9801BD73

Dear Mr. Lau:

SUBJECT: Chapter 6E-8 Historic Preservation Review of Proposed Pulehu
Road Improvements
Oma'opio Ahupua'a, Makawao District, Island of Maui
TMK2-5-01

This letter is a Historic Preservation review of proposed Pulehu Road improvements in Oma'opio Ahupua'a. Our review is based on reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field check was conducted of the subject properties.

The subject properties seem likely to have once been the location of pre-Contact agricultural fields and perhaps scattered housing. Twentieth century agriculture has since altered the landscape, making it unlikely that any historic sites remain intact. We therefore find the proposed construction projects to have "no effect" on historic sites.

As a contingency, in the event that unrecorded historic remains (i.e. subsurface pavings, artifacts, or human skeletal remains) are inadvertently uncovered during construction, all work should cease in the vicinity and the contractor should immediately contact the State Historic Preservation Division.

If you have any questions please contact Boyd Dixon at 243-5169.

Aloha,

DON HIBBARD, Administrator
State Historic Preservation Division

BD:jen

cc. Ralph Nagamine, Maui County Department of Public Works (fax: 243-7972)
David Blane, Maui County Planning Department (fax: 243-7634)

FEB 9 1998



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

REPLY TO
ATTENTION OF

July 17, 1998

Operations Branch

Ms. Lenna J. Pritchett
C. Takumi Engineering, Inc.
18 Central Avenue
Wailuku, Hawaii 96793

Dear Ms. Pritchett:

This letter is written regarding the proposed roadway improvements of Pulehu Road located in Omaopio, Maui, Hawaii. The County of Maui Department of Public Works and Waste Management is proposing to widen the existing Pulehu Road between Omaopio Road to Holopuni Road.

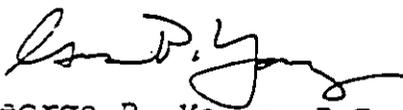
For your information, under Section 404 of the Clean Water Act, Department of the Army (DA) permits are required for the discharge of dredged or fill material in waters of the U.S., including wetlands. Based on the information submitted, it appears that a DA permit would be required.

A site visit would have to be conducted in order for a jurisdictional determination to be made. Also, we would like the opportunity to review the draft Environmental Assessment (EA).

File Number 980000259 is assigned to this project. Please refer to this number in any future correspondence with our office.

Should you have any questions or need additional information, you may call Ms. Lolly Silva of my staff at (808) 438-9258, extension 17.

Sincerely,


George P. Young, P.E.
Chief, Operations Branch

**11. APPENDIX C: DETERMINATION OF PERMITS REQUIRED
RESPONSE LETTERS**

Department of the Army - DOA 404 Permit

Commission on Water Resource Management - Stream Alteration Permit



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

August 11, 1998

REPLY TO
ATTENTION OF

Operations Branch

Ms. Lenna J. Pritchett
C. Takumi Engineering, Inc.
18 Central Avenue
Wailuku, Hawaii 96793

Dear Ms. Takumi:

This letter is written in regards to a jurisdictional determination for the Pulehu Road Improvement project located in Makawao, Maui, Hawaii.

Based on the photos and documentation you provided, the Corps has determined that the drainageways are not jurisdictional waters of the United States. Corps regulations at 33 CFR 328.4(c) state that the limit of waters of the U.S. extends to the ordinary high water mark. "Ordinary high water mark" is defined at 33 CFR 328.3(e) as the line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation and the presence of litter and debris. The photographs of the road crossings indicated a clear absence of any identifiable ordinary high water mark. Consequently, the proposed project does not contain jurisdictional waters of the U.S. and a DA permit is not necessary for the work.

Should you have further questions or need additional information, you may call Ms. Lolly Silva of my staff at (808)438-9258, extension 17. Please refer to file number 980000259.

Sincerely,


George P. Young, P.E.
Chief, Operations Branch

BENJAMIN J. CAYetano
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P. O. BOX 521
HONOLULU, HAWAII 96809

MICHAEL D. WILSON
CHAIRPERSON
ROBERT G. GIRALD
DAVID A. NOBRIGA
LAWRENCE H. MIKE
RICHARD H. COX
HERBERT M. RICHARDS, JR.
TIMOTHY E. JOHNS
DEPUTY DIRECTOR

AUG 20 1998

Ms. Lenna J. Pritchett
C. Takumi Engineering Inc.
18 Central Avenue
Wailuku, HI 96793

Dear Ms. Pritchett:

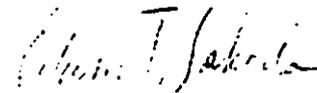
Pulehu Road Improvements
Omaopio, Maui, Hawaii

This is in response to your letter of August 5, 1998, requesting our assessment to determine if a stream channel alteration permit is required for the proposed work.

We consulted with the staff of the Department of Land and Natural Resources, Division of Aquatic Resources on Maui. They reported the Pulehu Gulch does not have sufficient flows of water to support instream uses. Therefore, that affected reach of Pulehu Gulch is not considered to be a 'stream' as defined in the Hawaii Revised Statutes §174C-3. A stream channel alteration permit will not be required for the proposed work.

Thank you for consulting with us on our permit requirements and for enclosing site photographs of the watercourse in Pulehu Gulch. If you have any questions regarding this letter, please call David Higa at toll free 1-800 984-2400 Extension 70249.

Sincerely,


for
TIMOTHY E. JOHNS
Deputy Director

DH:fc

12. APPENDIX D: COMMENT LETTERS & RESPONSES

Federal:

United States Department of Agriculture, National Resources Conservation Service

State:

Department of Health, Environmental Planning
Office of Environmental Quality Control

County:

Department of Planning
Department of Fire Control
Office of Economic Development (Kula Agricultural Park)

Private, Others:

Maui Electric Company, Ltd.
Maui Land & Pineapple Company, Inc.
Hawaii Commercial & Sugar Company (HC&S)
Kula Community Association



United States
Department of
Agriculture

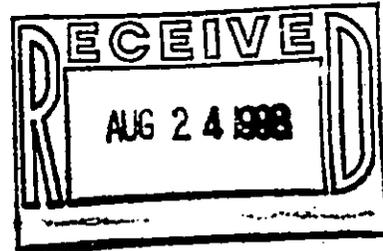
Natural
Resources
Conservation
Service

1000 Imi Kala St.
Suite 209
Wailuku, HI
96793-2100

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

August 20, 1998

Ms. Lenna J. Pritchett
C. Takumi Engineering, Inc.
18 Central Avenue
Wailuku, Hawaii 96793



Dear Ms. Pritchett,

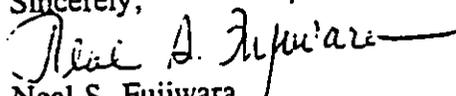
Subject: Pulehu Road Improvements

It is noted in the Draft Environmental Assessment, section 2.6, Proposed Improvements, that drainage improvements include paved shoulders swales which will drain into natural drainage ways and fields. As noted in my initial letter to you, it is hoped that runoff from the road improvements do not outlet into any field. If there are existing conditions as such, it is recommended that it be fixed.

Also, the drainage section does not mention any flows from the existing road, just the major gulches.

Thank you for the opportunity to comment.

Sincerely,


Neal S. Fujiwara
District Conservationist

The Natural Resources Conservation Service works hand-in-hand with
the American people to conserve natural resources on private lands.

AN EQUAL OPPORTUNITY EMPLOYER

**C. TAKUMI ENGINEERING, INC.
18 CENTRAL AVENUE
WAILUKU, MAUI, HAWAII 96793
PHONE: (808) 249-0411
FAX: (808) 249-0311**

August 25, 1998

Natural Resources Conservation Service
ATTN: Neil Fujiwara, Soil Conservationist
U.S. Department of Agriculture
210 Imi Kala Street, Suite 209
Wailuku, Hawaii 96793-2100

SUBJECT: Pulehu Road Improvements
Draft Environmental Assessment (EA)

REFER. NO. CPW-9801

Dear Mr. Fujiwara,

C. Takumi Engineering, Inc. is in receipt of your agency comments dated August 20, 1998. Cultivated fields consist of pineapple and sugar along the lower portion of the project and the Kula Agricultural Park mauka and along the upper portion of the project. The remainder of the project is mostly range land.

Generally, existing storm runoff mauka of Pulehu Road sheet flows across the road into adjacent fields. The existing drainage patterns will be maintained; primarily, storm runoff will sheet flow into the fields after the Pulehu Road improvements are completed. The proposed road widening and paving will add a small quantity of additional runoff to the existing storm runoff already occurring. Where concentrated storm runoff occurs, soil erosion considerations, mainly by reducing runoff velocities as storm discharge enters fields, will be made during the design phase of the project. No underground drainage systems are anticipated to intercept storm runoff along Pulehu Road.

The drainage ways presented in the environmental assessment will have concentrated storm discharge crossing Pulehu Road. Storm drainage culverts will be used at these drainage locations to keep the road passable during certain storms.

A storm drainage report will be prepared during the design phase of the project. The storm drainage report will conform to Maui County Drainage Standards and will be sent to the Natural Resource Conservation Service and the Soil and Water Conservation District for review and comment prior to finalizing the construction plans for the project and proceeding with construction.

—
—
—
Thank you again for your timely response to the Draft EA. If you have any further questions,
please do not hesitate to call us at 249-0411.

Very truly yours,



Lenna J. Pritchett
C. Takumi Engineering, Inc.



United States
Department of
Agriculture

Natural
Resources
Conservation
Service

210 Ima Kala St.
Suite 209
Wailuku, HI
96793-2100

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

September 4, 1998

Ms. Lenna J. Pritchett
C. Takumi Engineering, Inc.
18 Central Avenue
Wailuku, Hawaii 96793

Dear Ms. Pritchett,

Subject: Pulehu Road Improvements, Draft EA

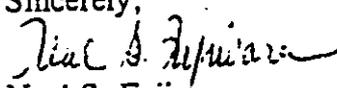
I am in receipt of your letter dated August 25, 1998.

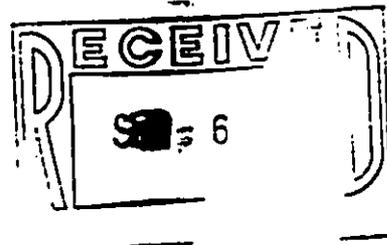
Your comment, "The remainder of the project is mostly range land," may be misconstrued. The land may not be productive now, but it may be in the future. The land(s) also is owned by someone who may be opposed to the idea of allowing road runoff flow onto their land.

I have seen the damage at the Kula Agricultural Park from runoff off Pulehu Road into the park. The ag park was once considered a field or range prior to its development.

I would urge you to contact land owners along Pulehu Road who will be affected by this project.

Sincerely,


Neal S. Fujiwara
District Conservationist



C. TAKUMI ENGINEERING, INC.
18 CENTRAL AVENUE
WAILUKU, MAUI, HAWAII 96793
PHONE: (808) 249-0411
FAX: (808) 249-0311

October 15, 1998

Natural Resources Conservation Service
ATTN: Neil Fujiwara, Soil Conservationist
U.S. Department of Agriculture
210 Imi Kala Street, Suite 209
Wailuku, Hawaii 96793-2100

SUBJECT: Pulehu Road Improvements

REFER. NO. CPW-002

Dear Mr. Fujiwara,

We are responding to your letter of September 4, 1998 regarding roadside drainage.

Longitudinal drainage will consist of roadside swales which will outlet at existing drainage ways leading away from the road. Culverts will be placed at certain gulches and larger drainage ways. Runoff from roadside swales will be considered, and a drainage report shall be prepared and submitted to the Natural Resources Conservation Service for review during the design phase of the project.

Major landowners who will be affected by this project have been sent the environmental assessment for their review. We will be scheduling a meeting with these major landowners as the project progresses.

Thank you again for taking the time to meet with us and for your comments and suggestions. Should you have any further questions or concerns, please do not hesitate to call our office.

Very Truly Yours,



Lenna J. Pritchett

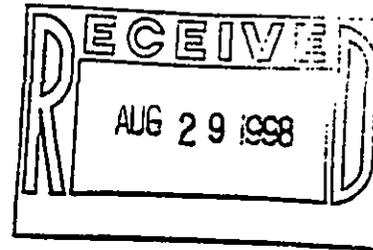
BENJAMIN J. CAYETANO
GOVERNOR



LAWRENCE MIKE
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
August 27, 1998



Lenna J. Pritchett
C. Takumi Engineering, Inc.
18 Central Avenue
Wailuku, Hawaii 96793

Dear Ms. Pritchett:

Subject: Pulehu Road Improvements
TMK: (2) 2-3-2 & 2-5-1

Thank you for the opportunity to comment on the project. We have the following comments to offer:

The noise created during the construction phase of the project may exceed the maximum allowable levels as set forth in Hawaii Administrative Rules, Chapter 11-46, "Community Noise Control". A noise permit may be required and should be obtained prior to the commencement of work.

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

Sincerely,

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

HERBERT S. MATSUBAYASHI
District Environmental Health Program Chief

**C. TAKUMI ENGINEERING, INC.
18 CENTRAL AVENUE
WAILUKU, MAUI, HAWAII 96793
PHONE: (808) 249-0411
FAX: (808) 249-0311**

September 2, 1998

District Environmental Health Chief
Department of Health
ATTN: Herbert Matsubayashi
54 High Street
Wailuku, Hawaii 96793

SUBJECT: Pulehu Road Improvements
Noise Permit

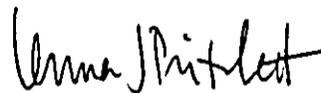
REFER. NO. CPW-9801

Dear Mr. Matsubayashi,

We are in receipt of your letter dated August 27, 1998 regarding the above subject. We will look into the possibility of needing a noise permit, and if necessary, we will include it in the construction documents.

Thank you for your research and timely response. Should you have any further questions or comments, please do not hesitate to contact us at 249-0411.

Very truly yours,



Lenna J. Pritchett
C. Takumi Engineering, Inc.

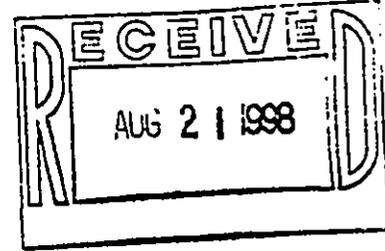
BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4186
FACSIMILE (808) 586-4188

GARY GILL
DIRECTOR



August 18, 1998

Charles Jencks, Director
Department of Public Works And Waste Management
200 South High Street
Wailuku, Hawaii 96793

Attention: Charlene Shibuya

Dear Mr. Jencks:

Subject: Draft Environmental Assessment (EA) for Pulehu Road Improvements,
Omaopio

A determination stating that an environmental impact statement will not be required is listed in Section 7 of the draft EA. The EIS law prohibits a determination of significant impact or lack of significant impact before the end of the 30-day public review period and prior to receipt, response and analysis of all written comments. For a draft EA the proper determination is *anticipated FONSI* (Finding of No Significant Impact).

In addition please include the following in the final EA:

1. Alternative transportation modes: State policy (HRS Chapters 26, 226, 264, 344) requires the promotion of alternative forms of transportation systems that reduce reliance on the private automobile, conserve energy, reduce pollution and provide safe accomodation for their users. Pursuant to this policy, please discuss what provisions are being made to create bicycle lanes or facilities, promote pedestrian safety and/or encourage other non-motorized modes of transportation.
2. Significance criteria: Include a discussion of findings and reasons, according to the significance criteria listed in HAR 11-200-12, that support your forthcoming determination, either Finding of No Signifcant Impact (FONSI) or EIS

Charles Jencks
August 18, 1998
Page 2

preparation notice. A simple reiteration of the criteria in the negative, as listed in the draft EA, will not suffice. You may use the enclosed sample as a guideline.

3. Construction impacts:

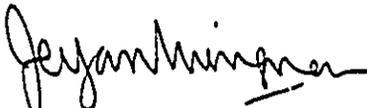
a. Traffic: The volume of traffic on Pulehu Road is not discussed in the draft EA. What are the anticipated impacts to traffic during construction and what mitigation measures will be employed to reduce these impacts?

b. Runoff: It is not clear from the maps whether there are any streams in the vicinity of Pulehu Road, although the text mentions that 5 gulches are crossed. Indicate whether there are any bodies of water in the area and, if so, what measures will be taken to prevent construction runoff from entering them.

4. Timeframe: Construction is expected to begin in 1999. What is the anticipated end date? If not known, what is the likely duration of the construction phase?

If you have any questions, please contact Nancy Heinrich at 586-4185.

Sincerely,



for
Gary Gill
Director

c: Carl Takumi

**C. TAKUMI ENGINEERING, INC.
18 CENTRAL AVENUE
WAILUKU, MAUI, HAWAII 96793
PHONE: (808) 249-0411
FAX: (808) 249-0311**

September 1, 1998

Mr. Gary Gill, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Mr. Gill:

Subject: Draft Environmental Assessment (DEA) for Pulehu Road
Improvements, TMK 2-3-2 & 2-5-1, Omaopio, Maui, Hawaii

We are in receipt of your agency's comments dated August 18, 1998 regarding the above subject. Responses to your comments are as follows:

1. ALTERNATIVE TRANSPORTATION MODES:

Alternative transportation modes have not been considered for this project for the following reason:

Pulehu Road is a major agricultural collector road primarily servicing the Kula Agricultural Park, Kula Glen Subdivision and other mauka agricultural properties. The wider road will allow farmers to transport their produce to the markets in Central Maui. The existing road width presently varies between 15 feet and 24 feet. The narrow pavement width limits the road to one-lane traffic and presently cannot safely accommodate alternative forms of transportation such as bicycling or pedestrians. The primary purpose of the proposed project will be to widen the road to 24 feet with three-foot wide shoulders to allow two-way traffic throughout the project. However, the project will also be safer for bicycles and pedestrians using the road. The primary bicycle route for the area as designated in Bike Plan Hawaii,

Highways Division, Department of Transportation, State of Hawaii, April 1994, is Kula Highway and Haleakala Highway.

2. SIGNIFICANCE CRITERIA:

Findings and reasons to the significance criteria have been included in the Final Environmental Assessment.

3. CONSTRUCTION IMPACTS:

- A. Traffic: Pulehu Road is a major agricultural collector street primarily servicing the Kula Agricultural Park, Kula Glen Subdivision and other mauka agricultural properties. The road width of Pulehu Road presently varies from about 15 feet to 24 feet. The road also accepts some traffic from Kula Highway, the primary route to Kahului and Central Maui. The volume of traffic is not of significance; simply, the road is presently not wide enough to accommodate two-way traffic when larger trucks are used to haul produce to the major wholesale-distribution centers, Kahului Airport, and Kahului Harbor located in Central Maui. The proposed project will widen the road to 24 feet wide with 3 feet wide shoulders, which will safely allow two-way traffic to traverse Pulehu Road. The wider road may encourage truck farmers along Pulehu Road to use the road as their primary access to Central Maui which would reduce traffic on the heavily used Kula Highway and Haleakala Highway.

The proposed improvements are planned for only the portion of Pulehu Road between Omaopio Road and Holopuni Road as stated in the Draft EA. The proposed improvements does not begin at or intersect any major thoroughfares such as Kula Highway, Haleakala Highway, or Hana Highway; therefore, no significant increase in traffic is anticipated due to the project.

Short-term impact on traffic due to construction will be mitigated as follows:

During the road widening operation, at least one lane of traffic will be kept open at all times with flag men to allow two-way traffic to pass alternately. The road shall be open to two-way traffic at the end of each work day and during weekends.

The contractor shall notify landowners and schedule work prior to working adjacent to driveways and make arrangements to minimize delays to land owners requiring access.

Appropriate detours shall be provided while working on drainage crossings and times when the road must be closed to traffic. Road closures will be scheduled for one time to complete all major improvements requiring road closure.

B. Runoff: There are no bodies of water or perennial streams crossing Pulehu Road. The Corps of Engineers and the Commission on Water Resource Management have reviewed the crossing locations and have determined that a DOA 404 Permit and a Stream Alteration Permit will not be required for the Project; these permits have been deleted as required permits from the EA. Letters from these agencies have been included in the Final EA. However, the total area of disturbance will exceed five acres and will require an NPDES permit for construction. Mitigating measures to reduce sediment leaving the site includes:

- Grassing or mulching exposed areas as soon as grading is completed and where slopes may be exposed for more than 30 days,
- Protection of road-side longitudinal swales will be by paving or natural fiber nets,
- Limit exposed areas by Project phasing.

Dust control shall be by sprinkling as needed including weekends and holidays. The contractor shall make arrangements for obtaining water for dust control including the use of R-1 wastewater from the Kahului Wastewater Treatment Facility.

4. TIME FRAME:

The time frame to complete the entire project is not known at the present time. Presently, the County does not have sufficient funds to perform all of the project at one time, and the Project is planned to be phased. Funding for the project is dependent upon future budget appropriation. It is estimated that each phase of the project will take approximately 6 to 8 months to complete. If funding becomes available to complete the project

at one time, the entire project can be completed in an estimated 8 to 12 month period.

Thank you for your research and timely response. Should you have any further questions or concerns, please do not hesitate to contact us at 249-0411.

Very Truly Yours,



Lenna J. Pritchett
C. Takumi Engineering, Inc.

LINDA LINGLE
Mayor

DAVID W. BLANE
Director

LISA M. NUYEN
Deputy Director

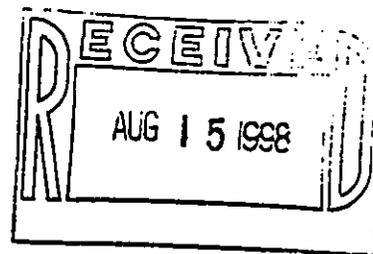


COUNTY OF MAUI
DEPARTMENT OF PLANNING

CLAYTON I. YOSHIDA
Planning Division

AARON H. SHINMOTO
Zoning Administration and
Enforcement Division

August 12, 1998



Mr. Carl Takumi
C. Takumi Engineering, Inc.
18 Central Avenue
Wailuku, Hawaii 96793

Dear Mr. Takumi:

Re: Draft Environmental Assessment (EA) for Pulehu Road Improvements

Thank you for the opportunity to provide early input for this project.

Pulehu Road was originally designed as an agricultural-access road, constructed to serve what was predominantly a farming region. Over the last several decades, Kula, Keokea, and areas even farther south have lost significant ag lands to residential uses. Now Pulehu Road is used more by commuters than farm trucks, and it is inadequate for the increase in volume. The Maui Planning Department (Department) agrees that this roadway needs to be improved.

The Department believes the following criteria should be addressed in the Draft EA:

1. Impacts to the Kula Glen Agricultural Subdivision: Currently, many commuters avoid Pulehu Road because of its sometimes hazardous conditions. After improvements, the overall volume of traffic will increase because this "short cut" will then be safe and fast.

This means that Holopuni Road, which winds through the Kula Glen Agricultural Subdivision, will also experience an increase in traffic volume. The residents of this agricultural subdivision consistently express their concerns over speeding motorists using this road.

Mr. Carl Takumi
August 12, 1998
Page 2

The Draft EA should address the increased volume on HoloPuni Road and identify potential mitigation measures.

2. Character of the Area: There has recently been considerable discussion and public outcry regarding the Department of Transportation's (DOT) liberal use of guardrails along Kula Highway. The residents complained about the unsightly appearance of the guardrails, the loss of the area's rural character, and the obscuration of the view plane. Now DOT is going to spend additional funds to remove some of the guardrails. Depending on the sensitivity of the final design, this project may hold some of the same controversy.

This concern is also supported by the Makawao-Pukalani-Kula Community Plan. While specifically calling for improvements to Pulehu Road, it also contains considerable language about maintaining the rural character of the region. Specifically related to the type of improvements proposed by this project, the Physical Infrastructure Section of the plan states:

Goal: The timely and environmentally sensitive development and maintenance of infrastructure systems which protect and enhance the safety and health of the Upcountry residents . . . while maintaining the region's rural character.

Objectives and Policies: 3. Support the planning of new roadways provided that there would be minimal impact to the Upcountry lifestyle and character.

Implementing Actions: 6. Provide roadway shoulder improvements to improve bicycling safety, but do not detract from the rural atmosphere.

The draft document should provide enough details regarding placement of guardrails and signage, pavement widening, etc., so this aspect of the design can be examined.

Mr. Carl Takumi
August 12, 1998
Page 3

The Maui Planning Department also suggests that the Kula Community Association be part of the early consultation process.

If you have any questions, please contact Mr. William Spence, Staff Planner, of this office at 243-7735.

Sincerely,

Lisa M. Nuyen

LISA M. NUYEN
Director of Planning

LMN:WRS:osy

c: Don Schneider, Deputy Director of Planning
Clayton Yoshida, AICP, Planning Program Administrator
Will Spence, Staff Planner
General File
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LINDA LINGLE
Mayor

LISA M. NUYEN
Director

DONALD A. SCHNEIDER, II
Deputy Director



CLAYTON I. YOSHIDA
Planning Division

AARON H. SHINMOTO
Zoning Administration and
Enforcement Division

COUNTY OF MAUI
DEPARTMENT OF PLANNING

September 28, 1998

Mr. Carl Takumi
C. Takumi Engineering, Inc.
18 Central Avenue
Wailuku, Hawaii 96793

Dear Mr. Takumi:

Re: Draft Environmental Assessment for Pulehu Road
Improvements

Thank you for the opportunity to comment on the Draft Environmental Assessment (EA). The Maui Planning Department (Department) agrees that this roadway needs to be improved.

The Department's previous letter from August 12, 1998 expressed certain topics that the Department felt should be addressed in the EA. The Department was concerned that the improvements would be excessive and more urban in scale and appearance rather than "fitting in" the countryside. This was both a reflection of the language of the Makawao-Pukalani-Kula Community Plan and other instances where improvements were, in the Department's view, over engineered.

Since the Department's initial letter, the Department has spoken to Ms. Charlene Shibuya from the Department of Public Works and Waste Management, Engineering Division, regarding this project. She provided us with more information regarding the types of improvements that would be made. The Department is satisfied that the improvements will not be excessive.

The Department's other concern was over an increase in traffic through the Kula Glen Subdivision. The Department's experience is that when a roadway is made safer, traffic counts go up and motorists' speeds tend to rise. This may be an unavoidable effect of the project and should be noted in the final document.

Mr. Carl Takumi
September 28, 1998
Page 2

The Department also notes that your office has been in contact with the Kula Community Association. It is important that they be kept informed of the project.

If you have any questions, please contact Mr. William Spence, Staff Planner, of this office at 243-7735.

Sincerely,



LISA M. NUYEN
Director of Planning

LMN:WRS:osy

c: Don Schneider, Deputy Director of Planning
Clayton Yoshida, AICP, Planning Program Administrator
William Spence, Staff Planner
Project File
General File
S:\ALLWILL\CORESPON\TAKUMI2.WPD

**C. TAKUMI ENGINEERING, INC.
18 CENTRAL AVENUE
WAILUKU, HAWAII 96793
PHONE: (808) 249-0411
FAX: (808) 249-0311**

October 15, 1998

Department of Planning
ATTN: Lisa M. Nuyen, Director
250 South High Street
Wailuku, Hawaii 96793

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT - PULEHU ROAD

Dear Ms. Nuyen,

We are in receipt of your letters dated August 12, 1998 and September 28, 1998 regarding the above subject. Thank you for your research and comments regarding the proposed Pulehu Road Improvements and the Draft Environmental Assessment (EA).

The following points were mentioned in your letter and will be addressed below:

1. Impacts to Kula Glen Agricultural Subdivision: The Pulehu Road Improvement Project involves only the portion of Pulehu Road between Omaopio Road and Holopuni Road. Pulehu Road is a County Major Agricultural Collector road serving farm and agricultural lands including Kula Glen Agricultural Subdivision and the Kula Agricultural Park. Pulehu Road is an existing major agricultural collector road and the project, by itself, does not encourage development. The Makawao-Pukalani-Kula Community plan already predicts an increase in population for the community. The increase in population will also mean increased traffic including traffic using Pulehu Road; however, the Kula Highway will still remain as the primary route to get to the major commercial and employment centers in central Maui as the population continues to grow. The proposed Pulehu Road Improvements will not upgrade Pulehu Road to a primary thoroughfare such as Kula Highway.

The proposed improvements include road widening for greater sight distance and increased highway safety. Although the wider street may encourage vehicles to go

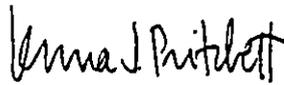
faster, the posted speed of Pulehu Road will be 35 miles per hour with advisory warning signs at curves. In addition, the proposed improvements end at the intersection of Pulehu Road and Holopuni road; traffic speeds within Kula Glen Subdivision should remain the same. The horizontal alignment of Pulehu Road will not be significantly changed and existing road curves will help reduce traffic speeds. The proposed improvements will afford the farmers along Pulehu Road including the Kula Agricultural Park to use their larger trucks to send their produce to market.

2. Character of the Area: The proposing agency is familiar with the Makawao-Pukalani-Kula Community Plan and understands the concern to maintain the community's rural character. Guardrails are required where high, steep fill embankments occur, and most of Pulehu Road does not have fill embankments, thus limiting the need for guardrails. Guardrails may be required at gulch crossings and limited right-of-way locations where flatter embankment slopes are not possible.

The Kula Community Association has been sent a Draft Environmental Assessment for comments.

Thank you again for your time, and please do not hesitate to call us with any further questions or concerns.

Sincerely,



Lenna J. Pritchett
C. Takumi Engineering, Inc.

LINDA CROCKETT LINGLE
MAYOR

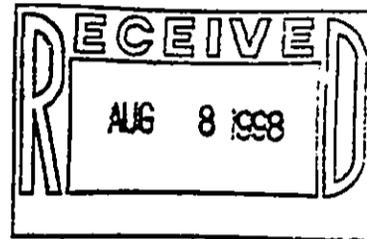


RONALD P. DAVIS
CHIEF
HENRY A. LINDO, SR.
DEPUTY CHIEF

COUNTY OF MAUI
DEPARTMENT OF FIRE CONTROL

200 DAIRY ROAD
KAHULUI, MAUI, HAWAII 96732
(808) 243-7551

August 6, 1998



Ms Lenna Pritchett
C. Takumi Engineering, Inc.
18 Central Avenue
Wailuku, HI 96793

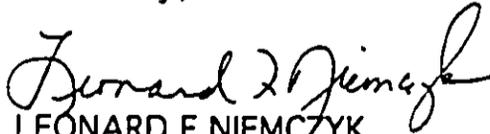
RE: Pulehu Road Improvements

Dear Ms Pritchett,

The Department of Fire Control has no comment on the environmental assessment, but will reserve comment until such time as the plans and specifications are submitted for review.

If you have any questions, direct them in writing, to the Fire Prevention Bureau 21 Kinipopo Street, Wailuku, HI 96793.

Sincerely,


LEONARD F NIEMCZYK
Captain, FPB

**C. TAKUMI ENGINEERING, INC.
18 CENTRAL AVENUE
WAILUKU, HAWAII 96793
PHONE: 249-0411
FAX: 249-0311**

August 17, 1998

Department of Fire Control
ATTN: Leonard F. Niemczyk, Captain, FPB
200 Dairy Road
Kahului, Hawaii 96732

SUBJECT: PULEHU ROAD IMPROVEMENTS

Dear Mr. Niemczyk,

We are in receipt of your letter dated August 6, 1998 regarding the above subject. Thank you for your timely response and continuing cooperation.

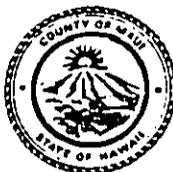
You stated you will reserve comment until plans and specifications are submitted for review. If you have any questions in the meantime, please do not hesitate to contact us.

Sincerely,



Lenna J. Pritchett

LINDA LINGLE
Mayor

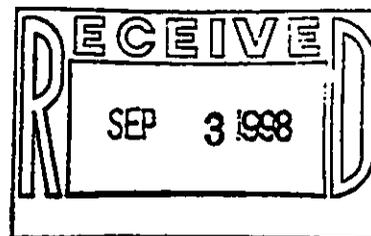


ROBBIE ANN A. KANE GUARD
Economic Development Coordinator

**OFFICE OF ECONOMIC DEVELOPMENT
COUNTY OF MAUI**

200 SOUTH HIGH STREET, 6TH FLOOR, WAILUKU, MAUI, HAWAII 96793 USA
Telephone: (808) 243-7710 Facsimile: (808) 243-7995

September 1, 1998



Mr. Carl Takumi
C. TAKUMI ENGINEERING, INC.
18 Central Avenue
Wailuku, Hawaii 96793

RE: PULEHU ROAD IMPROVEMENTS (Refer No. CPW-9801)

Dear Carl:

Thank you for the opportunity to review the draft Environmental Assessment (EA) for the Pulehu Road Improvements in Omaopio, Maui, Hawaii. We have no comments regarding the EA.

However, as you know, the County (through our office) manages the Kula Agricultural Park on Pulehu Road. The Ag Park contains 31 parcels, each with individual farmers. Being that any construction on this road would affect them directly, I would appreciate a "notice" from your office advising us on the construction including the area involved; the start date and approximate end date; the time of day when construction is expected to occur; and any other relevant information that would affect the farmers. This notice should be sent to our office and in turn we will ensure that all of our Kula Ag Park tenants receive the information. This would help us and our farmers tremendously.

Carl, thank you once again for the opportunity to review your document. If you have any questions, please do not hesitate to contact me. I look forward to hearing from you soon in regards to the notice for our Kula Ag Park tenants.

Sincerely,


ROBBIE ANN A. KANE GUARD
Economic Development Coordinator

RKG:jti

**C. TAKUMI ENGINEERING, INC.
18 CENTRAL AVENUE
WAILUKU, MAUI, HAWAII 96793
PHONE: (808) 249-0411
FAX: (808) 249-0311**

October 15, 1998

Office of Economic Development
Kula Agricultural Park
ATTN: Robbie Ann Kane Guard
200 South High Street, 6th Floor
Wailuku, Hawaii 96793

SUBJECT: Pulehu Road Improvements

REFER. NO. CPW-002

Dear Ms. Guard,

We are in receipt of your letter dated September 1, 1998 regarding the Environmental Assessment for the above subject. Information about Kula Agricultural Park will be included in the Contract Documents. A notice from the contractor advising you on the construction including the area involved; the start date and approximate end date; the time of day when construction is expected to occur; and any other relevant information that will affect farmers will be sent to your office. This will ensure that all of the Kula Ag Park tenants receive the information.

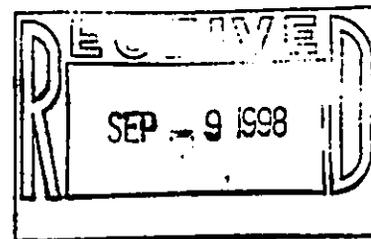
Thank you for your research and timely response. Should you have any further questions or concerns, please do not hesitate to contact our office.

Very Truly Yours,



Lenna J. Pritchett
C. Takumi Engineering, Inc.

Maui Electric Company, Ltd. • 210 West Kamehameha Avenue • PO Box 398 • Kahului, Maui, HI 96732-0398 • (808) 871-8461



September 5, 1998

Ms. Lenna J. Prichett
C. Takumi Engineering, Inc.
18 Central Avenue
Wailuku, Maui, Hawaii 96708

Dear Ms. Prichett,

Subject: Pulehu Road Improvements

As requested per your letter dated August 14, 1998, we have reviewed your proposal for the above subject project. As stated in your documentation under paragraph 4.2.2, there is no impact to our existing facilities in regards to this project. However, should there be a need to relocate our facilities, we request that you contact us as soon as possible.

We appreciate your consideration in notifying us and should you have concerns you may contact me at 871-2366.

Sincerely,


Gregorysenn Kauhi
Distribution Supervisor

Gk:gk

An HEI Company

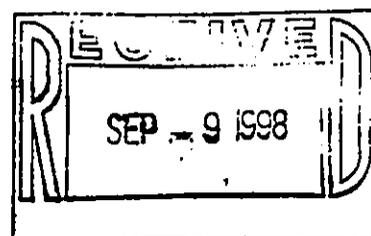


CORRECTION

THE PRECEDING DOCUMENT(S) HAS
BEEN REPHOTOGRAPHED TO ASSURE
LEGIBILITY
SEE FRAME(S)
IMMEDIATELY FOLLOWING

DOCUMENT CAPTURED AS RECEIVED

Maui Electric Company, Ltd. • 210 West Kamehameha Avenue • PO Box 398 • Kahului, Maui, HI 96732-0398 • (808) 871-8461



September 5, 1998

Ms. Lenna J. Prichett
C. Takumi Engineering, Inc.
18 Central Avenue
Wailuku, Maui, Hawaii 96708

Dear Ms. Prichett,

Subject: Pulehu Road Improvements

As requested per your letter dated August 14, 1998, we have reviewed your proposal for the above subject project. As stated in your documentation under paragraph 4.2.2, there is no impact to our existing facilities in regards to this project. However, should there be a need to relocate our facilities, we request that you contact us as soon as possible.

We appreciate your consideration in notifying us and should you have concerns you may contact me at 871-2366.

Sincerely,

Gregorysenn Kauhi
Distribution Supervisor

Gk:gk



**C. TAKUMI ENGINEERING, INC.
18 CENTRAL AVENUE
WAILUKU, MAUI, HAWAII 96793
PHONE: (808) 249-0411
FAX: (808) 249-0311**

October 15, 1998

Maui Electric Company, Ltd.
ATTN: Greg Kauhi
P. O. Box 398
Kahului, Hawaii 96732

SUBJECT: Pulehu Road Improvements

REFER. NO. CPW-002

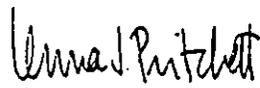
Dear Mr. Kauhi,

C. Takumi Engineering, Inc. is in receipt of your agency comments dated September 5, 1998, regarding the Draft Environmental Assessment for the above subject.

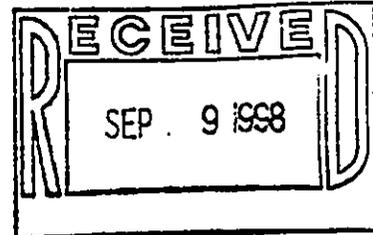
Several transmission poles exist close to the existing roadway. Clearance between poles and the pavement will be considered during the design phase of the project. In most cases, the road will be widened in the opposite side of the pole to avoid pole relocation. If relocation becomes necessary, we will contact you as soon as possible.

Thank you for your research and timely response. Should you have any further questions or concerns, please do not hesitate to contact our office.

Very Truly Yours,



Lenna J. Pritchett



MAUI LAND & PINEAPPLE COMPANY, INC.

September 8, 1998

Ms. Lenna J. Pritchett
C. Takumi Engineering, Inc.
18 Central Avenue
Wailuku, Maui, Hawaii 96793

Dear Ms. Pritchett:

Subject: Draft Environmental Assessment For
The Pulehu Road Improvements
Pulehu, Maui, Hawaii

We are in receipt of a copy of the subject draft environmental assessment that was provided to our company on August 14, 1998 and have the following comments to offer:

1. The improvements to Pulehu Road, which will include road widening improvements, is definitely needed as it is currently unsafe for Maui Pineapple Company, Ltd. (MPCO) to haul our pineapples on this road. MPCO currently uses this road under less than ideal conditions.
2. The road widening improvements may affect existing fencing located within the limits of the roadway improvements. All existing fencing damaged or removed shall be replaced.
3. The existing drainage along the Pulehu Road is inadequate as storm water runoff currently causes significant damage to the existing asphalt pavement. We strongly recommend that appropriate drainage improvements be constructed as part of the roadway improvements.
4. MPCO is currently farming lands located along the limits of the roadway improvements and MPCO must be provided with access to our pineapple fields at all times during construction of the roadway improvements. In addition, MPCO must be provided with the ability to haul our pineapples on Pulehu Road at all times.

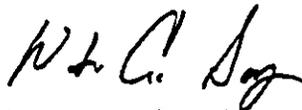
P.O. Box 187, Kahului, Hawaii 96732-0187 • (808) 877-3351 • Fax (808) 871-0953

Ms. Lenna J. Pritchett
September 8, 1998
Page 2

5. Adequate dust control measures must be implemented at all times during the construction phase of the roadway improvements. Dust can be a problem for our pineapple farming operations as it adversely affects the growth of the pineapple plant.

We sincerely appreciate being provided with the opportunity to submit our comments and if you have any questions or wish to discuss any of our comments, please do not hesitate to contact me at (808) 877-3882.

Mahalo,



Warren A. Suzuki
Vice President/Land Management

/dc

cc: Doug MacCluer

C. TAKUMI ENGINEERING, INC.
18 CENTRAL AVENUE
WAILUKU, MAUI, HAWAII 96793
PHONE: (808) 249-0411
FAX: (808) 249-0311

October 15, 1998

Maui Pineapple Company
ATTN: Warren Suzuki, Vice President/Land Management
P. O. Box 187
Kahului, Hawaii 96733-6687

SUBJECT: Pulehu Road Improvements

REFER. NO. CPW-002

Dear Mr. Suzuki,

C. Takumi Engineering, Inc. is in receipt of your agency comments dated September 8, 1998, regarding the Draft Environmental Assessment for the above subject.

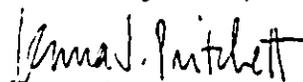
If road widening improvements affect existing fencing located within the limits of the project, all existing fencing damaged or removed will be replaced. Anticipated drainage improvements consist primarily of asphalt concrete paved shoulder swales with "turn-outs" into existing natural drainage ways or cross-slope pavement to allow storm water to sheet across pavement to minimize erosion through fields. Culverts crossing Pulehu Road at certain gulches and larger drainage ways are also part of the proposed improvements.

Access points to the pineapple fields will be maintained and kept at grade. MPCO will be provided with the ability to haul pineapples, as at least one lane of traffic will be open at all times. Adequate dust control, as stated in Section 6.0 Mitigative Measures, will be implemented within the construction area. Dust control will be included in the contract documents.

A notice from the contractor advising you on the construction including the area involved; the start date and approximate end date; the time of day when construction is expected to occur; and any other relevant information will be sent to your office.

Thank you for your research and timely response. Should you have any further questions or concerns, please do not hesitate to contact our office.

Very Truly Yours,

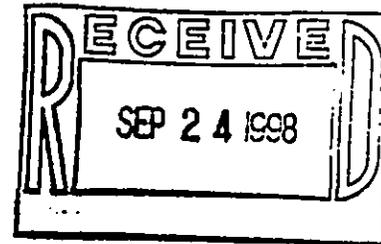

Lenna J. Pritchett



September 21, 1998

G. Stephen Holaday
Plantation General Manager, HC&S
Sr. Vice President, A&B Hawaii, Inc.

C. Takumi Engineering Inc.
18 Central Avenue
Wailuku, Hawaii 96793



Dear Sirs:

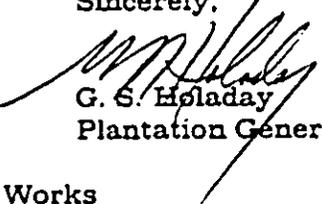
Thank you for providing us with a copy of the Draft Environmental Assessment for the Pulehu Road Improvements.

Although we support the benefits that the improvement of this existing roading will bring to the Maui community, there will be some adverse impacts caused to HC&S that need to be recognized and addressed. These are as follows:

1. HC&S has existing facilities under the existing road. These include a major water tunnel (Kauhikoa Tunnel), pipelines and ditch culverts. In order to enable HC&S' agricultural activities to continue, the tunnel should not be damaged by the construction work, and the pipelines and culverts will need to be extended when the road is widened.
2. Newly constructed drainage culverts, including all intake structures, will need to be located completely outside of our cane hauler roadway, so as not to obstruct our use of this roadway.
3. Access points from Pulehu Road to our field roads will need to be maintained. HC&S personnel and equipment must be able to continue to access fields in an efficient manner. An access point from Pulehu Road to A&B's parcel currently in pasture (above the cane) will also need to be maintained.
4. HC&S currently crosses Pulehu Road in three locations with our haulers and heavy equipment. It would be advisable to include concrete crossings and warning lights at these three locations to protect the road and provide additional safety to our employees and the public.

Thank you for your attention to our comments. We would be happy to meet with you as you develop the road design to facilitate the incorporation of our existing roads and irrigation systems into your plans. Please contact Randall Moore at 877-6968 if you have any questions.

Sincerely,


G. S. Holaday
Plantation General Manager

cc: County of Maui, Public Works
OEQC
M. J. Ching
R. C. Moore

A DIVISION OF A&B HAWAII, INC.
P.O. BOX 256 PUNENE MAUI HAWAII 96794 TEL 808 877 0011 FAX 808 871-2140

**C. TAKUMI ENGINEERING, INC.
18 CENTRAL AVENUE
WAILUKU, MAUI, HAWAII 96793
PHONE: (808) 249-0411
FAX: (808) 249-0311**

October 15, 1998

Hawaii Commercial & Sugar Company (HC&S)
ATTN: G. Stephen Holaday, Plantation General Manager
P. O. Box 266
Puunene, Hawaii 96784

SUBJECT: Pulehu Road Improvements

REFER. NO. CPW-002

Dear Mr. Holaday,

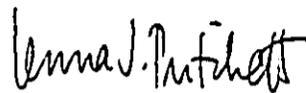
C. Takumi Engineering, Inc. is in receipt of your letter dated September 21, 1998 regarding the Draft Environmental Assessment for the above subject. The scope of the project can accommodate your requests as follows:

1. The Pulehu Road improvements through areas of concern will be widened and remain at existing road grades. The project should not affect the existing facilities, consisting of Kauhikoa Tunnel, pipelines, and ditch culverts. Making plans of these facilities available would be greatly appreciated.
2. Newly constructed drainage culverts will be located completely outside of the cane hauler roadway.
3. Access points from Pulehu Road to the field roads will be maintained. The project consists mostly of maintaining the road instead of modifying it.
4. Current locations where haulers and heavy equipment cross will be upgraded with concrete pavement, and the feasibility of warning lights will be investigated but may not be warranted.

We will be happy to meet with you during the design phase to facilitate the existing roads and irrigation systems of HC&S into our plans. A set of construction plans will then be sent for you to review. A notice from the contractor advising you on the construction including the area involved; the start date and approximate end date; the time of day when construction is expected to occur; and any other relevant information that will affect farmers will be sent to your office.

Thank you for your research and timely response. Should you have any further questions or concerns, please do not hesitate to contact us.

Very Truly Yours,



Lenna J. Pritchett
C. Takumi Engineering, Inc.

Kula Community Association
P. O. Box 417
Kula, Maui, Hawaii 96790
<http://falcon.t-link.net/~kea/>

"The specific purpose of this corporation is to improve the quality of life for the residents of Kula, to promote civic welfare and generally to benefit the community of Kula."

The vision of the Kula Community Association is to preserve open space, support agriculture, maintain a rural residential atmosphere, and to work together as a community.

September 8, 1998

Mr. Carl Takumi
C. Takumi Engineering, Inc.
19 Central Avenue
Wailuku, Hawaii 96793

Dear Mr. Takumi:

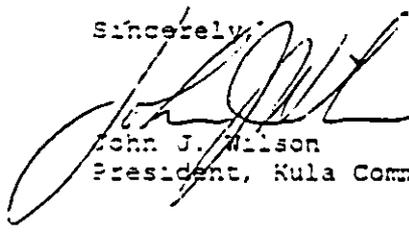
The Kula Community Association's Board of Directors has reviewed the Draft Environmental Assessment for the Pulehu Road Improvements project. Two comments were made: one, (re.3.7) Hawaiian owls have been seen in the evening and at night over the existing road; and two, (re.4.2.2) the second transmission pole on Pulehu after leaving Omaopio road is currently within three feet of the existing pavement edge and may be subjected to moving unless road is realigned with the project.

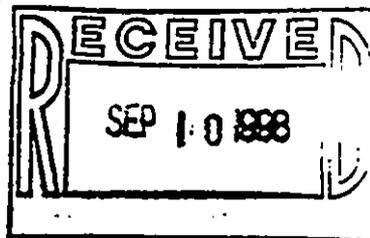
Subsequent to our meeting, it was brought to my attention the dry conditions creating possible fire hazards associated with the construction. Perhaps this can be addressed in Paragraph 4.1 Construction Impacts.

Also mentioned but not directly bearing on the environmental assessment was the need to consider turn lanes at the Kula Highway end of the road if the improvement causes increased traffic on Pulehu.

Questions concerning this response may be directed to me at 873-6440 in the evenings or at 243-7844 during work hours.

Sincerely,


John J. Wilson
President, Kula Community Association



CORRECTION

THE PRECEDING DOCUMENT(S) HAS
BEEN-REPHOTOGRAPHED TO ASSURE
LEGIBILITY
SEE FRAME(S)
IMMEDIATELY FOLLOWING

DOCUMENT CAPTURED AS RECEIVED

Kula Community Association
P. O. Box 417
Kula, Maui, Hawaii 96790
<http://falcon.t-link.net/~kea/>

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September 8, 1998

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C. Takumi Engineering, Inc.
13 Central Avenue
Wailuku, Hawaii 96793

Dear Mr. Takumi:

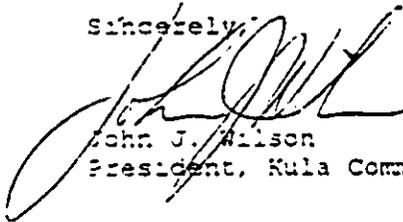
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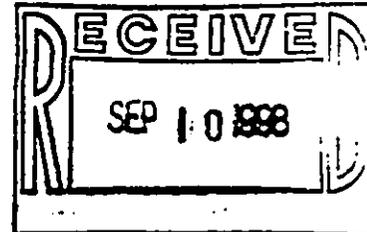
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Sincerely,



John J. Wilson
President, Kula Community Association



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18 CENTRAL AVENUE
WAILUKU, MAUI, HAWAII 96793
PHONE: (808) 249-0411
FAX: (808) 249-0311**

October 15, 1998

Kula Community Association
ATTN: John J. Wilson, President
P. O. Box 417
Kula, Hawaii 96790

SUBJECT: Pulehu Road Improvements

REFER. NO. CPW-002

Dear Mr. Wilson,

C. Takumi Engineering, Inc. is in receipt of your agency comments dated September 9, 1998 regarding the Draft Environmental Assessment for the above subject.

Dry conditions along Pulehu Road could be a possible fire hazard. Watering of the site for dust control at all times during the construction period is included under 6.0 Mitigative Measures and can also be considered as fire prevention. In addition, the contractor will be responsible for mitigating fire hazards during the course of his work.

The Hawaiian owl includes Pulehu Road as part of its search for food. However, no nesting sites were observed along the project route. The construction of the Pulehu Road improvements will be a short-term disturbance, and the habitat should return to normal at the conclusion of the project. Construction shall be limited to daylight hours of 7:30 a.m. to 4:30 p.m. and not during evening and night hours unless an emergency occurs.

There are several transmission poles very close to Pulehu Road. These poles will only be moved if absolutely necessary; otherwise, the road will be realigned or widened in the opposite direction. Such considerations will be addressed in the design phase of this project.

A review of traffic volumes taken on Holopuni Road and anticipated traffic volume indicate that a separate left turn lane from Kula Highway is not warranted. Also, the number of vehicles intending to turn left onto the section of Pulehu Road above Holopuni would be very low, if any. The upper section of Pulehu Road between Holopuni Road and Kula Highway services those parcels which abut the road. The proposed Pulehu Road Improvements should not significantly increase traffic.

Thank you for your research and timely response. Should you have any further questions or concerns, please do not hesitate to contact our office.

Very Truly Yours,



Lenna J. Pritchett
C. Takumi Engineering, Inc.