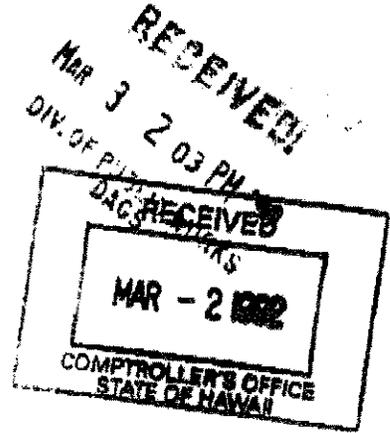




EXECUTIVE CHAMBERS
HONOLULU

JOHN WAIHEE
GOVERNOR

February 27, 1992



MEMORANDUM

TO: The Honorable Russel S. Nagata, Comptroller
Department of Accounting and General Services

SUBJECT: Final Environmental Impact Statement: Site Selection for the Proposed
Upcountry Maui High School

I am pleased to accept the subject final environmental impact statement as satisfactory fulfillment of the requirement of Chapter 343, Hawaii Revised Statutes.

This environmental impact statement will be a useful tool in the process of deciding if the action described therein should be allowed to proceed. My acceptance of the statement is an affirmation of the adequacy of that statement under the applicable laws and does not constitute an endorsement of the proposed action.

When the decision is made regarding the proposed action itself, I expect the proposing agency to consider if the societal benefits justify the environmental impacts which will likely occur. These impacts are adequately described in the statement and, together with the comments made by reviewers, provide useful analysis of the proposed action.


JOHN WAIHEE

DPW

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SITE SELECTION REPORT
AND
FINAL ENVIRONMENTAL IMPACT STATEMENT
FOR THE
PROPOSED UPCOUNTRY MAUI HIGH SCHOOL

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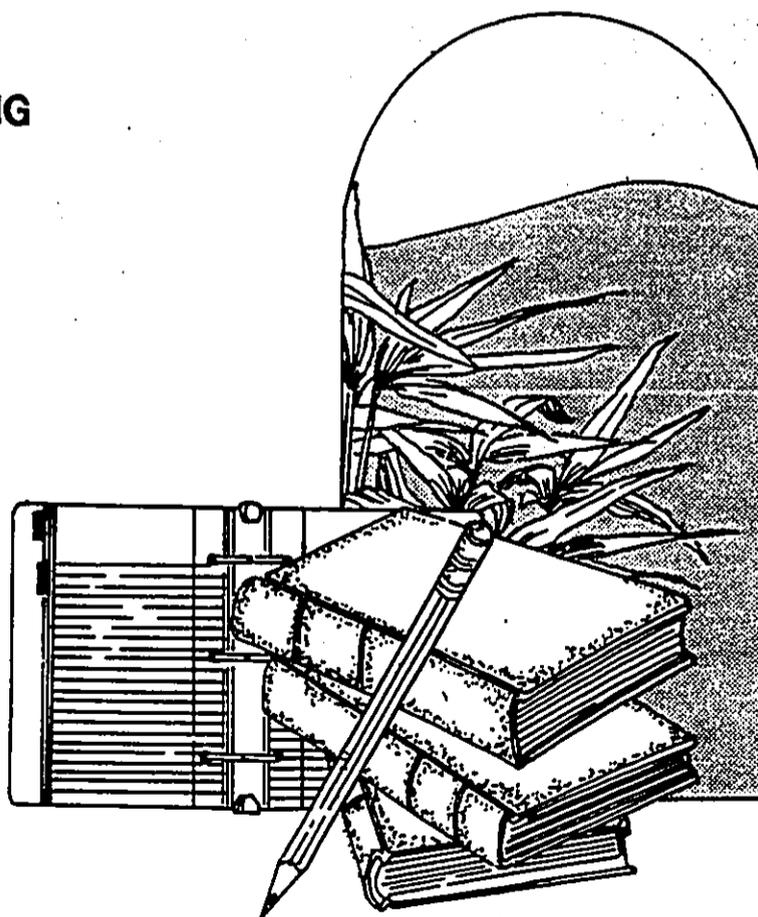
**DEPARTMENT OF ACCOUNTING
AND GENERAL SERVICES
STATE OF HAWAII**

Prepared By

**WILSON OKAMOTO
& ASSOCIATES, INC.**

1150 South King St. Suite 800
Honolulu, Hawaii 96814

December 1991



SITE SELECTION REPORT
AND
FINAL ENVIRONMENTAL IMPACT STATEMENT
FOR THE PROPOSED
UPCOUNTRY MAUI HIGH SCHOOL

This environmental document is prepared pursuant
to Chapter 343, Hawaii Revised Statutes

PREPARED FOR: Department of Accounting and General Services
State of Hawaii

RESPONSIBLE
OFFICIAL:



Russel S. Nagata, Comptroller

12/20/91
Date

ACCEPTING
AUTHORITY:

John Waihee, Governor of Hawaii

PREPARED BY:

Wilson Okamoto and Associates, Inc.
Engineers, Architects and Planners
1150 South King Street, Suite 800
Honolulu, Hawaii 96814

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APPENDIX B - ARCHAEOLOGICAL RECONNAISSANCE SURVEY

CORRECTION

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

PAGE

XV. AGENCIES, ORGANIZATIONS, AND INDIVIDUALS CONSULTED
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PREFACE

This environmental document is prepared pursuant to the requirements of Chapter 343, Hawaii Revised Statutes, and Chapter 200 of Title 11, Administrative Rules, Environmental Impact Statement (EIS) Rules.

The document incorporates the methodology and results of the Site Selection Report which was undertaken to identify candidate school sites for the proposed Upcountry Maui High School. The Site Selection Report does not recommend a preferred site, but identifies the relative advantages and disadvantages of the sites to facilitate discussion and decision making on a final site.

I. SUMMARY

A. Project Description

The State Department of Education (DOE) is proposing to construct a new high school in Upcountry Maui and to designate a new corresponding Upcountry service area to relieve projected overcrowding at Baldwin High School and Maui High School in Central Maui.

This EIS discusses potential environmental impacts of five candidate school sites which have been identified through a site selection methodology which is documented herein. Through the site selection process, many of the potentially adverse environmental impacts were minimized. However, unavoidable impacts such as those related to construction operations remain and are discussed accordingly.

B. Project Setting

Maui County is the second largest county in the State. The County encompasses four islands--Maui, Molokai, Lanai, and Kahoolawe--for a total area of 1,161.6 square miles. It is the third most populous County in the State with a resident population of approximately 89,900 in 1987.

The service area of the proposed Upcountry high school extends from Paia to Haiku along the north coast and mauka from there towards the slopes of Haleakala and to the south coast past Ulupalakua (see Figure 1, p. II-2). The towns of Pukalani, Makawao, Haliimaile, Kula, Paia, and Haiku are within the service area. Land uses are almost entirely residential and agricultural. Crops grown include pineapple, head cabbage, round onions, lettuce, and ornamental flowers. Cattle ranching is also practiced. Commercial activities are centered in town.

C. Relationships to Plans, Policies and Controls

Land use considerations pertinent to the candidate school sites are as follows:

- o State Land Use Classification
- o County General Plan
- o County Zoning

Plans, policies and controls were considered in the site evaluation process. All lands suitable for a potential school in the Upcountry area are designated

agricultural, and the following permits will be necessary to change this designation:

<u>Land Use Permits</u>	<u>Issuing Authority</u>	<u>Time Involved</u>
Community Plan Amendment (Ag to Public/Quasi Public)	Maui County Council	3 to 6 months
State Land Use District Boundary Amendment (Ag to Urban)	State Land Use Commission	6 months
County Zoning (A to P-1)	Maui County Council	8 to 9 months

A complete list of land use and construction permits and approvals for the project is included in Section XI.

D. Candidate Sites

Based on a set of minimum site criteria and other additional criteria necessary for reducing the field of potential sites, five candidate sites were selected, all of them on agricultural lands (pineapple). Site 1, the Lower Pukalani Site, is located below Pukalani subdivision along Haleakala Highway. Site 2 is situated just east of where Haleakala Highway meets Lower Kula Road above Pukalani subdivision. Sites 3 and 4 are located mauka and makai of Makawao Avenue, between Makawao and Pukalani. Site 5 is located along Baldwin Avenue below Makawao and the Maui Veteran's Cemetery.

E. Probable Impacts and Mitigation Measures

1. Short-term Impacts

Short-term impacts experienced during construction will include increased noise levels generated by heavy equipment and a local decrease in ambient air quality. The contractor will be responsible for properly maintaining construction equipment to minimize noise levels, and for minimizing dust generated during construction.

Also during the construction period, increased traffic along existing roadways leading to the project site is anticipated. The contractor will be responsible for providing traffic control measures and safety precautions to minimize

adverse effects. Some soil runoff into existing water courses may occur from areas requiring excavation and vegetation removal, but will be limited by erosion control procedures. The project will provide job opportunities for local workers employed in the construction industry. The increased construction activities will also benefit local material suppliers and retail businesses.

2. Long-term Impacts

Long-term site impacts include those associated with the displacement of agricultural land, and impacts on flora and fauna, infrastructure, traffic, and public health and safety.

Acquirement of the school site property will mean the loss of 35 acres of agricultural land to Maui Land and Pineapple Co. Inc. The loss of vegetation by the clearing and grading of the site will be offset by the grassing and landscaping of the school campus.

Maximum daily water demand is estimated at 169,000 gallons per day. The proposal to supply water to the new school will be submitted to the County Board of Water Supply for approval. Design plans for the school's wastewater system will conform to applicable provisions of the Department of Health Administrative Rules, Chapter 11-62, "Wastewater Systems". To ensure that runoff is contained on the new school site, a Grading and Grubbing Permit Application will be submitted for review to the Maui County Department of Public Works prior to construction.

The new school will bring additional cars into the area, but should improve overall traffic conditions by removing cars from Haleakala Highway bound for Kahului. All roadway improvements will be coordinated with the County Department of Public Works and the State Department of Transportation.

Appropriate mitigative measures such as fencing the school boundaries and proper building design to allow adequate air circulation shall be considered during the school's design phase. In addition, the school shall be designed to minimize impacts to adjacent residences from noise-generating sources such as air-conditioning units, exhaust fans, public address systems. Traffic noise will also be minimized by locating the school entrance as far from residential streets as practicable.

F. Alternatives Considered

1. The "no action" alternative is considered to be unacceptable since the two existing schools are operating beyond capacity, and continued population growth is projected for the region.
2. Continued busing to schools outside the service area (Maui and Baldwin High) is similarly considered infeasible since these facilities are also experiencing growth problems and are operating at capacity.
3. Moving the current high school program to an existing school is impractical. There are no existing schools in the Upcountry area which have adequate facilities to accommodate an increasingly large number of high school students.
4. Further expansion of existing high schools is infeasible since Baldwin High is limited by land space and Maui High is limited by administrative and educational constraints.

G. Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity

Implementation of the proposed project will include local short-term uses of the environment during the construction phase. Over the long term, however, the new school will assure the continued maintenance and enhancement of public education and social welfare by providing an essential educational service and a facility that will meet the enrollment requirements of the region.

H. Irreversible and Irrecoverable Commitments of Resources

Development of the proposed project will involve the irretrievable commitment of land for school use which will remove certain open space and agricultural resources from the area. Irretrievable resources committed to the project will include fuel, labor, funding, and materials to implement construction of the new school.

I. Unresolved Issues

Two unresolved issues were identified; local traffic conditions and water service. Local traffic increases will be mitigated by road widening, signalization, holding lanes, and other traffic mitigation measures as determined to be necessary by a traffic study for the selected school site.

Water supply is sufficient in the Upcountry area, but off-site infrastructure appears inadequate at this time. Proposals to provide water service will be coordinated with the Maui County Department of Water Supply.

II. PROJECT NEED AND DESCRIPTION

The State Department of Education (DOE) is proposing to construct a new high school in Upcountry Maui and to designate a new corresponding service area to relieve projected overcrowding at Baldwin High School and Maui High School in Central Maui. The new service area is derived from existing elementary school districts shown in Figure 1. The proposal to build a new school is based on an assessment of existing facilities and projected needs as discussed below.

A. Existing Facilities

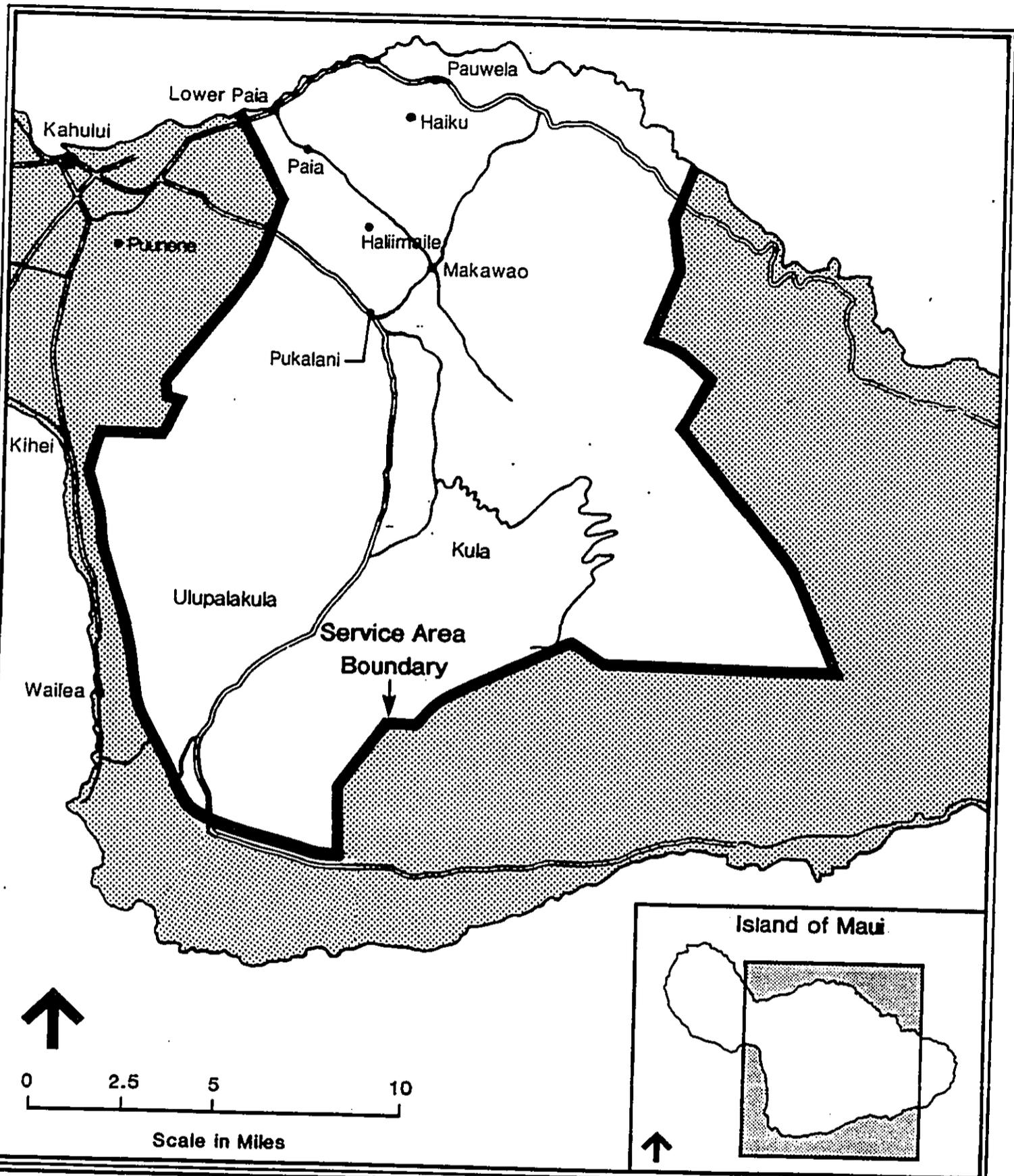
The DOE operates 25 public schools on the Island of Maui, 4 of which are high schools; Lahainaluna High, Hana High and Elementary, Baldwin High, and Maui High. Lahainaluna High is relatively small, serving just over 700 students in the Lahaina area. Haná High serves just 90 students. Baldwin High and Maui High serve approximately 1,600 and 1,700 students, respectively.

Both Maui and Baldwin High are currently operating at capacity and are serving the needs of most of Maui's residential growth areas. Seventy-five percent of Maui High's student body are bused from the Upcountry area, and this number (about 1,200 students) far exceeds guidelines for consideration of a new high school (DOE specifications minimum is 750). Additional classroom needs are now being supplied by portables which presently total 23 at the two high schools.

B. Projected Enrollment

Maui's school enrollment has paralleled the County's boom in tourism and economic growth. Enrollment at Baldwin High is expected to reach over 2,000 students by 1993 and 2,600 by the year 2010. Maui High anticipates a student body of 1,900 by 1993 and 2,400 by 2010. Of that number, it is projected that the Upcountry area, which already sends 1,200 students to Maui High, will be busing 1,740 students by 2010.

There is a strong indication that, since most of the residential project districts in the Maui Development Plan fall in the Maui High/Baldwin High service area, enrollment will continue to grow beyond the year 2010 projections of 5,000 students.



NEW SERVICE AREA BOUNDARY

Fig. 1

SITE SELECTION STUDY and EIS for the
**NEW UPCOUNTRY
 MAUI HIGH SCHOOL**

Prepared for :
DEPARTMENT OF ACCOUNTING & GENERAL SERVICES
 Prepared by :
WILSON OKAMOTO & ASSOCIATES, INC.

C. Limitations

To accommodate growth through 1993 alone, an additional 24 portables will need to be erected. However, Baldwin High is presently master planned for 1,600 students, and due to limited land space, it is not possible to expand the school to accommodate 2,600 students. Because of these limitations, any proposed alternative would require the expansion of Maui High to 3,000 or more students. However, this presents administrative and educational problems which are unacceptable to the DOE.

Expansion of existing schools becomes even more unfavorable as busing costs continue to increase. It is projected that 40 buses will be necessary to transport 1,740 students to Maui High by the year 2010, also contributing significantly to the traffic congestion between the Upcountry area and Kahului.

As a basis for comparing the development of a new school to expanding Maui and Baldwin High, cost estimates of additional classrooms and continued busing to the year 2010 were prepared by the DOE. (See Tables 1, 2, 3 and 4). Another 60 classrooms would need to be constructed at a cost of \$19.2 million, while continuing to bus an ever increasing number of students from the Upcountry area to Maui High over a 20 year period would cost an estimated \$32.3 million. With or without a new high school, busing costs will still be a major expense. However, the cost of busing students to a new, much closer school is estimated to be approximately \$13 million over a 20 year period (see Tables A-5 through A-9, Appendix A). The difference, about \$19.3 million, when added to the cost of additional classroom space, is about \$38.5 million. In twenty years, this sum approaches the estimated \$46.3 million which a new high school is expected to cost. (See Table 5).

D. Proposal

The DOE proposes to construct a new high school in Upcountry Maui within the existing service area. The new high school will ultimately be comprised of 43 general classrooms and 28 specialized classrooms which will address all other educational needs. Athletic, dining room, administrative, and library facilities will also be provided. The school will accommodate a design enrollment of 1,740 students, the number anticipated by the year 2010.

The cost of the proposed high school, including planning and facility construction, is estimated to be \$46.3 million (in 1989 dollars). The proposed high school will not change the feeder system of students graduating from elementary to intermediate school in the existing service area. (See Figure 2).

TABLE 1

CLASSROOM SPACE NEEDED TO MEET
PROJECTED ENROLLMENTS FOR YEAR 2010

Student Enrollment - 2010:	2,400 - Maui High
	<u>2,600 - Baldwin High</u>
=	5,000 Total
Classroom Space Required:	5,000 students at
	<u>25 students/classroom</u>
=	200 classrooms
Classrooms Required: (90% permanent)	.90 x 200
=	180 classrooms
Permanent Classrooms Currently Available:	60 - Maui High
	<u>60 - Baldwin High</u>
=	120 classrooms
Classroom Deficit:	180 classrooms required
	<u>- 120 classrooms available</u>
Total Deficit:	60 classrooms

TABLE 2

ESTIMATED COST OF ADDITIONAL CLASSROOMS
(Based on 80 percent Regular and 20 percent Special)

Regular Classroom cost:	.80 x 60 = 48 x \$250,000	=	\$12,000,000
Special Classroom cost:	.20 x 60 = 12 x \$600,000	=	<u>\$7,200,000</u>
Total Cost:			\$19,200,000

TABLE 3

ESTIMATED COST TO BUS STUDENTS
FROM UPCOUNTRY AREA TO MAUI HIGH OVER 20 YEARS*

Bus Capacity 44 students
 Cost/Bus/Day \$150
 No. of School Days 175

<u>Year</u>	<u>Est. No. Pupils</u>	<u>Inflation Rate 5%/Year</u>
1990	1,200	\$708,750
1991	1,227	\$771,750
1992	1,254	\$839,278
1993	1,281	\$881,242
1994	1,308	\$957,211
1995	1,335	\$1,005,072
1996	1,362	\$1,090,503
1997	1,389	\$1,181,964
1998	1,416	\$1,241,063
1999	1,443	\$1,343,838
2000	1,470	\$1,411,030
2001	1,497	\$1,526,478
2002	1,524	\$1,649,943
2003	1,551	\$1,732,440
2004	1,578	\$1,871,035
2005	1,605	\$1,964,587
2006	1,632	\$2,120,117
2007	1,659	\$2,286,288
2008	1,686	\$2,400,603
2009	1,713	\$2,586,965
2010	1,740	\$2,785,963
	Total Cost	\$32,356,120

* Prepared by DOE

TABLE 4

TOTAL COST OF MAINTAINING
MAUI AND BALDWIN HIGH SCHOOLS TO YEAR 2010

Cost of Additional Classrooms	\$19,200,000
Projected Busing Cost to a New Upcountry Maui High School	\$13,000,000
*Cost to Continue Busing to Maui, Baldwin	\$32,356,120
Adjusted Cost	\$19,356,120
	<hr/>
	+ \$19,200,000
Total Cost	\$38,556,120

* Estimate prepared by DOE.

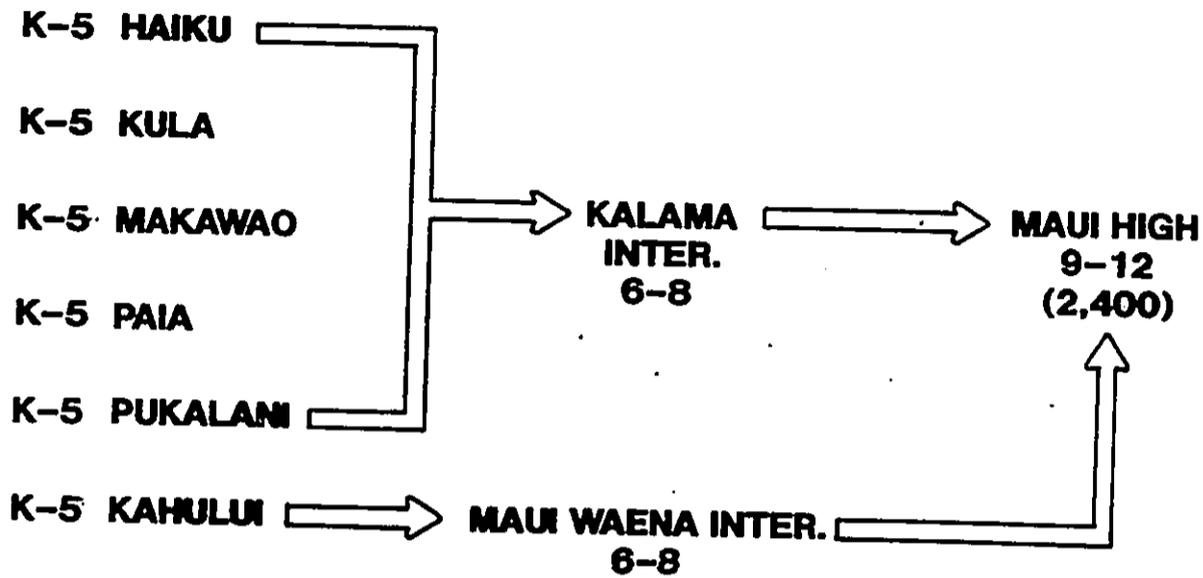
TABLE 5

COST ESTIMATE FOR THE NEW UPCOUNTRY MAUI HIGH SCHOOL*
(in 1988 dollars)

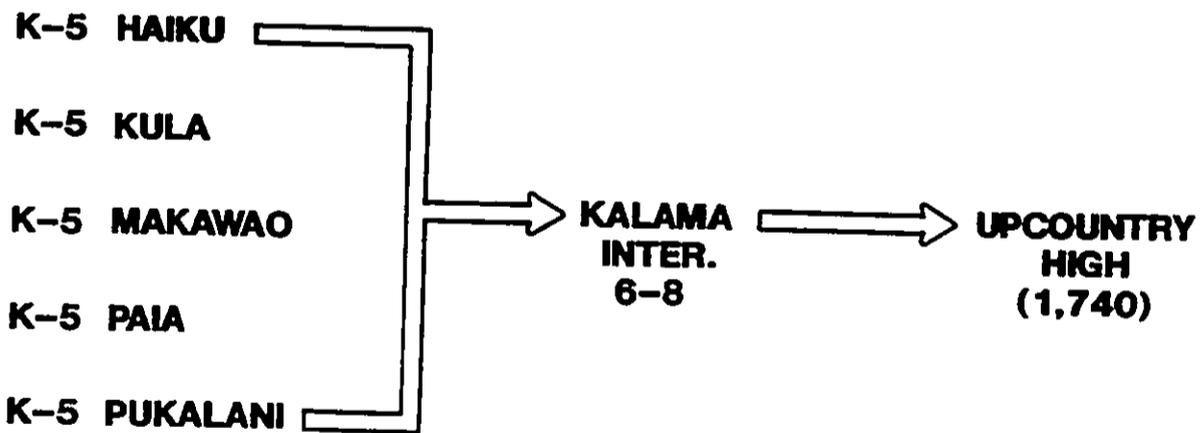
<u>Facilities</u>	<u>Cost</u>
Classrooms, regular (43)	\$ 7,585,200
Classrooms, special facilities (28)	\$14,989,000
Art	
Agricultural Technology	
Business Education	
Homemaking	
Industrial Arts	
Music	
Science	
Special Education	
Miscellaneous	
Portables	\$ 1,300,000
Administration/Adult Education	\$ 1,756,000
Library	\$ 1,935,000
Dining Facilities	\$ 3,420,000
Athletic Facilities	\$10,705,000
Gymnasium	
PE, Athletic Locker/Shower	
Athletic Field	
Lights	
Bleachers	
Baseball Field	
Grassed Area	
Paved Courts	
Tennis Courts	
Parking	\$ 314,000
Land Acquisition	\$ 1,875,000
Site Improvements	\$ 2,000,000
<u>Equipment - Classroom, Other.</u>	<u>\$ 502,000</u>
 Total	 \$46,381,200

* Estimates prepared by DOE.

EXISTING FEEDER COMPLEX



PROPOSED FEEDER COMPLEX



EXISTING AND PROPOSED FEEDER COMPLEX

SITE SELECTION STUDY and EIS for
NEW UPCOUNTRY MAUI HIGH SCHOOL

Fig. 2

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DEPARTMENT OF ACCOUNTING & GENERAL SERVICES
Prepared by :
WILSON OKAMOTO & ASSOCIATES, INC.

III. PROJECT SETTING

A. Regional Overview

The islands of Maui, Molokai, Lanai and Kahoolawe (a total area of 1,161.6 square miles) constitute the County of Maui, the second largest County in the State of Hawaii. It is the State's third most populous County and had a population of approximately 89,900 in 1987. The island's major population centers are Kahului, Wailuku, Lahaina and Kihei.

Maui County's trade and tourism industries are centered on Maui and are the island's primary industries. Recently, employment and investment opportunities have ensued from a construction boom associated with new hotels and condominiums. Diversified agriculture, scientific research and marine projects are also increasingly important facets of Maui's economy.

There are no separate municipal governments within Maui County, and like Hawaii's two other Neighbor Island Counties, Maui County is governed by a Mayor-County Council form of government which is centered in Wailuku.

B. Environmental Setting of the Service Area

1. Geology

The island of Maui consists of two major volcanoes. The older one is West Maui, and the younger is Haleakala. The broad plain between the two formed when the lava from Haleakala banked against the West Maui volcano.

In East Maui, three major volcanic series are evident. The first series, or Honomanu lavas, consists of thin-bedded, permeable basaltic pahoehoe and a'a flows. These have been overlaid by later flows of the Kula series which are composed chiefly of thicker alkalic a'a, and which contain inter-stratified thin ash-soil layers. Many large cinder cones were created during the Kula epoch, several of which are found in the Makawao area and contribute to its geological formations and soil character.

The third phase, or Hana volcanic series, occurred only in the east and southwest rift zones to the south of Makawao. These lavas are andesitic, picritic, and olivine basalts.

2. Hydrology

The four principal groundwater sources on Maui are fresh basal water, brackish basal water, dike-confined water and perched water.

Although dike complex formations in the Upcountry area may contain high level groundwater, most of the groundwater development efforts occur at lower elevations where groundwater resources are more accessible and abundant. In the Makawao area, water is obtained from stream flows and is treated and pumped uphill.

In Kula, under normal conditions, water is gravity-fed to lower Kula by Piihola reservoir. During drought conditions, water which is pumped uphill to Makawao may also supply lower Kula. Upper Kula is supplied by surface water runoff from Haipuaena, Puohokamoa, and Waikamoi perennial streams. Other intermittent streams which flow through the service area but are not used as water sources are Kailua Stream, Opana Gulch, Waiohiwi Gulch, and Kahakapao Gulch.

3. Topography

The topography in East Maui varies from gently sloping to strongly sloping. The very steep slopes are confined largely to sides of gulches and valleys.

4. Soils and Agricultural Potential

The most productive agricultural lands of East Maui are located in the area between Makawao and Ulupalakua above the 2,000 foot elevation. Soil types found in the Makawao-Pukalani vicinity include soils of the Waiakoa-Keahua-Molokai association. This soil association is characterized by nearly level to moderately steep, well-drained soils that have a moderately fine-textured sub-soil and are found on low uplands. Some uses of this soil type include sugarcane, pineapple, pasture, truck crops, and homesites.

The State Department of Agriculture has identified Agricultural Lands of Importance for the State of Hawaii (ALISH) and categorizes these into three groups. "Prime" agricultural lands are those which have the soil quality, growing season, and moisture supply needed to produce sustained high crop yields economically when treated and managed according to modern farming methods. "Unique" agricultural lands have a special combination of soil quality, location, growing season, and moisture supply currently used to produce sustained high yields

of a specific crop when treated and managed according to modern farming methods. "Other" important agricultural lands include agricultural lands which have not been rated "prime" or "unique".

The majority of the agricultural land in the service area is "prime" agricultural lands. Rural and urban developments are also identified.

Also used to rate agricultural productivity is the University of Hawaii Land Study Bureau's Detailed Land Classification, Island of Maui. To determine overall agricultural land productivity, a five class rating is applied using the letters A, B, C, D, and E, where A represents the class of highest productivity and E the lowest. According to this technique, the overall productivity rating of agricultural lands in the area is primarily "C" land. The overall productivity rating represents an average of soil characteristics such as drainage and depth, texture, slope, rainfall, and soil reaction, fertility, and salinity.

5. Wetlands

There are six major wetland areas located on Maui, none of which are situated anywhere near the proposed facility. The closest site is in Kahului along the coast.

6. Flood Hazard

Apart from the coastal areas of Paia and Haiku which are within the tsunami inundation zone, almost the entire service area is designated Zone C--"areas of minimal flooding". Only one site designated Zone B deserves mention. The site encompasses a 1,500 foot section of road and peripheral area where Kailua gulch meets Makawao Avenue. Zone B is described as follows:

"Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood."

This flood hazard area is very small, and any new high school can easily be located outside its boundaries.

7. Climate

Maui's climate varies according to altitude with climatic conditions influenced by leeward/windward locations. Lowland areas tend to have a semi-tropical climate, while higher elevations are characterized by temperate climates. The climate of Upcountry Maui is mild and characterized by warm days and cool nights which are conducive for both farming and residential purposes.

The Pukalani and Kula areas are relatively dry with rainfall ranging between 20 to 40 inches annually. The amount of rainfall increases northeastward towards Makawao and Kokomo to approximately 50 and 100 inches annually. Temperatures range from the low 60's during the winter to the mid 80's in the summer.

Maui is cooled by northeast tradewinds approximately 70 percent of the year. These winds are constant during the spring and summer months. Tradewinds are affected by local topographic conditions on Maui. The northeast tradewinds become northerly as they are funneled between the mountains of east and west Maui. Areas within the "wind shadows" of the highest elevation of the West Maui Mountains or Haleakala are shielded from all but the strongest tradewinds.

Winter months are characterized by Kona weather conditions; local low-pressure systems ranging from gale force, southerly winds with heavy rains, to calm, humid or rainy weather.

8. Air Quality

There are a number of possible sources that may affect air quality in the project area. Agricultural activities including sugar cane field burning, bagasse and fossil fuel burning at sugar mills, and pesticide spraying all have the potential for affecting air quality to varying degrees.

Motor vehicles are the principal source of air pollution on Maui. The most significant air pollutant is carbon monoxide.

9. Flora

The zonation of plants is highly dependent on climatic factors. Average annual rainfall is the most important factor governing plant

distribution in the Upcountry area. Most of the available land for a new school is cultivated pineapple fields with scrub growth. The type and abundance of existing flora in such areas is generally similar. The overgrowth consists of cactus, koa haole, silk oak, eucalyptus, guinea grass and other grasses and weeds.

There are no known endangered species of plants that are listed, proposed, or candidates for endangered species designations within the project service area.

10. Fauna

The fauna of the area consists of introduced species which are common throughout the Hawaiian Islands. These include rats, mice, mongoose, cats, and dogs. Birds found in the region include the cardinal, barred dove, mockingbird, myna, golden plover, pueo, ricebird, house sparrow, white eye, and spotted dove.

There are no known endangered species of fauna within the project service area. Because the area has no wetland resources, there is little likelihood of encountering any protected waterbird species such as the Hawaiian coot, gallinule, stilt, or duck.

11. Existing Land Uses

Residential subdivisions are centered in Pukalani, Makawao, Haliimaile, Kula, Paia and Haiku. Commercial activity is limited to these areas. Land use throughout the rest of the service area is predominantly rural and agricultural. Unlike most other parts of Maui where sugar is grown, primary crops in the Upcountry area include pineapple, ornamental flowers, head cabbage, lettuce, and onions. Cattle ranching is also practiced.

12. Scenic Characteristics

The service area is primarily open agricultural or scrub lands, sparsely forested or vegetated. The Upcountry area has a sweeping view of Central Maui, the West Maui mountains, and the ocean north and south of the coastline.

13. Archaeological/Historic Sites

Relatively few archaeological field investigations have been carried out in the Upcountry area. The State Inventory of Historic Places (SIHP) files include two archaeological sites in the vicinity of Makawao and Pukalani; the Hamakua Burial Cave (50-50-05-1264) and Puu Pane (50-50-11-1275). The Hamakua Burial Cave is located at the southwestern edge of Pukalani town, where the cliffs of Kalialinui Gulch intersect with the Hamakua Ditch. The cave is described as a 33 meter long lava tube divided into two narrow chambers. When first mapped and registered in 1973, the cave reportedly contained the disarticulated human remains of an estimated 30-50 individuals.

Puu Pane is located approximately 2.5 miles southeast of Pukalani and was reportedly a sacred hill and a heiau for high chiefs. When surveyed in 1973, a few alignments were reported which might have been the remnants of the heiau.

C. Socioeconomic Characteristics

1. Population

Maui County is the third most populous County in the State with a population of 89,900 in 1987. According to the Hawaii Department of Business and Economic Development (DBED) economic and demographic projections, Maui County's resident population will increase 50 percent, twice as fast as Oahu's 26 percent, to 145,200 by the year 2010.

The Makawao District of Maui County has experienced substantial growth since 1970. Resident population in 1970 was 9,979. The population increased by 90.4 percent to 19,005 in 1980, and another 16.4 percent to 22,129 in 1985, making it one of the fastest growing districts in the State of Hawaii. Population growth in the project area may be more significantly governed by the County's Makawao-Pukalani-Kula Community Plan which directs land use and growth in the Upcountry Maui region. The Community Plan uses a projected resident population of 17,000 to 20,000 for the next 20 years.

2. Employment and Income

The statewide unemployment rate in the first quarter of 1989 was 3.4 percent. In the same period, the island of Maui experienced the lowest unemployment rate in the state at 2.9 percent. Maui per capita personal income in 1986 was \$13,254 as compared to a state per capita income of \$14,658.

Agriculture is the dominant economic activity in the Upcountry area. Primary crops include pineapple, head cabbage, lettuce, and round onions. Production of ornamental flowers, including carnations and protea, is also a major activity. The majority of crop and flower farms are small operations, typically five to ten acres in size. The Kula area is a major truck crop and flower producing district in the State of Hawaii. Cattle ranching is also prevalent in the Upcountry region, primarily around Ulupalakua.

A variety of retail outlets in Paia, Haiku, and Makawao also cater to the visitor industry. The portion of coastline from Paia to Haiku is well known for ideal, challenging windsurfing conditions, and the local economy derives income from this notoriety. The commercial center of Makawao also attracts shoppers to what has become an eclectic mix of novelty and country stores.

3. Public Services

a. Recreation

The service area offers various recreational opportunities. In Makawao and Pukalani, recreational facilities include the Makawao School Park, the Makawao Park and Mayor Eddie Tam Memorial Center, Pukalani Park and Community Center, The Kula Botanical Garden, Harold F. Rice Park, Keokea Park, and the Pukalani Country Club Golf Course.

Recently, the Upcountry Youth Center was established and is now operating on the Eddie Tam Memorial Center grounds. The County also intends to seek funding support from the State of Hawaii for a "County-funded" public swimming pool in Upcountry.

b. Schools

Educational institutions within the service area include Makawao Elementary, Haiku Elementary, Pukalani Elementary, Kula Elementary, Paia Elementary, Kalama Intermediate School, St. Joseph School, and Seabury Hall.

c. Police Protection

The Wailuku Station is the nearest police station in the area and also functions as the Police Department Headquarters.

d. Fire Protection

The nearest county fire station is the Makawao Fire Station located in Makawao town.

e. Health Care Facilities

There is a general hospital located in Kula which provides care for tubercular, mental, and long-term patients. An ambulance stationed at Makawao provides emergency services between the service area and Maui Memorial Hospital in Wailuku if the need arises. The unit is in constant communication with the Hospital.

f. Transportation

Pukalani and Makawao subdivisions are accessible by Haleakala Highway, Baldwin Avenue and Kaupakulua Road to the north, and Kula Highway to the south.

Funds have been appropriated for design and construction of a by-pass highway from Haliimaile Road to Kula Highway junction, and for a truck climbing lane from Hana Highway to Haliimaile Road. The truck climbing lane will allow slow moving trucks and agricultural vehicles to travel up Haleakala Highway without impeding other traffic. The Haleakala Highway by-pass road will direct traffic around the east side of Pukalani, thereby avoiding the center of town.

D. Infrastructure

1. Water

Water supply to the service area is furnished by the Maui County Department of Water Supply. The Makawao-Kula potable water supply system is a complex, interconnected system of transmission and distribution mains which includes water mains as large as 24 inches to supply irrigation water. Major storage facilities include the 50 million gallon (mg) Piihola Reservoir, Waikamoi Reservoirs, and numerous water tanks in Olinda.

The only source of water for the Makawao water system is the intake at the Kamole Forebay on the Wailoa ditch system at approximately 1,100 feet elevation. The Kamole water treatment plant with a capacity of 8 mgd is located at this site. Water withdrawn from the Makawao water system in fiscal year 1989 averaged 2.4 million gallons per day (mgd).

The Kula system relies on surface runoff as its source for water. During 1987, approximately 0.26 mgd was supplemented to the Kula system. However, the Kamole treatment plant is periodically required to treat approximately 6 MGD of water in a 24-hour period when the surface source of the Kula system is unable to meet system demands due to low rainfall.

Storage facilities in the Makawao water system total 5 million gallons. They include: Pukalani tanks of .85 mg, .025, .07, and 1 mg. The rest of Makawao is served by the .05 mg Olinda tank, .5 mg Maluhia tank, .3 mg Pookela tank, 2 mg Pookela tank, .07 mg Haiku tank, .1 mg Kokomo tank, and .047 mg Haliimaile tank.

2. Sewerage

The agricultural and residential areas in the vicinity of the project site, including Makawao town, use cesspools for domestic wastewater disposal.

In compliance with State and County rules and regulations, a facility such as the proposed school will require an individual wastewater treatment and disposal system.

3. Electrical/Telephone

Electric power for industrial and residential use on Maui is supplied by Maui Electric Company, a subsidiary of Hawaiian Electric Company, Inc.

Telephone service for Maui, as for the rest of the State, is provided by the Hawaiian Telephone Company.

4. Drainage

Because of the well-drained nature of soils in the service area and the Makawao-Pukalani region's low to moderate rainfall, extensive drainage infrastructure to collect excess runoff has not been put in place in the Upcountry area. Several gulches collect rainfall naturally and direct flows to the ocean.

IV. RELATIONSHIP TO PLANS, POLICIES AND CONTROLS

A. Plans

1. Hawaii State Plan

The Hawaii State Plan is a statewide planning system which provides goals, objectives, and policies that address priority directions and concerns of the State of Hawaii. The proposed Upcountry Maui High School is consistent with the following State objective and policy:

"Planning for the State's socio-cultural advancement with regard to education shall be directed towards achievement of the objective of the provision of a variety of educational opportunities to enable individuals to fulfill their needs, responsibilities, and aspirations".

To achieve the education objective, it shall be the policy of this State to:

"Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs".

2. State Education Functional Plan

The State Functional Plans do not mandate County or private sector actions. Rather, they are guides to coordinate the various sectors of government and private industry toward achieving the objectives of the Hawaii State Plan. State Functional Plans are intended to act in a coordinated fashion with County General Plans and Development Plans in order to implement the Hawaii State Plan.

The State Education Functional Plan is one of fourteen plans called for by Chapter 226, Hawaii Revised Statutes, originally enacted in 1978 and amended in 1986 and 1987. The State Education Functional Plan attempts to provide for wise use of the Department of Education's resources and to guide its future.

Together with the other Functional Plans, the State Education Functional Plan seeks to achieve the State Goals (Section 226-4) of:

"A strong, viable economy, characterized by stability, diversity, and growth, that enables the fulfillment of the needs and expectations of Hawaii's present and future generations".

The proposed Upcountry Maui High School is consistent with the following State Education Functional Plan policies and goals:

- o *"Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs".*
- o *"Provide facilities that are sufficient in number, functional, well placed and compatible with the physical surroundings".*
- o *"Pursue actions with other agencies which will insure adequate and appropriate services and facilities on a timely basis".*

3. Maui County General Plan

The Maui County General Plan was adopted in 1980 as a comprehensive plan for the long range development of the County. The County General Plan is guided by the Hawaii State Plan formulated under the provisions of Chapter 226, Hawaii Revised Statutes. The Plan contains social, economic, environmental and design objectives for the general welfare and prosperity of the people of Maui County.

The proposed Upcountry Maui High School will further the County General Plan objectives and policies for education, special programs and government. The new school will meet the following objectives outlined in the General Plan:

- o *"To provide educational opportunities [for students] which can help them better understand themselves and their surroundings and help them realize their ambitions".*
- o *"To create a community in which the needs of all segments of the population will be recognized and met".*
- o *"Improve delivery of services by government agencies".*

The proposed high school will directly address the following policies:

- o *"Support education and training programs that will provide residents with knowledge and skills that can be utilized in basic industries and encourage them to be innovative so as to provide new and different employment opportunities to others".*
- o *"Require that educational facilities and services be available to all residents".*
- o *"Seek continual improvement in the quality of education at all levels for all residents".*
- o *"Encourage the development of a wide range of informal educational and cultural programs for people of all ages".*
- o *"Provide a variety of services and programs that meet the special needs of recent immigrants, the young, the elderly, and the handicapped".*
- o *"Support programs that will increase the overall effectiveness of government so as to provide greater responsiveness to the needs of the people".*
- o *"Coordinate government services to avoid unnecessary expenditure of funds".*

4. Makawao - Pukalani - Kula Community Plan

The Makawao-Pukalani-Kula Community Plan, adopted in October 1981, is the primary decision making tool used by the County for implementing the County General Plan within the Upcountry region of Maui. The Community Plan establishes land use and population growth policies within the area. The Community Plan was amended October 16, 1987 by Ordinance Number 1663. The Community Plan is updated every five years to incorporate new data, analyses and events.

The planning region is on the western slopes of Haleakala and includes portions of the Haleakala National Park. It is the only County Planning region without any shoreline resources. The region is referred to as "Upcountry", primarily because of its location on the

slopes of Haleakala and secondarily because of the small agricultural villages located throughout the area. The majority of the new residential growth in the region occurs in Makawao and Pukalani, where public services can accommodate it. Community Plan designations in the vicinity of the candidate sites are shown on Figure 11 in Chapter XI.

There are two education recommendations in the Community Plan which the construction and operation of a new Upcountry Maui high school can help to fulfill:

- o *"Support the development of an up-country high school at a site conveniently located to serve all communities to reduce transportation costs and achieve desired social objectives".*
- o *"Encourage shared use of school facilities with the community to include such facilities as a community-school library, gymnasium and public service rooms".*

One land use recommendation in the Community Plan which could affect selection of a school site in the Makawao-Pukalani-Kula area is as follows:

- o *"Maintain open space areas along the planned Haleakala Highway Bypass route to allow a distinct separation between Pukalani and Makawao".*

5. Paia - Haiku Community Plan

A Community Plan for the Paia-Haiku area is mandated by the Charter of Maui County (1977) and Maui County General Plan. The plan, developed to establish a program for implementing the County General Plan for the region, contains basic analysis and recommendations for the rural areas of Paia and Haiku. The major population center in the region is Paia to the northwest which includes the communities of Lower Paia, Upper Paia and Kuau. A secondary center is located to the southeast in the communities of Haiku and Kuiaha. Scattered rural settlements are located in the planning region.

One education statement of the Paia-Haiku Community Plan is to, *"determine a suitable site for the proposed upcountry high school."*

B. Land Use Policies

1. State Land Use Designation

The State Land Use Law regulates the classification and uses of State lands to accommodate growth and development. All State lands are classified by the State Land Use Commission, with consideration given to the General Plan of the County, as either Urban, Rural, Agricultural or Conservation.

A major portion of the service area is located within the State Agricultural District. State Land Use District delineations in the vicinity of the candidate sites are shown on Figure 10 in Chapter XI. Areas suitable for a school site were exclusively agricultural lands.

2. County Zoning

Lands classified as Agricultural by the State Land Use law have no County zoning.

C. Land Ownership

The island of Maui comprises 402,900 acres. In 1988, approximately 278,115 acres or 69 percent of the Island of Maui belonged to private landowners. The State of Hawaii owned approximately 24 percent, or 96,628 acres of all lands; the Federal Government held 6.7 percent, or 26,872 acres; and the County of Maui owned 0.3 percent, or 1,285 acres.

Land ownership of the potential school sites is further discussed in chapters V and VI.

V. IDENTIFICATION OF CANDIDATE SITES

A. Site Selection Methodology

A site selection study was performed to determine the relative advantages and disadvantages of sites for the proposed Upcountry Maui High School. General guidelines set forth by the DOE, (Board of Education Policy 6700) for site selection and facility layout formed the general basis for the selection of potential high school sites. These guidelines recommend the following:

- o Sites in a quiet location are preferred over sites adjacent to existing and foreseeable noise generators such as airports, freeways, and heavy industries.
- o Sites upwind of noisy sources are preferred over sites downwind of noisy sources.
- o Sites exposed to the wind to provide natural ventilation of facilities are preferred over sites without natural ventilation because of the cost of mechanical ventilation.
- o Sites in medium rainfall areas are preferred over sites in a low or high rainfall area.
- o Sites shaded by tall trees or mountains during part of the school day are preferred over sites without such shading.
- o Sites free from specular heat reflections from water are preferred over sites subject to such reflections.

While the above guidelines were generally observed, the site selection process recognized the large region encompassed by the new school service area and the need to systematically locate areas which would be sufficient, suitable, and acquirable for development into a school site. In this regard, three levels of analysis were established involving: 1) minimum criteria, 2) site delineation criteria, and 3) detailed site criteria.

The first step in the site selection methodology is a broad assessment of the new service area to identify potential locations for the school. The second step delineates candidate sites within the potential school areas. The third step assesses the advantages and disadvantages of each candidate site with respect to environmental and community concerns and

cost considerations, including those for land acquisition, on-site and off-site development, and bus subsidies.

1. Minimum Criteria Evaluation

Potential school site areas were broadly identified through selected minimum criteria. These include those established by the DOE, and new criteria developed through review and analyses of conditions most likely to enhance the viability and compatibility of potential site areas for educational activities. The minimum criteria and their rationale which was used for evaluation are discussed below. Figures 4 through 7 on the following pages depict the gradual elimination of potential developable lands where they do not meet these minimum criteria.

a. Proximity to Population Centers

To facilitate pedestrian and vehicular access, the new school should be located near an existing or potential population center. From a land use standpoint, this establishes a favorable condition for the State Land Use Commission to consider redesignating the site to Urban. Also, proximity to lands having favorable land use designations such as Urban (State) or Residential (County) ensures that a new school should have a nearby future student population as well.

The service area population for the proposed high school is widely distributed. However, a majority of the student population, approximately 55 percent, reside in the Makawao, Haliimaile and Pukalani subdivisions. (See Table 6 and Figure 3). The area contained by dashed lines in Figure 3 is the study area encompassing this population. Most of the remainder live in the rural and coastal areas mauka and makai of these subdivisions. To minimize the distance students must commute to school, the campus should be located in or around the communities of Makawao-Pukalani-Haliimaile.

b. Parcel Size, Occupancy and Ownership

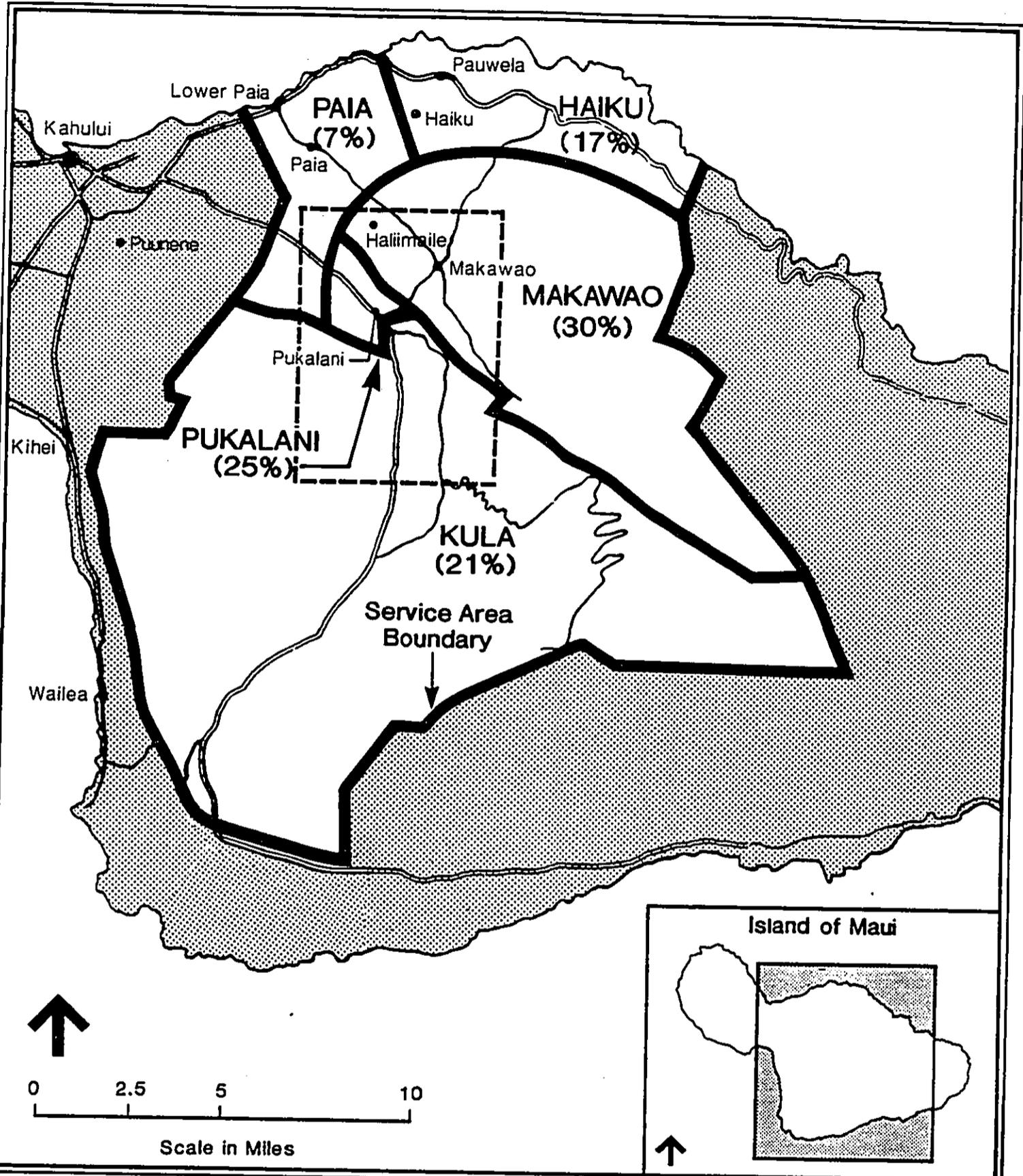
A minimum size of 30 acres is adequate for a new high school, though 35 acres is preferred. Figure 4 depicts all parcels greater than 35 acres. Given the rural character of

TABLE 6
SERVICE AREA PUBLIC SCHOOL ENROLLMENT
AS OF NOVEMBER 1991

<u>Elementary Schools*</u>	<u>Current 1991</u>	<u>Projected 1992</u>	<u>..... 1993</u>	<u>..... 1994</u>	<u>..... 1995</u>
Haiku	426	433	439	447	445
Kula	522	526	515	509	511
Makawao	731	748	765	771	775
Paia	199	216	243	253	250
Pukalani	592	601	594	584	579
<u>Intermediate**</u>					
Kalama	1,007	1,056	1,105	1,175	1,191
<u>High</u>					
Maui	1,767	1,795	1,823	1,840	1,924
<u>Baldwin</u>	<u>1,723</u>	<u>1,798</u>	<u>1,844</u>	<u>1,919</u>	<u>2,220</u>

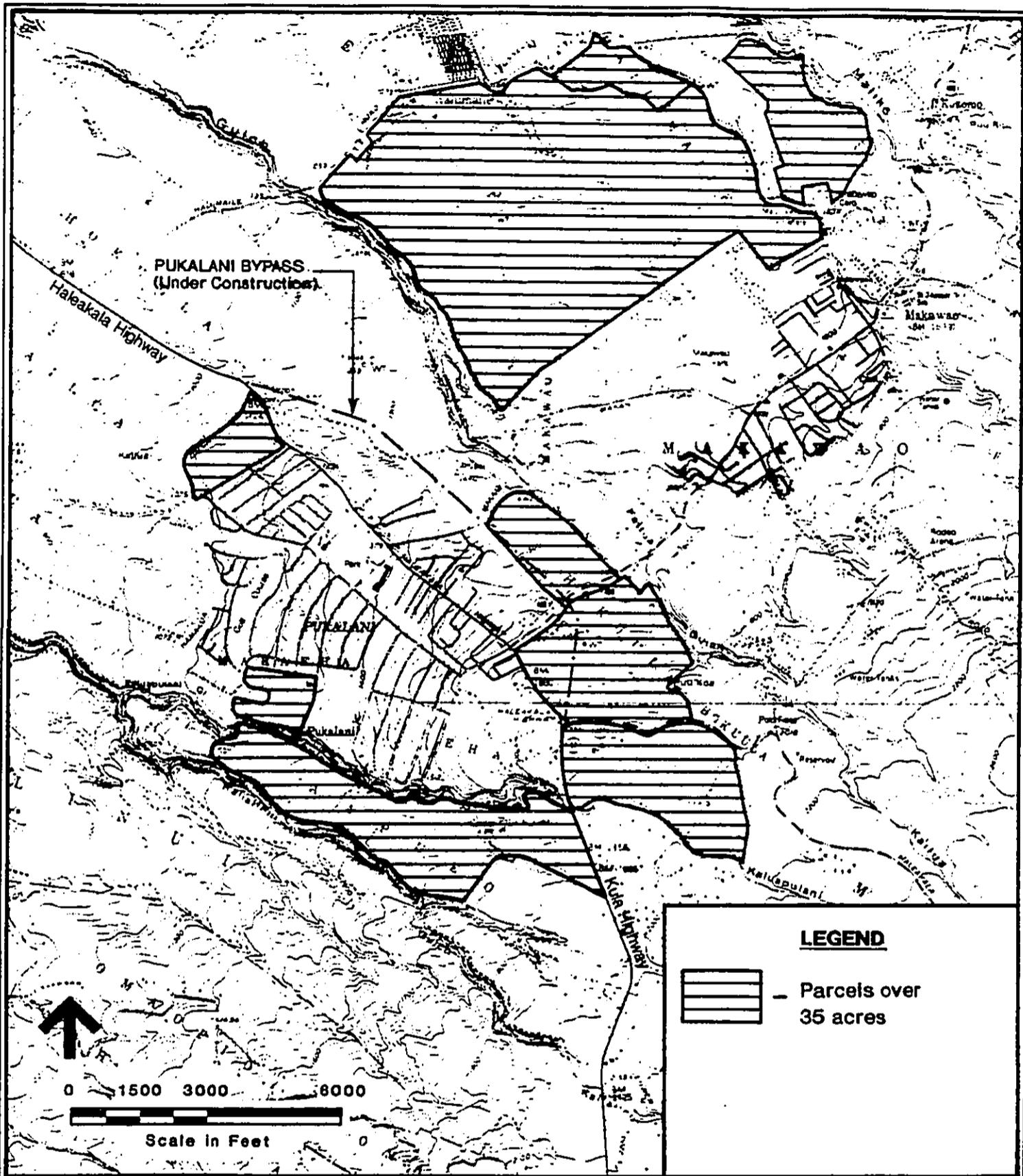
* --Elementary schools are K-5.

** --Intermediate schools are 6-8.



**STUDENT POPULATION DISTRIBUTION
BY ELEMENTARY SCHOOL DISTRICT**
SITE SELECTION STUDY and EIS for the
**NEW UPCOUNTRY
MAUI HIGH SCHOOL**

----- Boundary of Study Area **Fig. 3**
Prepared for :
DEPARTMENT OF ACCOUNTING & GENERAL SERVICES
Prepared by :
WILSON OKAMOTO & ASSOCIATES, INC.



PARCELS OVER 35 ACRES

**SITE SELECTION STUDY and EIS for the
NEW UPCOUNTRY
MAUI HIGH SCHOOL**

Fig. 4

Prepared for :
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Prepared by :
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the region, no displacement should be considered. If displacement of any residents must occur, it must not entail a mass relocation of families. The site should also be held by a single landowner in order to facilitate acquisition as well as to ensure that the site is acquired early enough to allow sufficient construction time to meet DOE's scheduled school opening date.

c. Slope

The site must not be located in an area with slopes greater than 10 percent. This criteria is established to avoid extraordinary construction costs and to create a safe and pleasant school environment. Figure 5 depicts land with slopes greater than 10 percent in the Makawao-Pukalani-Haliimaile area.

d. Natural Hazards

The following DOE-established minimum criteria regarding potential tsunami, flood and landslide hazards were not modified:

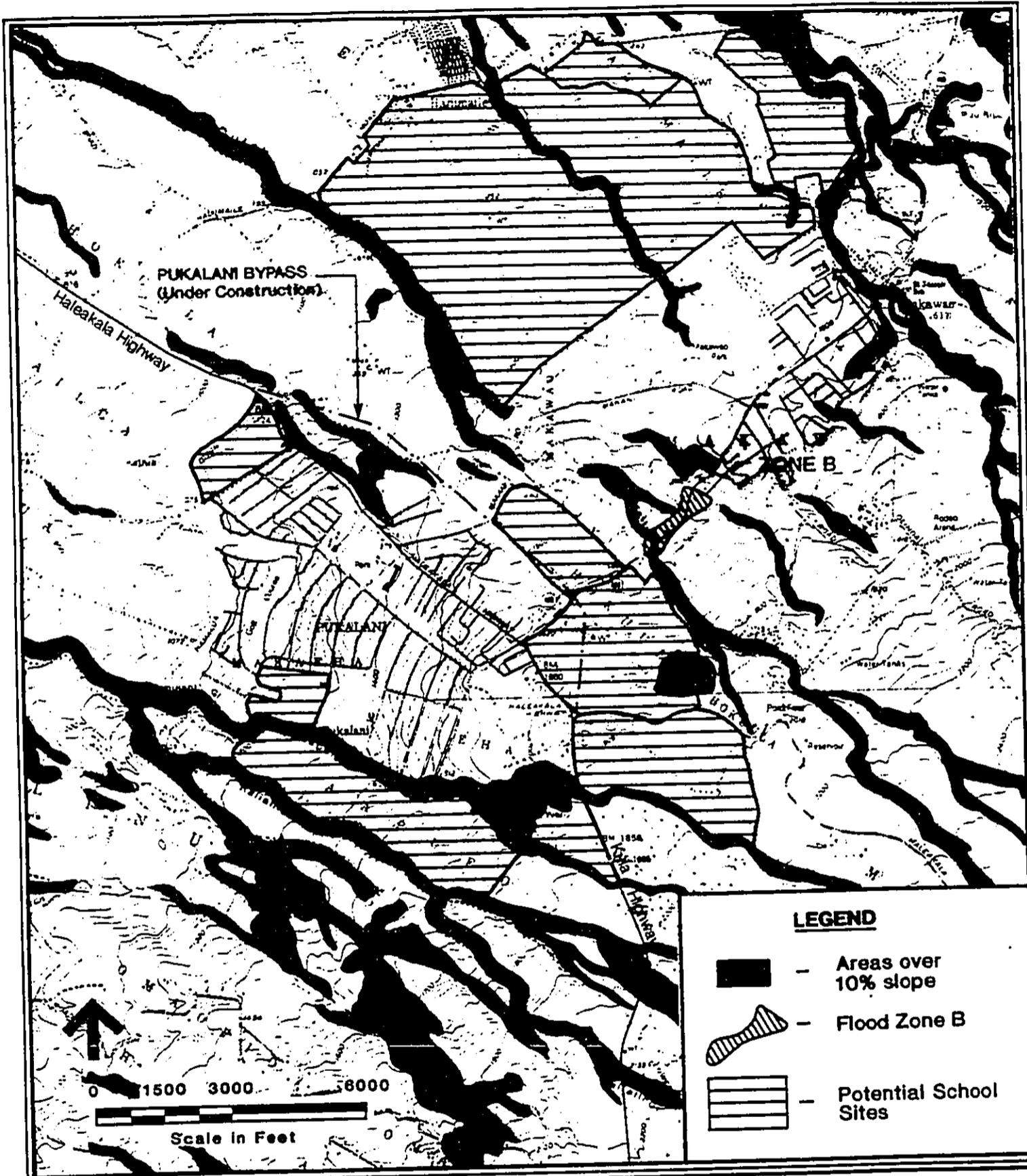
Criteria: The site must not be in a tsunami inundation zone as established by an authorized agency recognized by the State of Hawaii. There are no tsunami inundation zones in the project area.

Criteria: The site must not be in a major flood plain if adequate drainage provisions cannot be made at a reasonable cost. One Flood Zone "B" is depicted in Figure 5.

Criteria: The site must not be located within a known or potential landslide area. There are no identified landslide hazards in the area.

e. Water Service and Availability

Development of a high school within the service area will require extensive water system development or extension. To minimize costly development of water service connections, a distance of 4,500 feet is considered the



SLOPE AND FLOOD HAZARD MAP
 SITE SELECTION STUDY and EIS for the
NEW UPCOUNTRY
MAUI HIGH SCHOOL

Prepared for :
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 Prepared by :
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Fig. 5

maximum feasible distance the school should be located from existing water lines. Figure 6 depicts the alignment of water lines in the study area.

f. Central Location Along Major Roadway

The school should be located along a major roadway to facilitate transportation. Major roads are considered to be public roads with a minimum right-of-way of 50 feet along their entirety or significant portions thereof within the service area. These roads are depicted in Figure 7.

g. Historical

The acquisition and development of a site must be such that no building or site designated as historic and deserving of preservation by the Historic Buildings Task Force or the State Historic Preservation Division will be destroyed.

2. Site Delineation Criteria

Following identification of broad preliminary site areas in the first step of site evaluation, candidate sites were delineated within these areas. The criteria used to delineate these sites include modified DOE minimum criteria as well as new criteria which reflect conditions unique to the service area.

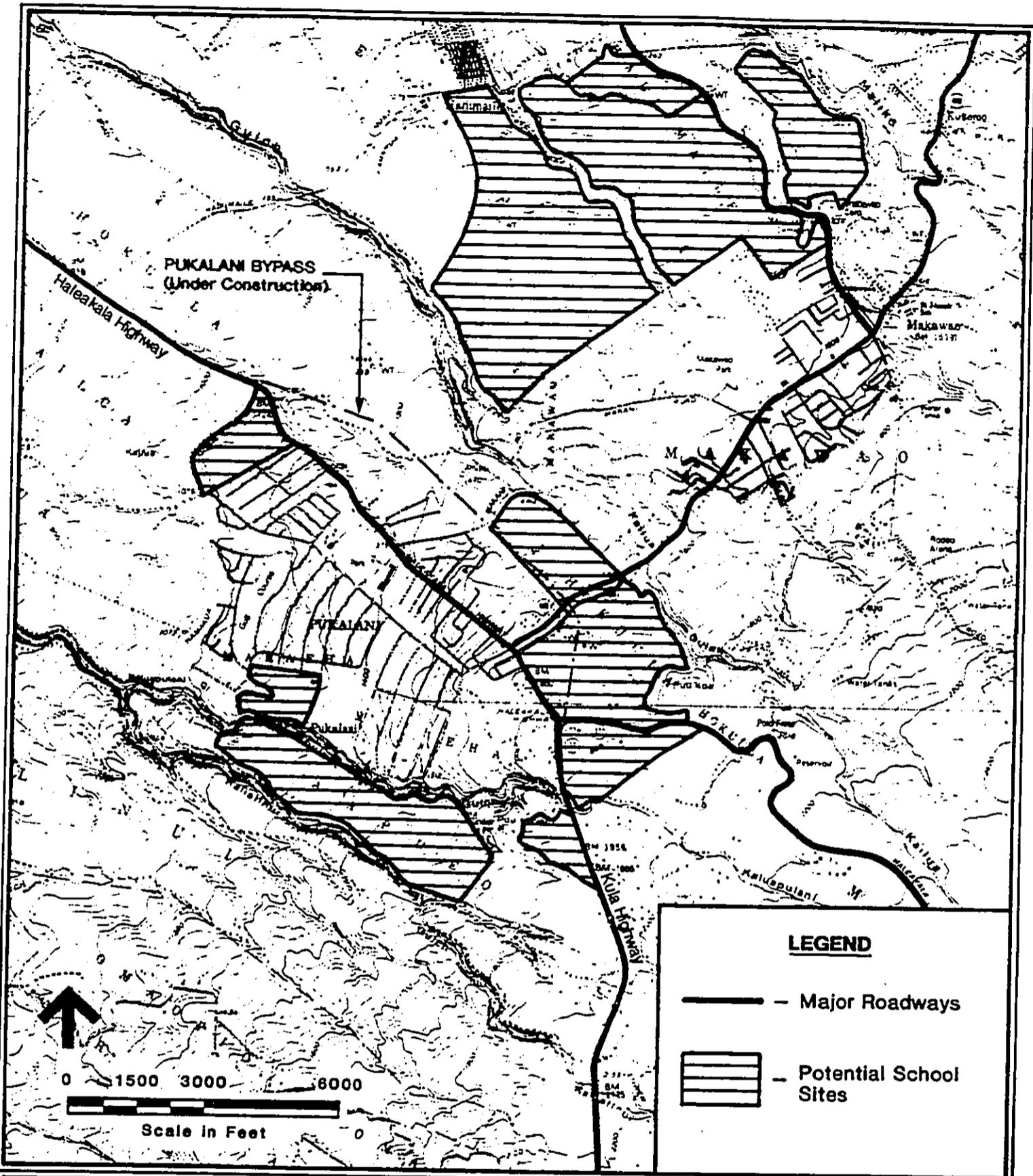
a. Acreage

The DOE minimum high school area is 30 acres, though 35 acres is preferred. Thus, all candidate sites are at least 35 acres in size.

Criteria: The candidate sites shall be at least 35 acres in size.

b. Shape

According to DOE criteria, the length to width ratio of the site must not exceed 2.5 to 1.0. A ratio of 1.5 to 1.0 is considered optimal for a new school.



MAJOR ROADWAYS

SITE SELECTION STUDY and EIS for the
**NEW UPCOUNTRY
 MAUI HIGH SCHOOL**

Fig. 7

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Criteria: The candidate sites shall have a length to width ratio of 1.5 to 1.0.

c. Noise

Highway traffic noise is detrimental to the learning environment. To address this concern, a new criteria was developed which requires that schools be located 500 feet from highways to minimize noise nuisances.

Criteria: The candidate site will be located at least 500 feet away from a highway to minimize noise nuisances.

B. Candidate Sites

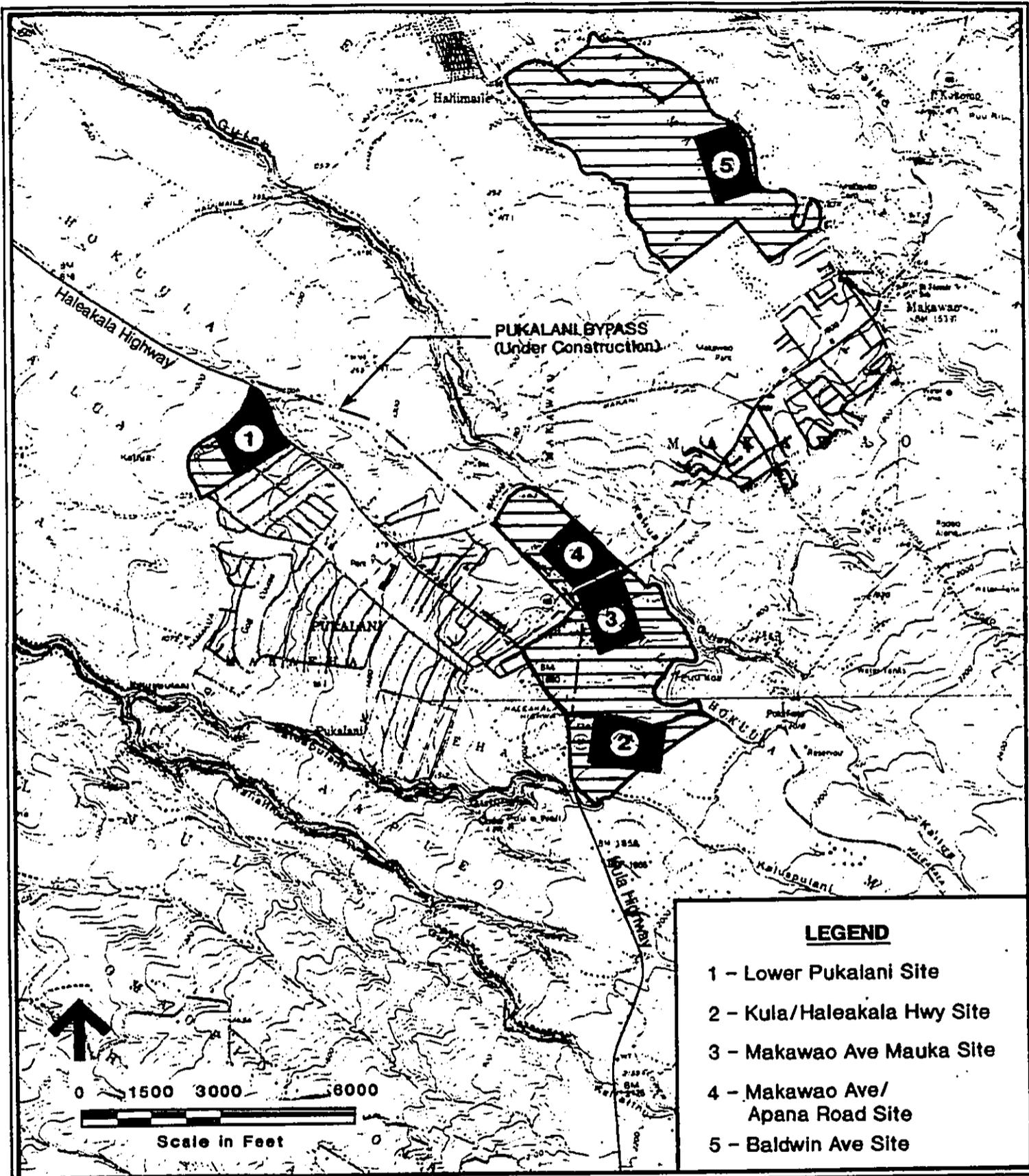
As depicted in Figures 4 through 7, undesirable areas were progressively eliminated to narrow the field of potential sites. Based on the minimum criteria evaluations and site delineation criteria, the following candidate sites were delineated. (See Figure 8).

1. Lower Pukalani Site 1

The Lower Pukalani Site (TMK 2-3-09 por. 7) is located directly below the Pukalani residential area at 1,100 feet elevation on a 50.06 acre parcel owned by Maui Land & Pineapple Company. The site is relatively flat with views of the West Maui Mountains, Maalaea Bay, Central Maui, Kahului Bay, and Kahakuloa Head. It is bordered on three sides by Haleakala Highway, Aeloa Road, and the New Hamakua Ditch. The site is currently planted with pineapple. The proposed bypass road begins just below where the parcels northernmost corner meets Haleakala Highway. The proposed road then runs northeast away from the site.

2. Kula Highway/Haleakala Highway Junction Site 2

Candidate site 2 (TMK 2-3-07: por. 1) is located near the junction of Haleakala Highway and Lower Kula Road within a 792.032 acre parcel owned by Maui Land & Pineapple Company. The site has been located approximately 500 feet away from Kula Highway for the purpose of providing a buffer of agricultural land use from highway-generated noise. If constructed, the southern end of the proposed bypass would connect with the junction of Haleakala and Kula Highway, making the site extremely accessible.



CANDIDATE SITES

**SITE SELECTION STUDY and EIS for the
NEW UPCOUNTRY
MAUI HIGH SCHOOL**

Fig. 8

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3. Makawao Avenue Mauka Site 3

This site is identified as TMK 2-3-07: por. 8, and is delineated within a 214.50 acre parcel owned by Maui Land & Pineapple Company. To the east is Kailua Gulch and the Filipino Camp, and to the west is Makawao Fire Station and a Board of Water Supply water tank. The site slopes gently and has views of the West Maui mountains and Kahului. It is currently planted with pineapple. Further mauka of the site, the slopes become unfavorable and limit available land space.

The proposed bypass will run next to the water tank and fire station, thereby skirting the western edge of the site.

4. Makawao Avenue/Apana Road Site 4

This site (TMK 2-3-09: por. 13) is accessible from two sides--from Makawao Avenue and Apana Road--the latter which is the western edge of Makawao's residential area. It is delineated within an 84.35 acre parcel owned and currently planted with pineapple by Maui Land & Pineapple Company. The proposed bypass road will run along the west side of the site when completed. A 500 foot noise buffer from the new road will be provided.

5. Baldwin Avenue Site 5

The Baldwin Avenue Site (TMK 2-4-01:por. 3) is delineated within a pineapple field on a 1075.705 acre parcel owned by Maui Land & Pineapple Company. The site is located a short distance down the road from the Maui Veterans Cemetery. A small, scattered residential neighborhood sits on the opposite side of Baldwin Avenue. Elevation of the site is about 1,400 feet. Views at the site are mostly directed north toward Paia.

VI. DETAILED EVALUATION OF CANDIDATE SITES

A. Detailed Site Evaluation Criteria

Having met the minimum and additional criteria which formed the first and second levels of site selection, the candidate sites were evaluated with respect to three separate evaluation considerations which comprised the third level of analysis, as follows:

- o School Site Criteria
- o Community Criteria
- o Cost Considerations

School site criteria are physical parameters which identify site development and school operational constraints and opportunities. Community criteria are factors which enable evaluation of school development in terms of governmental/land use compatibility and the relationship of the school to its surrounding community. Finally, cost considerations involve an assessment of school development and operational costs.

School site criteria, community criteria, and their associated rating scales are outlined below.

1. School Site Criteria

a. Environmental Characteristics

o Highway Noise:

Good - The site is more than 1,500 feet away from major highways, freeways and truck routes. Natural ventilation may be used without introducing highway noise in the classroom.

Fair - The site is 500 feet to 1,500 feet away from major highways, freeways and truck routes to keep the motor vehicular noise down to a level where normal conversation can be heard.

Poor - The site is within 500 feet of a major highway, freeway or truck route. Air conditioning may be required as windows would remain closed to exclude noise.

o Aircraft Noise:

Good - The site lies outside of the 55 Ldn noise contour projected for the service life of the facility as developed through the Federal Aviation Administration Part 150 Noise Compatibility Program for Kahului Airport.

Fair - The site lies between the 55 Ldn and 60 Ldn noise contours.

Poor - The site lies within the 60 Ldn noise contour.

o Industrial and Agricultural Nuisances:

Good - The site is free from noise, dust, odors, smoke, and other nuisances created by industrial or agricultural activities.

Fair - The noise, dust, odors, smoke, and other nuisances from industrial or agricultural activities are at worst periodic but well within the limits of human tolerance.

Poor - The above mentioned nuisances cause considerable discomfort and hamper school activities.

o Rainfall:

Good - The site has a median annual rainfall less than 30 inches. Walkways and playcourts may remain uncovered.

Fair - The site has a median annual rainfall between 30 inches to 39.9 inches.

Poor - The site has a median annual rainfall greater than 40 inches. Walkways and playcourts must be covered, in accordance with DOE standards.

o Foundation: (University of Hawaii Land Study Bureau Urban Land Classification Soil Character Code)

Good - Soil Character Codes, I, II, VIII, and IX. These soils are only slightly susceptible to expansion, have good bearing capacity and are well drained.

Fair - Soil Character Codes, III, IV, VI, and VII. Soils coded III and IV, sometimes referred to as "adobe," are susceptible to expansion and contraction but have good bearing capacity if properly insulated to maintain moisture content. Soils coded VI and VII are coral sands not susceptible to expansion which will provide good bearing strength if the sands are well contained.

Poor - Soil Character Code V. These are soils with poor bearing capacity and susceptible to shrinkage and subsidence on drying.

- o Slope: (Computed by analyzing the overall slope of the site and taking an average)

Good - The average slope of the site is between 1 and 3 percent.

Fair - The average slope of the site is between 4 and 10 percent.

Poor - The average slope of the site is greater than 10 percent.

- o Soil:

Good - The site is composed of non-rocky soil with a depth greater than 10 feet or coral or rocky soil with a depth greater than 15 feet. These soils would facilitate installation of underground utilities, lot grading and road building.

Fair - The site is composed of non-rocky soil with a 6 to 10-foot depth or coral or rocky soil with a depth of 11 to 15 feet.

Poor - The site is composed of (1) non-rocky soil with a 0 to 5-foot depth or (2) coral or rocky soil with a depth of less than 11 feet or (3) marshy soil or (4) lava.

o Natural Beauty:

Good - The site has some natural beauty in the form of trees, plants, rock formations, etc. which can be preserved and integrated into the school campus. The site is not crossed by overhead utility lines.

Fair - The site generally lacks natural beauty but still has the potential for beautification through proper landscaping. The site is not crossed by overhead lines.

Poor - The site has no natural beauty whatsoever. The site is crossed by overhead lines.

b. Roadways and Utilities

o Adequacy of Roadways:

Good - The site has adequate roadways to meet ultimate school needs. The minimum road right-of-way required is 60 feet.

Fair - The site is served by roadways requiring widening or other improvements to meet the interim and ultimate needs of the school. The minimum road right-of-way required is 50 feet.

Poor - The site is proximate to a roadway with a right-of-way less than 50 feet.

o Adequacy of Water Service:

Good - The site has adequate water pressure and capacity available to meet ultimate school needs.

Fair - The existing water service is insufficient but adequate service can be provided by the addition of transmission improvements and/or increasing storage capacity which will meet interim and ultimate needs of the school.

Poor - The site will require extensive development of a water system, including source development, to specifically meet school needs.

o Adequacy of Sewer Service:

Good - The site has, or is proximate to, sewer lines which are available to service the school.

Fair - The site will have adequate sewer service which can be developed without the need for extensive improvements to serve the school.

Poor - The site has no sewer service and will require extensive system development or extension of sewerlines to meet the school needs.

o Adequacy of Drainage Facilities:

Good - The site has adequate drainage facilities available to meet ultimate school needs.

Fair - The site may be connected to off-site drainage facilities to serve interim and ultimate needs of the school.

Poor - The site requires off-site drainage facility improvements and may require the development of a drainage system to specifically meet school needs.

o Adequacy of Power and Communications:

Good - The site has, or is proximate to, adequate existing power and communications lines which are available to service the school.

Fair - The site requires some off-site improvements which will provide for adequate power and communications to serve interim and ultimate needs of the school.

Poor - The site has insufficient power or communications available and will require extensive off-site improvement of these services to serve school needs.

c. Accessibility

o Pedestrian Access:

Good - The site has pedestrian access from two sides.

Fair - The site has pedestrian access from one side.

Poor - The site has no pedestrian access.

o Pedestrian Safety:

Good - Adequate and safe walkways/shoulders to the site are available.

Fair - Safe walkways/shoulders to the site may be provided along the school access road.

Poor - The site may require traffic signals and/or pedestrian overpasses in addition to walkway/shoulder improvements.

o Automobile Access:

Good - The site will have roadways along one short side and one long side.

Fair - The site will have roadways along one long side or two short sides.

Poor - The site will have a roadway only along one short side.

o Bus Service:

Good - The site is served by a major bus line running through the service area.

Fair - A major bus line passes within reasonable (0.5 mile) distance of the site.

Poor - No bus service is available.

o Traffic Flow:

Good - The site is adjacent to a major roadway with a low level of service and which allows right-hand access turns in harmony with the flow of peak morning traffic.

Fair - The site is adjacent to a major roadway with a low level of service but which requires left-hand access turns which slow peak morning traffic.

Poor - The site is adjacent to a major roadway which is congested and which requires left-hand access turns which slow peak morning traffic.

2. Community Criteria

a. Government

o State Land Use District Map Designation:

Good - The site is within the Urban District.

Fair - The site is within the Rural District.

Poor - The site is in the Agricultural or Conservation District.

o County Community Plan Designation:

Good - The site is designated Urban Residential, Rural Residential or Public, within which school use is consistent.

Fair - The site is designated for apartment or park use.

Poor - The site is designated for hotel, industrial, agricultural, or open space use.

o County Zoning Designation:

Good - The site is zoned commercial, within which schools are a permitted use.

Fair - The site is zoned Special Treatment (Public) and, requires a Use Permit for school development.

Poor - The site is zoned for uses other than commercial or Special Treatment (Public). A zoning change is required.

o Agricultural Land Classification: (University of Hawaii Land Study Bureau Agricultural Land Classification Productivity Rating).

Good - The site is located on land with very poor (E) productivity rating.

Fair - The site is located on land with fair (C) to poor (D) productivity rating.

Poor - The site is located on land with good (B) to very good (A) productivity rating.

b. Community Effects

o Interference with Institutions:

Good - The site is greater than 0.5 mile from hospitals, rest homes, and any other institution which may be disturbed by large groups of students.

Fair - The site is far enough away (0.25 to 0.5 mile) from any hospital, rest home, etc., so that any disturbance to the institution by the activities of the proposed school will be minimal.

Poor - The site is adjacent to a hospital, rest home, or similar institution which may be disturbed by the activities of the proposed school.

- o Existing Land Use: (In changing the existing use of the site to school use, there should be a minimal amount of disruption to the existing pattern of living within the community).

Good - The site is vacant and unused.

Fair - The site is being used for government agencies or institutions.

Poor - The site is being used for agriculture, residences or private businesses.

- o Proximity to Commercial Centers:

Good - The site is more than a half mile from those commercial enterprises that may attract students during school hours.

Fair - The site is reasonably far (0.25 to 0.5 mile) from potentially distracting commercial enterprises.

Poor - The site is within a quarter mile of potentially distracting commercial enterprises.

- o Aesthetic Value:

Good - The site is not an aesthetic asset to the community and will not interfere with scenic vistas when it is developed as a school.

Fair - The site has little aesthetic value to the community or may partially obstruct scenic vistas when it is developed as school.

Poor - The site is an aesthetic asset to the community or will obstruct scenic vistas when it is developed as a school.

- o Location:

Good - The site is within reasonable walking distance (0.75 mile) of 75% of the students.

Fair - The site is within reasonable walking distance of 50% of the students.

Poor - The site is within reasonable walking distance of less than 50% of the students.

3. Cost Considerations

a. Land Acquisition

Determination of the relative costs associated with land acquisition involve consideration of the following items:

- i. Land Acquisition - Estimated fair market value of the building, land, and easement obtained by using the Tax Office appraised value of the building and land together with an analysis of recent sales in the area.
- ii. Relocation of Displacees - Relocation payments to all tenants, owners, farms, and businesses that are displaced.

b. Off-Site Development

The following items are considered in the cost analysis to account for the differences in off-site development required for each candidate site:

- i. Utilities - Cost of providing additional lines for or increasing sizes of existing utility system facilities due to additional loads imposed by the school.
- ii. Drainage - Cost of constructing additional drainage facilities to accommodate added storm runoff resulting from development of the school.
- iii. Access Roads - Cost of constructing necessary access roadways to the site if none are available.

c. On-Site Development

To account for the differences in required on-site improvements for each candidate site, the following items were included in the cost analysis:

- i. Grading and Clearing - Cost of grading necessary to adapt the existing topography for buildings, play areas, and other facilities; cost of removing existing structures and heavy foliage.
- ii. Utilities - Additional costs of making utility connections.
- iii. Drainage - Cost of constructing major drainage facilities.
- iv. Foundation - Additional foundation cost due to adverse subsurface conditions.
- v. Soundproofing - Cost of soundproofing classrooms if predicted noise levels inside the classroom will exceed allowable limits.

B. Summary of Evaluations

This section summarizes the results of the evaluation based on school site criteria, community criteria and cost considerations. Evaluation ratings and explanations of cost considerations are presented in Appendix A. It should be noted that the intent of the Site Selection Report is not to recommend a single preferred site. Rather, results are intended for use as a basis for discussing the relative advantages and disadvantages of each site in order to facilitate selection of a preferred site.

1. Summary of School Site Criteria Evaluation

The results of the school site criteria evaluation are summarized in Table 7.

With respect to environmental considerations, all five sites were rated equally, with a few exceptions. The proximity of the Lower Pukalani Site (1) and the Kula/Haleakala Highway Site (2) to Haleakala Highway is a noise liability. Noise impacts can be mitigated in these cases by providing a 500 foot buffer between the highways and classrooms. With respect to rainfall, Site 1 appears to receive less than the other sites which may relax design requirements like covered walkways. On the other hand, the Baldwin Avenue Site (5) receives the most rainfall, over 45 inches

TABLE 7

SUMMARY OF SCHOOL SITE CRITERIA EVALUATION

<u>Criteria Evaluation</u>	<u>Lower Pukalani SITE 1</u>	<u>Kula/Haleakala Highway SITE 2</u>	<u>Makawao Avenue Mauka SITE 3</u>	<u>Makawao Avenue Apana Rd. SITE 4</u>	<u>Baldwin Avenue SITE 5</u>
<u>Environmental</u>					
Good	3	2	3	3	3
Fair	4	6	5	5	4
Poor	1	0	0	0	1
<u>Roadways & Utilities</u>					
Good	3	3	2	2	3
Fair	1	1	2	2	1
Poor	1	1	1	1	1
<u>Accessibility</u>					
Good	0	0	0	2	0
Fair	0	2	1	2	2
Poor	5	3	4	1	3
<u>TOTALS</u>					
Good	6	5	5	7	6
Fair	5	9	8	9	7
Poor	7	4	5	2	5

annually, and this may need consideration in the design phase. Otherwise, soil character, aircraft noise, agricultural nuisances, slope, foundation, and aesthetic value at all the candidate sites is nearly identical and appears favorable for school development.

Road right-of-way widths are adequate at all sites, except for possible necessary road widening at the two sites on Makawao Avenue. Water service is unavailable at all sites at this time, but a preliminary assessment indicates that development costs for water service to all sites would be on roughly the same order of magnitude. The Lower Pukalani Site (1) will require significant lengths of 16-inch and 8-inch waterline; Kula/Haleakala Highway Site (2) will need an independent storage tank and pump station; Makawao Avenue Mauka Site (3) will need 8-inch line and a storage tank; The Makawao Avenue/Apana Road Site (4) will need to replace existing 12-inch lines with 16-inch lines and install lengths of 8-inch line; and the Baldwin Avenue Site (5) will require significant lengths of 16-inch and 8-inch water line.

Sewer infrastructure is poor at all sites due to the communities reliance on cesspools. Some kind of independent wastewater treatment plant and leaching field will be necessary at the new school. Drainage infrastructure is also absent at all of the sites, but the well-drained nature of the soil in the Upcountry area generally precludes the need for major drainage improvements. All sites are proximate to electrical and communication utilities which run along their respective access roads.

Pedestrian access is best at the Makawao Avenue/Apana Road Site (4). All the other sites have no pedestrian access. These sites will all need to be provided with extensive walkway/shoulder improvements and possibly traffic signals. The Lower Pukalani Site (1) and Makawao Avenue Mauka Site (3) have automobile access from one short side only; The Kula/Haleakala Highway Site (2) and Baldwin Avenue Site (5) from one long side; and the Makawao Avenue/Apana Road Site (4) from one short and one long side. None of the sites is served by a municipal bus service.

In terms of traffic flow, the Makawao Avenue/Apana Road Site (4) is the most favorable since Makawao Avenue has a low level of service and allows right-hand access turns into the site with the majority of traffic flow. It also offers the most alternative access routes. The other sites offer fair conditions for traffic flow, except

the Lower Pukalani Site (1) which is accessible only from Haleakala Highway, a highway with a high level of service which is accessible only by left-hand turns which would obstruct morning peak traffic flow down into Kahului.

2. Summary of Community Criteria Evaluation

The results of the community criteria evaluation are summarized in Table 8. Site criteria and community criteria evaluation totals appear in Table 9.

All five candidate sites are within the State Land Use Agricultural District. A State Land Use Boundary Amendment will be required to include the agricultural land in the Urban District. A Community Plan amendment and zoning change to Public/Quasi-Public will be required for school development at any of the five candidate sites.

No student disruption of institutions such as hospitals and convalescent homes is anticipated. Regarding proximity to commercial centers, the two Makawao Avenue sites are within one-third of a mile of Pukalani Superette, and the Kula/Haleakala Highway site is within one-half mile. The Lower Pukalani site is about three-quarters of a mile from Pukalani's commercial center, as is the Baldwin Avenue site from the center of Makawao town.

Because of the population distribution within the service area, none of the sites is within reasonable walking distance of a majority of students. The sites are all open space agricultural lands which have a fair aesthetic appeal. Development of a high school at any of them will create certain disruptions to the communities patterns of living.

3. Summary of Cost Considerations

Cost estimates discussed in this section are for purposes of comparing the relative costs of the alternative sites and determining the least costly alternative site. Initial computations of development, land acquisition, and busing costs for each site reveal few significant differences (see Table 10). Off-site improvement costs were entirely a function of providing water service and were

TABLE 8

SUMMARY OF COMMUNITY CRITERIA EVALUATION

<u>Criteria Evaluation</u>	<u>Lower Pukalani SITE 1</u>	<u>Kula/Haleakala Highway SITE 2</u>	<u>Makawao Avenue Mauka SITE 3</u>	<u>Makawao Avenue Apana Rd. SITE 4</u>	<u>Baldwin Avenue SITE 5</u>
<u>Governmental</u>					
Good	0	0	0	0	0
Fair	1	0	1	1	1
Poor	3	4	3	3	3
<u>Community Effects</u>					
Good	2	1	1	1	2
Fair	1	2	2	2	1
Poor	2	2	2	2	2
<u>TOTALS</u>					
Good	2	1	1	1	2
Fair	2	2	3	3	2
Poor	5	6	5	5	5

TABLE 9

CRITERIA EVALUATION TOTALS

		Lower Pukalani <u>SITE 1</u>	Kula/ Haleakala Highway <u>SITE 2</u>	Makawao Avenue Mauka <u>SITE 3</u>	Makawao Avenue/ Apana Rd. <u>SITE 4</u>	Baldwin Avenue <u>SITE 5</u>
School Site	(G)	6	5	5	7	6
Criteria Total	(F)	5	9	8	9	7
	(P)	7	4	5	2	5
<hr/>						
Community	(G)	2	1	1	1	2
Criteria Total	(F)	2	2	3	3	2
	(P)	5	6	5	5	5
<hr/>						
TOTALS	(G)	8	6	6	8	8
	(F)	7	11	11	12	9
	(P)	12	10	10	7	10

G = Good
F = Fair
P = Poor

TABLE 10

COST ESTIMATE SUMMARY*

	Lower Pukalani <u>SITE 1</u>	Kula/ Haleakala Highway <u>SITE 2</u>	Makawao Avenue Mauka <u>SITE 3</u>	Makawao Avenue Apana Rd. <u>SITE 4</u>	Baldwin Avenue <u>SITE 5</u>
<u>Development Costs</u>					
Off-Site Improvements	\$0.90	\$0.85	\$0.80	\$0.90	\$0.90
On-Site Improvements	\$4.82	\$4.82	\$4.82	\$4.82	\$4.82
Subtotal	\$5.72	\$5.67	\$5.62	\$5.72	\$5.72
Contingencies (20%)	\$1.14	\$1.13	\$1.12	\$1.14	\$1.14
Land Acquisition	\$0.019	\$0.020	\$0.031	\$0.020	\$0.027
Bus Subsidy Costs	\$13.61	\$15.05	\$13.43	\$13.11	\$15.74
<hr/>					
Total Estimated Cost	\$20.5	\$21.9	\$20.2	\$20.0	\$22.6

*Costs, expressed in millions of 1990 dollars, are for planning evaluation purposes only.

nearly identical among all sites, ranging between \$800,000 and \$900,000. Due to the similar physical characteristics and proximity to main roadways, on-site development costs were also identical.

The estimated land acquisition cost associated with each site ranges from \$19,000 to \$31,000, based on the County's assessed tax valuation. However, actual acquirement cost is certain to be much higher. These values merely indicate the difference in market values among the sites.

Busing subsidy costs, calculated for the years 1990 to 2010, range from a low of \$13.1 million at the Makawao Avenue/Apana Road Site (4) to a high of \$15.7 million at the Baldwin Avenue Site (5). This relatively insignificant cost spread among the sites is due to the lack of a concentrated population center in the large Upcountry school service area.

More detailed explanation of cost parameters is presented in Appendix A.

VII. PROBABLE IMPACTS AND MITIGATIVE MEASURES

A. Short-Term Site Impacts

This section describes anticipated short-term impacts which may affect candidate sites or lands proximate to the candidate sites as a result of the school development. Short-term impacts are those associated with construction activities such as grading, utility installation, construction of structures, and landscaping.

The significance of short-term impacts for the five candidate sites will depend on the types of uses nearby. The Lower Pukalani Site 1, for example, is situated near a developed residential neighborhood. Construction activities at this site may result in a relatively higher degree of disruption and nuisance. On the other hand, the Kula Highway/Haleakala Highway Site 2 is located in a less developed area where impacts to the immediate environment may not be as great.

The following sections describe, in general, the anticipated noise, air quality, water quality, erosion, traffic, public health and safety, and archaeological impacts associated with construction.

1. Noise

Increased noise levels will be experienced during construction of the new school. Noise will be generated by heavy equipment required to haul materials to and within the project site, as well as equipment used for excavation and installation of the pipeline and appurtenances.

In accordance with standard State contract documents for the construction of public facilities, the contractor will be responsible for properly maintaining construction equipment to minimize noise levels. Equipment mufflers or other noise attenuating equipment may be necessary if noise levels are determined to be excessive. Construction activities will be limited to daylight hours only.

2. Air Quality

Ambient air quality will temporarily decrease as a result of construction activities. As prescribed in the State Department of Health Public Health Regulations, Chapter 60 on Air Pollution Control, the contractor will be responsible for minimizing dust generated during construction, particularly during earth moving

operations including trenching, excavating and road clearing. The contractor will be required to implement precautions such as water sprinkling to prevent particulate matter from becoming airborne.

Emissions from construction equipment and other motor vehicles involved in construction activities may adversely affect ambient air quality. The contractor shall minimize these impacts by properly maintaining construction equipment and vehicles.

3. Water Quality

Some soil runoff into existing water courses can be expected from areas requiring excavation and vegetation removal. Soil runoff can be minimized through strict adherence to erosion control procedures and minimal disturbance of ground surfaces and vegetative cover. To ensure that runoff is controlled during construction, a Grading and Grubbing Permit Application will be submitted for review to the Maui County Department of Public Works prior to construction.

The U.S. Department of Agriculture Soil Conservation Service designations for soils within the candidate sites are as follows:

Lower Pukalani Site 1 -- Soils at this site are Haliimaile Silty Clay (HhB) 3 to 7 percent slopes, and Haliimaile Silty Clay (HhB) 7 to 15 percent slopes. These soils have moderate erosion hazard when cultivated and not protected.

Kula/Haleakala Highway Site 2 -- Soils at Site 2 consist of Haliimaile Silty Clay Loam (HgC) 7 to 15 percent slopes, and Pane Silt Loam (PXD) 7 to 25 percent slopes. These soils have severe erosion hazard when cultivated and not protected.

Makawao Avenue Mauka Site 3 -- Soils at Site 3 are Haliimaile Silty Clay Loam (HgB) 3 to 7 percent slopes, and Haliimaile Silty Clay Loam (HgC) 7 to 15 percent slopes. HgB soils have moderate erosion hazard when cultivated and not protected, and HgC soils have severe erosion hazard when cultivated and not protected.

Makawao Avenue/Apana Road Site 4 -- Soils at the site are the same as Site 3.

Baldwin Avenue Site 5 -- Soils at this site are the same as for Site 1.

4. Traffic

During the construction period, increased traffic along existing roadways leading to the project site should be anticipated. Vehicles carrying materials, equipment and construction workers will increase traffic volumes. These impacts are unavoidable since alternate routes to any of the sites are limited. The contractor will be responsible for providing traffic control measures and safety precautions to minimize adverse effects.

5. Public Health and Safety

Appropriate measures to assure public health and safety are one of the contractor's prime concerns and responsibilities during all phases of construction. The construction site shall be secured during non-work hours as required by State and County regulations.

6. Flora/Fauna

There are no known rare or endangered species of flora or fauna within or in the immediate vicinity of the candidate sites. The Maui Parrotbill, the Maui Akepa, and the crested Honeycreeper are on the State and Federal Endangered Species list. They have been sited in the forest reserve areas.

7. Economy

Proceeding with the proposed project will have short-term impacts on the local economy. The project will provide job opportunities for local workers employed in the construction industry. The increased construction activities will also benefit local material suppliers and retail businesses.

B. Long-Term Impacts

1. Flora

No threatened or endangered species of flora are known to exist at any of the candidate sites. Any loss of vegetation due to necessary clearing and grubbing will be effectively mitigated by landscaping of the new school campus.

All of the available land for a new school is cultivated pineapple fields with scrub growth. The type and degree of existing flora at the sites is generally similar. The overgrowth consists of cactus, koa haole, silk oak, eucalyptus, guinea grass and other grasses and weeds. Construction of the school campus will displace existing pineapple and other common grasses and weeds on 35 acres. Based on comparable flora of the surrounding areas, it is unlikely that any rare or valuable plants will be destroyed by the school development. The loss of vegetation by the clearing and grading of the site should be offset by the grassing and landscaping of the school campus.

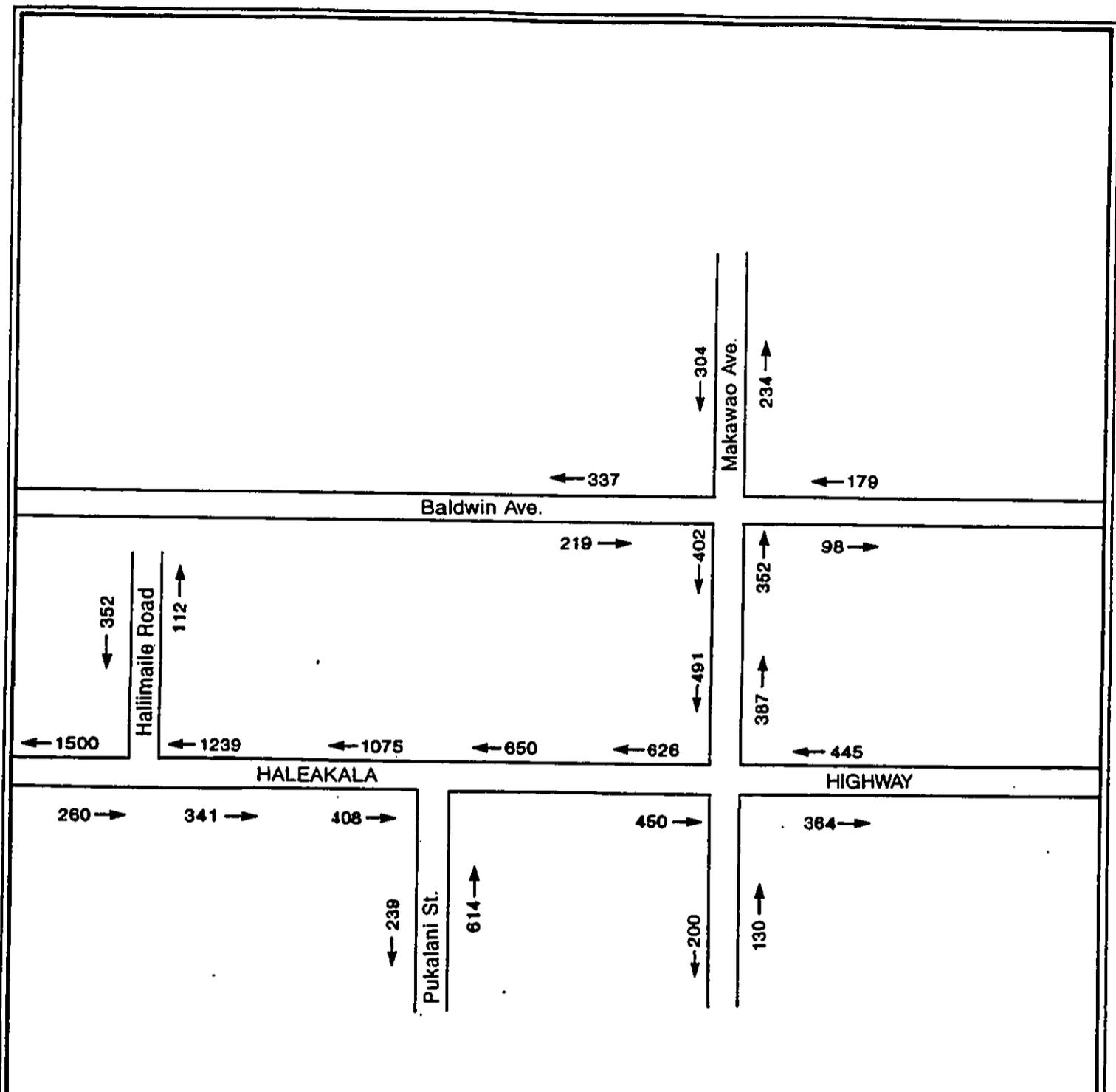
2. Fauna

Birds often appear at the candidate sites to feed, but there are no trees at the sites for nesting. Landscaping associated with new school development should provide a nesting and feeding environment for birds that are commonly found within the area. Mammals such as mice and rats which appear at the site will initially be displaced. Displacement of these mammals is not regarded as an adverse impact.

3. Traffic

Additional traffic in the Makawao-Pukalani area will be generated by the new Upcountry Maui high school. The major roadways passing through the school service area are Haleakala Highway, Kula Highway, Makawao Avenue, and Baldwin Avenue. A major by-pass route for Haleakala Highway through Pukalani is currently under design by the State Department of Transportation--Highways Division. Figure 9 provides estimated 1994 morning peak traffic volumes for the major roads affected by the candidate high schools. Figure 10 shows the probable 1994 morning peak traffic volume distribution on Haleakala Highway and the by-pass route if the by-pass route becomes available. The traffic counts on both Figures represent traffic volumes without the proposed high school.

The estimated volume of traffic generated by the high school during the morning peak period is approximately 150 passenger vehicles and 30 buses incoming and 50 passenger vehicles and 30 buses outgoing. These estimates are based on DOE's method of estimating busing costs which assumes that a certain percentage of the initial 1,200 students will be walking or biking, while the majority of the remainder will use the bus service.



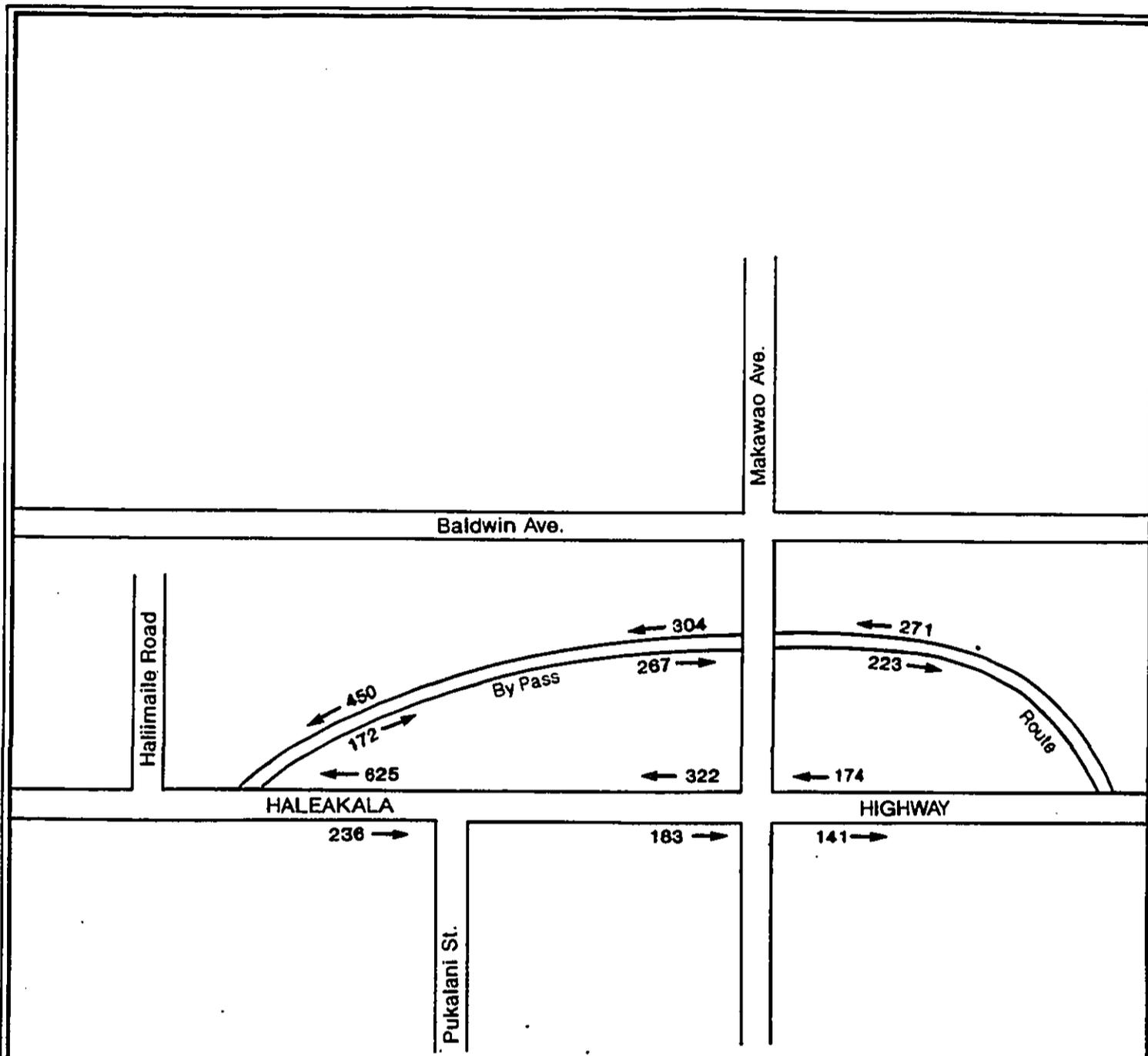
ESTIMATED 1994 AM PEAK HOUR TRAFFIC
 for Major Access Roads in Makawao and Pukalani
 without the high school
 Drawing Not to Scale



Fig. 9

SITE SELECTION STUDY and EIS for
**NEW UPCOUNTRY
 MAUI HIGH SCHOOL**

Prepared for :
DEPARTMENT OF ACCOUNTING & GENERAL SERVICES
 Prepared by :
WILSON OKAMOTO & ASSOCIATES, INC.



TRAFFIC DISTRIBUTION

on By-Pass Route and Haleakala Hwy
 (Theoretical 1994 AM Peak Hour Traffic
 without the high school)

Drawing Not to Scale



Fig. 10

SITE SELECTION STUDY and EIS for
**NEW UPCOUNTRY
 MAUI HIGH SCHOOL**

Prepared for :
DEPARTMENT OF ACCOUNTING & GENERAL SERVICES
 Prepared by :
WILSON OKAMOTO & ASSOCIATES, INC.

Presently, Haleakala Highway is the major route to school for high school students residing in Upcountry Maui since they now attend high school in Kahului. Haleakala Highway is currently congested during peak traffic periods. An appreciable reduction in traffic volume is anticipated if the proposed Upcountry Maui High School is located in the Makawao-Pukalani area. The following are the major roadways which would access each candidate site:

- o Lower Pukalani Site No. 1--Preferred route is via Haleakala Highway. Alternate routes are via Baldwin Avenue and Haliimaile Road, or via Baldwin Avenue and Makawao Avenue.
- o Kula/Haleakala Highway Site No. 2--Preferred route is Haleakala Highway. An alternate route is via Baldwin Avenue, Olinda Road, Hanamu Road and Kealaloa Avenue.
- o Makawao Avenue Mauka Site No. 3--Preferred route is via Makawao Avenue. Alternate routes are via Haleakala Highway, Makani Road and Apana Road or via Baldwin Avenue, Haliimaile Road, Haleakala Highway, Makani Road and Apana Road.
- o Makawao Avenue/Apana Road Site No. 4--Preferred route and alternate routes are as described in Site No. 3.
- o Baldwin Avenue Site No. 5--Preferred route is Baldwin Avenue. An alternate route is via Haleakala Highway and Haliimaile Road.

4. Public Health and Safety

The candidate sites are generally free of flood, tsunami, erosion, and landslide hazards. One small 1,500 foot section of road where Kailua gulch meets Makawao Avenue is identified as being an area between the limits of the 100-year flood and 500-year flood. The candidate sites are all located outside its boundary.

Soils at all sites occupy capability grouping IIe and IIIe, "soils subject to moderate to severe erosion if they are cultivated and not protected." All sites are currently cultivated and tended. Landscaping and construction will stabilize any soil runoff in the long-term even more so than at present.

Residential areas near the school will experience increased pedestrian and vehicular traffic in their neighborhoods. Increased noise in some areas immediately adjacent to the school could result from equipment such as air-conditioning units, exhaust fans, and public address systems, as well as from traffic entering and leaving the school. There may be other social impacts resulting from the increased potential for interaction with students and faculty.

Appropriate mitigative measures such as fencing and landscaping the school boundaries will be taken to minimize any noise and social impacts of the school on surrounding land uses. In addition, the school shall be designed to minimize impacts to adjacent residences from noise-generating sources such as the aforementioned air-conditioning units, exhaust fans, and public address systems. Traffic noise will be minimized by locating the school entrance as far from residential streets as practicable.

Also to be considered during the school's design phase will be improvements for pedestrian access and safety.

A soil study may be needed at time of construction to test for presence of any pesticide contaminants in the soil which may represent a health threat.

5. Surrounding Land Uses

All of the candidate sites occupy pineapple lands which border residential areas. All of them may be subject to intermittent dust, odor, and noise nuisances associated with planting and harvesting operations. By coordinating the scheduling of these operations with the school schedule, adverse impacts can be minimized.

Residences near any of the school sites may be disrupted periodically by students; an inevitable factor when faced with a new school.

6. Displacement

All five candidate sites are undeveloped. Therefore, no homes or other facilities will be displaced to develop the school on these sites.

7. Agriculture

All five candidate sites are on land owned by Maui Land and Pineapple Company, Inc. Accordingly, acquisition of any one of the candidate sites will result in the loss to Maui Land and Pineapple Company, Inc. of approximately 35 acres of agricultural land.

Table 11 is based on Agricultural Lands of Importance to the State of Hawaii (ALISH) maps, and the Land Study Bureau's Detailed Land Classification system overall agricultural productivity ratings. The ALISH values for each site were provided by the State of Hawaii Department of Agriculture. Descriptions of the categories "Prime" and "Other Important" agricultural lands, and of the overall agricultural productivity rating system, are given in Chapter 3 under Soils and Agricultural Potential.

TABLE 11
"ALISH" VALUES AND
OVERALL AGRICULTURAL PRODUCTIVITY RATINGS
FOR EACH CANDIDATE SITE

<u>Site</u>	<u>ALISH Value</u>	<u>Approx. % Area</u>	<u>Overall Productivity Rating</u>
1	Prime Other Important	60 40	D
2	Other Important	100	B and C
3	Prime Other Important	65 35	C
4	Prime Other Important	55 45	C
5	Prime Other Important	65 35	C

8. Off-Site Infrastructure

Preliminary evaluation of off-site infrastructure systems such as drainage, sewerage, and water systems was conducted for each of the candidate sites. Drainage systems will be consistent with the rest of the Upcountry area and involve construction practices to contain runoff on-site. The Maui County Department of Public Works has a policy that new construction cannot increase runoff downstream or, if unavoidable, must be appropriately mitigated. To ensure that runoff is contained on the new school site, a Grading and Grubbing Permit Application will be submitted for review to the Maui County Department of Public Works prior to construction. The permit application will include, at a minimum, a description of soils at the site, details and locations of proposed land drainage patterns, drainage structures, drainage pipes, retaining walls, and an erosion control plan.

Because there is no sewer infrastructure in Upcountry Maui, a new school will require an individual wastewater treatment and disposal system to minimize the potential for degradation of underground water resources. Design plans for the system will conform to applicable provisions of the Department of Health Administrative Rules, Chapter 11-62, "Wastewater Systems". Design will also be closely coordinated with the County of Maui Department of Public Works.

The Upcountry Maui water system has available water supply to service the new school. However, the existing water system infrastructure is limited by small line sizes and an inadequate number of storage facilities. To determine the new school's need for off-site water system improvements, a water master plan shall be prepared for the selected school site which will be subject to the County Department of Water Supply's approval.

9. Archaeology

An archaeological inventory survey of the candidate sites was conducted March 5, 6, and 8, 1990, in accordance with guidelines of the State of Hawaii Department of Land and Natural Resources (see Appendix B for complete survey). During the field survey, no surface structural remains were located and no archaeological sites were recorded. Four lithic artifacts and a ceramic sherd were collected from Site 4, including one ulu maika fragment, a biface, a complete small adze, and an adze fragment. There was no pattern or clustering of the artifacts to indicate even a general location of a possible former

habitation site. The interpretive value of the artifacts is therefore limited to a consideration of individual function.

One complete small adze was collected at Site 5. No evidence of prehistoric or early historic period activities was identified at Sites 1, 2, and 3.

On the basis of these findings, it appears that Sites 1, 2, 3, and 5 contain no known or potential historic/archaeological sites or resources. No additional field work or archival work appears to be necessary for a determination of no adverse effect should school construction occur at one of these four sites.

Through archival research, it was determined that part of the field at Site 4 where the ceramic sherd was found was formerly divided into four small Land Grants, any of which could have been a house site. If Site 4 is considered as a school site, it is recommended that additional archival work be conducted to; investigate applicants and dates of Land Grants 1444, 1445, 1455, and 1523 located within the parcel; determine the nature of use and possible presence of former residences on this land; and obtain any cartographic sources which would confirm early historic period residences in the Pukalani/Makawao area. It is also recommended that Site 4 be plowed for 100% surface visibility to facilitate a total surface examination.

10. Aesthetic Considerations

The terrain of the candidate sites evaluated for the proposed school is typical for the slopes of Haleakala. The sites do not contain significant natural landmarks which would be affected by the school development. The design of the school buildings will be coordinated with the character of the surrounding community. Zoning ordinance will regulate the buildings' heights, setbacks, and other design standards.

VIII. ALTERNATIVES TO THE PROPOSED ACTION

A. No Action

Existing high schools outside the service area are presently operating at capacity, and continued population growth is projected for the Upcountry region. Limited space at Baldwin High and the resulting additional burden on Maui High to take in upwards of 3,000 students in coming years presents administrative problems unacceptable to the DOE. A "no action" alternative would preclude the DOE's goal of ensuring the provision of adequate and accessible educational services and facilities.

B. Busing to Schools Outside the School Service Area

Continued busing does not take into account the projected growth and resulting demand for educational services within the Upcountry region. The estimated cost to bus 1,740 students to Maui High over the next 20 years is \$32,356,120. Busing students to a new school is estimated to cost only \$13,000,000. Relying on busing also fails to account for the growth problems existing high schools are already experiencing in their own service areas. It also adds to already congested traffic conditions.

C. Relocating the High School Program to a New School

There are no existing schools which have the operating capacity or adequate facilities to accommodate an increasing number of high school students.

D. Expanding the Capacity of the Existing Schools

Baldwin High cannot accommodate 2,000 students due to limited land space. Maui High should not be expanded to 3,000 or more students due to administrative and educational constraints. The estimated cost of additional permanent classrooms needed by 2010 is \$19 million which, when added to busing costs, approaches the total cost of a new high school.

IX. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF
MAN'S ENVIRONMENT AND THE MAINTENANCE AND
ENHANCEMENT OF LONG-TERM PRODUCTIVITY

A. Short-Term Uses

Implementation of the proposed project will include local short-term uses of man's environment during the construction phase of the project. Construction activities associated with the new Upcountry Maui high school will create minor disruptions and nuisances in the vicinity of the project site. Temporary economic benefits will result from construction expenditure and employment opportunities.

B. Long-Term Productivity

Construction of the school will involve a long-term commitment of land on which other potentially beneficial uses will be foreclosed. A range of potentially beneficial uses on land in the vicinity of the school will also be narrowed to the extent that uses adversely affecting school operations such as industrial activities would not be allowed. In any case, current land use controls do not provide for such activities in the vicinity of the candidate sites. No long-term risks to health or safety from operation of the school are anticipated or foreseeable.

The amount of agricultural land available for cultivation in the Upcountry area will decrease by 35 acres, and this may result in a mild loss of employment for agricultural workers. On the other hand, long-term economic benefits to the area will be associated with employment required for the operation and maintenance of the school. In addition, the new high school will assure the continued maintenance and enhancement of public education and social welfare in Upcountry Maui by providing an essential educational service and a facility that will meet the current and future enrollment requirements of the region.

X. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Implementation of the proposed action would involve the commitment of fuel, labor, funding and materials for the construction of the new school. Labor, materials, and utilities would also be required for operation and maintenance of the proposed project.

Construction of the proposed project will involve the commitment of land for school use which will eliminate other land use options such as open space and agriculture. In terms of open space, the Makawao-Pukalani-Kula Community Plan makes a recommendation to, "*Maintain open space areas along the planned Haleakala Highway Bypass route to allow a distinct separation between Pukalani and Makawao*". Placement of a high school at Sites 3 or 4 would represent a loss of this specific open space resource, although it would still represent a separation of sorts between the two communities.

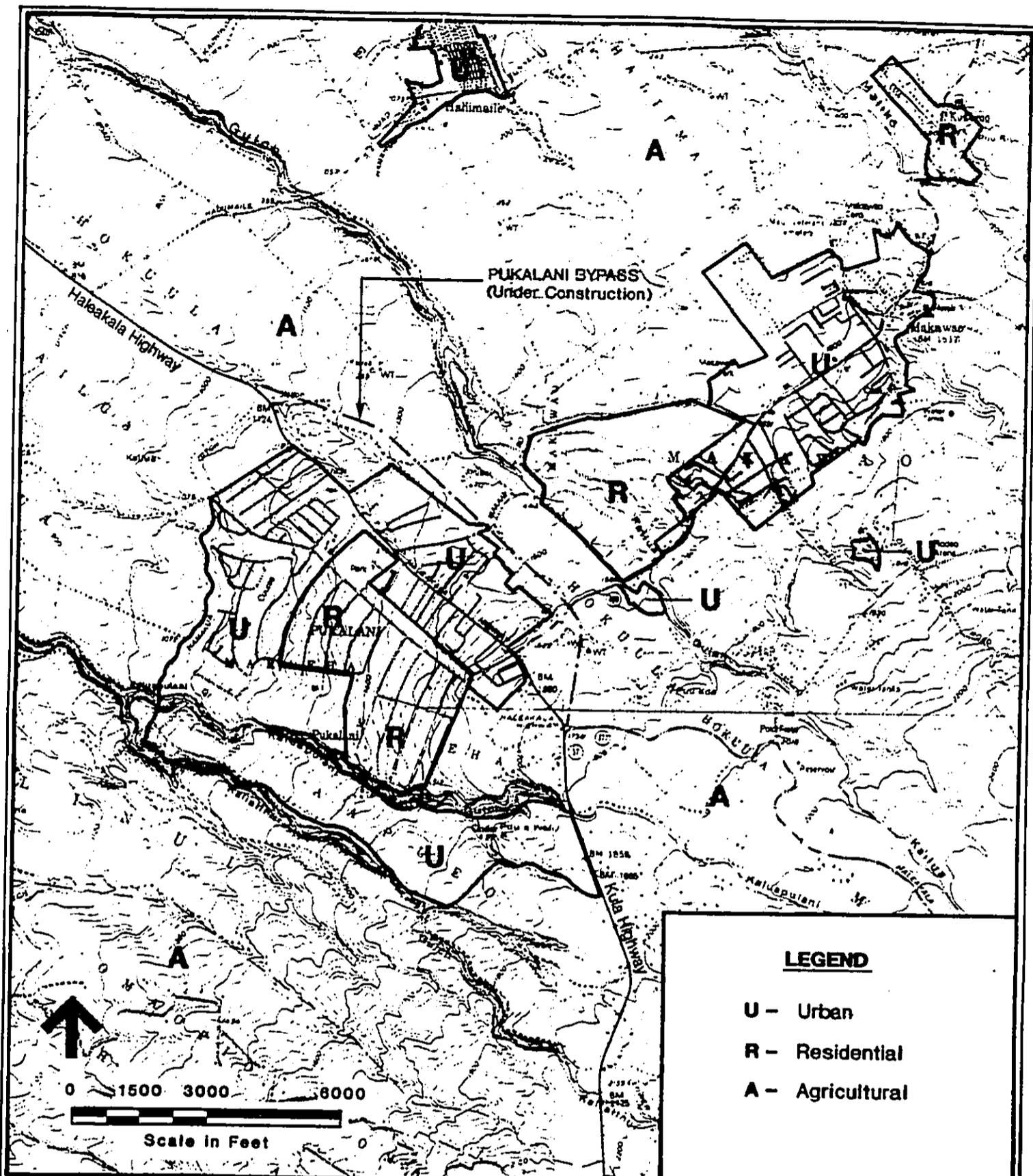
XI. LIST OF NECESSARY APPROVALS

Development of school facilities at any of the candidate sites will require similar governmental permits and approvals. All of the sites are in the State Land Use Agricultural District, are designated Agriculture in the Makawao-Pukalani-Kula Community Plan, and have an agricultural land classification productivity rating of "C" or lower. (See Figures 11 and 12). Areas classified as "Agricultural" on the State Land Use map have no zoning designation on Maui County's land use maps but are presumed to be designated "agriculture".

State law allows the County Planning Commission to issue a Special Permit for the establishment of a public school on these lands if the site is less than 15 acres. However, because the proposed school site is larger than 15 acres, a State Land Use Boundary Amendment to include the agricultural land in the Urban District will be required.

A Community Plan amendment and zoning change to Public/Quasi-Public will also be required for school development at any of the five candidate sites. Similarly, a County zoning change will also be needed from "A" (agricultural district) to "P-1" (public/quasi-public district). None of the sites are within the County Special Management Area.

Table 12 lists the necessary land use approvals as well as construction related permits which will be required for the selected site prior to construction.

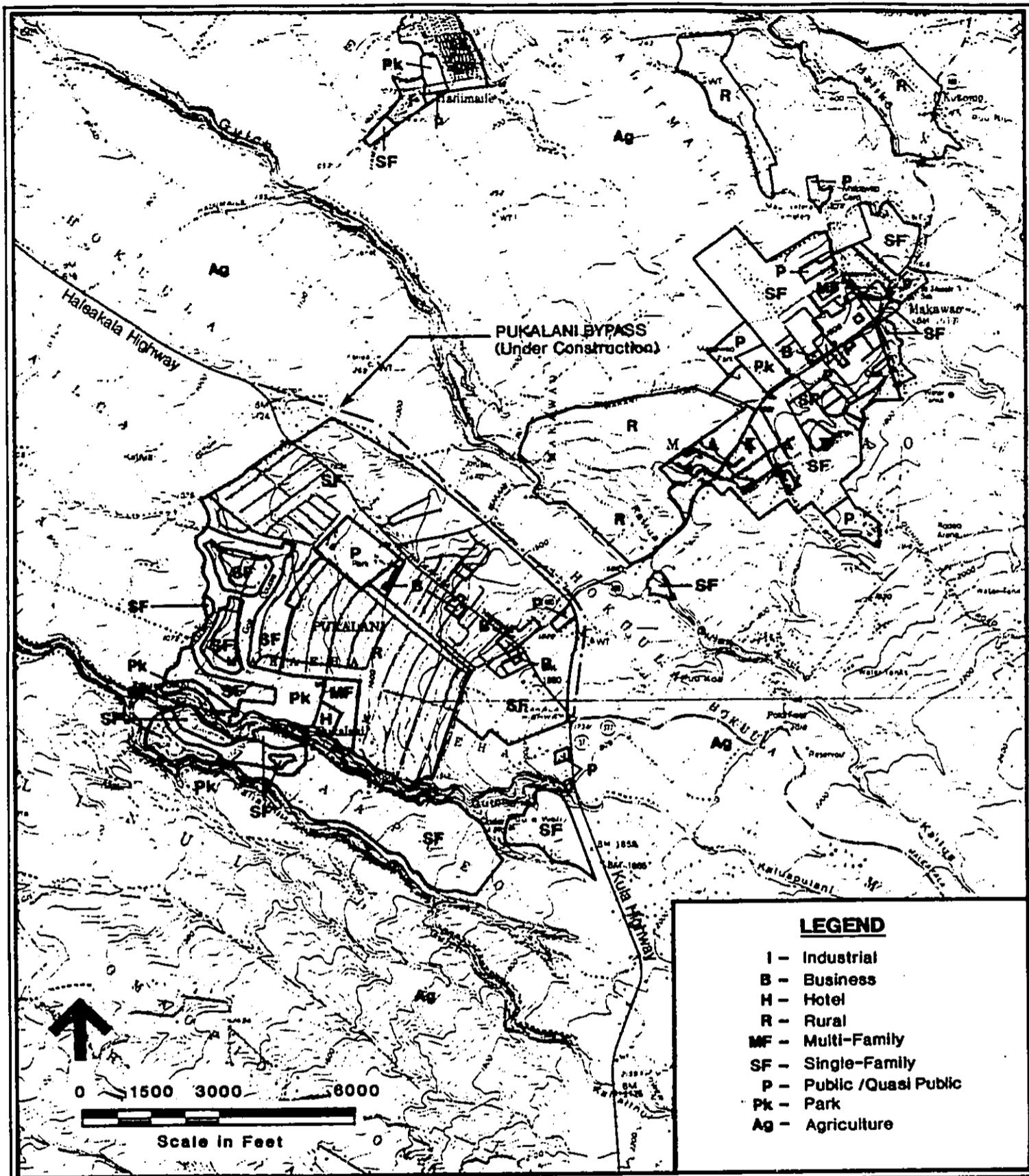


STATE LAND USE DISTRICTS

Fig. 11

**SITE SELECTION STUDY and EIS for the
NEW UPCOUNTRY
MAUI HIGH SCHOOL**

Prepared for :
DEPARTMENT OF ACCOUNTING & GENERAL SERVICES
Prepared by :
WILSON OKAMOTO & ASSOCIATES, INC.



COMMUNITY PLAN

**SITE SELECTION STUDY and EIS for the
NEW UPCOUNTRY
MAUI HIGH SCHOOL**

Fig. 12

Prepared for :
DEPARTMENT OF ACCOUNTING & GENERAL SERVICES
Prepared by :
WILSON OKAMOTO & ASSOCIATES, INC.

TABLE 12 - LIST OF NECESSARY APPROVALS

Permit/Approval & Issuing Authority	Lower Pukalani SITE 1	Kula/ Haleakala Highway SITE 2	Makawao Avenue Mauka SITE 3	Makawao Avenue Apana Rd. SITE 4	Baldwin Avenue SITE 5
State LUC Boundary Amendment (State Land Use Commission)	X	X	X	X	X
Change in Zoning (County Council)	X	X	X	X	X
Community Plan Amendment (County Council)	X	X	X	X	X
Subdivision (DPW)	X	X	X	X	X
Plan Approval (DPW)	X	X	X	X	X
Building Permit (DPW, DWS and Applicable Agencies)	X	X	X	X	X
Work w/in State Right-of-way (State DOT-Hwys.)	X	X			
Work w/in County Right-of-way (DPW)			X	X	X
Grading & Grubbing Permit (DPW)	X	X	X	X	X
Water Service (DWS)	X	X*	X*	X	X
UIC Permit (DOH)	X	X	X	X	X

* Depending on the location of the water tanks for Sites 2 and 3, a Conservation District Use Application may be necessary.

XII. PROBABLE ADVERSE ENVIRONMENTAL IMPACTS WHICH CANNOT BE AVOIDED

Environmental impacts which cannot be avoided include the displacement of 35 acres of agricultural land and the elimination of some open space. Current traffic impacts in Wailuku near the current high schools will shift to the Upcountry area, resulting in increased local traffic and associated automobile emissions in the vicinity of the new school. However, traffic in the roads between the Upcountry area and the existing schools will be reduced by the omission of commuting student-related traffic. Traffic congestion and associated air quality impacts in the vicinity of the proposed high school will be mitigated by appropriate siting of access roads, as well as by any roadway improvements and traffic signalization deemed necessary through traffic studies at the selected school site.

Residential areas near the school will experience increased pedestrian and vehicular traffic in their neighborhoods. Increased noise in some areas immediately adjacent to the school could result from equipment such as air-conditioning units, exhaust fans, and public address systems, as well as from traffic entering and leaving the school. There may be other social impacts resulting from the increased potential for interaction with students and faculty.

Appropriate mitigative measures such as fencing and landscaping the school boundaries will be taken to minimize any noise and social impacts of the school on surrounding land uses. In addition, the school shall be designed to minimize impacts to adjacent residences from noise-generating sources such as the aforementioned air-conditioning units, exhaust fans, and public address systems. Traffic noise will be minimized by locating the school entrance as far from residential streets as practicable.

Notwithstanding the unavoidable effects, the proposed action will provide community benefits and mitigate adverse impacts of the current school system. The new Upcountry Maui high school will assure the continued maintenance and enhancement of public education and social welfare by providing an essential educational service and a facility that will meet the enrollment requirements of the region. It will lessen overcrowding at high schools in Central Maui and relieve traffic congestion on Haleakala Highway. Some long-term economic benefits will also be realized through associated employment at the new school.

XIII. SUMMARY OF UNRESOLVED ISSUES

Roadway improvements needed to mitigate the local increase in traffic during peak periods are unresolved at this time. Once a site is selected, further study will be conducted to determine what measures such as road widening, signalization, and holding lanes may be necessary to facilitate safe access and minimize the potential for traffic congestion.

Water supply is sufficient in the Upcountry area, but off-site infrastructure appears inadequate at this time for all candidate sites. Proposals to provide water service will be coordinated with the Maui County Department of Water Supply once a site is selected.

XIV. AGENCIES, ORGANIZATION, AND INDIVIDUALS CONSULTED DURING EIS PREPARATION NOTICE PHASE

The following is a list of agencies, organizations, and individuals who were consulted as part of the EIS Preparation Notice Phase. Those consulted parties who responded to consultation letters are noted with an asterisk. A double asterisk indicates those who provided substantive comments. Letters received and responses to those with substantive comments are shown on the following pages.

FEDERAL AGENCIES

- ** Department of the Army
- * Soil Conservation Service
- * Fish and Wildlife Service
- U.S. Army Support Command Hawaii
- ** National Park Service

STATE AGENCIES

- Department of Agriculture
- * Department of Business, Economic Development and Tourism
- * Department of Defense
- ** Department of Education
- * Department of Human Services
- Haiku Elementary School
- Kula Elementary School
- Makawao Elementary School
- Pukalani Elementary School
- Paia Elementary School
- Samuel Inoka Kalama Intermediate
- Maui High School
- ** Department of Health
- Department of Land and Natural Resources
- Department of Social Services and Housing
- ** Department of Transportation
- Office of Environmental Quality Control
- Environmental Center-University of Hawaii

COUNTY AGENCIES

- Department of Parks and Recreation
- Department of Public Works

- ** Department of Water Supply
- * Department of Human Concerns
- ** Planning Department

UTILITY COMPANIES

- ** Maui Electric Company, Ltd.
- Hawaiian Telephone Company
- The Gas Company-Maui Division

GOVERNMENT OFFICIALS

Representative David Morihara
Senator Mamoru Yamasaki
Representative Joseph Souki
Mr. Hannibal Tavares, Mayor
Goro Hakama, Chairman

INDIVIDUALS

- Dick Mayer
- Maui Land & Pineapple Co., Inc
- * Sierra Club



DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, HONOLULU
BUILDING 230
FT. SHAFTER, HAWAII 96858-5440

RECEIVED
JAN 9 9 04 AM '91
DIV. OF PL.

REPLY TO
ATTENTION OF:
Planning Division
January 4, 1991

RECEIVED
JAN 9 1991
COMPTROLLER'S OFFICE
STATE OF HAWAII



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 111, HONOLULU, HAWAII 96810

RUSSEL S. NAGATA
COMPTROLLER
ROBERT P. LEONG
SENIOR COMPTROLLER

LETTER NO. (P)11260.1

Mr. Russel S. Nagata
Department of Accounting and
General Services
1151 Punchbowl Street
P.O. Box 119
Honolulu, Hawaii 96810

MAR 15 1991

Mr. Kisuk Cheung
Director of Engineering
Department of the Army
U. S. Army Engineer District, Honolulu
Fort Shafter, Building 230
Honolulu, Hawaii 96858-5440

Dear Mr. Nagata:

We have reviewed the Site Selection Report and Environmental Impact Statement Preparation Notice for the Proposed Upcountry Maui High School. The following comments are offered:

- a. A Department of the Army permit is not required for project construction at any of the candidate sites.
- b. The flood hazard zone information on page III-3 (section III.B.6) of the document is correct.

Sincerely,

Russel S. Nagata
Russel S. Nagata
Comptroller of Engineering

Dear Mr. Cheung:

Subject: Upcountry Maui High School
Environmental Impact Statement
Preparation Notice (EISPN)

Thank you for your January 4, 1991 comments regarding the subject EISPN.

We appreciate your input for this project.

Very truly yours,
Russel S. Nagata
RUSSEL S. NAGATA
State Comptroller

RECORD OF PUBLIC WORKS

Project No.	111-3
Project Name	Upcountry Maui High School
Project Location	Maui
Project Status	Approved
Project Date	Jan 9 1991
Project Cost	\$100,000,000
Project Type	Education
Project Category	Construction
Project Sub-category	High School
Project Phase	Design
Project Milestones	Design Complete
Project Risks	Low
Project Compliance	Compliant
Project Notes	

UNITED STATES
DEPARTMENT OF
AGRICULTURE

SOIL
CONSERVATION
SERVICE

P. O. BOX 50004
HONOLULU, HAWAII
96850

January 3, 1990

JAN 9 8 45 AM '90
DIV. OF PUBLIC WORKS
3365

Mr. Charles Inatsuoka
Project Coordinator
Public Works Division
Department of Accounting and
General Services
1151 Punchbowl Street
P.O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Inatsuoka:

Subject: Letter No. (P)2004.0, Environmental Impact Statement Preparation
Notice (EISP) - Upcountry Maui High School, Upcountry, HI

We have reviewed the above-mentioned petition and have no comments to offer
at this time. We would appreciate the opportunity to review the draft EIS.

Sincerely,

Warren M. Lee
WARREN M. LEE
Acting
State Conservationist



United States Department of the Interior
FISH AND WILDLIFE SERVICE
PACIFIC ISLANDS OFFICE
P.O. BOX 50187
HONOLULU, HAWAII 96850

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DIV. OF PUBLIC WORKS
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RECEIVED
JAN 3 - 1990
COMPTROLLER'S OFFICE
STATE OF HAWAII

Mr. Russel S. Nagata
State Comptroller
Department of Accounting and
General Services
1151 Punchbowl Street
P. O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Nagata:

Re: Upcountry Maui High School
EIS Consultation Phase

Due to current staff limitations, the Pacific Islands Office, Fish and
Wildlife Enhancement cannot devote the time to adequately evaluate potential
impacts to important fish and wildlife resources from the proposed project.
Please understand that this notification does not represent the Fish and
Wildlife Service's approval of the proposed activity. We may review future
actions related to this project should workload constraints be alleviated, or
if significant adverse impacts to trustee fish and wildlife resources are
identified.

Sincerely yours,

Ernest Kosaka
Ernest Kosaka
Field Office Supervisor
Fish and Wildlife Enhancement

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DIV. OF PUBLIC WORKS
3365

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3365



United States Department of the Interior

NATIONAL PARK SERVICE
HALEAKALA NATIONAL PARK
P.O. BOX 369
MAKAWAO, MAUI, HAWAII 96768

JAN 11 9 45 AM '91
U.S. DEPARTMENT OF THE INTERIOR
DIVISION OF PUBLIC WORKS

JOHN WALKER
CONTROLLER



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 111, HONOLULU, HAWAII 96810

RUSSEL S. NAGATA
COMPTROLLER
ROBERT TAYLOR
SUPERVISOR

LETTER NO. (P)1261.1

January 7, 1991

Mr. Russel S. Nagata
State Comptroller
Department of Accounting and General Services
State of Hawaii
P. O. Box 119
Honolulu, HI 96810

Dear Mr. Nagata:

We have reviewed the Site Selection Report for the Upcountry Maui High School. We are unaware of potential adverse impacts to native Hawaiian flora or fauna at any of the candidate sites. Whichever site is chosen we recommend you consider landscaping with trees and shrubs native to Maui wherever feasible. When you have landscape plans prepared we would appreciate reviewing the plant species list. There are certain non-native plants such as pampas grass which could spread and threaten the natural resources of Haleakala National Park.

Thank you for the opportunity to comment.
Sincerely,

Donald W. Reeser

Donald W. Reeser
Superintendent

Mr. Donald W. Reeser
Superintendent
U. S. Department of the Interior
National Park Service
Haleakala National Park
P. O. Box 369
Makawao, Maui, Hawaii 96788

Dear Mr. Reeser:

Subject: Upcountry Maui High School
Environmental Impact Statement
Preparation Notice (EISPN)

Thank you for your January 7, 1991 comments on the subject EISPN. As requested, upon preparation of the landscape plans for the proposed school, we will coordinate the review of the plant species list with your office.

We appreciate your input for this project.

Russel S. Nagata
RUSSEL S. NAGATA
State Comptroller

DIVISION OF PUBLIC WORKS
RECEIVED 1/11/91
State P.W. Eng. Agency
P.W. Sect. 5-7
State Serv. Div. 11-7
Planning Div. 1-1
Proc. & Insp. Div. 5-1
Design Div. 5-2
Insp. Div. 5-3
Qual. Control 5-4
Training 5-5



DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM

STATE OF HAWAII
DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM
MAILING ADDRESS: P.O. BOX 2159, HONOLULU, HAWAII 96810-0215
FAX: (808) 548-1744

JOHN WARD
GOVERNOR

ROGER A. ULVELING
COMPTROLLER

BARBARA K. KANE
DEPUTY COMPTROLLER

LESLIE S. MATSUHARA
DEPUTY DIRECTOR

December 20, 1990

MEMORANDUM

TO: The Hon. Russel S. Nagata
Comptroller

FROM: Roger A. Ulveling

SUBJECT: Upcountry Maui High School
EIS Consultation Phase

We wish to inform you that we have no comments to offer on the subject environmental impact statement preparation notice.

Thank you for the opportunity to review the document.

[Signature]
for Director

RAU:MIHK/hkeis22

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DIV. OF PUBLIC WORKS



STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
240 DULANEY ROAD, HONOLULU, HAWAII 96819-0000

December 18, 1990

Engineering Office

Honorable Russel S. Nagata
Comptroller
Department of Accounting and
General Services
1151 Punchbowl Street
P.O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Nagata:

Upcountry Maui High School
EIS Consultation Phase

Thank you for providing us the opportunity to review the above subject project.

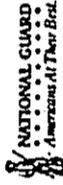
We have no comments to offer at this time regarding this project.

Sincerely,

[Signature]
Jerry M. Matsuda
Lieutenant Colonel
Hawaii Air National Guard
Contracting & Engineering Officer

DIVISION OF PUBLIC WORKS
DEC 18 1990

State P.W. Eng.	Appraisal
Plan. Sec'y	Spec.
State Serv. Bk.	Info.
Planning Bk.	File
Prog. Mgmt. Bk.	Spec. Plan.
Design Bk.	Contract
Inst. Bk.	Inv. & Insp.
Qual. Cont. Bk.	Reg.
Training Bk.	Spec. Plan.



JOHN WAINKE
COMPTROLLER



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P. O. BOX 2288
HONOLULU, HAWAII 96804

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Dec 27 12 58 PM '90
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DEC 27 1990
COMPTROLLER'S OFFICE
STATE OF HAWAII

JOHN WAINKE
COMPTROLLER



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 111, HONOLULU, HAWAII 96804

RUSSEL S. MAGATA
COMPTROLLER
JAMES N. TASUDA
DEPUTY COMPTROLLER
LETTER NO. [REDACTED]

OFFICE OF THE SUPERINTENDENT

December 17, 1990

JAN 4 1991

MEMO TO: Honorable Russel Magata, Comptroller
Dept. of Accounting and General Services
FROM: Charles T. Toguchi, Superintendent
Department of Education
SUBJECT: Upcountry Maui High School
EIS Consultation Phase

Honorable Charles Toguchi
Superintendent
Department of Education
State of Hawaii
P. O. Box 2360
Honolulu, Hawaii 96804

Dear Mr. Toguchi:

This is in response to your letter dated December 10, 1990, on the subject matter.

Subject: Upcountry Maui High School
EIS Consultation Phase

The Department of Education, after review of the report and in consultation with the Maui District Office (DOE), recommends the selection of Site 4 -- Makawao Ave/Apana Road.

Thank you for your December 17, 1990 comments on the subject project.

We appreciate the expeditious review of the final evaluation and recommendation of the proposed site. The Department is on a very tight time schedule in meeting the target school opening date of September, 1994.

The Department of Accounting and General Services will complete the EIS process before a site recommendation is made. This will assure that all information available has been presented and evaluated. However, your preference for Makawao Avenue/Apana Road Site 4 is noted and will be considered in the final selection process.

Should you have any questions, please call the Facilities Branch at 737-2796.

We appreciate your input for this project.

CTT:NO:SY

cc: Eugene Imai
Lokelani Lindsey, Maui Dist.

Very truly yours,
RUSSEL S. MAGATA
State Comptroller

IN OFFICE OF THE SUPERINTENDENT
Mr. Tolson
Mr. DeLoach
Mr. Mohr
Mr. Bishop
Mr. Casper
Mr. Callahan
Mr. Conrad
Mr. Felt
Mr. Gale
Mr. Rosen
Mr. Sullivan
Mr. Tavel
Mr. Trotter
Tele. Room
Miss Holmes
Miss Gandy

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER

JOHN WARDLE
Director



STATE OF HAWAII
DEPARTMENT OF HUMAN SERVICES

P.O. Box 339*
Honolulu, Hawaii 96809

January 3, 1991

RECEIVED
JAN 9 9 45 AM '91
U.S. DEPT. OF PUBLIC WORKS

WINONA E. RUBIN
Director
ALFRED K. SUGA
Deputy Director
MERRYN S. JONES
Deputy Director

RECEIVED
JAN - 9 1991

MEMORANDUM

TO: Mr. Russel S. Nagata, State Comptroller
Department of Accounting and General Services

FROM: Winona E. Rubin

SUBJECT: Upcounty Maui High School, EIS Consultation Phase

Thank you for the opportunity to review this project. We have no comments to offer at this time.

Winona E. Rubin
Winona E. Rubin, Director

SECTION OF PUBLIC WORKS
JAN 10 1991
Mr. SUGA
Mr. JONES
Mr. RUBIN
Mr. WARDLE
Mr. ...
Mr. ...



STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3319
HONOLULU, HAWAII 96810

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

FEB 15 1991
COMMUNICATIONS SECTION

IN 1991, PLEASE REFER TO
150-108

February 11, 1991

The Honorable Russel S. Nagata
State Comptroller
Department of Accounting
& General Services
P.O. Box 119
Honolulu, HI 96810

Attn: Mr. Charles Inatsuka
Dear Mr. Nagata:

Subject: Upcountry Maui High School
EIS Consultation Phase

We have reviewed the material on the subject project submitted by your office. In compliance with the Administrative Rules, Chapter 11-62, "Wastewater Systems," all public facilities are required to hook up to available County sewer service systems. If County sewers are not available, a wastewater treatment works or non-cesspool individual wastewater systems (IWS) would be the only acceptable alternatives.

Our Maui District Health Office has expressed great concerns over the possible use of IWSs in the general area. Existing IWSs have a history of failure in many of the upcountry areas. Furthermore, potable water may well be a concern of the Maui Water Department. Therefore, we recommend that before any type of wastewater system be proposed, a complete engineering study be conducted to insure that the selected system will work and meet the concerns of protecting groundwater resources.

All wastewater plans must conform to applicable provisions of Chapter 11-62. We do reserve the right to review detailed wastewater plans for conformance to applicable rules at the time of actual construction.

Should you have any further questions, please contact Harold Yee of the Wastewater Branch at telephone 543-8287.

Sincerely,

Bruce S. Anderson
BRUCE S. ANDERSON, Ph.D.
Deputy Director for
Environmental Health

HKY:LK/eo
A:UPCOMAUI.RC



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 118, HONOLULU, HAWAII 96810

JOHN WINKLE
COMPTROLLER

LETTER NO (R)1269.1

MAR 19 1991

Dr. Bruce Anderson
Deputy Director for
Environmental Health
Department of Health
State of Hawaii
Honolulu, Hawaii

Attention: Mr. Harold Yee

Dear Dr. Anderson:

Subject: Upcountry Maui High School
Environmental Impact Statement
Preparation Notice

Thank you for your February 11, 1991 comments regarding the high failure rate of individual wastewater systems in the Upcountry area and the need for a complete engineering study to select an appropriate wastewater system. Accordingly, we will coordinate closely design of the proposed school's wastewater system with your department.

We appreciate your input for this project.

Very truly yours,
Russel S. Nagata
RUSSEL S. NAGATA
State Comptroller

JOHN WAHNE
DIRECTOR



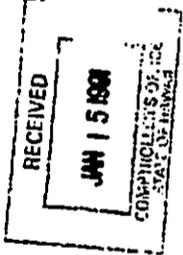
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
100 SOUTH KING STREET
HONOLULU, HAWAII 96813

January 14, 1991

RECEIVED

JAN 16 9 55 AM '91

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
100 SOUTH KING STREET
HONOLULU, HAWAII 96813



MEMORANDUM

TO: Russel S. Nagata, Comptroller
Department of Accounting and General Services

FROM: Edward Y. Hirata, Director

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT CONSULTATION PHASE,
PROPOSED UPCOUNTRY MAUI HIGH SCHOOL,
PUKALANI, MAUI, TMK: 2-3/4

Thank you for your letter of December 10, 1990, requesting our review of the subject proposed project.

We have the following comments:

1. The sites under consideration have poor to fair pedestrian access and safety. Improvements such as pedestrian overpasses and pedestrian/traffic activated signals should be evaluated and considered.
2. Bikeways and/or pedestrian pathways should be provided within a one-mile radius of the selected site.
3. Construction plans, and a traffic impact study and drainage report should be submitted for our review. We expect that roadway improvements will be necessary to accommodate project-generated traffic.

DEPARTMENT OF PUBLIC WORKS
 1. State PW Form 7 Approved
 2. Planning & Design
 3. Engineering
 4. Surveying
 5. Inspection
 6. Maintenance
 7. Administration



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 114, HONOLULU, HAWAII 96810

MAR 27 1991

Honorable Edward Hirata
Director
Department of Transportation
State of Hawaii
Honolulu, Hawaii

Dear Mr. Hirata:

Subject: Upcountry Maui High School
EIS Consultation Phase

Thank you for your January 14, 1991 comments on the subject project. Our responses to your comments are as follows:

1. The poor to fair ratings for pedestrian access and safety acknowledge the need for improvements such as traffic signals and/or pedestrian overpasses. A more in-depth evaluation of such improvements will be made during the design phase after selection of a final site.
2. We agree that bikeways and/or pedestrian pathways within a one-mile radius of the selected site are desirable. However, this is an off-site requirements and beyond the scope of the Department of Education.
3. Upon selection of a final site, the master plan and design of the school will be initiated. During the design phase, we will coordinate the need for roadway improvements within State highways with your department.

We appreciate your input for this project.

Very truly yours,
[Signature]
RUSSEL S. NAGATA
State Comptroller

WILSON
OKAMOTO
ASSOCIATES

Ms. Rae Shikuma, Director
County of Maui
Department of Water Supply
P. O. Box 1109
Wailuku, Maui, HI 96793

April 8, 1991

SUBJECT: Upcountry Maui High School
Environmental Impact Statement Preparation Notice
(EISPN)

Dear Ms. Shikuma:

Thank you for your comments dated December 17, 1990 in regard to the subject EISPN. As shown in the attached, we propose to incorporate the corrections you provided concerning the Upcountry Maui water system in the Draft EIS. Your verification of these corrections would be greatly appreciated.

In response to your request to discuss off-site infrastructure, the Department of Accounting and General Services has indicated that it will initiate consultation with your office once a school site has been selected.

If you have any questions regarding this request for verification, please contact Mr. Bruce Gorst of Wilson Okamoto & Associates at 531-5261.

Very truly yours,

Earl Matsukawa
Earl Matsukawa
Project Manager

cc: Mr. Charles Inatsuka, DAGS



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

April 15, 1991

Mr. Earl Matsukawa
Wilson Okamoto & Associates
P. O. Box 3530
Honolulu, Hawaii 96811

Dear Mr. Matsukawa:

Re: Upcountry Maui High School, Environmental Impact Statement Preparation Notice (EISPN)

Please be advised that your proposed changes regarding the Upcountry Maui water system are acceptable.

Sincerely,

Rae H. Shikuma
Rae H. Shikuma
Director

"By Water All Things Find Life"



DEPARTMENT OF
HUMAN CONCERNS
COUNTY OF MAUI

300 SOUTH HIGH STREET, WAILUKU, HAWAII 96791

December 21, 1990

HANNIBAL HAVAREN
Mayor
ROBERT AGREN, JR.
Deputy Mayor
MIRIAM KAHILAKI
Deputy Director

RECEIVED

DEC 26 7 34 PM '90 (808) 241-7805

DIV. OF PUBLIC WORKS
DACS

Hr. Russel S. Nagata
Department of Accounting and
General Services
1151 Punchbowl Street
P. O. Box 119
Honolulu, Hawaii 96810

Dear Hr. Nagata:

Subject: Site Selection Report and Environmental Impact
Statement for the Upcountry Maui High School

The Office of Economic Development, a Division of the
Department of Human Concerns have reviewed the subject environ-
mental Impact Statement and find that, in general it has
adequately identified and assessed the major environmental
impacts which can be anticipated to result from the proposed
project.

We have no other comments to offer at this time; however,
we thank you for the opportunity to review the Environmental
Impact Statement.

Very truly yours,

Fred Matsumoto

FRED MATSUMOTO
Economic Development Coordinator

DIVISION OF PUBLIC WORKS
ROUTING SLIP
DATE PREPARED: 12/21/90
BY: [Signature]
FOR: [Signature]
STAFF SERV. BR.: [Signature]
PLANNING BR.: [Signature]
PROJ. MGMT. BR.: [Signature]
DESIGN BR.: [Signature]
REG. BR.: [Signature]
PLANNING DIV.: [Signature]
REG. DIV.: [Signature]

EDWIN OKUBO
Administrative
Coordinator

ROBIN HANAKA
Administrative
Coordinator

MICHAEL LUXION
South Services Division
Coordinator

FRED MATSUMOTO
Economic Development
Division
Coordinator

ARNOLD BAXA
Management Services
Division
Coordinator

JAN DAPIAN
Volunteer Action Division
Coordinator

ROY FUSATO
Office and Administrative
Services Division
Coordinator



COUNTY OF MAUI
PLANNING DEPARTMENT
250 S HIGH STREET
WAILUKU, MAUI, HAWAII 96793

CHRISTOPHER L. HART
Planning Director
JOHN E. NIHI
Deputy Planning Director

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JAN 14 1 07 PM '91
OFFICE OF PUBLIC WORKS
3442

Mr. Russel S. Nagata
January 7, 1991
page 2

4. Sites 3 and 4 along Makawao Avenue are in close proximity to a Country Town Business District. It is suggested that the school site be located within a residential district.

5. The Maui County General Plan is currently being reviewed and the Community Plans will be reviewed soon after. We would appreciate being informed as to the status of the site selection process. We also would like to provide you with any changes associated with both plans.

We thank you for the opportunity to comment. If further clarification is required, please contact this office.

Very truly yours,

Guy A. Haywood
Acting Deputy Planning Director

Mr. Russel S. Nagata
State Controller
Department of Accounting
and General Services
1151 Funchbowl Street
P.O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Nagata

SUBJECT: Upcountry Maui High School-EIS Consultation Phase

The Planning Department has reviewed the Site Selection Report and EIS Preparation Notice for the above project and would like to offer the following comments for your consideration:

1. The Makawao, Pukalani, Kula Community Plan supports the development of an upcountry high school at a site conveniently located to serve all communities, to reduce transportation costs and achieve desired social objectives.
2. The Plan designates a specific site for a proposed school, library and health facility. The site selection report has not analyzed this site. The report instead designates site 2 (Kula/Haleakala Highway) which is in close proximity.
3. We recommend that the school site be in close proximity to the proposed by-pass road to mitigate potential traffic problems. Substantial traffic improvements will have to be made to the existing roadway systems servicing the proposed high school facility to maintain an acceptable level of service.

DISPOSITION OF PUBLIC COMMENTS

State Planning Dept.	_____
Public Works	_____
State Dept. of Accounting and General Services	_____
State Dept. of Health	_____
State Dept. of Education	_____
State Dept. of Transportation	_____
State Dept. of Public Safety	_____
State Dept. of Parks and Recreation	_____
State Dept. of Natural Resources	_____
State Dept. of Land and Natural Resources	_____
State Dept. of Water	_____
State Dept. of Energy	_____
State Dept. of Information Systems	_____
State Dept. of Finance	_____
State Dept. of Labor	_____
State Dept. of Social Services	_____
State Dept. of Housing	_____
State Dept. of Community Development	_____
State Dept. of Cultural Affairs	_____
State Dept. of Archives and Library Services	_____
State Dept. of Office of the State Historian	_____
State Dept. of Office of the State Architect	_____
State Dept. of Office of the State Auditor	_____
State Dept. of Office of the State Comptroller	_____
State Dept. of Office of the State Engineer	_____
State Dept. of Office of the State Geologist	_____
State Dept. of Office of the State Historian	_____
State Dept. of Office of the State Librarian	_____
State Dept. of Office of the State Museum	_____
State Dept. of Office of the State Seal and Coat of Arms	_____
State Dept. of Office of the State Solicitor General	_____
State Dept. of Office of the State Treasurer	_____
State Dept. of Office of the State Attorney General	_____
State Dept. of Office of the State Clerk	_____
State Dept. of Office of the State Secretary	_____
State Dept. of Office of the State Auditor	_____
State Dept. of Office of the State Comptroller	_____
State Dept. of Office of the State Engineer	_____
State Dept. of Office of the State Geologist	_____
State Dept. of Office of the State Historian	_____
State Dept. of Office of the State Librarian	_____
State Dept. of Office of the State Museum	_____
State Dept. of Office of the State Seal and Coat of Arms	_____
State Dept. of Office of the State Solicitor General	_____
State Dept. of Office of the State Treasurer	_____
State Dept. of Office of the State Attorney General	_____
State Dept. of Office of the State Clerk	_____
State Dept. of Office of the State Secretary	_____



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 111, HONOLULU, HAWAII 96833

MUSSEL S. HAZETA
COMPTROLLER
ROBERT B. TADUNA
SECRETARY

LETTER NO. P1297.1

Mr. Guy A. Haywood
Page 2
Ltr. No. (P)1297.1

selection process. However, since then, we learned that the DOT is moving toward construction of the road by August 1991. This change will be considered in the draft EIS.

- 4. In accordance with the Department of Education's minimum site criteria, sites within residential districts are preferable. However, due to the lack of developable lands within or near residential districts, Sites 3 and 4 were included.
- 5. Thank you for offering to provide us with information on changes to the Maui County General Plan and Community Plans. We appreciate your assistance. Since you are on our consulted party list, a copy of the draft EIS will be sent to you for review and comments. In this way, you will continue to be informed of the status of the site selection process.

We appreciate your input for this project.

Very truly yours,

Teuane Toming
TEUANE TOMING
State Public Works Engineer

CI:jk

MAR 25 1991

Mr. Guy A. Haywood
Acting Deputy Planning Director
County of Maui Planning Department
250 South High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Haywood:

Subject: Upcountry Maui High School
Environmental Impact Statement
Preparation Notice (EISP/N)

Thank you for your January 7, 1991 comments on the subject EISP/N. Our responses to your comments are as follows:

- 1. Compatibility with the Makawao, Pukalani, Kula Community Plan shall be considered in the criteria for selection of the Upcountry high school site.
- 2. The area designated for a proposed school, library, and health facility in the Makawao, Pukalani, Kula Community Plan was excluded from consideration because of the following:
 - a. It did not provide sufficient usable area to meet the 35-acre criteria for the high school.
 - b. The area is limited by steep slopes greater than 10 percent.
 - c. Its irregular shape does not satisfy the desired length-to-width ratio of 1.5 to 1.0, even when the adjacent land designated for single family residential development is included.
- 3. During preparation of the EISP/N, the State Department of Transportation (DOT) indicated that construction of the proposed by-pass road was uncertain due to lack of funds. Therefore, proximity to the road was not adopted as a criteria in the site

Maui Electric Company, Ltd. • 210 West Kamehameha Ave. • PO Box 398 • Kahului, Maui, HI • 96732-0398

RECEIVED.

DEC 24 8 37 AM '90
DIVISION OF PUBLIC WORKS
DACS



December 19, 1990

Mr. Charles Inatsuka
Project Coordinator
Department of Accounting and General Services
1151 Punchbowl Street
P. O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Inatsuka:

Subject: Upcountry Maui High School
EIS Consultation Phase

We have reviewed the subject Upcountry Maui High School EIS Consultation Phase and have no comments.

Due to the increased construction activity on Maui, Maui Electric Company may need a lead time of six months to a year for the designing, permitting, and acquiring of certain equipment. It is our understanding that you will notify us during the preliminary design stages of this project to assure that the installation schedule will meet your timeframe.

Thank you for the opportunity to comment on the subject study. If there are any questions, please contact Reginald Foo at 871-2395.

Sincerely,

Edward L. Reinhardt
Edward L. Reinhardt
Manager, Engineering

ELR:rc

DIVISION OF PUBLIC WORKS INITIAL FOR USE:	
___	State P. W. Engr. _____ Approval
___	Proj. Serv. _____ Sign
___	State Serv. Br. _____ Inv.
___	Planning Br. _____ File
___	Proj. Mgmt. Br. _____ See me
___	Design Br. _____ Comments
___	Insp. Br. _____ Ins'd &
___	Qual. Cont. Engr. _____ Repl
___	Training Serv. Br. _____

AnHEI Company



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

JOHN WAHNE
DIRECTOR

MUSSEL S. HAGATA
COMPTROLLER
JAMES H. HESUDA
STATE COMPTROLLER
LETTER NO. (P)1038.1

JAN 15 1991

Mr. Edward L. Reinhardt
Manager, Engineering
Maui Electric Company, Ltd.
210 West Kamehameha Avenue
Kahului, Hawaii 96732-0398

Dear Mr. Reinhardt:

Subject: Upcountry Maui High School
Environmental Impact Statement
Preparation Notice (EISPN)

Thank you for your December 19, 1990 letter informing us of the lead time your company requires for implementation of the project. Please be assured that we will closely coordinate the design of the project with your company.

As a consulted party, we will send a copy of the draft EIS to your company for review and comments.

If there are any questions regarding the EIS, please have your staff contact Mr. Earl Matsukawa of Wilson Okamoto and Associates, our EIS consultant, at 531-5261.

Very truly yours,

Teuane Tohinaga
TEUANE TOHINAGA
State Public Works Engineer

CI:jkc

CC: Mr. Earl Matsukawa

Mr. Earl Matsukawa
1150 S. King St. #800
Honolulu, HI 96814

Dec. 14, 1990

Re: Upcountry Maui High School

The Sierra Club, Maui Group, wishes to be a consulted party
in the preparation of the Environmental Impact Statement for the
proposed new high school in upcountry Maui. We would appreciate
any documents or maps relative to this project.

Thank you,

Mary M. Evanson

Mary M. Evanson
Conservation Chair
Sierra Club, Maui Group
P.O. Box 594
Hakawao, HI 96768

XV. AGENCIES, ORGANIZATION, AND INDIVIDUALS CONSULTED DURING DRAFT EIS PHASE

The following is a list of agencies, organizations, and individuals who were consulted as part of the Draft EIS Phase. Those consulted parties who responded to consultation letters are noted with an asterisk. A double asterisk indicates those who provided substantive comments. Letters received and responses to those with substantive comments are shown on the following pages.

FEDERAL AGENCIES

- Army-DAFE (Facilities Eng.-USASCH)
- Environmental Protection Agency
- ** U.S. Army Corps of Engineers
- U.S. Coast Guard
- U.S. Fish and Wildlife Service
- National Park Service
- * Naval Base Pearl Harbor
- ** U.S. Soil Conservation Service

STATE AGENCIES

- ** Department of Agriculture
- * Department of Budget and Finance-HFDC
- Department of Business, Economic Development and Tourism
- DBED Library
- DBED State Energy Office
- * Department of Defense
- * Department of Education-Superintendent
 - Facilities and Support Services Branch
 - Maui District Office
 - Haiku Elementary School
 - Kula Elementary School
 - Makawao Elementary School
 - Pukalani Elementary School
 - Paia Elementary School
 - Samuel Inoka Kalama Intermediate
 - Maui High School
- ** Department of Health
- * Department of Human Services
- ** Department of Land and Natural Resources
 - DLNR State Historic Preservation Officer

- * Department of Social Services and Housing
- * Department of Transportation
- State Archives
- ** Office of Environmental Quality Control
- ** Office of State Planning
- Office of Hawaiian Affairs

COUNTY AGENCIES

- ** Department of Parks and Recreation
- Department of Public Works
- ** Engineering Division
- ** Wastewater Reclamation Division
- ** Solid Waste Division
- ** Land Use & Codes Administration
- ** Department of Water Supply
- Economic Development Agency
- ** Office of the Mayor
- ** Planning Department

UNIVERSITY OF HAWAII

- ** Environmental Center
- Water Resources Research Center

MEDIA

Honolulu Star-Bulletin
Honolulu Advertiser
Sun Press
Maui News

ELECTED OFFICIALS

Representative David Morihara
Senator Mamoru Yamasaki
Representative Joseph Souki
Mayor Linda Crockett Lingle
Howard S. Kihune, Council Chairman

LIBRARIES

Maui Community College Library
University of Hawaii Hamilton Library
Legislative Reference Bureau
State Main Library
Kaimuki Regional Library
Kaneohe Regional Library
Pearl City Regional Library
Hilo Regional Library
Wailuku Regional Library
Kauai Regional Library
Kahului Library
Lahaina Library
Makawao Library

UTILITY COMPANIES

Maui Electric Company, Ltd.
Hawaiian Telephone Company
The Gas Company-Maui Division

OTHERS

American Lung Association
Dick Mayer
** Maui Land & Pineapple Co., Inc
Sierra Club

UNSOLICITED INDIVIDUAL RESPONDENTS

** Kitty L. Alday, President, Kalama Intermediate PTA
** Leinaala Teruya Drummond, Councilmember
** Vivien, Arnold, A.K. Herrick
** L. J. McDonnell, Charles Levy, Helen Kahn, Dana Gibson
** C. Nakaganeku
** William F. Ogle, Lawyer
** David Rezents
** Mary Ann Ruiz
** Glenn L. Shepherd
** Jeffrey T. Weller, Upland Estates Coordinator



DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
BUILDING 230
FT. SHAFTER, HAWAII 96858-5440

REPLY TO
ATTENTION OF:
Planning Division

June 7, 1991

JUL 10 10 05 AM '91
Div. of Public Works
3405



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 111, HONOLULU, HAWAII 96819

RUSSEL S. NAGATA
COMPTROLLER
OFFICE OF THE COMPTROLLER
OF PUBLIC ACCOUNTS
LETTER NO. (P)1803.1

Mr. Russel S. Nagata
State Comptroller
Department of Accounting and
General Services
State of Hawaii
P.O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Nagata:

Thank you for the opportunity to review and comment on the Site Selection Report and Draft Environmental Impact Statement for the Proposed Upcountry Maui High School. Our previous comment regarding the need for a Department of the Army permit (paragraph a of letter dated January 4, 1991) is modified by the following additional comment:

Discharge of fill material into any streams or wetlands would require a Department of the Army permit. For more information on permit requirements, please contact Operations Division at 438-9258 and refer to file number P091-142.

Sincerely,

Russel S. Nagata
Russel S. Nagata
Director of Engineering

DIVISION OF PUBLIC WORKS
INITIAL AND DATE

Shirley P. W. Eng	Approval	
P. W. Secy.	Sigs	
Staff Serv. Br.	Info	
Planning Br.	File	
Proj. Mgmt. Br.	Site Inv	
Engrg. Br.	Comments	
Asst. Br.	Invest	
Qual. Cont. Br.	Rep'd	
Living Serv. Br.		

JUL 29 1991

Mr. Kisuk Cheung
Director of Engineering
Department of the Army
U. S. Army Engineer District, Honolulu
Fort Shafter, Building 230
Honolulu, Hawaii 96858-5440

Dear Mr. Cheung:

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)

Thank you for your June 7, 1991 comments concerning the subject DEIS. We do not anticipate the discharge of fill material into any streams or wetlands during construction of the subject school.

We appreciate your input for this project.

Very truly yours,

Teavane Tomimaga
Teavane Tomimaga
State Public Works Engineer

SH:jk



DEPARTMENT OF THE NAVY
 COMMANDER
 NAVAL BASE PEARL HARBOR
 BOX 110
 PEARL HARBOR, HAWAII 96822

11010
 Ser 00FZ/1343
 20 MAY 1991

Department of Accounting and General Services
 State of Hawaii
 1151 Punchbowl Street
 P. O. Box 119
 Honolulu, Hawaii 96810

Gentlemen:

UPCOUNTRY MAUI HIGH SCHOOL EIS PUBLIC REVIEW PHASE

The Draft Environmental Impact Statement (DIES) and Site Selection Report for Upcountry Maui High School is being returned as we have no comments to offer at this time.

Thank you for the opportunity to review the draft.

Sincerely,

W. K. LIU
 Assistant Depe Civil Engineer
 By direction of
 the Commander

RECEIVED
 MAY 23 2 12 PM '91
 DIV. OF PUBLIC WORKS
 DSGS

Encl:
 (1) Site Selection Report and DEIS

RECEIVED
 MAY 23 1991
 COMPTROLLER'S OFFICE
 STATE DEPARTMENT

DIVISION OF PUBLIC WORKS
 ALL EMPLOYEES
 State P.W. Engr. Approval
 P.W. Sect. Sign
 Staff Sect. Br. Min.
 Planning Br. I.A. Plan
 Proj. Mgmt. Br. Site use
 Design Br. Comments
 Insp. Br. Invest. &
 Qual. Cont. Engr. Rept
 Leasing Sect. Br.

UNITED STATES
DEPARTMENT OF
AGRICULTURE

SOIL
CONSERVATION SERVICE
P. O. BOX 50004
HONOLULU, HAWAII
96850

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DI. OF PUBLIC WORKS
DAYS

May 24, 1991

Mr. Russel S. Nagata
State Comptroller
Department of Accounting and
General Services
P.O. Box 119
Honolulu, Hawaii 96810



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

JOHN WILSON
DIRECTOR

RUSSEL S. NAGATA
COMPTROLLER
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 119, HONOLULU, HAWAII 96810

LETTER NO. P11855.1

AUG 14 1991

Dear Mr. Nagata:

Subject: Draft Environmental Impact Statement (DEIS) -
Upcountry Maui High School, Upcountry, Maui, Hawaii

We have reviewed the Site Selection Report and the DEIS for the Upcountry Maui High School Project and would like to offer the following comments:

- 1) As indicated in the DEIS, this project currently would result in the loss of up to 35 acres of prime agricultural land. We believe that the State of Hawaii should avoid any loss of prime agricultural land.
- 2) We would hope to see more attention placed on the off-site storm water runoff impacts of this project. The DEIS needs to explore in greater detail:
 - a) The increase in storm runoff caused by the change from cropland to urban land uses; and
 - b) the potential down stream impacts of the increased storm runoff and the measures planned to mitigate these impacts.

Field observations indicate that the cropland in the downstream areas of these proposed sites have reported increasing storm runoff damage proportionate to the increasing urbanization of the upstream areas.

Thank you for allowing us to comment on this document and we would appreciate an opportunity to review the final EIS. DIVISION OF PUBLIC WORKS

Sincerely,

Warren M. Lee
WARREN M. LEE
State Conservationist

State P.W. Eng.	Approved	_____
P.W. Sec'y	Sept.	_____
Soil Serv. Br.	Info.	_____
Planning Br.	File	_____
Proj. Mgmt. Br.	Stamp	_____
Engrg. Br.	Comments	_____
Inspr. Br.	Initials	_____
Qual. Cont. Eng.	Rec'd	_____
Training Serv. Br.		_____

Mr. Warren M. Lee
State Conservationist
U. S. Department of Agriculture
Soil Conservation Service
P. O. Box 50004
Honolulu, Hawaii 96850

Dear Mr. Lee:

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)

In response to your May 24, 1991 comments on the subject project we provide the following:

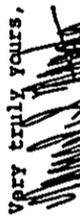
1. A minimum criteria for a site selection study is locating a new school in the Department of Education's proposed service area which includes large tracts of agriculture lands. To minimize the distance students must commute to school, the sites considered were limited to areas where a majority of the student population reside. Unfortunately, these areas are all agriculture lands owned and under cultivation by Maui Land and Pineapple Company.
2. The Maui County Department of Public Works has a policy that new construction cannot increase runoff downstream or, if unavoidable, must be appropriately mitigated. To ensure that runoff is contained on the new school site, a Grading and Grubbing Permit Application will be submitted for review to the Maui County Department of Public Works prior to construction. The permit application will include, at a minimum, a description of soils at the site, details and locations of proposed land drainage patterns, drainage structures, drainage pipes, retaining walls, and an erosion control plan.

Mr. Warren M. Lee
Page 2

Ltr. No. (P)1855.1

Your agency is on the EIS distribution list and a copy of the final EIS will be transmitted for your review. We appreciate your input for this project.

Very truly yours,


RUSSEL S. MAGAÑA
State Comptroller

JOHN WAIHEE
GOVERNOR



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 So. King Street
Honolulu, Hawaii 96814-2312

YUKIO KITAGAWA
CHAIRPERSON, BOARD OF AGRICULTURE
DEPUTY TO THE CHAIRPERSON
2101A A. PIHANALA
Honolulu, Hawaii 96823-2159

June 21 3 FAX: 948-6100
017-57 P.M. Mailing Address:
P.O. Box 22159
Honolulu, Hawaii 96823-2159

JUN 20 1991
COMMUNICATIONS SECTION

June 18, 1991

To: Russel S. Nagata, State Comptroller
Department of Accounting
and General Services

From: Yukio Kitagawa, Chairperson
Board of Agriculture

Subject: Upcountry Maui High School
Site Selection Report and
Draft Environmental Impact Statement (DEIS)
Pukalani-Makawao, Maui, Hawaii

TRK: 2-3-09: por. of 7
2-3-07: por. of 1
2-3-07: por. of 8
2-3-09: por. of 13
2-4-01: por. of 3

The Department of Agriculture has reviewed the subject document and has the following comments.

The Department of Accounting and General Services proposes to construct a new high school in the Pukalani/Makawao area to relieve projected overcrowding at Baldwin High School and Maui High School in Central Maui. Five sites have been selected as alternate locations for the 35-acre facility.

References to the Land Study Bureau's Detailed Land Classification system are correct with the exception of Site 2 at the junction of Kula and Haleakala Highways. If Site 2 is correctly depicted in Figure 8 (pg. V-12), a portion falls within a "B" productivity rating area. According to the Agricultural Lands of Importance to the State of Hawaii (ALISH) maps of the area, and the USDA Soil Conservation Service Soil Survey for the Island of Hawaii, each site varies considerably.

Site	ALISH Value	Approx. Area	USDA-SCS Survey*
1	Prime Other Important	60 40	HhB, HhC



Mr. Russel S. Nagata
June 18, 1991
Page 2

Site	ALISH Value	Approx. Area	USDA-SCS Survey*
2	Other Important	100	HgC, PXD
3	Prime Other Important	65 35	HgB, HgC
4	Prime Other Important	55 45	HgB, HgC
5	Prime Other Important	65 35	HhB, HhC

* USDA Soil Conservation Service designations for soils within the various sites are represented by:

- A. Halimaile Silty Clay Loam - (HGB) 3 to 7 percent slopes, Capability Subclass Iie. These soils have moderate erosion hazard when cultivated and not protected.
- B. Halimaile Silty Clay Loam - (HGC) 7 to 15 percent slopes, Capability Subclass IIIe. These soils have severe erosion hazard when cultivated and not protected.
- C. Halimaile Silty Clay - (HhB) 3 to 7 percent slopes, Capability Subclass Iie. These soils have moderate erosion hazard when cultivated and not protected.
- D. Halimaile Silty Clay - (HhC) 7 to 15 percent slopes, Capability Subclass IIIe. These soils have severe erosion hazard when cultivated and not protected.
- E. Pane Silt Loam - (PXD) 7-25 percent slopes, Capability Subclass IVe. These soils have severe erosion when cultivated and not protected.

General Comments:

- 1. Page V-II - Candidate site 2 is described as providing a "500 foot noise buffer from Kula Highway." What is its current use? Pineapple? Fallow?
- 2. Page VII-7 - Are 35 acres planned for construction of the facility at each site? Please clarify.

Mr. Russel S. Nagata
June 18, 1991
Page 3

We recommend site 4 be chosen as it represents the smallest portion of Prime agricultural lands to be lost to development. It is also adjacent to the State Urban District. Conversely, we would prefer that the other sites, especially site 2, which contains a portion of lands with the Land Study Bureau's "B" soil classification, not be utilized.

We look forward to receiving a copy of the Final EIS for our review. Thank you for the opportunity to comment.

c: OEQC

JOHN MAUIE
SECRETARY



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

P. O. BOX 111, HONOLULU, HAWAII 96819

RUSSEL S. NAGATA
CHAIRPERSON
COMMITTEE ON
AGRICULTURE
AND RURAL DEVELOPMENT

LETTER NO. (P)1992-1

SEP 18 1991

Honorable Yukio Kitagawa
Chairperson
Department of Agriculture
State of Hawaii
Honolulu, Hawaii

Dear Mr. Kitagawa

Subject: Upcountry Maui High School
EIS, Public Review Phase

Thank you for your June 18, 1991 comments on the subject EIS. Our response to your comments are as follows:

1. The EIS will be revised to indicate that a portion of Site 2 falls within a "B" productivity rating area. We appreciate the additional information regarding ALISH values and soil types, which will be incorporated into the EIS.
2. Page V-II - The EIS will be revised to indicate that Site 2 is located approximately 500 feet away from Kula Highway for the purpose of providing a buffer from highway-generated noise. The section along Kula Highway is part of Maui Land and Pineapple's agricultural operations which is currently under cultivation for pineapple.
3. Page VII-7 - The new school will encompass approximately 35 acres of land, no matter which of the five candidate sites is selected.
Item 7 Agriculture will be revised to read, "All five candidate sites are on land owned by Maui Land and Pineapple Company, Inc. Accordingly, acquisition of any one of the candidate sites will result in the loss to Maui Land and Pineapple Company, Inc. of approximately 35 acres of agricultural land."
4. Your preference for Site 4 for the reasons given is noted and will be considered during selection of a final site.



6M
551



JOHN WILSON
Commissioner

Itr. No. (P) 1993.1

Honorable Yukio Kitagawa
Page 2

STATE OF HAWAII
DEPARTMENT OF BUDGET AND FINANCE
HOUSING FINANCE AND DEVELOPMENT CORPORATION
1675 WATERFRONT PLAZA, SUITE 200
HONOLULU, HAWAII 96813
FAX (808) 533-3441

IN REPLY REFER TO:
91:PLMG/2807jt

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JUN 19 1991

June 17, 1991

WILSON OKAMOTO & ASSOCIATES

5. Your objections to the selection of the other sites, especially Site 2, is noted and will be considered during selection of a final site.

We appreciate your input on this project. If there are any further questions regarding the EIS, please have your staff contact Mr. Charles Inatsuka of the Public Works Division at 548-5703.

Very truly yours,

RUSSEL S. NAGATA
State Comptroller

TO: The Honorable Russel S. Nagata
Department of Accounting and General Services

FROM:
Joseph K. Conant
Executive Director

SUBJECT: Upcountry Maui High School EIS Public Review Phase

Thank you for the opportunity to review the Site Selection Report and draft EIS for the proposed Upcountry Maui High School. We have no comments to offer.

JKC/JT:eks

c: Charles Inatsuka, Public Works Division
Wilson Okamoto & Associates, Inc.



STATE OF HAWAII
 DEPARTMENT OF DEFENSE
 OFFICE OF THE ADJUTANT GENERAL
 344 DIAMOND ROAD, HONOLULU, HAWAII 96813-4000
 May 16, 1991

JOHN WAINEE
 Captain

EDWARD V. ENCLANDSON
 Major General
 ADJUTANT GENERAL
 ILES M. MAOULU
 ADJUTANT GENERAL

RECEIVED
 MAY 21 4 14 PM '91
 DIV. OF PUBLIC WORKS
 DAGS

Engineering Office

Honorable Russel S. Nagata
 State Comptroller
 Department of Accounting and
 General Services
 1151 Punchbowl Street
 P.O. Box 119
 Honolulu, Hawaii 96810

Dear Mr. Nagata:

Upcountry Maui High School
 EIS Public Review

Thank you for providing us the opportunity to review the above subject project.

We have no comments to offer at this time regarding this project.

Sincerely,

Jerry M. Matsuda

Jerry M. Matsuda
 Lieutenant Colonel
 Hawaii Air National Guard
 Contracting & Engineering Officer

DIVISION OF PUBLIC WORKS
 MAY 21 1991
 [Handwritten initials and marks over routing slip]

NATIONAL GUARD
 American Air Mail Box

JOHN WAINES
Assistant

RECEIVED
MAY 21 9 11 AM '91
OFFICE OF THE SUPERINTENDENT



STATE OF HAWAII
DEPARTMENT OF EDUCATION

P. O. BOX 2200
HONOLULU, HAWAII 96810

CHARLES T. TOGUCHI
Superintendent

May 15, 1991

MEMO TO: Honorable Russel S. Nagata, State Comptroller
Department of Accounting and General Services
F R O M: *Russel S. Nagata*
Charles T. Toguchi, State Superintendent
Department of Education

SUBJECT: Draft Environmental Impact Statement
Upcountry Maui High School
Upcountry, Maui, Hawaii

We have reviewed the subject document and have no additional comments to offer to our letter dated December 17, 1990, which is exhibited in the draft.

We wish to again affirm our recommendation of Site 4 -- Makawao Avenue/Apana Road -- and request your expeditious completion of the final environmental impact statement. Our concerns are predicated on the target school opening date of September, 1994.

Should you have any questions, please call the Facilities Branch at 737-4743.

CTT:jl

cc: T. Nakai
L. Lindsey

IC	Division of Public Works	Initial for Tour
State P.W. Eng. Br.	Approved	
P.W. Secy.	Sign	
State Secy. Br.	Info	
Planning Br.	File	
Prog. Mgmt. Br.	See me	
Design Br.	Comments	
Insp. Br.	Invent #	
Qual. Cont. Eng.	Rep	
Utility Secy. Br.		

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER



STATE OF HAWAII
OFFICE OF DISTRICT SUPERINTENDENT
DEPARTMENT OF EDUCATION
14 HIGH STREET, 4TH FLOOR
HAULUNUI, MAUI, HAWAII 96714

July 29, 1991

Memo to: Mr. Thomas Nakai
Acting Assistant Superintendent
Office of Business Services
From: Lokelani Lindsey *Lokelani Lindsey*
District Superintendent
Subject: UPCOUNTRY HIGH SCHOOL SITE

After reviewing the Environmental Impact Statement (EIS) and meeting with various publics on Maui, I am recommending Site #2 for the upcountry high school.

The change from my initial recommendation is due to the fact that Maui Land and Pine donated a site for the water storage tank and granted the Department of Education access to the tank site as per the attached letter. (Note: I just received word that replacing the 12" pipe with the 16" pipe is not possible since they already installed the 12" pipe.)

Please expedite the planning, design and construction of the upcountry high school so that it will open as scheduled in September, 1994.

If you have any questions, please call me.

LL:aaa
Attachment

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER

JOHN WAINES
DIRECTOR OF HEALTH



RECEIVED

STATE OF HAWAII
DEPARTMENT OF HEALTH
1001 KALANOAU AVENUE
HONOLULU, HAWAII 96813

AUG - 7

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

The Honorable Russel S. Nagata
July 26, 1991
Page 2

All wastewater plans must conform to applicable provisions of Department of Health Administrative Rules, Chapter 11-62, "Wastewater Systems." We do reserve the right to review detailed wastewater plans for conformance to applicable rules at the time of actual construction.

91-2-161X/epo

SEARCHED _____
SERIALIZED _____
INDEXED _____
FILED _____
AUG 1 1991
HONOLULU, HAWAII

TO: The Honorable Russel S. Nagata
Director, Department of Accounting
& General Services

FROM: John C. Levin, M.D.
Director of Health

SUBJECT: Upcountry Maui High School
EIS Public Review Phase

We have reviewed the material on the subject project submitted by your office. We have the following comments to offer:

Noise and Radiation

The facility should be designed to minimize potential noise impacts on adjacent residences from stationary equipment such as air conditioning units and exhaust fans. Noise from public address systems may have a negative impact on nearby residences. Traffic noise from vehicles entering and leaving the premises may also adversely affect adjacent residences.

Please note that under section V-A-1, "Construction Noise," provisions of Department of Health Administrative Rules, Chapter 11-42 and 11-43 apply only to the island of Oahu. However, mitigative measures toward minimizing noise disturbances on Maui from construction activities should be implemented.

Wastewater

In compliance with Department of Health Administrative Rules, Chapter 11-62, "Wastewater Systems," all public facilities are required to hook up to an available County sewer service system. As County sewers are not available, a wastewater treatment works or non-cesspool individual wastewater system (IWS) are acceptable alternatives. In the past, large septic tanks with soil absorptions system have been utilized for school facilities.

Our Maui District Health Office has expressed concerns over wastewater disposal in the general area. Existing IWS's have a history of failure in many of the upcountry areas. Therefore, caution is advised in the sizing and location of any soil absorption system utilized for wastewater disposal.



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 118, HONOLULU, HAWAII 96810

RUSSEL S. NAKATA
COMPTROLLER
ROBERT S. TAYLOR
DEPUTY COMPTROLLER

LETTER NO. (P)1931.1

SEP -5 1991

Honorable John C. Lewin, M.D. Ltr. No. (P)1931.1
Page 2

We appreciate your input for this project. If there are any further questions regarding the EIS, please have your staff contact Mr. Charles Inatsuka of the Public Works Division at 548-5703.

Very truly yours,

RUSSEL S. NAKATA
State Comptroller

CI:bk

Honorable John C. Lewin, M.D.
Director
Department of Health
State of Hawaii
Honolulu, Hawaii

Dear Mr. Lewin:

Subject: Upcountry Maui High School
EIS, Public Review Phase

Thank you for your July 26, 1991 comments on the subject project. Our responses to your comments are as follows:

1. Noise and Radiation

The EIS will be revised to include an assessment of impacts on adjacent residences due to noise-generating sources on site such as air conditioning units, exhaust fans, public address systems and traffic. To minimize such impacts, we will address the concerns during planning and design of the facility.

We understand that the provisions of the Department of Health Administrative Rules, Chapters 11-42 and 11-43 apply only to the island of Oahu. However, a clause in our standard contract documents for the construction of facilities, statewide, requires compliance with the provisions. Accordingly, section VII.A.1 will be revised to clarify our position on this matter.

2. Wastewater

An individual wastewater system (IWS) is proposed to service the facility. Accordingly, design plans for the system will conform to applicable provisions of the Department of Health Administrative Rules, Chapter 11-62, "Wastewater Systems" and will be submitted to your office for review.

3/20/91

JOHN WAHNE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF HUMAN SERVICES
P. O. Box 339
Honolulu, Hawaii 96809

RECEIVED
MAY 20 7 55 AM '91
DIV. OF PERSONNEL
WINONA E. RUBIN
DIRECTOR
LYNN H. FALLIN
DEPUTY DIRECTOR
HELE S. MATSUBARA
DEPUTY DIRECTOR

May 13, 1991

MEMORANDUM

TO: The Honorable Russel S. Nagata, Comptroller
Department of Accounting and General Services

FROM: Winona E. Rubin, Director

SUBJECT: SITE SELECTION REPORT AND ENVIRONMENTAL IMPACT STATEMENT FOR THE
UPCOUNTRY MAUI HIGH SCHOOL

We thank you for the opportunity to review the Environmental Impact Statement for the Upcountry Maui High School.

The Department of Human Services has no comments to offer at this time following our review process of this document.

Winona E. Rubin
Director

DEPARTMENT OF HUMAN SERVICES
MAY 13 1991

State P. M. Secy.	Approved
P. M. Secy.	Signed
State Serv. Br.	Info.
Planning Br.	File
Prog. Mgmt. Br.	See me
Design Br.	Comments
Info. Br.	Invest. &
Qual. Cont. Engr.	Rep.
Leasing Serv. Br.	

EDWARD Y. HIRATA
DIRECTOR
DEPUTY DIRECTORS
AL PANG
JOYCE T. OAHNE
JANNE K. SCHULTZ
CALVIN H. TSUDA
IN REPLY REFER TO



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
88 PUNAHONUA STREET
HONOLULU, HAWAII 96813-5087
May 24, 1991

RECEIVED
MAY 28 2 18 PM '91
DIV. OF PUBLIC WORKS
DAGS

JOHN WAIKANE
COMMISSIONER

RUSSEL S. NAGATA
COMPTROLLER
ROBERT P. TAYLOR
SECRETARY



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 115, HONOLULU, HAWAII 96810
AUG 29 1991

LETTER NO. P11923.1

Honorable William Paty
Chairperson
Department of Land and
Natural Resources
State of Hawaii
Honolulu, Hawaii

Dear Mr. Paty:

Subject: Upcountry Maui High School
Environmental Impact Statement (EIS)
Public Review Phase

Thank you for your June 20, 1991 comments regarding the
subject EIS. Our responses to your comments are as follows:

1. Page III-5, Item 13
Your confirmation of our adequate description of
known historic sites in the vicinity of the five
candidate school sites is noted and appreciated.
2. Page V-2, Item 9
This section will be revised in the EIS by replacing
Bishop Museum's name with the State Historic
Preservation Division.
3. Page VII-6, Item 9
Your confirmation of the adequacy of the archaeo-
logical survey results and your concurrence with
both findings and proposed mitigation measures are
noted and appreciated.

We appreciate your input for this project.

Very truly yours,
[Signature]
RUSSEL S. NAGATA
State Comptroller

MEMORANDUM

TO: Russel S. Nagata, Comptroller
Department of Accounting and General Services

FROM: Edward Y. Hirata, Director
Department of Transportation *[Signature]*

SUBJECT: UPCOUNTRY MAUI HIGH SCHOOL
EIS PUBLIC REVIEW PHASE

Thank you for your letter of May 7, 1991, requesting our review
of the subject draft EIS.
We have no further comment to add at this time until the final
selection of the site for the proposed Highway School is made.

DIVISION OF PUBLIC WORKS
MAY 28 1991

State P.W. Eng.	_____
P.W. Sect.	_____
Staff Serv. Br.	_____
Planning Br.	_____
Proj. Mgmt. Br.	_____
Design Br.	_____
Inst. Br.	_____
Qual. Cont. Eng.	_____
Leasing Serv. Br.	_____



STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

228 SOUTH KING STREET
FOURTH FLOOR
HONOLULU, HAWAII 96813

June 10, 1991

Mr. Charles Inatsuka
State of Hawaii
Department of Accounting and General Services
1151 Punchbowl Street
Honolulu, Hawaii 96813

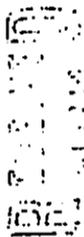
Dear Mr. Inatsuka:

This is written in reference to the Site Selection Report and Draft Environmental Impact Statement (DEIS) for the Proposed Upcountry Maui High School. Our office has reviewed the DEIS for administrative completeness (under Section 11-200-17 of the Hawaii Administrative Rules (HAR), Department of Health), and respectfully offer the following seven comments for your earnest consideration:

1. HAR §11-200-17(b): Please include in Section I, a concise and brief discussion of: proposed mitigation measures; unresolved issues; compatibility with land use plans and policies; and, a listing of permits or approvals.
2. HAR §11-200-17(b): In addition to the description of permits/approvals and issuing authorities in Section XI, please provide a description of the *current status* of each permit/approval (i.e., submitted and pending, etc.) for each candidate site. Also, Section VII makes mention of certain approvals (such as sewer treatment facility and underground injection wells; approval by the Maui Board of Water Supply of a proposal for supplying drinking water at a new school). To facilitate public review of the DEIS, we would like to suggest that you coordinate approval/permit listings from all sections of the DEIS (such as Sections VII and XI) and list these approvals/permits by site. We would like to suggest that this take the form of a table or matrix for each site which lists each permit/approval, the corresponding issuing authority, and the *current status* of each permit/approval.
3. HAR §11-200-17(i): In Section IX, please include a discussion on the extent to which the proposed action forecloses future options, narrows the range of beneficial uses of the environment, or poses long term risks to health and safety.

EM

BRIAN J. J. CHOY
Director



WILSON OKAMOTO & ASSOCIATES

Mr. Charles Inatsuka
Department of Accounting & General Services
June 10, 1991
Page 2 of 2

4. HAR §11-200-17(k): Section X should also consider the possibility of environmental accidents resulting from any phase of the action. Any discussion of resources in Section X must also include consideration of natural and cultural resources committed to loss or destruction by the action.
5. HAR §11-200-17(i): Please provide a section entitled **PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED** which includes: a brief summary of any adverse effects (such as water or air pollution, urban congestion, threats to public health or other consequences adverse to environmental goals and guidelines established by HRS 343 and *State Environmental Policy* in HRS 344); a discussion of the rationale for proceeding with a proposed action, notwithstanding unavoidable effect; and an indication of the extent to which stated countervailing benefits could be realized by following reasonable alternatives to the proposed action that would avoid some or all of the adverse environmental effects.
6. HAR §11-200-17(o): Please provide a section entitled: **SUMMARY OF UNRESOLVED ISSUES** which describes unresolved issues and discusses how such unresolved issues will be resolved prior to commencement of the action (or discusses overriding reasons for proceeding without resolving the problems).
7. Page VII-9 of the DEIS states that "[t]he design of the school buildings will be coordinated with the character of the surrounding community" The action under consideration appears to focus on site selection with no consideration given to design or construction. We would like to respectfully suggest that a clarifying statement be included in the DEIS describing whether design and construction of the new school at the chosen site will be handled as a separate action for the purposes of environmental impact statement law in HRS 343.

Thank you for the opportunity to comment. If you have any questions, please contact Mr. Leslie Segundo, Environmental Health Specialist at 548-6915.

Very truly yours,

Brian J. J. Choy
for
BRIAN J. J. CHOY
Director

cc: Mr. Earl Matsukawa
Wilson Okamoto & Associates, Inc.



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS

P. O. BOX 114, HONOLULU, HAWAII 96810
SEP -5 1991

RUSSEL S. INATSUMA
COMPTROLLER
ROBERT P. FALCON
DIRECTOR
DEPT. OF PUBLIC WORKS

LETTER NO. (P)1942.1

Mr. Brian J. J. Choy
Page 2
Ltr. No. (P)1942.1

Mr. Brian J. J. Choy
Director
Office of Environmental Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawaii

Dear Mr. Choy:

Subject: Upcountry Maui High School
EIS Public Review Phase

Thank you for your June 10, 1991 comments on the subject project. Our responses to your comments are as follows:

1. Section I will be revised to include a summary of mitigation measures, unresolved issues, and a reference to the table of permits and approvals that will be included in Section XI List of Necessary Approvals.
- 2a. Upon selection of a final site, we will coordinate the acquisition of permits and approvals with the appropriate agencies. Accordingly, the current status for all required permits/approvals is that no action has been taken.
- 2b. The approvals mentioned in Section VII will be included in the new table to be incorporated in Section XI.
- 2c. Section XI will be revised to include a table listing necessary permits/approvals for each site and the corresponding issuing authority.
3. Section IX will be revised and expanded to include a discussion on the extent to which the proposed action forecloses future options, narrows the range of beneficial uses of the environment, or poses long-term risk to health and safety.
4. Section X will be revised to discuss the irrevocable commitment of natural and cultural resources such as labor, materials, agricultural

land and open space. Since the discussion of environmental accidents with regard to the construction, operation, and maintenance of a school may be academic, we will discuss this with your office for a better understanding.

5. The EIS will be revised to include a new section which examines the probable adverse environmental effects which cannot be avoided. The rationale for proceeding with the proposed action, notwithstanding unavoidable effects, will be included in the discussion. This will show that reasonable alternatives to the proposed action could avoid some or all of the adverse environmental effects but would also create their own adverse effects.
6. The EIS will be revised to include a new section summarizing unresolved issues.
7. The design and construction of the school are not considered separate actions with respect to fulfilling the requirements of Chapter 343, HRS. We will clarify this in the Preface.

Although the action under consideration seems to focus on site selection, the methodology and criteria include parameters that affect and influence design and construction. For example, the consideration of a site that is at least 500 feet away from a busy highway is based on the desire to provide an environment free from distracting noises without constructing soundproof structures which are expensive. Similarly, the minimum criteria precludes the selection of sites that may create adverse problems in design and construction.

We appreciate your input for the project. If there are any questions on this matter, please have your staff call Mr. Charles Inatsuka of the Public Works Division at 548-5703.

Very truly yours,

TEUANE TOMINAGA
State Public Works Engineer

CI:jnt



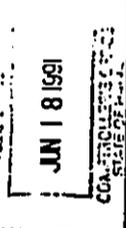
OFFICE OF STATE PLANNING

Office of the Governor
STATE CAPITOL, HONOLULU, HAWAII 96813
TELEPHONE 808-548-1440

RECEIVED
JUN 19 8 10 AM '91

JUN 18 1991

June 14, 1991



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 111, HONOLULU, HAWAII 96810

MICHAEL S. NAGATA
DIRECTOR
STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

LETTER NO. (P)1991-1

MEMORANDUM

TO: The Honorable Russel S. Nagata, State Comptroller
Department of Accounting and General Services

SUBJECT: Draft Environmental Impact Statement (DEIS) and
Site Selection Report for the Upcountry High School
Upcountry, Maui, Hawaii

It is our understanding that the State of Hawaii Department of Education is proposing to build a new Upcountry Maui High School on approximately 35 acres of land to alleviate the classroom shortage and current need to bus students to the already crowded Maui and Baldwin High Schools.

The proposed high school will consist of 43 general classrooms and 28 specialized classrooms for Art, Music, Science Education, Special Education and other functions. Athletic, dining room, administrative, and library facilities are also included in the plans. The DEIS and Site Selection Report named five possible sites for the school. All five sites were within the Upcountry service area.

After reviewing the subject document, we have some concerns that should be thoroughly discussed in the final Environmental Impact Statement. First, because water service is currently unavailable at all five sites and the Upcountry Maui Water Service is currently at capacity, a workable proposal from the County of Maui Department of Water Supply and the State Department of Land and Natural Resources should be solicited.

Second, because an independent wastewater treatment plant and leaching field will be necessary, the facility should be sited to minimize degradation of underground water resources.

Finally, the State Department of Transportation cautions that the sites under consideration have poor to fair pedestrian access and safety. Improvements such as pedestrian overpasses and pedestrian/traffic activated signals should be considered.

Thank you for the opportunity to comment. Should you have any questions, please feel free to call me or the Land Use Division at 548-2066.

Sub P.W. Eng. A Approved
P.W. Secy. _____
Staff Serv. Br. _____
Planning Br. _____
Proj. Mgmt. Br. _____
Environ. Br. _____
Insp. Br. _____
Qual. Cont. Eng. _____
Leasing Serv. Br. _____

Harold S. Masumoto
Harold S. Masumoto
Director

SEP 18 1991

Mr. Harold S. Masumoto
Director
Office of State Planning
State Capitol
Honolulu, Hawaii

Dear Mr. Masumoto:

Subject: Upcountry Maui High School
EIS, Public Review Phase

Thank you for your June 14, 1991 comments on the subject EIS. Our responses to your comments are as follows:

1. The Upcountry water system has available water supply to service the new school. However, the existing water system infrastructure is limited by small line sizes and an inadequate number of storage facilities. We will clarify this in the final EIS. Upon selection of a school site, we will coordinate the design of the water service to the new school with the County of Maui Department of Water Supply.
2. Since the design of the wastewater treatment plant and leaching field will be closely coordinated with the Department of Health and the County of Maui, the degradation of underground water resources will be minimized. Accordingly, this consideration should not be site specific.
3. The criteria for pedestrian access and safety highlights features that the DOE should consider during selection of a site. However, they should not be required to correct such deficiencies if the improvements are beyond their jurisdiction. Accordingly, upon selection of a final site, we will consider improvements for pedestrian access and safety during the design phase of the project. However, the implementation of such alternative measures should be dependent upon the determination of responsibility for such actions.

Mr. Harold S. Hasumoto
Page 2

Ltr. No. (P)1994.1

We appreciate your input for this project. If there are any further questions regarding the EIS, please have your staff contact Mr. Charles Inatsuka of the Public Works Division at 548-5703.

Very truly yours,


RUSSEL S. NAGATA
State Comptroller



DEPARTMENT OF
PARKS AND RECREATION
COUNTY OF MAUI

1580 KAAHUMANU AVENUE, WAILUKU, HAWAII 96793

May 31, 1991

LINDA CROCKETT LINGLE
Mayor
CHARMAINE TAVARES
Director
ARMAND RADUA
Deputy Director

JUN 5 10 10 AM '91

DIVISION OF PUBLIC WORKS
1405

(808) 243-1230



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS

P. O. BOX 111, HONOLULU, HAWAII 96810

LETTER NO. (P)1878.1

AUG 22 1991

Ms. Charmaine Tavares
Director
Department of Parks and Recreation
County of Maui
1580 Kaahumanu Avenue
Wailuku, Hawaii 96793

Dear Ms. Tavares:

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)
Thank you for your May 31, 1991 comments concerning the subject project. Our responses to your comments are as follows:

1. Page II-8
The proposed high school site will be large enough to accommodate all listed facilities.
2. Page III-7
The section on Recreation will be amended and expanded in accordance with the information provided.

We appreciate your input for this project.

Very truly yours,

Teuane Tominaga
TEUANE TOMINAGA
State Public Works Engineer

CI:bk

Mr. Russel S. Nagata
State Comptroller
Department of Accounting
and General Services
P. O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Nagata

SUBJECT: UPCOUNTRY MAUI HIGH SCHOOL EIS

The Department of Parks and Recreation, County of Maui, has no comment regarding the alternative sites for the Upcountry High School.

On Page II-8, the estimated costs include physical education and athletic department facility needs. I recommend that the site be large enough to accommodate these facilities as park space in the Upcountry area is limited and already very heavily utilized.

On Page III-7, 3. Public Services as Recreation

- Keakua Ball Park should be Keokea Park.
- The Upcountry Youth Center has been established and is operating on the Eddie Tam Center grounds.
- The "county-funded public swimming pool" is proposed; however, the County intends to seek funding support from the State of Hawaii.

I appreciate the opportunity to comment on this EIS.

Sincerely,

Charmaine Tavares
CHARMAINE TAVARES
Director of Parks & Recreation

DIVISION OF PUBLIC WORKS	
APPROVAL SIGNATURE	
1	State P.W. Eng. Approval
	P.W. Secy. Sign.
	Staff Serv. Br. InCh.
2	Planning Br. File
	Park Maint. Br. See
	Design Br. Comments
	Inst. Br. Initials
	Spec. Contr. Eng. Post

Park Maintenance Division
Recreation Division
Aquatic Division
Zoo & Botanical Gardens
Waiehu Golf Course

80854821291# 3

8082437870-

9-6-91 1:38PM

SEVT. BY: COUNTY OF MAUI

80854821291# 2
Land Use and Code Administration
EASING WALKER, P.E.
Wastewater Reclamation Division
RALPH M. NAGAMINE, P.E.
Engineering Division
ERIN HARRISON, P.E.
Solid Waste Division
HELVEN BIPOLLITO
Highways Division

8082437870-

9-6-91 1:37PM



RECEIVED

SEP -6 PM 1:33
COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

Office of the Mayor
George N. Kaya
Director

March 11, 1991

MEMO TO: CHARLES JENCKS, DEPUTY DIRECTOR OF PUBLIC WORKS
FROM: RALPH M. NAGAMINE, ENGINEERING DIVISION CHIEF
SUBJECT: UPCOUNTRY MAUI HIGH SCHOOL
EIS CONSULTANT PHASE

As discussed with you last Friday, these are my comments regarding the Site Selection Report and the Environmental Impact Statement Preparation Notice.

1. Page II-5 - Why are only 90% of the required classrooms permanent?
2. Page III-9 - The statement that "portions of Pukalani are served by County owned sewers." is inaccurate.
3. Page III-9 - A generalized assessment that "drainage infrastructure which normally would collect excessive amounts of water is not required." may not be true depending upon the school site selected.
4. Page V-2 - Why is 35 acres the preferred school lot size? The EIS should include a survey of existing high schools with good physical education facilities to provide a relative comparison for lot size.
5. Page V-9 - I do not totally agree with the statement that "it is also preferable that the site be located makai of the population centers so that commuting to and from school is accomplished in harmony with the majority of commuter traffic flow." Consideration should also be made to utilize unused lane capacity on the "other" side in opposite direction of the peak flow traffic.

Charles Jencks
March 11, 1991
Page 2

Secondly, Figure 7 shows Makavao Avenue and Baldwin Avenue as having a minimum tight-of-way of 50-feet. This representation is incorrect. The tight-of-way width in some sections of these roads maybe less than 40-feet wide.

6. Page V-12 - Figure 8 and all other map exhibits should include the alignment of the proposed Pukalani By-pass highway.

7. Page VI-7 - A site "which allows right hand access turns in harmony with the flow of peak morning traffic" does not necessarily make a site "good". With the completion of the Pukalani By-pass highway, existing traffic patterns within the Makavao-Pukalani area are expected to be altered. The site evaluations for Traffic Flow does not include discussions of those anticipated changes in traffic patterns.

9. Page VI-13 - The evaluation that "Roadways are adequate at all sites, except...the two sites on Makavao Avenue" is inaccurate and may mislead readers to think that no road improvements are necessary.

I concur that the Makavao Avenue/Apana Road site #1 is the most accessible because it provides the most access options.

9. Page A-22 - I strongly disagree with the statement that "None of the potential sites required off-site improvements." Since bussing is provided for students beyond a one mile walking radius of the school, I assume that students living within the one mile radius are expected to walk to school. If students are expected to walk to school, the DOE should provide road widening and a good sidewalk network within the one mile radius. All sites under consideration are deficient in shoulder improvements.

I am also transmitting the following review comments from the other divisions:

- Wastewater Reclamation - Comments dated January 29, 1991
- Solid Waste Division - Comments dated January 30, 1991
- LUCA - Comments dated February 4, 1991

If you have any questions regarding this matter, please call me at extension 7745.

Enclosures
RMN:cah(ED91-158)



STATE OF HAWAII
 DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
 DIVISION OF PUBLIC WORKS
 P. O. BOX 111, HONOLULU, HAWAII 96810

RUSSEL S. HAGATA
 COMPTROLLER
 ROBERT P. TARDIA
 DEPUTY COMPTROLLER

LETTER NO. (P)2273.1

NOV 22 1991

Mr. Ralph M. Nagamine
 Engineering Division Chief
 Department of Public Works
 County of Maui
 200 South High Street
 Wailuku, Maui, Hawaii 96793

Dear Mr. Nagamine:

Subject: Upcountry Maui High School
 EIS Public Review Phase

Thank you for your March 11, 1991 comments in regard to the subject project. Our responses to your comments are as follows:

1. The Department of Education (DOE) commonly plans the design of new schools so that at least 10 percent of the classrooms are temporary buildings. This helps to ensure that permanent classroom buildings are not left vacant when the service area ages and student enrollment declines.
2. The statement about portions of Pukalani being served by County-owned sewers was derived from the Final Environmental Impact Statement for the Kula Water System Improvements (August 1988). Based on your information, however, we will delete this statement from the final EIS.
3. Regarding drainage, we will amend the statement on Page III-9 to read, "Because of the well-drained nature of soils in the service area and the Makawao-Pukalani region's low to moderate rainfall, extensive drainage infrastructure to collect excess runoff has not been put in place in the Upcountry area."

Mr. Ralph M. Nagamine
 Page 2

Ltr. No. (P)2273.1

A preliminary assessment of the candidate school sites based on soil conditions seemed to indicate that storm runoff could be accommodated by on-site facilities. However, we are aware of the County policy that new construction cannot increase runoff downstream or, if unavoidable, must be appropriately mitigated. Therefore, following selection of a site, additional studies will be conducted and we shall pursue further discussion with your office on this matter. A Grading and Grubbing Permit Application will be submitted for review by your office during design of the school.

4. The DOE follows guidelines set by their Educational Specifications and Standards for Facilities (ESSF) which recommends 20 to 30 usable acres for a new high school. However, because the new high school in Upcountry Maui will require an independent wastewater treatment facility and leaching field, and because of County requirements for fire lanes to access school buildings, a nominal figure of 35 gross acres was earmarked for acquisition. The actual acreage acquired will depend upon the terrain of the site selected and accommodation of all facilities in accordance with government regulations and the ESSF.

5a. The preference criterion for locating the school downstream of population centers was intended as a general guide for identifying appropriate school locations. It considers potential interruptions of primary traffic flow lanes and ease of right hand turns for student drop-offs. We concur, however, that this rule may not be appropriate in all instances. Accordingly, we will evaluate the need for the statement in the EIS.

5b. The intent of the major roadway criterion was to identify sites served by primary commuter thoroughfares in the Makawao-Pukalani-Haliimaile area. The 50-foot right-of-way criterion was used to identify these roads. Although we were unaware that portions of these roads may fall short of this criterion, in general the criterion serves the purpose of identifying major roads. We will clarify this criterion in the final EIS to indicate that roads meeting the minimum right-of-way widths along significant portions will be regarded as major roads.

Mr. Ralph M. Nagamine
Page 3

Ltr. No. (P)2273.1

6. We shall revise all applicable figures to include the alignment of the Pukalani By-Pass Highway which is currently under construction.
7. The concept of right hand access turns in harmony with the flow of peak morning traffic was used as a general guide based on the fact that the major traffic congestion occurs on Haleakala Highway. We feel that with the completion of the Pukalani By-Pass, this general rule should still apply. Traffic impacts in the immediate vicinity of a selected school site will be studied in greater detail as a basis for designing vehicular and pedestrian access to the school.
8. The use of "adequate" was not meant to imply that no roadway improvements will be necessary, but that right-of-way widths were adequate to serve the site according to the accessibility criteria. Following selection of a school site, ingress and egress requirements will be examined to determine what roadway improvements are necessary.
9. We will amend the final EIS to say that off-site pedestrian related improvements will be necessary. Any improvements will be discussed with your agency once a school site has been selected and greater scrutiny can be applied to roads near the site. At this time, the DOE has not indicated a commitment to providing road widening and other pedestrian related improvements.

We appreciate your input for this project. If there are any further questions regarding the EIS, please have your staff contact Mr. Allen Yamanoha of the Public Works Division at 586-0483.

Very truly yours,


TEUANE TOMIHAGA
State Public Works Engineer

AY:jk

cc: Mayor Linda Crockett Lingle

SEP-15-91 THU 15:57 DMS PUBLIC WORKS
COUNTY OF MAUI
5-19-91 4:21PM 8082-37870-



GEORGE N. KAYA
Acting Director

905532128:8 2
ALAN HONOHONO, P.E.
Lead User and Chief Administrator
EASSIE MILLER, P.E.
Wastewater Reclamation Division
RALPH M. MAGMINE, P.E.
Engineering Director
SALVATORE HIFOLITO
Highway and Construction

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
300 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

January 29, 1991

MEMO TO: RALPH M. MAGMINE, ENGINEERING DIVISION CHIEF
FROM: EASSIE MILLER, WASTEWATER RECLAMATION DIVISION CHIEF
SUBJECT: UP-COUNTRY MAUI HIGH SCHOOL
EIS CONSULTATION PHASE

In general, the Wastewater Reclamation Division would recommend sites that are centrally located in the Hakawao/Pukalani area (sites 2, 3, & 4). In the future, a wastewater system is planned for the Hakawao/Pukalani area and a centrally located school would have a much lower capital cost in terms of converting from an on-site wastewater system to a municipal off-site system.

Site No. 1 has the potential of connecting to the Pukalani Terrace and Country Club Sewage Treatment Plant, although this treatment plant is privately owned.

Site No. 5, on Baldwin Avenue, would have a high capital cost if the decision were made to abandon the on-site system and connect to the County facilities. In all likelihood, wastewater would need to be pumped to a gravity connection point in Hakawao town, possibly involving a series of pump stations and force mains.

Should you have any questions, please feel free to call Dave Wisnar at extension 7417.

DW:ym(MH91211)



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 111, HONOLULU, HAWAII 96810

NOV 19 1991

Mr. Eassie Miller
Chief
Wastewater Reclamation Division
Department of Public Works
County of Maui
200 South High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Miller:

Subject: Upcountry Maui High School
EIS Public Review Phase

Thank you for your January 29, 1991 comments on the subject project. We appreciate the information regarding potential options and limitations for providing future sewer service for the proposed high school. Your recommendations for siting the school in a central location at Sites 2, 3, and 4 to facilitate future wastewater collection will be considered in selecting the final site.

We appreciate your input for this project. If there are any questions regarding the EIS, please have your staff contact Mr. Allen Yamanoha of the Planning Branch at 586-0483.

Very truly yours,

TEUAME TOHINAGA
State Public Works Engineer

AY:jk

MISEL S. HAGA
Downloaded
ROBERT P. TAYLOR
www.digitallibrary.com

LETTER NO. (P) 2251.1

SEP-19-91 THU 15:57 DMCS PUBLIC WORKS
BY: COUNTY OF MAUI
GEORGE N. KAYA
Acting Director



80954212913
LANON SHIMOTO, P.E.
WALTER MULLER, P.E.
RALPH N. MAGNINE
Engineering Division
BRIAN HASHIRO, P.E.
Solid Waste Division
MELVIN HIFOLLITO
Acting Highways Division

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96743
January 30, 1991

MEMO TO: RALPH N. MAGNINE, ENGINEERING DIVISION CHIEF
FROM: BRIAN HASHIRO, SOLID WASTE DIVISION CHIEF
SUBJECT: UPCOUNTRY MAUI HIGH SCHOOL
EIS CONSULTATION PHASE

Brian Hashiro

We have reviewed the subject request and offer the following comments for your consideration.

- ✓ The owners and their contractors shall implement solid waste reduction, re-use and recycling programs to reduce the amount of solid waste to be disposed of at the County landfills.
 - ✓ All yard debris shall be composted and re-used on their landscape plantings.
 - ✓ Alternative means of disposal of grubbed material and rock shall be utilized other than disposed of at the County landfills.
 - ✓ Refuse collection shall be by a private collector.
- Thank you for the opportunity to comment on this proposed development.

BH:jip



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 115, HONOLULU, HAWAII 96819

NOV 19 1991

Mr. Brian Hashiro
Chief
Solid Waste Division
Department of Public Works
County of Maui
200 South High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Hashiro:

Subject: Upcountry Maui High School
EIS Public Review Phase

Thank you for your January 30, 1991 comments on the subject project. We offer the following responses to your comments:

1. Your statements regarding solid waste reduction through re-use, recycling, and composting will be brought to the attention of the Department of Education.
2. The disposal of grubbed material and rock will be addressed through the submittal of a Grading and Grubbing Permit during the permit phase of the project.
3. We understand that refuse collection at the new school will need to be performed by a private collector.

We appreciate your input for this project. If there are any questions regarding the EIS, please have your staff contact Mr. Allan Yamanoha of the Planning Branch at 586-0483.

Very truly yours,

Teuave Tomihaga
TEUAVE TOMIHAGA
State Public Works Engineer

AY:jk

AUSIE S. MACATA
COMPTROLLER
ROBERT P. TRACY
DIRECTOR
LETTER NO. (P) 2250.1

SEP-19-91 THU 15:58 DMIS PUBLIC WORKS

STATE OF HAWAII
COUNTY OF MAUI
George N. Kaya
Acting Director

9-18-91 4:28PM

8082437870

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COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
230 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

February 4, 1991

RECEIVED

FEB 3 1991

ENGINEERING DIV.
DEPT. OF PUBLIC WORKS

MEMO TO: Mr. Ralph Nagamine, Engineering Division Chief
FROM: Mr. Aaron Shinmoto, Administrator
SUBJECT: UP-COUNTRY MAUI HIGH SCHOOL
EIS CONSULTATION PHASE

In reviewing the site selection and the EIS report, we offer the following comments:

1. The final school site may require a community plan amendment and zoning change.
2. Master plans and supporting documentation (i.e. drainage and soil erosion report, traffic studies, etc.) for drainage, sewer, and road improvements up to the Year 2010 should be required.

A more detailed review can then be made upon submittal of the above.



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 111, HONOLULU, HAWAII 96819

NOV 19 1991

Mr. Aaron Shinmoto
Administrator
Land Use and Codes Administration
Department of Public Works
County of Maui
200 South High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Shinmoto:

Subject: Upcountry Maui High School
EIS Public Review Phase

Thank you for your February 4, 1991 comments on the subject project. We offer the following responses to your comments:

1. The need for a community plan amendment and zone change to develop the school has been noted in Section XI of the final EIS.
2. After a site for the proposed school has been selected, various master plans and studies will be prepared or required in support of applications for the above land use approvals. Your office will be consulted in this regard.

We appreciate your input for this project. If there are any questions regarding the EIS, please have your staff contact Mr. Allen Yamanoha of the Planning Branch at 586-0483.

Very truly yours,

Teuane Tohinaga
TEUANE TOHINAGA
State Public Works Engineer

AY:jk

AUSSEL S. NGATA
COMPTROLLER
ROBERT P. TAGUDA
DEPUTY COMPTROLLER
(P) 2249.1

SEP-19-91 THU 12:58 PM DEPT. OF PUBLIC WORKS

DEPT. OF PUBLIC WORKS
COUNTY OF MAUI
GEORGE N. KAYA
Acting Director

80854821291# 4

8082437870-



DEPARTMENT OF PUBLIC WORKS
250 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

AARON SHINMOTO, P.E.
Land Use and Codes Administration
BASSIE MILLER, P.E.
Watershed Reclamation Director
RALPH N. NAGAMINE
Engineering Director
BRIAN MASHIRO, P.E.
Solid Waste Director
HELVIN HISPOLITO
Highway Director

RECEIVED

FEB 3 1991

MEMO TO: Mr. Ralph Nagamine, Engineering Division Chief
ENGINEERING DIV.
OF DEPT. OF PUBLIC WORKS

FROM: Mr. Aaron Shinmoto, Administrator
Land Use & Codes Administration

SUBJECT: UPCOUNTRY MAUI HIGH SCHOOL
EIS CONSULTATION PHASE

In reviewing the site selection and the EIS report, we offer the following comments:

1. The final school site may require a community plan amendment and zoning change.
2. Master plans and supporting documentation (i.e. drainage and soil erosion report, traffic studies, etc.) for drainage, sewer, and road improvements up to the Year 2010 should be required.

A more detailed review can then be made upon submittal of the above.



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 114, HONOLULU, HAWAII 96810

LETTER NO. (P)2249.1

NOV 19 1991

Mr. Aaron Shinmoto
Administrator
Land Use and Codes Administration
Department of Public Works
County of Maui
200 South High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Shinmoto:

Subject: Upcountry Maui High School
EIS Public Review Phase

Thank you for your February 4, 1991 comments on the subject project. We offer the following responses to your comments:

1. The need for a community plan amendment and zone change to develop the school has been noted in Section XI of the final EIS.
2. After a site for the proposed school has been selected, various master plans and studies will be prepared or required in support of applications for the above land use approvals. Your office will be consulted in this regard.

We appreciate your input for this project. If there are any questions regarding the EIS, please have your staff contact Mr. Allen Yamanoha of the Planning Branch at 586-0483.

Very truly yours,

Teuane Toming
TEUANE TOMING
State Public Works Engineer

AY:jk



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1108
WAILUKU, MAUI, HAWAII 96793-7108

RECEIVED

JUN 7 10 05 AM '91
DIV. OF PUBLIC WORKS

May 31, 1991

Mr. Russel Nagata
State of Hawaii
Department of Accounting & General Services
P. O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Nagata:

Subject: UPCOUNTRY MAUI HIGH SCHOOL - Site Selection Report
and Draft Environmental Impact Statement

Thank you for giving our Department the opportunity to review the site selection report and draft environmental impact statement for the proposed upcountry Maui high school.

Our Department has the following comments:

1. Page III-8 of the report indicated that during fiscal year 1987 1.39 million gallons per day (MGD) of water was withdrawn from the Wailoa ditch and treated at the Kamole treatment plant. Based on fiscal year 1989 data, the average flow was 2.4 MGD. The 1989 data should be used since it is representative of the current flow.
2. Page III-8 of the report indicated approximately 0.26 MGD of water from the Kamole treatment plant supplemented the Kula system during the 1987 fiscal year. Please note that the Kula system relies on surface runoff as its source for water. During periods of low rainfall when surface runoff flow is inadequate to meet water demands, water is diverted from the Kamole treatment plant into the Kula system. Our records indicate flows of up to 6 million gallons were processed within 24 hour periods from the Kamole treatment plant.

State P.W. Eng.	Approved
P.W. Sect.	Sign.
Staff Serv. Br.	Info.
Plan. & Insp. Br.	File
Prog. Mgmt. Br.	See me
Crng. Br.	Comments
Inst. Br.	Env. 2-A
Qual. Cont. Eng.	Reg.
Learning Serv. Br.	

"By Water, All Things Find Life"

Mr. Russel Nagata
State of Hawaii
Department of Accounting & General Services
Subject: UPCOUNTRY MAUI HIGH SCHOOL - Site Selection Report
and Draft Environmental Impact Statement
May 31, 1991
Page 2

The report should be revised to indicate that the Kamole treatment plant periodically is required to treat approximately 6 MGD of water in a 24-hour period when the surface source of the Kula system is unable to meet system demands. The 6 MGD figure is appropriate in the report if it is intended to determine the reserve capacity of the Kamole treatment plant and its ability to supply additional water required by the proposed high school.

Concerning the offsite water system improvements proposed for the various school sites, page A-22 of the report does not contain adequate information to allow our Department to provide comments. Please submit engineering data such as fire, domestic and irrigation flow requirements for the school sites. Maps or plans showing the location of the proposed water improvements should also be submitted.

Sincerely,

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI

Rae M. Shikuma
Rae M. Shikuma
Director

hc



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 118, HONOLULU, HAWAII 96818

1/74

FRASSEL E. HAGAHA
DIRECTOR
ROBERT T. TAYLOR
DEPUTY DIRECTOR

LETTER NO. (P)1883.1

Mr. Rae Shikuma
Page 2

Ltr. No. (P)1883.1

AUG 22 1991

Mr. Rae Shikuma
Director
Department of Water Supply
County of Maui
P. O. Box 1109
Wailuku, Maui, Hawaii 96793-7109
Dear Ms. Shikuma:

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)

Thank you for your May 31, 1991 comments regarding the subject project. Our responses to your comments are as follows:

1. Page III-8, D. Infrastructure, 1. Water

The EIS will be revised to reflect 1989 data which indicates that an average water flow of 2.4 MGD was withdrawn from the Wailoa ditch and treated at the Kamole treatment plant.

2. Page III-8, D. Infrastructure, 1. Water

The EIS will be revised to include the additional information provided on the Makawao-Kula water systems. The section will be expanded to clarify the relation between the Kula system and the Kamole treatment plant during periods of low rainfall.

3. Page A-22, Offsite Improvement Costs

The proposed offsite water system improvements for the various school sites are conceptual in nature and only intended for comparison purposes. Once a

school site has been selected, the design of the water system will be closely coordinated with your office to develop specific plans.

We appreciate your input for this project.

Very truly yours,

TEUANE TOMINGA
State Public Works Engineer

CI:bk

LINDA CROCKETT LINGLE
Mayor
TELEPHONE 243-7855



Jul 24 3 32 AM '91
OFFICE OF THE MAYOR
COUNTY OF MAUI
MAILING, MAUI, HAWAII 96703

July 24, 1991

Mr. Russel S. Nagata
State Comptroller
State of Hawaii
Department of Accounting and
General Services
P. O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Nagata:

RE: Upcountry Maui High School
Environmental Impact Statement Review

The Departments of Planning and Public Works have reviewed the Environmental Impact Statement. Their specific comments are enclosed. In addition to their comments, I offer the following observations:

1. Growth in the upcountry Maui area has been large and continuous over the past 10 years. Using water consumption as an indicator, growth in this key figure has averaged 4.7% per year between 1979 and 1989. Based on the large amounts of land and low infrastructure costs, this growth is expected to continue.
2. There are currently very striking differences in traffic levels on Haleakala Highway between summer vacation and regular school periods. A very significant part of the traffic must be due to students, parents and educators making morning and evening commutes. Transfer of that traffic onto Makawao Avenue, a much inferior highway, will create massive traffic problems.

Based on these observations and others enclosed, I feel very strongly that both a population study and a detailed traffic study needs to be done to clearly define the impact of and projected demand on the school.

Mr. Russel S. Nagata
July 24, 1991
Page 2

I am very strongly in favor of the Makawao high school. If these concerns are addressed, I am sure we will have an excellent and sorely needed addition to our school system.

Sincerely,

LINDA CROCKETT LINGLE
Mayor, County of Maui

NP:jso
Enclosures
c:\letter\dags

DEPARTMENT OF PUBLIC WORKS
MAILING ROOM
10
Mr. M. Eng. Approved
P. M. Secy. Secy.
S. H. Ser. Br. Adm.
Planning Br. Pla.
Pub. Work Br. S. & S.
Design Br. Constr.
Ins. Br. Insp.
Gen. Cost Eng. Est.
Lic. Ser. Br. Lic.



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 115, HONOLULU, HAWAII 96810

ROSEMARY S. MCGEE
COMPTROLLER
STATE OF HAWAII

LETTER NO. (P)2133.1

The Honorable Linda Crockett Lingle Ltr. No. (P)2133.1
Page 2

OCT 18 1991

The Honorable Linda Crockett Lingle
Mayor
County of Maui
200 South High Street
Wailuku, Maui, Hawaii 96793

Dear Mayor Lingle:

Subject: Upcountry Maui High School
Public Review Phase, EIS

Thank you for your July 24, 1991 comments on the subject project and the departmental reviews that were enclosed. Due to the extensive comments made by your departments, we sent respective responses to them with copies to your office. Regarding the two items of concern you mentioned, we provide the following comments:

1. We appreciate the information provided on growth in the Upcountry Maui area which is being closely monitored by the Department of Education. We agree that an updated population study would be helpful. However, we feel that the population study is beyond the scope of this project.
Since the ultimate action is the construction of a high school with a specific design enrollment for a certain service area, the projected demand on the school has been predetermined. Upon further growth within the area, another school would be considered and could be constructed. Accordingly, for our purposes, we would rely on agencies that regularly provide projections of population growth such as your departments.
2. Upon selection of a final site, we will prepare design plans that will be submitted to your departments for review. Should the need for a traffic study be warranted, we will comply.

We appreciate your input on this project. If there are any further questions regarding the EIS, please have your staff contact Mr. Allen Yamanoha of the Public Works Division at 548-5742.

Respectfully,

ROSEMARY S. MCGEE
State Comptroller

BRIAN MISKAL
Planning Director
GUY A. MAYWOOD
County Planning Director



COUNTY OF MAUI
PLANNING DEPARTMENT
MAUI, HAWAII

June 12, 1991

MEMORANDUM

TO: NOLAN PERREIRA
MAYOR'S OFFICE

FROM: BRIAN MISKAL
PLANNING DIRECTOR

RE: UPCOUNTRY HIGH SCHOOL SITE SELECTION STUDY AND
DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)

Based on the preliminary information contained in the DEIS as well as an examination of surrounding land uses and Community Plan designations, site No. 4 (Apana Road) would appear to be the most appropriate site for the High School. Site No. 4's favorable factors include:

- o A central location between Makawao and Pukalani.
- o Proximity to existing and planned residential areas.
- o Alternative access routes.

We have concerns, however, about the lack of or possible inadequacies in the information contained in the DEIS.

1. The assumptions made and the basis for population and student growth projections should be made clear. Some of the information presented does not seem realistic. For instance, the projected pupil growth rate shown in Table 3 actually declines over the twenty year design period. Also, Table 6 shows decreasing student enrollments at Pua and Kaimu elementary schools in Table 6. Were future developments planned in the Pua/Kaimu area and recent growth in the Kaimu area considered?
2. The assessment of probable long-term traffic impacts is inadequate:
- 2a. The estimates of volume of traffic generated by the project seem unrealistically low. Estimates on page VII-6 for morning peak periods are 150 incoming passenger vehicles and 30 buses. This does not relate in any way to the current

situation at Maui High school where the average student car count is 950, the faculty and administration parking totals nearly 100, the regular bus count is 19, and the special education bus count is 3. With the addition of cars dropping off students, it would appear that the traffic volume for the morning peak periods would be well over six (6) hundred passenger vehicles.

- 2b. It is unclear whether the traffic counts in figures 9 and 10 represent volumes with or without the High School.
- 2c. There has been no attempt to analyze the traffic impacts of each alternative and how they differ from one another.
- 2d. There has been no analysis on the impacts to key intersections in the area. These intersections include Haleakala Highway/Makawao Ave., Haleakala Highway/Pukalani Street, Haleakala Highway/Makani Road, Haleakala Highway/Haliimaile Road, Baldwin Avenue/Makawao Avenue. Impacts to future intersections along the new bypass at Haleakala Highway, Makani Road and Makawao Avenue should also be evaluated, as well as impacts to intersections directly affected by each alternative.

Currently, during morning peak hours, the Baldwin Ave./Makawao Ave. and Haleakala Highway/Haliimaile Road intersections have extremely poor levels of service. All of the alternative sites would increase volume at these intersections. Sites 1-4 would increase left turns from Haliimaile Road onto Haleakala Highway and likely cause major traffic disruptions.

- 2e. Improvements necessary to mitigate potential adverse traffic impacts should be identified.
- 2f. There should be consultation with the State Department of Transportation to discuss impacts on the proposed bypass, the results of this discussion should be discussed in the final EIS.

The State Department of Transportation's current plans for the Bypass calls for only one intersection to be signalized (at Makawao Ave). Would any of the sites lead to increased need for signalization of the Makani Road, or either of the two Haleakala Highway intersections?

3. Neighboring property owners have expressed concern regarding potential negative impacts due to traffic, loitering and other impacts which may arise from living across the street from a high school. There should be a discussion of these potential impacts and identification of mitigation measures such as landscaped buffer areas and security which could alleviate these impacts.



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS

P. O. BOX 118, HONOLULU, HAWAII 96818

RUSSEL S. HAGAIA
COMPTROLLER
ROBERT P. TAYLOR
DEPUTY COMPTROLLER

LETTER NO. (P) 2266-1

Mr. Brian Miskae
Page 2

Ltr. No. (P)2266.1

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

Dear Mr. Miskae:

Subject: Upcountry Maui High School
EIS Public Review Phase

Thank you for your June 12, 1991 comments regarding the subject project.

Your preference for Site 4 for the reasons given is noted and will be considered in the selection of the final site. In response to your concerns, we provide the following comments:

- 1a. As indicated in III.C.1. Population, the Department of Business, Economic Development, and Tourism's (DBEDT) economic and demographic projections were used to estimate population growth. Additionally, the Makawao-Pukalani-Kula Community Plan mentioned in IV.A.4. is cited as the County's decision making tool for the implementation of the County General Plan within the Upcountry region of Maui. We understand that the plan establishes land use and population growth policies within the area.

The student growth projections are based on the following items:

- a. The trends of past years.
- b. Birth rates.
- c. Housing projects that have received approvals or are highly likely to be approved.

For your information, Table 3 was developed to estimate only busing costs and does not represent student growth. The projected enrollments are shown on Table 6.

- 1b. The future developments in the Paia/Kuau area were not considered in the draft EIS because they received approval after the enrollment figures in Table 6 were obtained. Accordingly, the Department of Education (DOE) updated their enrollment projections and the higher estimates will be reflected in the revised EIS.

- 2a. We appreciate your analysis of the current traffic situation at Maui High School. However, we do not agree that it should be used as a basis for traffic analysis at the proposed high school because it is site specific. Instead, the traffic assessment was designed to be general for comparison purposes only and relied on assumptions consistent with the DOE's method of estimating busing costs by assuming that a certain percentage of the initial 1,200 students would be walking or biking, while the majority of the remainder would use the bus service. This will be clarified in the final EIS.

- 2b. The traffic counts in Figures 9 and 10 represent volumes without the high school. We will clarify this in the final EIS.

- 2c. Once a school site is selected, traffic impacts in the immediate vicinity of a selected school site will be studied in greater detail as a basis for designing vehicular and pedestrian access to the school. The need for improvements such as lane widening, signalization and installation of side-walks to alleviate projected traffic congestion will be considered at that time. Alternative access routes will also be examined.

- 2d. Same comments as 2.c.

- 2e. Same comments as 2.c.

- 2f. The State Department of Transportation has been apprised of the project plans and has no comments to offer at this time. They will be consulted during the design phase for the selected school site.

Mr. Brian Miskae
Page 3

Ltr. No. (P)2266.1

3. We shall add a discussion concerning potential community perceptions of adverse impact a new school may have on surrounding land uses as well as mitigation measures such as security, fencing and landscaping which could reduce such impacts.

We appreciate your input for this project. If there are any further questions regarding the EIS, please have your staff contact Mr. Allen Yamanoha of the Planning Branch at 586-0483.

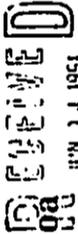
Very truly yours,


TEUNNE TOMINGA
State Public Works Engineer

AV:jk
cc: Mayor Linda Crockett Lingle



University of Hawaii at Manoa



JUN 14 1991

Environmental Center
A Unit of Water Resources Research Center
Crawford 317 - 2550 Campus Road • Honolulu, Hawaii 96824-1004 JAH:WJG & ASSOCIATES
Telephone: (808) 956-7361

EM
by

Governor Mather P. 2 June 21, 1991

Education officials to combine a high school and community center.
Community Plan

We note that section IV.A.4 (page IV-3) should mention another recommendation of the Community Plan that suggests more coordination between the school and community.

Flora and Fauna

The brief description of the impacts upon flora and fauna given in section VII.A.6 (page VII-2) should be expanded.

District Boundary

Our reviewers were unable to understand the rationale for including the water level areas extending from La Perouse Bay to Kamao Beach in the Upcountry district boundary. The busing distance to the preferred site would have the adverse impacts of longer and more uncomfortable bus rides for the students as compared with busing them to Kihai or another closer high school site which may be developed in the future.

General Comments

A difference of opinion on the preferred site was expressed by our reviewers. While some reviewers agreed with the selected site, others opted for Site #4 at Makawao Ave/Asapara Road, because it is the least expensive and scored consistently high on other criteria.

Our reviewers note that this DEIS very adequately identifies the relative advantages and disadvantages of the sites and meets the general requirements of this type of document.

Thank you for the opportunity to review this document and we hope you will find our comments helpful.

Sincerely,

John T. Harrison, Ph.D.
Environmental Coordinator

- cc: DEQC
- DACS
- ✓Zari Matsubawa, c/o Wilson Okamoto and Associates Inc.
- Charles Inatsuka, Dep. of Accounting and General Services
- Roger Fujioke, HRC
- Jim Harpstrite, School of Education
- Sheldon Varney, School of Public Health
- Richard Meyer, Maui Community College
- Alex Buttaro

June 21, 1991
RE:0584

Governor, State of Hawaii
c/o Office of Environmental Quality Control
220 South King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Governor Mather:

Draft Environmental Impact Statement (DEIS)
Upcountry Maui High School
Makawao, Maui

This document reflects the Department of Education's proposal to construct a new high school in the Upcountry area of Maui with a design enrollment of 1,740 students. Students who live in that region are currently bused to Maui High School in Kahului and represent approximately 75% of its enrollment. This project will modify the school services area and the feeder systems from the intermediate schools. Major increases in the student populations of Maui and Hahione High Schools have caused overcrowding and indicate the need for this project which is estimated to cost \$46,381,000. The proposed high school will be located on approximately 35 acres and will consist of 70 classrooms, athletic, administrative, and library facilities, and a dining room. This document provides a site selection report which evaluates 5 sites based on the criteria established by the Department of Education. All 5 sites are situated on cultivated pineapple fields.

The review of this document and subsequent comments on were prepared with the assistance of Jim Harpstrite, School of Education; Sheldon Varney, School of Public Health; Richard Meyer, Maui Community College; and Alex Buttaro of the Environmental Center.

Alternatives Considered

Our reviewers note that missing among the options given on Page I-2 is the alternative of reducing high schools to a maximum of 500 students and building several smaller community schools. Increasingly, the 1950s approach of building large high schools is being reexamined in favor of smaller, community based schools.

Public Services

Section III.C.3.A (Page III-7) states, "Additional proposed facilities in the Upcountry area include a youth center and a county-funded public swimming pool." We suggest that it would be desirable for Department of

An Equal Opportunity/Affirmative Action Institution



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS

P. O. BOX 111, HONOLULU, HAWAII 96822

SCP : 3 1001

MUSTEL, S. MACKIA
COMPTROLLER
ROBERT P. HANLON
DIRECTOR

LETTER NO. (P)1989-1

Dr. John T. Harrison
Page 2

Ltr. No. (P)1989.1

Dr. John T. Harrison
Environmental Coordinator
University of Hawaii
Environmental Center
2550 Campus Road, Crawford Center
Honolulu, Hawaii 96822

Dear Dr. Harrison:

Subject: Upcountry Maui High School
EIS, Public Review Phase

Thank you for your June 21, 1991 comments on the subject project. Our responses to your comments are as follows:

1. The alternative of reducing the enrollment of high schools to a maximum of 500 students is not a viable option because of the high cost of support facilities for each high school and because of the very limited program that small schools offer. Since the limit of 500 students seems to be self-defeating, both economically and programmatically, we would appreciate any research data you may have on this matter.
2. While the DOE is not adverse to combining community based and school facilities, past experiences has shown that there are basic problems regarding construction, operation, maintenance and use of these facilities. Please note that the new school will share at least some of its facilities after, its needs are met.
3. The EIS will be revised to include the additional recommendation of the Community Plan that suggests more coordination between the school and community.
4. The impacts on flora and fauna will be expanded to mention the displacement of pineapple and other common grasses and weeds, as well as associated insects, small mammals and other fauna.

5. The service area boundary for the new high school is currently under review by the DOE and will be revised for publication in the final EIS.
6. Since this document is an impartial examination of various sites and does not have a specific selection recommendation, we could not ascertain which site was the "selected site". However, your preference for Site #4 is noted and will be considered during selection of the final site.
7. Your confirmation that the DEIS adequately identifies the relative advantages and disadvantages of the sites and meets the general requirements of a DEIS is appreciated.

We appreciate your input for this project. If there are any further questions regarding the EIS, please have your staff contact Mr. Charles Inatsuka of the Planning Branch at 548-5703.

Very truly yours,

TEUANE TOMINAGA
State Public Works Engineer

CI:bk



Maui Pineapple Company, Ltd.
Halliimaile Division

June 5, 1991

Wilson Okamoto and Associates, Inc.
1150 South King St., Suite 800
Honolulu, HI 96814

Dear Sir:

I have reviewed your environmental impact statement for the Maui Up-Country High School and I am disappointed that we were not consulted during the evaluation. The proposed Site #4 is the only corridor for our fire flow and irrigation water for the Halliimaile area and our only Hauka-makai connecting fields that allow heavy equipment to be moved on our own property.

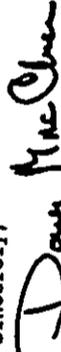
It should also be noted that Site #4 is the most productive pineapple land in the State and has been designated "Prime" in the State General Plan.

It is my opinion that the traffic flow problems have been inadequately evaluated at Site #4, considering the By-Pass Highway connections and the present morning traffic problems. To add 1,000 students to Site #4 will clog Makani and Makawao Avenue for long periods of time during morning traffic hours.

The Maui County General Plan designates Site #4 as a buffer zone between Pukalani and Makawao; thus using this site for a school would allow the two communities to merge.

Unfortunately your plan did not have the expected input prior to evaluation. Please feel free to contact me if I can be of any assistance in correcting the deficiencies in the plan.

Sincerely,


L. D. MacCincher
Plantation Manager

LDM/sj

XC: CCC, JWH, RHC, EC

870 Halliimaile Highway • Halliimaile, Maui, Hawaii 96765 • Telephone (808) 572-7211

EM



RECEIVED

MAUI LAND & PINEAPPLE COMPANY, INC. • P.O. Box 187, Kahului, Maui, Hawaii 96732-0187 • (808) 877-3351
JUN 7 10 06 AM '91
U.S. MAIL

June 5, 1991

Department of Accounting
& General Services
State of Hawaii
P. O. Box 119
Honolulu, Hawaii 96810

Ladies and Gentlemen:

We have a number of concerns with the favored location of the Maui up-country high school which we understand is Site #4 as listed on the Environmental Impact Statement. First of all, let us apologize for not responding to the original draft of the EIS; somehow it fell between the two stools of our Halliimaile Plantation operation and the Corporate Office. Regardless of that, we do have some concerns with the selection of Site #4.

1. The particular portion of our pineapple field designated as Site #4 is our best pineapple field. It had the highest yields of any of our fields last year and the highest recovery in the cannery. It would be a significant blow to lose a portion of this. I also understand that Mrs. Lokelani Lindsey stated she would like additional land in that area for a sports complex; along with the Pukalani Highway by-pass, this would in fact take the entire field. This sports complex proposal was not included in the EIS and although it would not be part of this process it sounds somewhat ominous to us for the future.

2. Site #4 results in a virtual elimination of the buffer between Makawao and Pukalani, a buffer which is called for in the Maui County General Plan in order to preserve the identities of the two communities and to maintain the existing rural up-country flavor. We think this is highly desirable.

3. Site #4 contains our main water transmission lines for the Halliimaile fire flow and irrigation system. Since this is the last mauka-makai corridor for our equipment and water systems, disruption of this flow would have serious consequences on the ability to farm pineapple up-country.

MAUI FOR YOU:	
Site Plan, Exp.	Approval
Site Serv. Br.	Info.
Planning Br.	File
Prog. Mgmt. Br.	See me
Engng. Br.	Comments
Legal Br.	Permit
Public Aff. Br.	File
Plantation Serv. Br.	File



MAUI LAND & PINEAPPLE COMPANY, INC. • P.O. Box 187, Kahului, Maui, Hawaii 96732-0187 (808) 877-3351

RECEIVED 572-74
JUN 19 8 10 AM '91
MAIL ROOM

4. Contrary to the statements in the EIS, Site #4 has major traffic problems. At present, Makawao Avenue and Hakani Road are substandard to handle the proposed traffic flow. The addition of 1,000 students to this site would significantly impact and impede the normal traffic flow along both of these roads.

Of the sites selected, we believe that Site #1, which is located just west of the existing Pukalani town, is much more acceptable to us from an agricultural point of view. With the completion of the Pukalani Highway by-pass, which will be done prior to the building of the school, Site #1 should also provide good traffic flow and good access from Pukalani and Kula.

Site #2, below the "y" where the Upper and Lower Kula Roads meet, is also an acceptable site. Traffic flow into the school would be excellent, as stated in the EIS.

We look forward to meeting with Mrs. Lindsey to discuss this further and hopefully with Wilson Okamoto and Associates or representatives of DAGS as well.

Sincerely,

Colin C. Cameron
Chairman & President

/s/
c: Lokelani Lindsey
L. Doug MacCluer

June 14, 1991

Mr. Russell Nagata
Department of Accounting
& General Services
State of Hawaii
P. O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Nagata:

During our June 12, 1991, meeting with Mrs. Lokelani Lindsey on the proposed Upcountry High School we presented our concerns and other comments on the sites discussed in the EIS. She suggested that we present these in written form to you for consideration in the selection process. We would have liked to present these earlier, but unfortunately the consultants and engineers did not approach us even though we are the owner of all parcels under consideration. However, I trust our comments will be given appropriate weight in making final recommendations to the Board of Education.

We understand that Site 4 is currently favored, at least by the consultants and some local Maui groups. However, we do not feel Site 4 is appropriate for a school for these reasons:

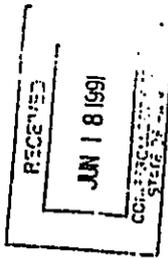
1. Selection of this site would cut off our upcountry pineapple fields from our downcountry ones. This field is currently used as a corridor for transportation of heavy equipment which now can easily and quickly cross Makawao Avenue. If we are unable to use this corridor, it would not only be significantly more costly for us for this purpose but also more disruptive to traffic, particularly on Haleakala Highway.

In addition, our main waterline passes through this site. At the very least we would have to retain an easement for this waterline as we have no other alternative location for it.

2. We feel the consultants misjudged the traffic situation along Makawao Avenue. According to our personal experience, traffic is a serious situation now, particularly on this relatively inadequate road, and morning school hour traffic would compound this with rush-hour traffic. This would cause significantly greater congestion.

3. Site 4 is probably our best pineapple field in terms of production.

OFFICE OF PUBLIC WORKS
DEPARTMENT OF PUBLIC WORKS
1115 KALANANĀHUI DRIVE
HONOLULU, HAWAII 96813
1115 KALANANĀHUI DRIVE
HONOLULU, HAWAII 96813
1115 KALANANĀHUI DRIVE
HONOLULU, HAWAII 96813
1115 KALANANĀHUI DRIVE
HONOLULU, HAWAII 96813



Mr. Russell Nagata
June 14, 1991
Page 2

4. When the EIS was prepared we do not know if the final routing of the Fukalani by-pass road had been determined. In any event, it appears this road comes quite close to Site 4 and could significantly impact the noise level at the school. We feel this situation should be restudied.

We believe Site 1 is most desirable for a number of reasons:

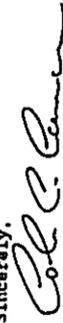
1. Traffic flow using the new Fukalani by-pass road would allow easy and safe access without increasing traffic on either Makawao Avenue or Haleakala Highway through the town of Fukalani. This would apply both to students coming from upcountry as well as those coming from Haiku who could easily access this site through Halimaile. Access to Site 1 is also available through Fukalani Terrace Subdivision on the Kihai side of the parcel.
2. From a farming point of view Site 1 is already an isolated parcel and thus would be much less disruptive to our operations if it were lost.

Site 2 would also be acceptable:

1. Its traffic flow pattern is excellent and with the new Fukalani by-pass road it would be equally good as Site 1 for students coming either from Haiku or upcountry. Students from Makawao would still have to pass through Makawao Avenue, but could presumably turn up on the new Fukalani by-pass road which would lighten the overall traffic load in that area.
2. We were informed that one of the reasons for downgrading Site 2 was the cost of bringing in 18,000 feet of waterline from above. Again we feel that the consultants did not consider the new waterlines, soon to be constructed, which will pass just below this site. It might have to be re-sized and a short extension run up the hill, but this would be a lot less expensive than the other proposed alternatives.

Thank you for your consideration.

Sincerely,



Colin C. Cameron
Chairman & President

/s/ c:
Charles Inasuka
Lokelani Lindsay
L. Douglas MacCluer



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 113, HONOLULU, HAWAII 96810

JOHN WAINES
Director

RUSSELL S. NAGATA
CHAIRMAN
ROBERT P. FARNSWORTH
MEMBER
HAWAII COUNTY BOARD

LETTER NO. (P) 1925.1

AUG 29 1991

Mr. Colin C. Cameron
Chairman and President
Maui Land and Pineapple Company, Inc.
P. O. Box 187
Kahului, Maui, Hawaii 96732

Dear Mr. Cameron:

Subject: Upcountry Maui High School
EIS Public Review Phase

Thank you for your June 5 and 14, 1991 comments on the subject project. Our responses to your comments are as follows:

1. Your objections to the selection of Site #4 are noted and will be considered in selecting the final site. We appreciate the additional information provided on the productivity, possible buffer designation, location of water transmission lines, traffic problems and use as a corridor for transportation of heavy equipment.
2. Regarding our lack of coordination with your company on the subject project, we discussed the matter with our consultant Wilson Okamoto and Associates (WOA) and provide the following comments:
 - a. A project initiation meeting was held on March 21, 1989 to discuss the project schedule and potential sites. Mr. Alec J. W. McEarnet, Jr. of your firm was present.
 - b. Following the above meeting, representatives of the DOE, DAGS, WOA and members of the community toured the service area and the candidate sites. Thereafter, our consultant met with Mr. McEarnet to discuss the candidate sites. We understand that although Site #1 was preferred, no strong objections to the other sites were voiced.

Mr. Colin C. Cameron
Page 2

Ltr. No. (P)1925.1

c. We invited Maui Land and Pineapple Company, Inc. to two public informational meetings for the purpose of discussing the site selection process and the candidate sites. However, we do not have any record of attendance by representatives of your firm at the meetings which were held respectively on January 8, 1990 and October 8, 1990.

d. On December 10, 1990 we sent your firm a copy of the EIS Preparation Notice (EISP/N) as part of the consultation process since your firm was listed as a consulted party. The EISP/N was essentially a pre-draft of the Site Selection Report and Draft EIS. No comments were received from your firm during the consultation phase.

3. Although the final alignment of the Pukalani by-pass road was not determined by the time we published the DEIS, the intent was to locate Sites #3 and #4 approximately 500 feet from the road in accordance with the criterion for sites along a major highway. Accordingly, the effect of road noise should be minimized. However, this criterion will be reviewed due to the finalization of the roadway alignment.

4. Your preference for Sites #1 and #2 for the reasons given are noted and will be considered in selecting the final site.

We appreciate your input for this project. If there are any questions on this matter, please have your staff call Mr. Charles Inatsuka of the Planning Branch at 548-5703.

Very truly yours,


TEUANE TOMIHAGA
State Public Works Engineer

CI:bk

JOHN HUNTER
SECRETARY



STATE OF HAWAII
OFFICE OF DISTRICT SUPERINTENDENT
DEPARTMENT OF EDUCATION
14 HIGH STREET, 4TH FLOOR
HONOLULU, MAUI, HAWAII 96732

July 19, 1991

Mr. Colin C. Cameron
Chairman & President
Maui Land and Pineapple, Inc.
P.O. Box 187
Kahului, Hawaii 96732

Dear Mr. Cameron:

Thank you for meeting with Meyer Usecka and me to discuss your concerns regarding preliminary recommendation of a site for the Upcountry High School.

In discussing alternatives, it is my understanding that, in relation to a proposal to select Site #2, Maui Land and Pine will:

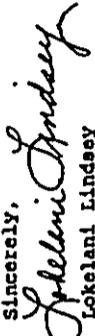
- . Donate a site for the water storage tank.
- . Provide access to the tank site.
- . Look into the possibility of changing the 12" pipe leading to the Maui Land and Pine housing from Mokuahu Tank to a 16" line. (Note: Cost considerations will be determined at a later date.)
- . Sell the land to the Department of Education at a fair price.

I am certain that there will be other questions as we proceed but, with the promise of continuing dialog, feel that these will be addressed quickly.

Please call me if my understanding of the agreements are not as stated above.

Again, my appreciation to you for your assistance.

Sincerely,


Lokelani Lindsey
District Superintendent

cc: Mr. Meyer Usecka
Member, Board of Education

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER

CHARLES TOUCHER
SECRETARY

DACS
June 5, 1991
Page Two

I would appreciate your sincere consideration for site 2 for the long awaited Upcountry High School. I realize that in order for the opening of said school in the Fall of 1994, the EIS must be finalized and approved by June 22, 1991.

Sincerely,

Kitty L. Alday

Kitty L. Alday,
President, Kalama Intermediate
1990-91

0200K/19-20

RECEIVED
JUN 10 2 20 PM '91

June 5, 1991

DACS
1151 Punchbowl Street
Honolulu, HI. 96814

Re: UPCOUNTRY HIGH SCHOOL SITE

Dear Sirs:

I am writing as the outgoing President of the Kalama Intermediate PTA and as a concerned resident/parent of Pukalani regarding the Wilson Okamoto EIS and the "preferred" site #4 (Apana Road and Makawao Avenue).

First of all, I attended the June 4th meeting wherein Lokelani Lindsey presented the final draft of the EIS and many, many comments regarding same showed, for the most part, dissatisfaction of the Apana Road site.

I and my three children, ages 14, 8 and 6, live right behind the Pukalani Square (81 Makawao Avenue). We enjoy being near everything. However, to have a high school a block or so away would impact the traffic tremendously.

I feel that site 2 near the Kula and Haleakala Highways would best fit everyone's needs:

- it is in a quiet section to enable the students to study and yet make noise during recess, etc. as there are no residential homes immediately adjacent to that property;
- it would not be right off of Makawao Avenue, which is one of the most highly traveled upcountry avenues due to the prosperity of the Pukalani Superette, the Pukalani Post Office, the Pukalani Square and the Cinemagic Video store; and
- it already has two access roads, which may also include the new upcountry by-pass road, to be fairly easily accessible for most "feeder" schools.

DIVISION OF ZONING

10 _____

State P.W. Eng. _____

P.H. Stry. _____

State Serv. Bk. _____

Planning Bk. _____

Pub. Works Bk. _____

Design Bk. _____

Ins. Bk. _____

Qual. Cont. Eng. _____

Land Use Serv. Bk. _____



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS

P. O. BOX 115, HONOLULU, HAWAII 96810

RUSSO, S. ANGLIA
COMPTROLLER
ROBERT P. FARLOW
DEPT. CONTROLLER

LETTER NO. P11846.1

JOHN WAINIE
DIRECTOR

AUG 13 1991

Ms. Kitty L. Alday
President
Kalama Intermediata PTA
81 A Makawao Avenue
Makawao, Hawaii 96768

Dear Ms. Alday:

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)

Thank you for your June 5, 1991 comments concerning the subject project. Your objection to Makawao Avenue/Apana Road, Site 4 and your support of Kula/Haleakala Highway Junction, Site 2 for the reasons given are noted and will be considered in the selection of the final site.

We appreciate your input for this project.

Very truly yours,

TEUANE TOMINAGA
State Public Works Engineer

CI:bk

Council Chair
Howard S. Maune
Council Vice-Chair
Patrick S. Kemano
Council Members
Vince O. Baggio, Jr.
Doro Holama
Alice L. Lee
Richard M. Maki
Wynne K. Hibbel
Joe S. Tanaka
Leinaala Teruya Drummond



COUNTY COUNCIL
COUNTY OF MAUI
200 S. HIGH STREET
WAILUKU, MAUI, HAWAII 96793

Gwen Yoshimi-Ohashi
Director of Council Services

JOHN WARD
Secretary



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 111, HONOLULU, HAWAII 96819

RUSSEL S. NAGATA
COMPTROLLER
RUSSEL S. NAGATA
STATE COMPTROLLER

LETTER NO. P11813.1

June 12, 1991

AUG 08 1991

Meyer Ueoka
Chairman of the Facility Committee
Board of Education
2103 Welis Street
Wailuku, Hawaii 96793

Dear Mr. Ueoka:

Thank you for the opportunity to meet with you today and to present the concerns of many Upcountry residents regarding site No. 4 for the Upcountry High School. As Chairman of the Board of Education Facility Committee we would appreciate your recommendation of Site No. 2, Kula Highway - Haleakala Highway as far more favorable due to - but not limited to - the following reasons:

- A) The ability to absorb increased traffic loads
- B) Available open acreage allowing for future school and sports complex expansion
- C) Its centralised location and easy access from Makawao, Kula, Pukalani and Haiku
- D) Located away from major residential areas, therefore, maintaining an organized and peaceful community

Thank you for your positive support in this matter.

Sincerely,

Leinaala Teruya Drummond
Council Member

LTD:wmr
cc DAGS
Lokelani Lindsey

The Honorable Leinaala Teruya Drummond
Council Member
Maui County Council
200 South High Street
Wailuku, Maui, Hawaii 96793

Dear Council Member Drummond:

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)

Thank you for your June 12, 1991 comments on the subject project. Your objections to the selection of Site 4 and support of Site 2 for reasons given are noted and will be considered in the selection of the school site.

We appreciate your input for this project.

Respectfully,

RUSSEL S. NAGATA
State Comptroller

PO BOX 1505
Makawao HI 96768
9 June 1991

RECEIVED
Dept. of Accounting & General Services
1151 Punchbowl
Honolulu, HI 96813
JUN 18 3 27 AM '91
DIV. OF GEN. SVCS.



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 114, HONOLULU, HAWAII 96810

JUN 17 1991
COMMUNICATIONS SECTION
STATE OF HAWAII

644
RUSSEL S. HARRIS
COMPTROLLER
ROBERT S. TERRY
SECRETARY
STATE OF HAWAII

LETTER NO. (P)1918.1

With respect to those selecting sites 3 or 4 for the new upcountry High School; as a citizen of upcountry, please consider sites 1 or 2 as safer and better for traffic.

Director or Dept. Manager:

Site 3 is located next to the Makawao Fire Station. Site 4 is across the street and both being on Makawao Avenue as is the fire station. If there should be an alarm when school begins in the morning or is dismissed in the afternoons, there will be a dangerous grid-lock situation. No vehicle would be able to move on Makawao Avenue. Loss of a single of valuable structure because fire trucks could not get to an emergency situation soon enough is reason to locate th new H. S. on site 1 or 2.

Also, please consider the fact that site 3 and 4 are more expensive and that in itself should determine the new school be located at site 1 or 2.

Respectfully,

DIVISION OF PUBLIC WORKS
INITIAL FOR YOUR

State P.W. Eng.	Approval
P.W. Sect.	Sign
State Serv. Bk.	File
Planning Bk.	File
Pub. Mgmt. Bk.	See me
Design Bk.	Comments
Imp. Bk.	Approved
Qual. Cont. Eng.	File
Learning Serv. Bk.	File

AUG 27 1991

Ms. Vivien Herrick
P. O. Box 1505
Makawao, Hawaii 96768

Dear Ms. Herrick:

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)

Thank you for your June 9, 1991 comments concerning the subject project. Your objections to Site 3 and 4 and your support of Site 1 or 2 for the reasons given are noted and will be considered in the selection of final site.

We appreciate your input for this project.

Very truly yours,

TEUANE TOMINAGA
State Public Works Engineer

CI:dk

A. V. Herrick
P. O. Box 1505
Makawao, HI 96768
June 9, 1991

RECEIVED
JUN 13 8 27 AM '91
DEPT. OF ACCOUNTING & GENERAL SERVICES
1151 Punchbowl
Honolulu, HI 96813

Dept. Head

With all due respect as a concerned citizen of upcountry, Maui
Please, consider sites 1 or 2, even 5 for the location of the
Upcountry High School.
There are two very important reasons for the right location of
the new school.

1. Maui Pine considers the currently favored sites 3 and 4 more
valuable parcels and therefore it must stand to reason that it
would cost accounting more in these days of budgeting cuts.
2. The Makawao Fire Station is located right next to sites 3 and
right across Makawao Avenue from site 4. There would be a
potential grid-lock in a fire alarm situation should the school
be located on either site 3 or 4. Can you imagine or consider
the possible loss of a single life because fire rescue could
not reach a burning structure or or rescue a child from danger
because of bumper to bumper traffic when a fire alarm went
off at the same time school began or was dismissed?
I know I speak for many people that may not have the time to write
you personally.
Again, please consider sites 1 or 2 or 5 for the upcountry H. S.
Thank you sincerely,

A. V. Herrick



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS

P. O. BOX 1118, HONOLULU, HAWAII 96818

JOHN WAIKANE
Commissioner

RUSSEL S. NAGATA
Commissioner
ROBERT E. HERRICK
Secretary

LETTER NO. (P)1920.1

AUG 27 1991

Mr. Arnold Herrick
P. O. Box 1505
Makawao, Hawaii 96768

Dear Mr. Herrick:

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)

Thank you for your June 9, 1991 comments concerning the
subject project. Your objections to Sites 3 and 4 and your
support of Sites 1, 2 or 5 for the reasons given are noted and
will be considered in the selection of the final site.

We appreciate your input for this project.

Very truly yours,

Teuane Tohinaga
TEUANE TOHINAGA
State Public Works Engineer

CI:bk

PO BOX 1505
Makawao, HI 96768

Dept. of Accounting & General Services
1151 Punchbowl
Honolulu, HI 96813

RECEIVED
JUN 18 8 27 AM '91
DIRECTOR OF DEPT. SERVICES

RECEIVED
JUN 17 1991
COMPTROLLER'S OFFICE
STATE OF HAWAII



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 111, HONOLULU, HAWAII 96818

RUSSEL L. NAKATA
COMPTROLLER
STATE OF HAWAII
DIVISION OF PUBLIC WORKS

LETTER NO. (P)1919.1

AUG 27 1991

A. K. Herrick
P. O. Box 1505
Makawao, Hawaii 96768

Dear A. K. Herrick,

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)

Thank you for your June 9, 1991 comments concerning the subject project. Your objections to Sites 3 and 4 and your support of Site 1 or 2 for the reasons given are noted and will be considered in the selection of the final site.

We appreciate your input for this project.

Very truly yours,

Teuane Tohinaga
TEUANE TOHINAGA
State Public Works Engineer

CI:bk

Director or Dept Managers:

With respect to those selecting sites 3 or 4 for the new upcountry High School, as a citizen of this community, please consider sites 1 or 2 as better and safer sites to locate the new H. S.

Site 3 is located next to the Makawao Fire Station. Site 4 is across from site 3, both on Makawao Avenue as is the fire station. Locating the H. S. at either site 3 or 4 is unsafe and the State cannot afford that. If there is an alarm at the fire station when school begins or when school is dismissed the potential for a grid lock poses a very dangerous situation. The bumper to bumper traffic would not allow any vehicle to move on Makawao Avenue. Loss of a single life or very valuable structure because fire trucks could not get to an emergency situation soon enough should be reason enough to locate the H. S. on site 1 or 2.

Also, please consider the fact that sites 3 and 4 are more expensive to purchase and that in itself should be a factor in locating at sites 1 or 2

Respectfully,
A. K. Herrick

XEROX COPY

10/1



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 111, HONOLULU, HAWAII 96813
LETTER NO. (P)1939.1

SEP - 4 1991

Mr. Charles Levy
192 Kapuahi Street
Makawao, Hawaii 96768

Dear Mr. Charles Levy:

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)

Thank you for your comments concerning the subject project. Your objection to Site 4 and your support of Site 2 for the reasons given are noted and will be considered in the selection of the final site.

We appreciate your input for this project.

Very truly yours,

Teuane Tohinaga
TEUANE TOHINAGA
State Public Works Engineer

CI:bk

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JUN 19 1 01 PM '91
DIV. OF PUBLIC WORKS
DACS

Dept. of Accounting & General Services
1151 Punchbowl
Honolulu, HI 96813

- 1) I am very opposed to the plan (site #4) to put the high-school in a crowded residential area.
- 2) Makani road is already overloaded at the intersection with Haleakala Highway.
- 3) The site is adjacent to residences at "Upland Estates" east side of Apana Rd. These property values would decrease drastically.
- 4) Another suggestion is to put the school down-hill of the new development on the east side of Haleakala Highway down-hill from Pukalani. Since the individual home-owners have not yet bought their lots they will at least have the information before purchase. This is an alternate suggestion to my preferred site, #2 in Kula.

DIVISION OF PUBLIC WORKS	
APPROVAL TRACK	
Site Plan Eng.	Approval
Site Plan	Sign
Site Plan	Init.
Planning	File
Site Plan	Sign
Comments	Initial
Quality Control	Review
Site Plan	Sign

Thank you
Charles Levy

Charles Levy
192 Kapuahi St
Makawao, HI 96768

XEROX COPY

Dept. of Accounting & General Services
1151 Punchbowl
Honolulu, HI 96813

JUN 21 1991
JUN 21 1991
COMMUNICATIONS SECTION

4/4/91 2:30 PM '91 to

We, the following, are opposed to the selection of site #4 for the up-county high school, for the reasons stated on the next page. We are all registered voters.

Charles Lewis Charles King 192 Kapiuhi St, Makawao.
Helen Kahn Helen Kahn 1912 Kapiuhi St, Makawao
Virginia Gibson Dava Gibson 190 Kapiuhi Makawao



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 115, HONOLULU, HAWAII 96813

RUSSEL S. HAGATA
COMPTROLLER
ROBERT P. TADUPOA
SECRETARY
LETTER NO. (P)1835.1

AUG 08 1991

Charles Levy, Helen Kahn
and Dana Gibson
192 Kapuahi Street
Makawao, Hawaii 96768

Dear Concerned Makawao Residents:

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)

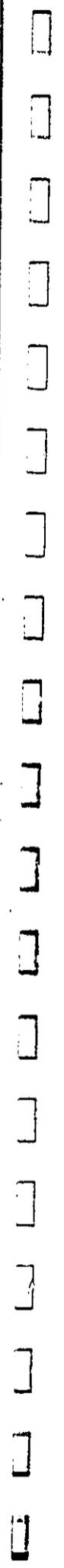
Thank you for your comments on the subject project. Your objections to the selection of Site 4 and your support of Site 2 for reasons given are noted and will be considered in the school site selection.

We appreciate your input for this project.

Very truly yours,
Tedane Tohinaga
TEDANE TOHINAGA
State Public Works Engineer

CI:bk

- DIVISION OF PUBLIC WORKS
MAILING LIST
- State P.W. Engr.
 - P.W. Sect.
 - Staff Serv. Br.
 - Planning Br.
 - Proj. Mgmt. Br.
 - Est. Br.
 - Insp. Br.
 - Const. Equip.
 - Lic. Serv. Br.
 - Approval
 - S&E
 - M&A
 - F&A
 - S&M
 - Comm. Br.
 - Inv. Br.
 - R-1



UPCOUNTRY HIGH SCHOOL SITE SELECTION

Dept. of Accounting & General Services
1151 Punchbowl
Honolulu, HI 96813

RECEIVED

JUN 19 12 59 PM '91

DIV. OF PUBLIC WORKS
3455

6/18/91

Dear Sui or Madame,

I should like to make my opinion known regarding the Upcountry School Site selection.

I am against # 4. Site for the following (attached) reasons. Thank You for your consideration in this matter.

JJ McDaniel
192 KAPUNI ST.
MAKAWAO

DIVISION OF PUBLIC WORKS	
INTERNAL FOR YOUR	
State P.M. Eng.	Approval
P.W. Sect.	Sup.
Staff Serv. Br.	Info.
Planning Br.	FS
Prog. Mgmt. Br.	See me
Equip. Br.	Contracts
Inst. Br.	Inv. M.
Dist. Const. Eng.	P-2
Upcountry Site R.	

The following persons are against the selection of Site No. 4, Makawao Avenue-Apana Road, as the proposed location of the Upcountry High School for (but not limited to) the following reasons:

- A. The proposed High School & By-pass route will greatly increase traffic on the already congested Makawao Avenue, Hakani & Apana Roads.
- B. Site No. 4 is prime agricultural land to Maui Land & Pineapple Company with high returns on these crops.
- C. The lack of sidewalks & safety road borders on Makawao Avenue & Hakani Road will make it impossible to walk to school safely.
- D. Lack of space to accommodate for future school expansion. The proposed sports center possibly exceeding residential wise guidelines & creating street parking problems.
- E. The close vicinity to major residential areas, Upland Estates, Maui Uplands, & Hakani Subdivision will create the potential for loitering, vandalism and unsafe roadways. (NOTE: parking accommodations for the students was not considered)

We believe Site No. 2, Kula Highway-Halealaka Highway is far more favorable due to (but not limited to) the following reasons:

- A. The ability to absorb increased traffic loads.
- B. Available Open acreage allowing for future school & center expansion.
- C. It's centralized location & easy access from Makawao, Kula, Pukalani & Haiku.
- D. Located away from major residential areas, therefore maintaining a organized & peaceful community.

JOHN WAINKE
Director



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS

P. O. BOX 111, HONOLULU, HAWAII 96810

MUSSEL S. MAGATA
Director
ROBERT P. TARDON
Deputy Director
DEPT. OF PUBLIC WORKS

LETTER # (P) 1800.1

JUL 29 1991

L. J. McDonnell
192 Kapuahi Street
Makawao, Hawaii 96768

Dear L. J. McDonnell:

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)

Thank you for your June 18, 1991 comments concerning the subject DEIS. Your objections to Makawao Avenue/Apana Road, Site 4 for the reasons given are noted and will be considered in the selection of the final site.

We appreciate your input for this project.

Very truly yours,

TEDANE TOHINAGA
State Public Works Engineer

SH:jk

June 10, 1991

RECEIVED
JUN 12

Dear DAD,
I'm writing in regards to the proposed site for the new elementary high school here in Maui. I was worried and therefore was unable to attend the public hearing held last week.

I realize the need for a high school up here. There are two proposed sites bordering Melauna Avenue that would compound the existing traffic problems we now face. I feel any of the other three sites would be better choices because of this. Perhaps you could consult your traffic study reports that were made prior to the selection of the top site at the intersection of Melauna Highway and Melauna Ave.

Thank you for your time.
Sincerely,
E. Kelegak



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 111, HONOLULU, HAWAII 96768

MISSIL S. NAGATA
COMPTROLLER
ROBERT P. TAYLOR
GOVERNOR

LETTER # (P)1854.1

AUG 13 1991

C. Nakaganaku
80 Alapio Place
Hakawao, Hawaii 96768

Dear C. Nakaganaku:

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)

Thank you for your June 10, 1991 comments concerning the subject project. Your objection to Sites 3 and 4 and your support of Sites 1, 2, or 5 for the reasons given are noted and will be considered in the selection of the final site.

We appreciate your input for this project.

Very truly yours,

TEUANE TOMINAGA
State Public Works Engineer

CI:bk

**WILLIAM F. OGLE
LAWYER**

6 June 1991

DAGS
PO Box 119
Honolulu, HI 96810

Re: Maui, Upcountry high school site selection.

I support the location of the new high school at site #4, Apana Rd and Makawao Ave. At the 4 June 1991 meeting held by Ms. Lindsey some objections to the site on the grounds that 1) it was prime farm land, 2) they did not want a school next to their homes, and 3) it will cause traffic problems for the area. The last two are not valid considerations.

The Pukalani bypass will take a portion of the farm land and other sites, except site 1, are also prime land per the representatives from Maui Land & Pine. Site 1 would be an acceptable alternate but for the traffic tie ups a school there would cause. The "Not In My Neighborhood" whining should be dismissed out of hand. Regarding traffic, the overall effect on upcountry will be quite positive. Placing the school at site 4 will reduce traffic as many students will be able to walk or bike (my children will be biking).

Site 4 is by far the best site and I urge the Department to place the school there. By the way, Haleakala High is a great name.

Sincerely yours,

William F. Ogle
William F. Ogle



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 115, HONOLULU, HAWAII 96810

ONE HUNDRED
SIXTY

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JUN 10 10 05 AM '91

MAIL ROOM

RUSSELL S. HAGA
CHIEF OF BUREAU
ROBERT P. HAGA
DEPUTY CHIEF OF BUREAU

LETTER NO. P11844.1

AUG 13 1991

Mr. William F. Ogle
Lawyer
2180 Main Street, Suite 700
Wailuku, Maui, Hawaii 96793

Dear Mr. Ogle:

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)

Thank you for your June 6, 1991 comments concerning the subject DEIS. Your support of Site 4 for the reasons given are noted and will be considered in the selection of the final site.

We appreciate your input for this project.

Very truly yours,

Teuane Tomihaga
TEUANE TOMIHAGA
State Public Works Engineer

CI:bk

IC DIVISION OF PUBLIC WORKS
HONOLULU, HI 96810

1	Site Plan	Approved
2	Site Map	Final
3	Site Plan	Final
4	Planway Br.	Final
5	Prop. Altn. Br.	See me
6	Design Br.	Comments
7	Plan Br.	Inv'd C
8	Qual. Cost. Exp.	Rec'd
9	Leasing Serv. Br.	

2180 Main Street, Suite 700 • Wailuku, Hawaii 96793
Telephone (808) 242-6666, 242-4936



1024

RECEIVED
July 19 1 00 PM '91

UPCOUNTRY HIGH SCHOOL SITE SELECTION

The following persons are against the selection of Site No. 4, Makawao Avenue-Apapa Road, as the proposed location of the Upcountry High School for (but not limited to) the following reasons:

- A. The proposed High School & By-pass route will greatly increase traffic on the already congested Makawao Avenue, Makani & Apapa Roads.
- B. Site No. 4 is prime agricultural land to Maui Land & Pineapple Company with high returns on these crops.
- C. The lack of sidewalks & safety road borders on Makawao Avenue & Makani Road will make it impossible to walk to school safely.
- D. Lack of space to accommodate for future school expansion. The proposed sports center possibly exceeding residential noise guidelines & creating street parking problems.
- E. The close vicinity to major residential area's, Upland Estates, Maui Uplands, & Makani Subdivision will create the potential for loitering, vandalism and unsafe roadways. (NOTE: parking accommodations for the students was not considered)

We believe Site No. 2, Kula Highway-Halealaka Highway is far more favorable due to (but not limited to) the following reasons:

- A. The ability to absorb increased traffic loads.
- B. Available Open acreage allowing for future school & center expansion.
- C. It's centralized location & easy access from Makawao, Kula, Pukalani & Haiku.
- D. Located away from major residential areas, therefore maintaining a organized & peaceful community.

I signed this petition because I believe

the above statements are true.

Site No. 2
 Site No. 4
 Site No. 2
 Site No. 4
 Site No. 2
 Site No. 4
 Site No. 2
 Site No. 4

David Reizents



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 111, HONOLULU, HAWAII 96818

LETTER NO. (P)1941.1

SEP - 4 1991

Mr. David Reizents
260 Kapuahi Street
Hakawao, Hawaii 96768

Dear Mr. Reizents:

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)

Thank you for your comments concerning the subject project. Your objection to Site 4 and your support of Site 2 for the reasons given are noted and will be considered in the selection of the final site.

We appreciate your input for this project.

Very truly yours,

[Signature]
TEUANE TOMINAGA
State Public Works Engineer

CI:bk

Steve WR

Dept. of Accounting & General Services
1151 Punchbowl
Honolulu, HI 96813

Director or Dept Manager:

With respect to those selecting sites 3 or 4 for the new Upcountry High School, as a citizen of this community, please consider sites 1 or 2 as better and safer sites, to locate the new H. S.

Site 3 is located next to the Makawao Fire Station. Site 4 is across from site 3, both on Makawao Avenue as is the fire station. Locating the H. S. at either site 3 or 4 is unsafe and the State cannot afford that. If there is an alarm at the fire station when school begins or when school is dismissed the potential for a grid lock poses a very dangerous situation. The bumper to bumper traffic would not allow any vehicle to move on Makawao Avenue. Loss of a single life or very valuable structure because fire trucks could not get to an emergency situation soon enough should be reason enough to locate the H. S. on site 1 or 2.

Also, please consider the fact that sites 3 and 4 are more expensive to purchase and that in itself should be a factor in locating at sites 1 or 2

Respectfully,
Mary Ann Ruiz

Director of Public Works	_____
Chief of Staff	_____
Planning Dir.	_____
Fire Dept. Dir.	_____
Finance Dir.	_____
Legal Coun.	_____
Public Works Dir.	_____
Engineering Dir.	_____
Transportation Dir.	_____
Information Systems Dir.	_____
Personnel Dir.	_____
Training Dir.	_____
Records Mgmt. Dir.	_____
Facilities Dir.	_____
Energy Dir.	_____
Procurement Dir.	_____
Construction Dir.	_____
Public Works Dir.	_____
Public Works Dir.	_____



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 111, HONOLULU, HAWAII 96810

RUSS'S REGATA
COMPANIES
ADDRESS SERVICE
1151 PUNCHBOWL
HONOLULU, HI 96813

LETTER # (P) 1853.1

AUG 13 1991

Ms. Mary Ann Ruiz
P. O. Box 331038
Kahului, Hawaii 96733

Dear Ms. Ruiz:

Subject: Upcountry Maui High School
Draft Environmental Impact Statement (DEIS)

Thank you for your comments concerning the subject project. Your objections to Sites 3 and 4 and your support of Sites 1 or 2 for the reasons given are noted and will be considered in the selection of the final site.

We appreciate your input for this project.

Very truly yours,

Teuane Tohinaga
TEUANE TOHINAGA
State Public Works Engineer

CI:dk

GLENN L. SHEPHERD
477 SOUTH ALU ROAD
WAILUKU, MAUI, HAWAII 96793

RECEIVED

Department of Accounting and General Services
P.O. Box 149
Honolulu, HI 96810
JUL 24 12 44 PM '91

21 June 1991

Re: Site Selection of the Upcountry
High School, Maui.

Dear Sirs,

It is lamentable that Wilson Okamoto and Associates in their consideration of sites for the proposed high school restricted the choice to prime agricultural lands currently under pineapple production. Said lands are rated A (highest productivity rating) under the Detailed Land Classification - Island of Maui, L.S.B. Bulletin No. 7, May 1967.

It appears to be a failure of imagination and planning to put a high school on 35 acres of our best agricultural lands when there are many other sites on the slopes of Haleakala which are not prime agricultural lands and admirably amenable to development of the high school.

Said high school is long overdue and I urge a fast-track selection on less desirable agricultural lands. My mistake must be made in selecting one of the five sites, I hope it will be restricted to Site No. 1 which is the least agriculturally desirable.

Sincerely,

Glenn L. Shepherd



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 118, HONOLULU, HAWAII 96810

LETTER NO. (P)1924.1

AUG 29 1991

Mr. Glen L. Shepherd
477 South Alu Road
Wailuku, Maui, Hawaii 96793

Dear Mr. Shepherd:

Subject: Upcountry Maui High School
EIS Public Review Phase

Thank you for your June 21, 1991 comments on the subject project.

Regarding the agricultural productivity of the lands under consideration, we reviewed the Detailed Land Classification - Island of Maui, L. S. B. Bulletin No. 7, May 1967 and provide the following observations:

Site No.	Land Classification		Productivity Rating Selected Crop (Pineapple)
	Map No.	Land Type	
1	62	44	D
2	63	21 & 37	C/B
3	62	21	C
4	62	21	C
5	62	1 & 49	C/C

With irrigation, Sites 1 through 4 would be upgraded to a productivity rating of A and Site 5 would be upgraded to a rating of B. Accordingly, the deletion of such lands from useful agricultural production is a negative factor. However, it is difficult to avoid such a factor due to other criteria considered for selection of the most suitable site.

Based on minimum site criteria such as proximity to population centers, central roadways, and water lines, we identified developable lands within the service area that were

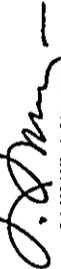
Mr. Glenn L. Shepherd
Page 2

Ltr. No. (P)1924.1

approximately 35 acres in size. However, to avoid the mass relocations of families, the sites selected for evaluations are all agricultural lands owned and under cultivation by Maui Land & Pineapple Co. (MLP). Accordingly, to minimize the impact of taking such lands, the Department of Education is working with MLP to reach a mutual agreement on a new school site.

We appreciate your input for this project.

Very truly yours,


TEUANE TOMIHAGA
State Public Works Engineer

CI:bk

DPW

RECEIVED
 JUN 21 2 55 PM '91
 DIV. OF PUBLIC WORKS

Jeffrey T. Weller
 335 Leoki Place
 Makawao, HI 96708

RECEIVED
 JUN 21 1991

June 19, 1991

Department of Education
 1390 Miller Street
 Honolulu, Hawaii 96813

Attention: Mr. Charles Toguchi
 Subject: Upcountry High School Site Selection

Gentlemen:

I am writing this letter because we (Upland Estates Association) are concerned about the Upcountry High School site selection. The fact that proposed site numbers 3 and 4 were given a high ranking by the consultant firm of Wilson Okamoto & Associates indicates that traffic flow patterns were not analyzed. The amount of traffic on Makawao Avenue will greatly increase once the State Bi-pass route is installed. By locating the high school in the same vicinity, you have only increased the high loads to this area. Makawao town as a whole will be hampered by this traffic congestion, not helped.

Sites number 1 and 2 offer greater flexibility in handling traffic flow as their locations are not central to any major residential areas. Therefore, the downtown traffic would not interfere with the school traffic.

Enclosed for your information and use are copies of a petition against site number 4 selection. This petition was circulated throughout the Upcountry area. The general consensus here is that the Makawao community does not want the high school built on site number 4 but site number 2.

Also consider that Maui Land and Pineapple Company has publicly opposed site number 4 and endorsed selection of site numbers 1 and 2 for agricultural reasons. Site number 4 yields high returns on crops compared to sites 1 and 2.

IN DEPARTMENT OF PUBLIC WORKS
 JUN 21 1991

State Dir. Eng.	Approved
PH. Sect.	Spa
State Spm. Br.	Eds
Planning Br.	Fcs
Eng. Insp. Br.	Str. Eng.
Ins. Div.	Comm. Div.
Gen. Inv. Div.	Rec. Mgmt.

Department of Education
 Upcountry High School Site Selection
 June 19, 1991
 Page 2

School expansion will be better suited at site number 2. The proposed sports center will easily fit into site 2 acreage (792 acres). Note that Maui High and Baldwin High schools are similar in acreage to proposed site number 4 (See enclosed statistics sheet). Both schools are experiencing extreme over crowding. Site number 2 would not pose this problem.

We ask that you recognize and acknowledge the concerns of the makawao community. We all agree that an Upcountry high school is needed. We disagree with Mrs. Lokelani Lindsey's selection of site number 4 as the best location for the community.

We look forward to your response to this matter.

Cordially yours,

UPLAND ESTATES ASSOCIATION

Jeffrey T. Weller
 Jeffrey T. Weller
 Coordinator

JW/dp

cc: Dept. of Accounting & G S
 Lokelani Lindsey
 Leinaala Drummond

STATISTICS

Balwin High School

approximately 1,700 students attend Balwin High.
Acreage is 41.961
Maui War Memorial is on 38.492 acres
total acreage is 80.453

School officials of Balwin feel extreme over crowding and no space to expand.

Maui High School

approximately 1,600 students attend Maui High.
Acreage is 73.532

Again officials of Maui High feel over crowding and no space to expand.

Site #4
Acreage 84.35 -(area for new By-pass)

Site #2
Acreage 792.032

UPCOUNTRY HIGH SCHOOL SITE SELECTION

The following persons are against the selection of Site No. 4, Makavao Avenue-Apana Road, as the proposed location of the Upcountry High School for (but not limited to) the following reasons:

- A. The proposed High School & By-pass route will greatly increase traffic on the already congested Makavao Avenue, Makani & Apana Roads.
- B. Site No. 4 is prime agricultural land to Maui Land & Pineapple Company with high returns on these crops.
- C. The lack of sidewalks & safety road borders on Makavao Avenue & Makani Road will make it impossible to walk to school safely.
- D. Lack of space to accommodate for future school expansion. The proposed sports center possibly exceeding residential noise guidelines & creating street parking problems.
- E. The close vicinity to major residential area's, Upland Estates, Maui Uplands, & Makani Subdivision will create the potential for loitering, vandalism and unsafe roadways. (NOTE: parking accommodations for the students was not considered)

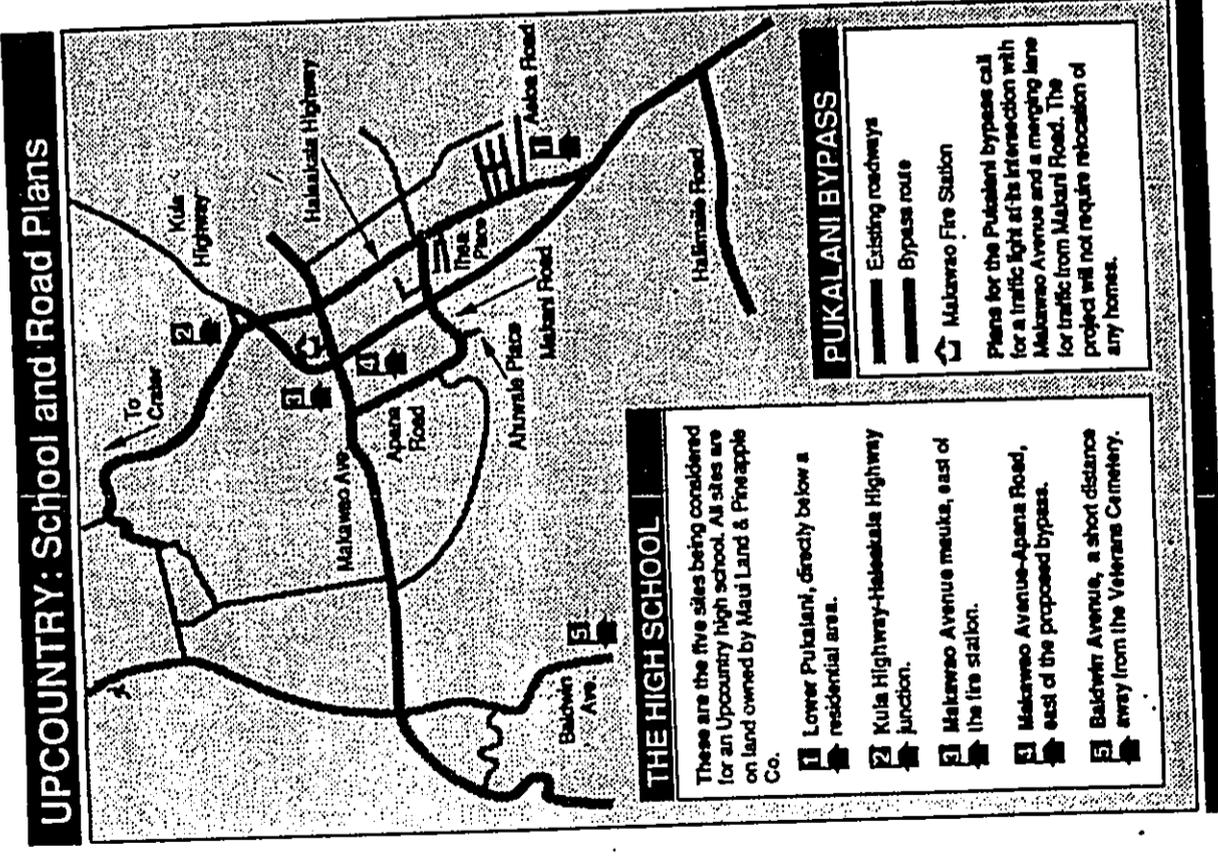
We believe Site No. 2, Kula Highway-Halealaka Highway is far more favorable due to (but not limited to) the following reasons:

- A. The ability to absorb increased traffic loads.
- B. Available Open acreage allowing for future school & center expansion.
- C. It's centralized location & easy access from Makavao, Kula, Pukalani & Haiku.
- D. Located away from major residential areas, therefore maintaining a organized & peaceful community.

(cont.) petition regarding UPCOUNTRY HIGH SCHOOL

NAME ADDRESS

BRAS K. COLLEY	50 Alamo Rd.
C. Kikisaka #1 or #2	80 Alamo Place Makawao HI
WANDA L. LEE #1 or #2	P.O. Box 547 Makawao HI 96768
Mauika Malua	140A Maui PC
VAJESSA SHANE #5	564 Piihelo Rd Makawao HI 96768
Lorena Ledesma (2)(5)	2612 Baldwin Ave Makawao HI 96768
Wanda L. Lee #1 or #2	P.O. Box 547 Makawao HI 96768
Wendy Pagan	P.O. Box 127 Makawao HI 96768
Grace Wood	221 Box 748A Kula HI 96790
Josephine Urrutia	940 S. Kiki Rd. Kihikihi HI 96753
Anna Stano	50 Alamo Rd. Kula HI 96790
Mark D. Johnson (5)	P.O. Box 547 Makawao HI 96768
Patricia A. Schmitt	Box 358, Kula HI 96790
John J. ...	Box 1192 Makawao HI 96768
Josephine Urrutia #15	105 Maunaloa St. Makawao HI 96768
Debra J. ...	504-C Olmsted Rd. Makawao HI 96768
George ...	20 Kula Rd. Makawao HI 96768
George ...	P.O. Box 127 Makawao HI 96768
George ...	" " " Makawao HI 96768
George ...	P.O. Box 992 Makawao, HI 96768
George ...	P.O. Box 1841 Makawao, HI 96768
George ...	996 26th St Makawao HI 96768
George ...	570 W. Puuikihi Ave HI 96768



(cont.) petition regarding Upcountry High School site selection

NAME

ADDRESS

 Michael P. Rubin
 140 LILIANA ST. MANAMA, HI
 2882 Ipolani St., Pelealani HI 96768
 399 Makai Kumu St., Kahului 96732
 731 Mualaki St., Wailuku 96793
 1134 Makani Pl., Hale, HI 96768

NAME

ADDRESS

 Karl W. Phillips
 550 EKINOA RD.
 110 Lauer St, Makawao
 784 E. Kaha Rd.
 2493 Universal St.
 2005 W. Lelehuo Pl.
 806 POKOKE Ln.
 2005 W. Lalehuo Pl.



NAME

ADDRESS

Naomi Murakami

Ruth Alexander

Jody Joagrain

Dorothy A. Uno

39 Leoki Place

170 Maui Place

27 Market Street Kula HI 96790

192 Maoli A. Puna 96799

RR2 Box 291

NAME

ADDRESS

Sheryl Zukowsky

Al C Fenell

David Kim

Shawn R. Swick

P. Chumcheh Gito 5

Andy Estlin

Byron Ago

Bozie Ago

John A. Gill

Verna Javaroni

Spike Javaroni

20 Kula Pl. Makawao

1101 Pepee St. Makawao

1079 Meolu St. Makawao

119 Kealahou Av. Makawao

15 Hooe St. Makawao

20 Kula Pl. Makawao

640 Kaiulu Loop Makawao

" "

656 Imuhika Rd. Ho. Kii.

308 Malani Pukalani

" "

" "

XEROX COPY

(con't.) petition regarding Upcountry High School Site Selection

NAME	ADDRESS
Wendy Muriobe	P.O. Box 341, Pukalani, HI
Malawi Paliwa	140 A Kapuni St, Makawao HI
Harriet A. Linnely	3039 Pihikapai Pl, Pukalani
Edward Yap	250 Kunalani Loop, Pukalani
Alaina M. Moxey	2214 Kapuni St, Makawao
Quita G. Moxey	2242 Kapuni St, Makawao
Julie Pace	215 Kapuni St, Makawao
Janeth Tamura	2283 Kapaeha St, Makawao
Maria Harris	119A Kula Ave, Makawao
Sharon Spink	175A Kapuni St, Makawao
Kathleen H. Harty	131A Kapuni St, Makawao
M. A. O. V. Primrose	144 Kapuni St, Makawao
John P. Moxey	75 Kapuni St, Makawao
Sharon H. Harty	70 Kapuni St, Makawao
Anna M. Moxey	65 Kapuni St, Makawao
Jimmy J. Moxey	315 Hulali St, Makawao
Maria Moxey	315 Hulali St, Makawao
Chas. H. Harty	345 Hulali St, Makawao
James D. Moxey	54 Kapuni St, Makawao
John H. Harty	54 Kapuni St, Makawao
Robert Moxey	" "
Bob Moxey	72 Kapuni St
Danny Moxey	80 Kapuni St
Angela Moxey	80 Kapuni St, Makawao 96743
Carly Moxey	334 Hulali St, Makawao
Mary Moxey	302 Makawao
John Moxey	40 Makawao St, Makawao
John Moxey	90 Makawao St, Makawao
John Moxey	106 Makawao St
John Moxey	3253 Kapaeha Pl.

(con't.) petition regarding Upcountry High School Site Selection

NAME	ADDRESS
Robert J. Linnely	1140 Makawao, Pukalani
J. Wilson	272 H. Okalani St, Pukalani
John W. Linnely	431 Makawao Ave, Makawao
Paul Jones	11-C Kula Ave, Kula HI
John F. Moxey	175 Pihiloni, Pukalani, HI 96743
Lee Moxey	1244 Halopua Rd, Kula HI 96743
Lee Moxey	91 Kula Ave, Makawao HI 96743
Lee Moxey	96 ALAET ST, Makawao HI 96743
Lee Moxey	91 Makawao St, Pukalani HI 96743
Lee Moxey	450 S. Wilson Ave, Kula HI 96743
Lee Moxey	201 AHO ST, Kula HI 96743
Lee Moxey	593 Makawao Pl, Hailu, 96708
Lee Moxey	104 Kula Ave, Kula HI 96743
Lee Moxey	P.O. Box 1908, Makawao, HI 96743
Lee Moxey	R.R. 1 - Box 449-1, Pukalani, HI 96743
Lee Moxey	1144 Kapaeha Pl, Kula, HI 96743
Lee Moxey	1057 Makawao St, Makawao HI 96743

XEROX COPY

(con't.) petition regarding Upcountry High School Site Selection

NAME ADDRESS

Edward J. Farnsworth
 P.O. Box 1371 Makawao
 3327 Kihapoi Pl. Fikekani
 3937 Kihapoi Pl. Fikekani
 522 Pikohe Place, Makawao
 110 Waoukale Pl. Kula, HI
 " " " "
 " " " "
 " " " "
 27 Makula St., Makawao 96761
 " " " "
 P.O. Box 193 Makawao 96768
 " " " "
 " " " "
 48 Hualapai Ln. Fikekani 96768
 153 Anol. Dr. Makawao 96768

(con't.) petition regarding Upcountry High School Site Selection

NAME ADDRESS

Edy - Sando
 P.O. Box 105, Suleka
 709 Pelekena Pl. Makawao
 P.O. Box 44 Makawao HI
 1777 " " " "
 2711 Kihapoi Pl. Fikekani St. Fikekani
 534 Keenan Dr. Makawao 96768
 P.O. Box 235 Kula 96790
 116 Lanipaa Way Kula 96790
 89 Akaka Dr. Makawao 96768
 88 Makua Dr. Makawao 96768
 2518 W. Main St. Wailuku 96793

XEROX COPY

(con't.) petition regarding Upcountry High School Site Selection

NAME	ADDRESS
CLIFF NICHOLS	224 AUBURN DR HAWAII
Joe J. Li	255-A Kapehu St
William M. Stenley	255 Kapehu St. Makani
Kathleen Perrera	3521 Bala... Ave MAKANAHI
Thomas Kavan	136 Puipui Place Makani
William M. Stenley	311 Liliuokalani St
James Matariki	91 Hema Pl. Paia
Eric L. S.	P.O. Box 1025 Hana 96714
August DeChant	493 PLO DR # 214 WAILUKU
Ester O. Quay	195 SO. WILKINS PL. MAKANAHI
Henry J. Smith	250 Mena Es Makani 17 96742

(con't.) petition regarding Upcountry High School Site Selection

NAME	ADDRESS
William M. Stenley	34 Ulenia Pl. Pulehala 96763
James Matariki	466 Pulehala Pl. Makani, Hawaii
William M. Stenley	190 Wai... Pl. MakanaHI 96763
William M. Stenley	236 Pape... Pl. Makani 96763
William M. Stenley	270 Kaula... Pl. Makani 96763
William M. Stenley	112 Kaula... Pl. Makani
William M. Stenley	148 Mak... St. MakanaHI 96763
William M. Stenley	2793 An... Pl. Pulehala HI
William M. Stenley	551 K... Pl. Makani 96763
William M. Stenley	118 K... Pl. Makani 96763
William M. Stenley	362 E... Pl. Pulehala 96763



STATE OF HAWAII
 DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
 DIVISION OF PUBLIC WORKS
 P. O. BOX 111, HONOLULU, HAWAII 96810

ROSELE S. WAGNER
 Controller
 ROBERT S. YAROSH
 Deputy Controller
 LETTER NO. DP1843.1

AUG 13 1991

Mr. Jeffrey T. Weller
 Coordinator
 Upland Estates Association
 335 Leoki Place
 Makawao, Hawaii 96708

Dear Mr. Weller:

Subject: Upcountry Maui High School
 Draft Environmental Impact Statement (DEIS)

Thank you for your June 19, 1991 comments concerning the subject project. Your objections to Site 4 and your support of Site 2 for the reasons given are noted and will be considered in the selection of the final site.

We appreciate your input for this project.

Very truly yours,

Tedane Tomiaga
 TEDANE TOMIAGA
 State Public Works Engineer

CI:bk

PREPARERS OF THE EIS DOCUMENT

Earl Matsukawa: Director, Planning Department
University of Hawaii, MURP, 1983, Land Use and Environmental Planning
Western Washington University, 1975, B.S., Environmental Planning
Area of Expertise for Project: Project Management, Land Use and Environmental Planning

George Moriwaki: Civil Engineer
University of Hawaii, B.S., Civil Engineering
University of Southern California, B.S., Electrical Engineering
Registered Professional Engineer, Hawaii
Area of Expertise for Project: Civil Engineering

Malcolm Ching: Graphic Designer
Leeward Community College, A.S., 1986, Graphic Arts
Leeward Community College, Certificate in Graphic Arts, 1986
Area of Expertise for Project: Maps, Figures, and Production

Bruce Gorst: Planner
University of Hawaii, B.A., 1989, English
Area of Expertise for Project: Land Use Research and Analysis, Production

REFERENCES

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APPENDIX A

Candidate Site Evaluations and Results

APPENDIX A

CANDIDATE SITE EVALUATIONS AND RESULTS

This technical appendix document lists results of the candidate site evaluations relative to school site and community criteria, and cost considerations. Descriptions of the criteria are contained in Chapter VI of the EIS for the New Upcountry Maui High School.

A. School Site and Community Criteria Results

SITE 1: LOWER PUKALANI SITE

School Site Criteria

1. Environmental Characteristics

	<u>Rating</u>
a. <u>Highway Noise</u> The site is adjacent to Haleakala Highway	Poor
b. <u>Aircraft Noise</u> Outside the 55 Ldn Noise Contour.	Good
c. <u>Industrial and Agricultural Nuisances</u> Degree of effect: Periodic disturbance from nearby agricultural activity is likely.	Fair
d. <u>Rainfall</u> Average Annual Rainfall: 29 inches	Good
e. <u>Foundation</u> Soil Character Code: I2L.	Good
f. <u>Slope</u> Degree of Slope: Rises 8 percent in a southwest direction.	Fair
g. <u>Soil</u> Description: The soils are non-rocky with well drained surfaces. The underlying material, at a depth of 6 to 10 feet, is consolidated lava	Fair

- h. Natural Beauty Fair
The site is a pineapple field.
Potential for beautification: Yes.
Crossed by overhead lines: No.

RATING TOTALS

Good 3
Fair 4
Poor 1

2. Roadways and Utilities

- a. Adequacy of Roads Good
The site is served by Haleakala Highway which
has a right-of-way width of 80 feet.
- b. Adequacy of Water Supply Fair
Adequate service can be provided by the addition
of transmission lines and increased storage capacity.
- c. Adequacy of Sewer Service Poor
A separate wastewater treatment facility and
accompanying leaching field will be required.
- d. Adequacy of Drainage Facilities Good
Because of the well-drained nature of the soil
and the areas low rainfall, no drainage
facilities will be required.
- e. Adequacy of Power and Communications Good
The site is proximate to adequate existing
lines.

RATING TOTALS

Good 3
Fair 1
Poor 1

3. **Accessibility**
 - a. Pedestrian Access Poor
No pedestrian access.
 - b. Pedestrian Safety Poor
In addition to paved walkway/shoulder improvements,
the site may require traffic signals.
 - c. Automobile Access Poor
The site will only have access along
Haleakala Highway, the sites short side.
 - d. Bus Service Poor
Service Availability: There is no public
bus service on Maui.
 - e. Traffic Flow Poor
Existing conditions: The site is proximate
to Haleakala Highway which is congested during
morning hours and which would require left-hand
access turns into the school site.

RATING TOTALS

Good 0
Fair 0
Poor 5

Community Criteria

1. **Governmental**
 - a. State Land Use District Map Designation Poor
District Designation: Agriculture.
A State Land Use Boundary Amendment
is required.
 - b. County Community Plan Designation Poor
General Plan Designation: Agriculture.
A Community Development Plan amendment
is required.

- c. County Zoning Designation Poor
Zoning Designation: No zoning designation is shown on agricultural lands
- d. Agricultural Land Classification Fair
Productivity Rating: D.

RATING TOTALS

Good 0
Fair 1
Poor 3

2. Community Effects

- a. Interference with Institutions Good
Nearest hospitals, rest homes, etc. located in Kahului.
- b. Existing Land Use Poor
Present Use: Agriculture.
- c. Proximity to Commerical Centers Good
Distance from commercial centers: .7 mile.
- d. Aesthetic Value Fair
The site has little aesthetic value to the community: Yes.

Site development may partially obstruct scenic vistas: Yes.
- e. Location Poor
Estimated percentage of students within 1 mile radius of site: 18.7 percent.

RATING TOTALS

Good 2
Fair 1
Poor 2

SITE 2: KULA/HALEAKALA HIGHWAY JUNCTION SITE

School Site Criteria

	<u>Rating</u>
1. Environmental Characteristics	
a. <u>Highway Noise</u> The site is about 500 feet from Kula Highway.	Fair
b. <u>Aircraft Noise</u> Outside the 55 Ldn Noise Contour.	Good
c. <u>Industrial and Agricultural Nuisances</u> Degree of effect: Periodic disturbance from nearby agricultural activity is likely.	Fair
d. <u>Rainfall</u> Average Annual Rainfall: 33 inches.	Fair
e. <u>Foundation</u> Soil Character Code: I2L.	Good
f. <u>Slope</u> Degree of Slope: Rises 7 percent in a southwest direction.	Fair
g. <u>Soil</u> Description: The soils are non-rocky with well-drained surfaces. The underlying material, at a depth of 6 to 10 feet, is consolidated lava.	Fair
h. <u>Natural Beauty</u> The site is a pineapple field. Potential for beautification: Yes. Crossed by overhead lines: No.	Fair

RATING TOTALS

Good 2
Fair 6
Poor 0

2. Roadways and Utilities

- a. Adequacy of Road Good
The site is served by Haleakala Highway which has a right-of-way width of 80 feet.
- b. Adequacy of Water Supply Fair
Adequate service can be provided by the addition of transmission lines and increased storage capacity.
- c. Adequacy of Sewer Service Poor
A separate wastewater treatment facility and accompanying leaching field will be required.
- d. Adequacy of Drainage Facilities Good
Because of the well-drained nature of the soil and the areas low rainfall, no drainage facilities will be required.
- e. Adequacy of Power and Communications Good
The site is proximate to adequate existing lines.

RATING TOTALS

Good 3
Fair 1
Poor 1

3. Accessibility

- a. Pedestrian Access Poor
The site has no pedestrian access.

- b. Pedestrian Safety Poor
Existing conditions: No paved walkways or shoulders exist along Haleakala Highway. The site may require traffic signals in addition to walkway and shoulder improvements.
- c. Automobile Access Fair
Existing conditions: The site will have access along one long side.
- d. Bus Service Poor
Service Availability: There is no public bus service on Maui.
- e. Traffic Flow Fair
Existing conditions: Haleakala Highway has a low level of service where it fronts the site. However, this portion of road is off the commuter route.

RATING TOTALS

Good 0
Fair 2
Poor 3

Community Criteria

- 1. Governmental
 - a. State Land Use District Map Designation Poor
District Designation: Agriculture.
A State Land Use Boundary Amendment is required.
 - b. County Community Plan Designation Poor
General Plan Designation: Agriculture.
A Community Development Plan amendment is required.
 - c. County Zoning Designation Poor
Zoning Designation: No zoning designation is shown on agricultural lands

- d. Agricultural Land Classification Poor
Productivity Rating: B and C.

RATING TOTALS

Good 0
Fair 0
Poor 4

2. Community Effects

- a. Interference with Institutions Good
Nearest hospitals, rest homes, etc. located
in Kahului.
- b. Existing Land Use Poor
Present Use: Pineapple.
- c. Proximity to Commercial Centers Fair
Distance from commercial centers:
.5 mile.
- d. Aesthetic Value Fair
The site has little aesthetic value to the
community: Yes.
Site development may partially obstruct scenic
vistas: Yes.
- e. Location Poor
Estimated percentage of students within 1 mile
radius of site: 9.8 percent.

RATING TOTALS

Good 1
Fair 2
Poor 2

SITE 3: MAKAWAO AVENUE MAUKA SITE

School Site Criteria

1. Environmental Characteristics

	<u>Rating</u>
a. <u>Highway Noise</u> Distance from highway/truck route: 1700 feet.	Good
b. <u>Aircraft Noise</u> Outside the 55 Ldn Noise Contour.	Good
c. <u>Industrial and Agricultural Nuisances</u> Degree of effect: Periodic disturbance from nearby agricultural activity is likely.	Fair
d. <u>Rainfall</u> Average Annual Rainfall: 33 inches.	Fair
e. <u>Foundation</u> Soil Character Code: I2L.	Good
f. <u>Slope</u> Degree of Slope: Rises 5 percent in a southwest direction.	Fair
f. <u>Soil</u> Description: The soils are non-rocky with well-drained surfaces. The underlying material, at a depth of 6 to 10 feet, is consolidated lava.	Fair
g. <u>Natural Beauty</u> The site is a pineapple field. Potential for beautification: Yes. Crossed by overhead lines: No.	Fair

RATING TOTALS

Good 3
Fair 5
Poor 0

2. Roadways and Utilities

- a. Adequacy of Road Fair
The site is served by Makawao Avenue which has a right-of-way width of 56 feet.
- b. Adequacy of Water Supply Fair
Adequate service can be provided by the addition of transmission lines and increased storage capacity.
- c. Adequacy of Sewer Service Poor
A separate wastewater treatment facility and accompanying leaching field will be required.
- d. Adequacy of Drainage Facilities Good
Because of the well-drained nature of the soil and the areas low rainfall, no drainage facilities will be required.
- e. Adequacy of Power and Communications Good
The site is proximate to adequate existing lines.

RATING TOTALS

Good 2
Fair 2
Poor 1

3. Accessibility

- a. Pedestrian Access Poor
The site has no pedestrian access.
- b. Pedestrian Safety Poor
The site may require traffic signals in addition to walkway and shoulder improvements.

- c. Automobile Access Poor
Existing conditions: Access to the site is only available along a short span of Makawao Avenue.
- d. Bus Service Poor
Service Availability: There is no public bus service available on Maui.
- e. Traffic Flow Fair
Existing conditions: Makawao Avenue has a low level of service, but access to this site will require left-hand turns for a majority of users.

RATING TOTALS

Good 0
Fair 1
Poor 4

Community Criteria

- 1. Governmental
 - a. State Land Use District Map Designation Poor
District Designation: Agriculture.
A State Land Use Boundary Amendment is required.
 - b. County Community Plan Designation Poor
General Plan Designation: Agriculture.
A Community Development Plan amendment is required.
 - c. County Zoning Designation Poor
Zoning Designation: No zoning designation is shown on agricultural lands
 - d. Agricultural Land Classification Fair
Productivity Rating: C.

RATING TOTALS

Good 0
Fair 1
Poor 3

2. Community Effects

- a. Interference with Institutions Good
Nearest hospitals, rest homes, etc. located
in Kahului.
- b. Existing Land Use Poor
Present Use: Pineapple.
- c. Proximity to Commercial Centers Fair
Distance from commercial centers:
.3 mile.
- d. Aesthetic Value Fair
The site is an aesthetic asset to the
community: No.
Site development may partially obstruct
scenic vistas: Yes.
- e. Location Poor
Estimated percentage of students within 1 mile
radius of site: 19.8 percent.

RATING TOTALS

Good 1
Fair 2
Poor 2

SITE 4: MAKAWAO AVENUE/APANA ROAD SITE

School Site Criteria

1. Environmental Characteristics

	<u>Rating</u>
a. <u>Highway Noise</u> Distance from highway/truck route: 1700 feet.	Good
b. <u>Aircraft Noise</u> Outside the 55 Ldn Noise Contour.	Good
c. <u>Industrial and Agricultural Nuisances</u> Degree of effect: Periodic disturbance from nearby agricultural activity is likely.	Fair
d. <u>Rainfall</u> Average Annual Rainfall: 33 inches.	Fair
e. <u>Foundation</u> Soil Character Code: I2L.	Good
f. <u>Slope</u> Degree of Slope: Rises 5 percent in a southwest direction.	Fair
f. <u>Soil</u> Description: The soils are non-rocky with well-drained surfaces. The underlying material, at a depth of 6 to 10 feet, is consolidated lava.	Fair
g. <u>Natural Beauty</u> The site is a pineapple field. Potential for beautification: Yes. Crossed by overhead lines: No.	Fair

RATING TOTALS

Good 3
Fair 5
Poor 0

2. Roadways and Utilities

- a. Adequacy of Road Fair
The site is served by Makawao Avenue
which has a right-of-way width of 56 feet.
- b. Adequacy of Water Supply Fair
Adequate service can be provided by the addition
of transmission lines and increased storage capacity.
- c. Adequacy of Sewer Service Poor
A separate wastewater treatment facility and
accompanying leaching field will be required.
- d. Adequacy of Drainage Facilities Good
Because of the well-drained nature of the soil
and the areas low rainfall, no drainage
facilities will be required.
- e. Adequacy of Power and Communications Good
The site is proximate to adequate existing
lines.

RATING TOTALS

Good 2
Fair 2
Poor 1

3. Accessibility

- a. Pedestrian Access Fair
The site has pedestrian access from Apana Road.

- b. Pedestrian Safety Fair
Safe walkways/shoulders may be provided along Apana Road.
- c. Automobile Access Good
Existing conditions: The site will have access along Apana Road and Makawao Avenue.
- d. Bus Service Poor
Service Availability: There is no public bus service on Maui.
- e. Traffic Flow Good
Existing conditions: Makawao Avenue has a low level of service and will allow most users to make right-hand access turns. It offers the most alternative access routes.

RATING TOTALS

Good 2
Fair 2
Poor 1

Community Criteria

- 1. **Governmental**
 - a. State Land Use District Map Designation Poor
District Designation: Agriculture. A State Land Use Boundary Amendment is required.
 - b. County Community Plan Designation Poor
General Plan Designation: Agriculture. A Community Development Plan amendment is required.
 - c. County Zoning Designation Poor
Zoning Designation: No zoning designation is shown on agricultural lands
 - d. Agricultural Land Classification Fair
Productivity Rating: C.

RATING TOTALS

Good 0
Fair 1
Poor 3

2. Community Effects

- a. Interference with Institutions Good
Nearest hospitals, rest homes, etc. located
in Kahului.
- b. Existing Land Use Poor
Present Use: Pineapple.
- c. Proximity to Commercial Centers Fair
Distance from commercial centers:
.3 mile.
- d. Aesthetic Value Fair
The site is an aesthetic asset to the
community: No.
Site development may partially obstruct
scenic vistas: Yes.
- e. Location Poor
Estimated percentage of students within 1 mile
radius of site: 21.8 percent.

RATING TOTALS

Good 1
Fair 2
Poor 2

SITE 5: BALDWIN AVENUE SITE

School Site Criteria

	<u>Rating</u>
1. Environmental Characteristics	
a. <u>Highway Noise</u> Distance from highway/truck route: 2 miles.	Good
b. <u>Aircraft Noise</u> Outside the 55 Ldn Contour.	Good
c. <u>Industrial and Agricultural Nuisances</u> Degree of effect: Periodic disturbance from nearby agricultural activity is likely.	Fair
d. <u>Rainfall</u> Average Annual Rainfall: 47 inches.	Poor
e. <u>Foundation</u> Soil Character Code: I2L.	Good
f. <u>Slope</u> Degree of Slope: Rises 8 percent in a southwest direction.	Fair
f. <u>Soil</u> Description: The soils are non-rocky with well-drained surfaces. The underlying material, at a depth of 6 to 10 feet, is consolidated lava.	Fair
g. <u>Natural Beauty</u> The site is a pineapple field. Potential for beautification: Yes. Crossed by overhead lines: No.	Fair

RATING TOTALS

Good 3
Fair 4
Poor 1

2. Roads and Utilities

- a. Adequacy of Road Good
The site is served by Baldwin Avenue which has a 60 foot right-of-way width.
- b. Adequacy of Water Supply Fair
Adequate service can be provided by the addition of transmission lines and increased storage capacity.
- c. Adequacy of Sewer Service Poor
A separate wastewater treatment facility and accompanying leaching field will be required.
- d. Adequacy of Drainage Facilities Good
Because of the well-drained nature of the soil and the areas low rainfall, no drainage facilities will be required.
- e. Adequacy of Power and Communications Good
The site is proximate to adequate existing lines.

RATING TOTALS

Good 3
Fair 1
Poor 1

3. Accessibility

- a. Pedestrian Access Poor
The site has no pedestrian access.

- b. Pedestrian Safety Poor
No paved walkway/shoulders exist along Baldwin Avenue. The site may require traffic signals in addition to shoulder improvements.
- c. Automobile Access Fair
Existing conditions: Access to the site is available along Baldwin Avenue which runs along one long side of the school lot.
- d. Bus Service Poor
Service Availability: There is no public bus service on Maui.
- e. Traffic Flow Fair
Existing conditions: Baldwin Avenue has a low level of service but will require most users to make left-hand access turns into the site.

RATING TOTALS

Good 0
Fair 2
Poor 3

Community Criteria

- 1. Governmental
 - a. State Land Use District Map Designation Poor
District Designation: Agriculture.
A State Land Use Boundary Amendment is required.
 - b. County Community Plan Designation Poor
General Plan Designation: Agriculture.
A Community Development Plan amendment is required.
 - c. County Zoning Designation Poor
Zoning Designation: No zoning designation is shown on agricultural lands

- d. Agricultural Land Classification Fair
Productivity Rating: C.

RATING TOTALS

Good 0
Fair 1
Poor 3

2. Community Effects

- a. Interference with Institutions Good
Nearest hospitals, rest homes, etc. located
in Kahului.
- b. Existing Land Use Poor
Present Use: Pineapple.
- c. Proximity to Commercial Centers Good
Distance from commercial centers:
.7 mile.
- d. Aesthetic Value Fair
The site is an aesthetic asset to the
community: No.
Site development may partially obstruct
scenic vistas: Yes.
- e. Location Poor
Estimated percentage of students within 1 mile
radius of site: 5.6 percent.

RATING TOTALS

Good 2
Fair 1
Poor 2

B. Cost Considerations

As a basis for further comparing the relative merits of each candidate site, cost estimates were developed for site acquisition, off-site development, on-site development, and the busing subsidy.

1. Site Acquisition Costs

Site acquisition costs are commonly estimated to determine approximate costs for acquiring privately owned land, based on the County's assessed property tax valuation. The assessed valuation is regarded as the amount the State must expend to acquire a school site. However, these cost estimates do not reflect market assessment of land values, but instead estimate magnitudes of order and relative valuations among the sites.

Agricultural land is generally assessed at a much lower rate. Table A-1 estimates are based on the County's assessed property tax valuation.

TABLE A-1
SITE ACQUISITION COST ESTIMATES

SITE	TMK of Parcel Occupied	Value Per Acre	Site Acreage	Site Value (Rounded to nearest 100)
Site 1: Lower Pukalani Site	2-3-09:7	\$551	35	\$19,300
Site 2: Kula/Haleakala Hwy. Site	2-3-07:1	\$558	35	\$19,500
Site 3: Makawao Avenue Mauka Site	2-3-17:8	\$893	35	\$31,300
Site 4: Makawao Avenue/ Apana Road Site	2-3-09:13	\$579	35	\$20,300
Site 5: Baldwin Avenue Site	2-4-01:3	\$772	35	\$27,000

2. Off-Site Improvement Costs

Significant off-site improvements considered necessary for all five candidate sites include water service infrastructure, and pedestrian and roadway improvements. Water service assessment costs were calculated based on information about the areas existing water system. These estimates are included in Table A-2. The cost for off-site pedestrian and roadway improvements was assumed to be in the same order of magnitude for all candidate sites, inasmuch as they all will likely require new sidewalks and roadway improvements at vehicular access and egress points. New traffic signalization may also be required. The necessity and cost for improvements such as roadway widening, signalization, and installation of sidewalks will be assessed in detail for the selected school site.

Measures to provide adequate water supply and fire flow protection varied among the five sites due to the different site elevations and distance from water sources. Requirements at the Lower Pukalani Site 1 included 3,200 linear feet (L.F.) of 16-inch water line, 4,000 L.F. of 8-inch water line, and an associated pressure reducing valve and compound meter with boxes. Facilities needed at Kula/Haleakala Highway Site 2 include a 300,000 gallon storage tank, pump station, and meters. The Makawao Avenue Mauka Site 3 would also need a 300,000 gallon storage tank plus 1,800 L.F. of 8-inch water line.

Improvements at the Makawao Avenue/Apana Road site involve replacing 4,600 L.F. of existing 12-inch water line with 16-inch, and installing another 1,800 L.F. of 8-inch water line. At the Baldwin Avenue Site 5, 3,200 L.F. of 16-inch and 4,200 L.F. of 8-inch water line would need to be installed. As shown in Table A-2, the cost estimate for improvements at any of the sites is relatively equal despite the different site requirements.

None of the candidate sites require off-site improvements for grading, landscaping, drainage, sewer, or gas (see Table A-2). Grading and landscaping were regarded as unnecessary since slope and natural landscape features offered by the surrounding terrain were judged to be adequate. Also judged adequate is the drainage in the Upcountry area due to its well-drained soils.

TABLE A-2
OFF-SITE IMPROVEMENT COSTS*

Improvements	Lower Pukalani Site <u>(1)</u>	Kula/ Haleakala Hwy. Site <u>(2)</u>	Makawao Avenue Mauka Site <u>(3)</u>	Makawao Avenue Apana Road Site <u>(4)</u>	Baldwin Avenue Site <u>(5)</u>
Water	\$900,000	\$850,000	\$800,000	\$900,000	\$900,000
Roadway	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Grading	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Landscaping	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Drainage	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Sewer	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Elec./Tel.	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Gas	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
TOTAL	\$900,000	\$850,000	\$800,000	\$900,000	\$900,000

There is no County sewerage system in the Upcountry area so all homes are served by cesspools. Due to the magnitude of demand produced by the high school, an individual wastewater treatment system will be required. Wastewater treatment facilities will likely consist of an on-site treatment plant and leaching field. Sewer costs are thus reflected as an on-site cost rather than an off-site cost.

All sites have electrical power/telephone systems along their respective access roads and will not require any off-site installation of overhead lines. The provision of gas lines is also considered unnecessary since none of the sites are near existing gas infrastructure. Instead gas would be trucked in and stored in tanks.

3. On-Site Improvement Costs

On-site improvement costs were assumed to be the same for all sites. Costs were estimated for roadways, parking, grading, drainage, and landscaping, as well as various utilities such as sewerage, water, electrical power/communications,

and gas (see Table A-3). They were calculated based on 1987 on-site improvement costs for an elementary school of 8 acres. A factor of 4.5 was multiplied to the costs to account for a 35 acre area, and this figure was multiplied by 5 percent inflation per year to arrive at a 1990 dollars figure.

Costs for wastewater treatment were an exception. A new Upcountry high school will require an independent wastewater system with a design capacity of 200,000 gallons per day. Based on an average factor of \$5/gallon, an independent on-site treatment plant will cost approximately \$1 million.

Roadway improvements are estimated to cost \$480,000 for driveway, drop-off and parking areas. Water system improvements, including the installation of meters, water lines, and fire hydrants are expected to total approximately \$320,000. Drainage costs are estimated at \$550,000. The installation of lines and cables for the electrical and telephone system is estimated at \$360,000. The gas system, including gas lines and a storage tank, would be approximately \$70,000.

On-site landscaping improvements amounting to \$960,000 assume the need for topsoil, grassing and an irrigation system for half of the landscaped area. Grading costs for all sites are identical at \$1,080,000.

Table A-4 provides a summary of combined off-site and on-site improvement costs at each of the sites.

4. Bus Subsidy Cost

An allowance for bus transportation is provided for students who reside more than one mile in walking distance from school. Bus subsidy costs are computed based on the number of students who qualify for the bus subsidy, and the cost of the bus service.

TABLE A-3
ON-SITE IMPROVEMENT COSTS

<u>Improvements</u>	
Grading	\$1,080,000
Roadway	\$ 480,000
Water	\$ 320,000
Drainage	\$ 550,000
Sewer	\$1,000,000
Elec./Tel.	\$ 360,000
Gas	\$ 70,000
Landscaping	<u>\$ 960,000</u>
TOTAL	\$4,820,000

TABLE A-4
COST SUMMARY*

Improvements	Lower Pukalani Site (1)	Kula/ Haleakala Hwy. Site (2)	Makawao Avenue Mauka Site (3)	Makawao Avenue/ Apana Road Site (4)	Baldwin Avenue Site (5)
Grading	\$1.08	\$1.08	\$1.08	\$1.08	\$1.08
Roadway	\$0.48	\$0.48	\$0.48	\$0.48	\$0.48
Water	\$1.22	\$1.17	\$1.12	\$1.22	\$1.22
Drainage	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55
Sewer	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
Elec./Tel.	\$0.36	\$0.36	\$0.36	\$0.36	\$0.36
Gas	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07
Landscaping	<u>\$0.96</u>	<u>\$0.96</u>	<u>\$0.96</u>	<u>\$0.96</u>	<u>\$0.96</u>
TOTAL	\$5,720,000	\$5,670,000	\$5,620,000	\$5,720,000	\$5,720,000

*Costs, expressed in millions of 1990 dollars, are for planning evaluation purposes only.

An analysis of the distance between each potential site and residential areas within the service area revealed that if the proposed school were to be located at the Lower Pukalani Site (1), approximately 81.3% of the students would require busing. If the school were to be located at the Kula/Haleakala Highway Site (2), approximately 90.2% of all students within the proposed service area would be bused. For the Makawao Avenue Mauka Site (3), Makawao Avenue Apana Road Site (4), and Baldwin Avenue Site (5), approximately 80.2%, 78.2%, and 94.4% of students, respectively, would have to be bused to school.

To assess busing costs, student enrollment for the proposed high school in 1990 was assumed at 1200 students while enrollment for the year 2010 was projected at 1740 students, the design enrollment. The bus subsidy rate established by the Department of Accounting and General Services (DAGS) is \$150 per bus per day in 1990. The annual cost is determined by a 175-day school year. Passenger capacities for each bus is placed at 88 students, assuming that each 44-passenger bus can make 2 runs in each direction per day.

Bus subsidy costs were calculated on a present worth basis for an assumed service life of the school of 20 years, from 1990 to 2010. During this period the student population is assumed to grow steadily at a rate of 1.9% per year to achieve the design enrollment. The DAGS-established busing cost of \$150.00 per bus per day in 1990 is assumed to increase at a steady annual rate of 5% due to inflation.

Bus subsidy costs calculated on this basis for the Lower Pukalani site and Kula/Haleakala Highway site were estimated at \$13.61 and \$15.05 million, respectively (in 1990 dollars). The cost of bus subsidy for the Makawao Avenue Sites 3 and 4 is approximately \$13.43 million and \$13.11 million (in 1990 dollars). Bus subsidy cost for the Baldwin Avenue site was estimated at \$15.74 million (in 1990 dollars). Tables A-5 through A-9 show the incremental increase in the number of buses required and the resulting costs.

TABLE A-5

ESTIMATED BUS SUBSIDY COSTS - LOWER PUKALANI SITE 1

Year	Estimated No. of Pupils	No. being bused *	No. of buses **	Cost (5% inflation/yr.)
1990	1,200	976	12	304,000
1991	1,227	998	12	326,000
1992	1,254	1,020	12	350,000
1993	1,281	1,041	12	375,000
1994	1,308	1,063	13	402,000
1995	1,335	1,085	13	430,000
1996	1,362	1,107	13	460,000
1997	1,389	1,129	13	492,000
1998	1,416	1,151	14	527,000
1999	1,443	1,173	14	563,000
2000	1,470	1,195	14	602,000
2001	1,497	1,217	14	643,000
2002	1,524	1,239	15	687,000
2003	1,551	1,261	15	734,000
2004	1,578	1,283	15	784,000
2005	1,605	1,305	15	836,000
2006	1,632	1,327	16	893,000
2007	1,659	1,349	16	952,000
2008	1,686	1,371	16	1,016,000
2009	1,713	1,393	16	1,083,000
2010	1,740	1,415	17	1,154,000
TOTAL				\$13,613,000

* Based on a calculated population of 18.7% of students within walking distance, or 81.3% being bused.

** Based on the assumption of 44 students per bus, each bus making two runs per day in each direction.

TABLE A-6

ESTIMATED BUS SUBSIDY COST - KULA/HALEAKALA HIGHWAY SITE 2

Year	Estimated No. of Pupils	No. being bused *	No. of buses **	Cost (5% inflation/yr.)
1990	1,200	1,082	13	336,000
1991	1,227	1,107	13	360,000
1992	1,254	1,131	13	386,000
1993	1,281	1,155	14	414,000
1994	1,308	1,180	14	444,000
1995	1,335	1,204	14	475,000
1996	1,362	1,229	14	509,000
1997	1,389	1,253	15	544,000
1998	1,416	1,277	15	582,000
1999	1,443	1,302	15	623,000
2000	1,470	1,326	16	666,000
2001	1,497	1,350	16	711,000
2002	1,524	1,375	16	760,000
2003	1,551	1,399	16	812,000
2004	1,578	1,423	17	867,000
2005	1,605	1,448	17	925,000
2006	1,632	1,472	17	987,000
2007	1,659	1,496	18	1,053,000
2008	1,686	1,521	18	1,123,000
2009	1,713	1,545	18	1,198,000
2010	1,740	1,569	18	1,277,000
TOTAL				\$15,052,000

* Based on a calculated population of 9.8% of students within walking distance, or 90.2% being bused.

** Based on the assumption of 44 students per bus, each bus making two runs per day in each direction.

TABLE A-7

ESTIMATED BUS SUBSIDY COST - MAKAWAO AVENUE MAUKA SITE 3

Year	Estimated No. of Pupils	No. being bused *	No. of buses **	Cost (5% inflation/yr.)
1990	1,200	962	11	300,000
1991	1,227	984	12	322,000
1992	1,254	1,006	12	345,000
1993	1,281	1,027	12	370,000
1994	1,308	1,049	12	396,000
1995	1,335	1,071	13	424,000
1996	1,362	1,092	13	454,000
1997	1,389	1,114	13	486,000
1998	1,416	1,136	13	520,000
1999	1,443	1,157	14	556,000
2000	1,470	1,179	14	594,000
2001	1,497	1,201	14	635,000
2002	1,524	1,222	14	678,000
2003	1,551	1,244	15	724,000
2004	1,578	1,266	15	773,000
2005	1,605	1,287	15	826,000
2006	1,632	1,309	15	881,000
2007	1,659	1,331	16	940,000
2008	1,686	1,352	16	1,002,000
2009	1,713	1,374	16	1,069,000
2010	1,740	1,395	16	1,139,000
TOTAL				\$13,434,000

* Based on a calculated population of 19.8% of students within walking distance, or 80.2% being bused.

** Based on the assumption of 44 students per bus, each bus making two runs per day in each direction.

TABLE A-8

ESTIMATED BUS SUBSIDY COST - MAKAWAO AVE./APANA ROAD SITE 4

Year	Estimated No. of Pupils	No. being bused *	No. of buses **	Cost (5% inflation/yr.)
1990	1,200	938	11	293,000
1991	1,227	960	11	314,000
1992	1,254	981	12	337,000
1993	1,281	1,002	12	361,000
1994	1,308	1,023	12	387,000
1995	1,335	1,044	12	414,000
1996	1,362	1,065	13	443,000
1997	1,389	1,086	13	474,000
1998	1,416	1,107	13	507,000
1999	1,443	1,128	13	543,000
2000	1,470	1,150	14	580,000
2001	1,497	1,171	14	620,000
2002	1,524	1,192	14	662,000
2003	1,551	1,213	14	707,000
2004	1,578	1,234	15	755,000
2005	1,605	1,255	15	806,000
2006	1,632	1,276	15	860,000
2007	1,659	1,297	15	917,000
2008	1,686	1,318	15	978,000
2009	1,713	1,340	16	1,043,000
2010	1,740	1,361	16	1,112,000
TOTAL				\$13,113,000

* Based on a calculated population of 21.8% of students within walking distance, or 78.2% being bused.

** Based on the assumption of 44 students per bus, each bus making two runs per day in each direction.

TABLE A-9

ESTIMATED BUS SUBSIDY COST - BALDWIN AVENUE SITE 5

Year	Estimated No. of Pupils	No. being bused *	No. of buses **	Cost (5% inflation/yr.)
1990	1,200	1,133	13	351,000
1991	1,227	1,158	14	377,000
1992	1,254	1,184	14	404,000
1993	1,281	1,209	14	433,000
1994	1,308	1,235	15	464,000
1995	1,335	1,260	15	497,000
1996	1,362	1,286	15	532,000
1997	1,389	1,311	15	569,000
1998	1,416	1,337	16	609,000
1999	1,443	1,362	16	651,000
2000	1,470	1,388	16	696,000
2001	1,497	1,413	17	743,000
2002	1,524	1,439	17	794,000
2003	1,551	1,464	17	848,000
2004	1,578	1,490	17	906,000
2005	1,605	1,515	18	967,000
2006	1,632	1,541	18	1,032,000
2007	1,659	1,566	18	1,101,000
2008	1,686	1,592	19	1,174,000
2009	1,713	1,617	19	1,252,000
2010	1,740	1,643	19	1,335,000
TOTAL				\$15,735,000
* Based on a calculated population of 5.6% of students within walking distance, or 94.4% being bused.				
** Based on the assumption of 44 students per bus, each bus making two runs per day in each direction.				

APPENDIX B

**Archaeological Inventory Survey
Potential Upcountry Maui High School Sites**

**Archaeological Inventory Survey
Potential Upcountry Maui High School Sites
Lands of Haliimaile, Hokuula, Kailua, and Makaeha
Makawao District, Island of Maui**

by

**Theresa K. Donham, M.A.
Supervisory Archaeologist**

Prepared for

**State of Hawaii
Department of Accounting and General Services
c/o Wilson Okamoto & Associates
P.O. Box 3530
Honolulu, Hawaii 96811**

April 1990

PHRI

Paul H. Rosendahl, Ph.D., Inc.

Archaeological • Historical • Cultural Resource Management Studies & Services

305 Mohouli Street • Hilo, Hawaii 96720 • (808) 969-1763 • FAX (808) 961-6998
P.O. Box 12835 • Tamuning, Guam 96911 • (671) 649-3045 • FAX (671) 649-2611

SUMMARY

At the request of Mr. Earl Matsukawa of Wilson Okamoto & Associates (WOA), on behalf of their client, State of Hawaii-Department of Accounting and General Services (DAGS), Paul H. Rosendahl, Ph.D., Inc. (PHRI) conducted an archaeological inventory survey of five potential Upcountry Maui High School sites. The potential school sites are located in the Lands of Haliimaile, Hokuula, Makaaha, and Kailua, Makawao District, Island of Maui. Each potential site (Parcels 1 through 5) consists of approximately 35 acres, for a total survey area of approximately 175 acres.

The survey field work was conducted March 5, 6, and 8, 1990, and consisted of 100% coverage of all observable surface areas within the sites. All of the parcels examined were cultivated pineapple fields. The observable surface area of the fields ranged from 100% to approximately 20% of the total surface area. No archaeological sites were identified during the field survey.

State Inventory of Historic Places (SIHP) records and archaeological manuscripts on file at the Historic Sites Section, Department of Land and Natural Resources, were examined with reference to the potential school sites. No records of previously identified sites were located in the SIHP records. No references to archaeological resources or potential resources within the project areas were located.

During the survey field work, five lithic artifacts and four ceramic sherds were collected from disturbed surface contexts. The artifacts are described in this report. Based on the current findings, no further archaeological field investigations are recommended at potential school site Parcels 1, 2, 3, and 5. If Parcel 4 is further considered for a school site it is recommended that additional historic archival research and a systematic surface collection be conducted within the parcel.

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INTRODUCTION

BACKGROUND

This report presents the results of an archaeological inventory survey conducted at five potential Upcountry Maui High School project areas, located in the Lands of Haliimaile, Hokuula, Kailua, and Makaaha, Makawao District, Island of Maui (TMK 2-3-09:7,13;2-3-07:Por.8,1;2-4-01:Por.3). The survey was conducted by Paul H. Rosendahl, Ph.D., Inc. (PHRI) at the request of Mr. Earl Matsukawa of Wilson Okamoto & Associates, on behalf of their client, State of Hawaii-Department of Accounting and General Services. The overall purpose of the survey was to provide information appropriate to and sufficient for preparation of an Environmental Impact Statement (EIS).

The survey field work was conducted March 5, 6, and 8, 1990, by Supervisory Archaeologist Theresa K. Donham, M.A.. Approximately 19 labor-hours were expended during the field work portion of the survey. The literature and record search for the project was conducted March 28, 1990 at the Historic Sites Section, Department of Land and Natural Resources (HHS/DLNR) in Honolulu.

This report constitutes the final report for the project. It includes a scope of work, descriptions of the project areas, a review of previous archaeological work relevant to the project areas, historical documentary research, field methods, findings, and recommendations.

SCOPE OF WORK

The basic purpose of an inventory survey is to identify—to discover and locate on available maps—all sites and features of potential archaeological significance present within a specified project area. An inventory survey is extensive rather than intensive in scope, and is conducted basically to determine the presence or absence of archaeological resources within a specified project area. This level of survey indicates both the general nature and variety of archaeological remains present, and the general distribution and density of such remains. It permits a general significance assessment of the archaeological resources and facilitates formulation of realistic recommendations and estimates for any subsequent mitigation work as might be necessary or appropriate. Such work could include further data collection involving detailed recording of sites and features, and selected test excavations; and possibly subsequent data recovery research excavations, construction monitoring, interpretive planning and development, and/or

preservation of sites and features with significant scientific research, interpretive, and/or cultural values.

The basic objectives of the current survey were (a) to identify all sites within the project areas, (b) to evaluate the potential general significance of all identified resources, (c) to determine the possible impacts of proposed development on the identified resources, and (d) to define the general scope of any subsequent data collection and/or other mitigation work that might be necessary or appropriate.

Based on a review of available background literature, general familiarity with the Makawao area, and discussions with Mr. Matsukawa of WOA and Ms. Agnes Estioko Griffin, staff archaeologist for Maui and Molokai in the DLNR-HSS/SHPO, the following specific tasks were determined to constitute an appropriate scope of work for the inventory survey:

1. Conduct limited archaeological and historical documentary background research involving review and evaluation of readily available archaeological and historical literature, historic documents and records, and cartographic sources relevant to the immediate project area;
2. Conduct 100% coverage, variable-intensity (30- to 90-ft intervals) surface survey of the project areas in order to identify, record and evaluate any previously identified sites and all newly identified sites;
3. Conduct limited subsurface testing of selected sites and features identified within the school sites (a) to determine the presence or absence of potentially significant buried cultural features or deposits, and (b) to obtain suitable samples for age determination analyses; and
4. Analyze background and field data, and prepare appropriate reports.

PROJECT AREA DESCRIPTION

The five potential Maui High School sites are located in the vicinity of Pukalani and Makawao towns, Makawao District, Island of Maui (Figures 1 and 2). The sites are situated on the eastern slopes of Haleakala, where the bedrock mantle is Pleistocene Age Kula volcanic series lavas (Macdonald, Abbott, and Peterson 1983:370-371).

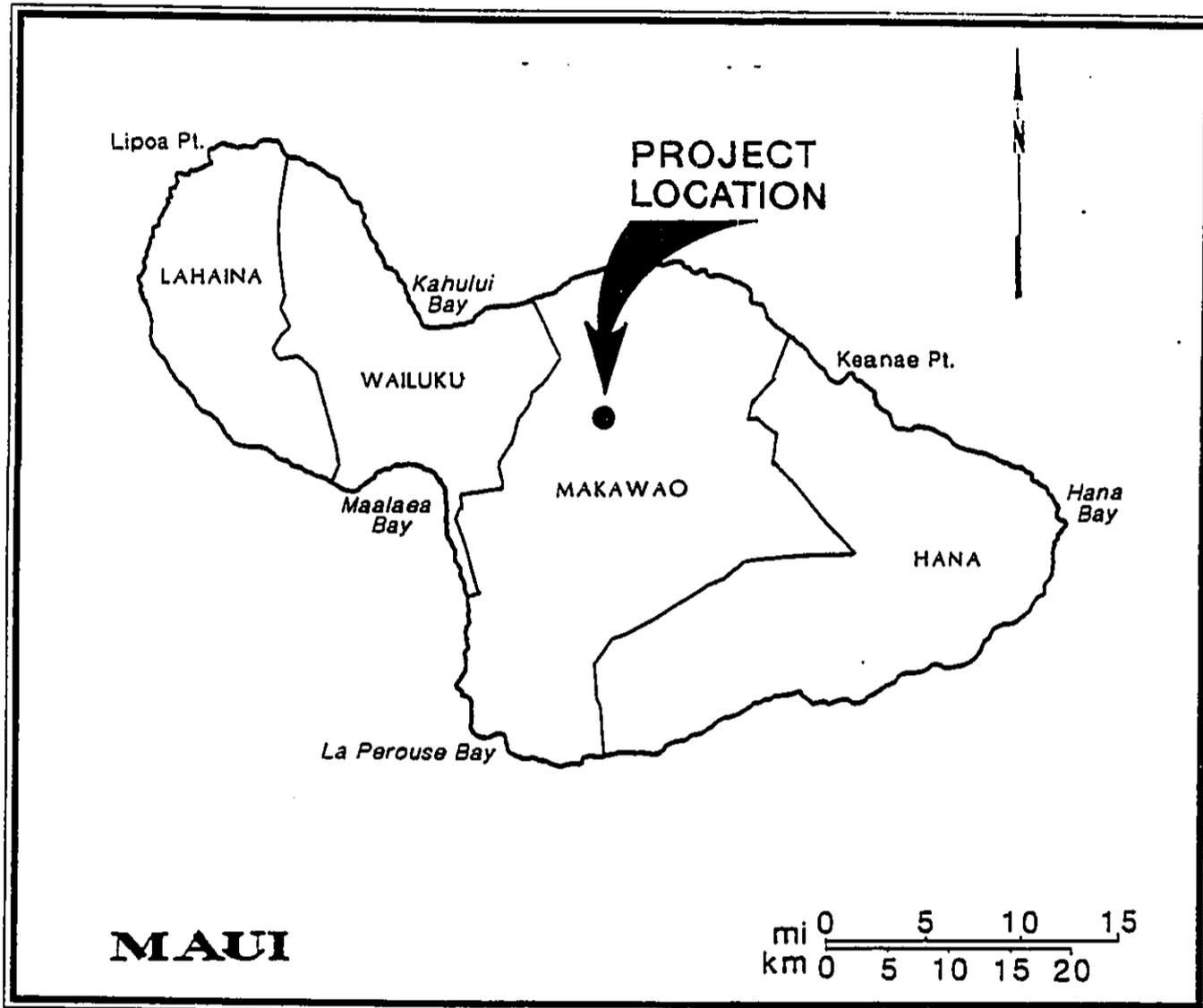


Figure 1. PROJECT LOCATION MAP
ARCHAEOLOGICAL INVENTORY SURVEY
POTENTIAL UPCOUNTRY MAUI HIGH SCHOOL SITES
Lands of Haliimaile, Hokuula, Kailua, and Makaeha
Makawao District, Island of Maui
(TMK 2-3-09:7,13; 2-3-07:Por.8,1; 2-4-01:Por.3)

PHRI Project 89-599

April 1990

The overlying soils at all five locales are well-drained Haliimaile Series silty clay loam. These soils occur on slopes of 3-15% and average 1.5 to 2.0 m thick, except on eroded knolls and ridgetops (Foote, Hill, Nakamura, and Stephens 1972:35). Rainfall in the general area of the sites averages 40-60 inches annually. All parcels are on northwest-facing terrain and range in elevation from 1,100 to 1,860 ft AMSL (above mean sea level).

All five parcels are the property of Maui Land and Pineapple Company (MLP), and were in various stages of pineapple cultivation at the time of survey. According to field managers at the Haliimaile Plantation, all fields have been under cultivation by MLP or Baldwin Packers for over 30 years. The parcel number designations assigned by the planners (1-5) are used in this report and are shown in Figure 2. The specific location and a brief description of each parcel follows.

Parcel 1 (TMK 2-3-09:7), Land of Kailua, Paia Quad - This site is located at the northwestern edge of Pukalani town, and fronts the west side of Haleakala Highway. It is bordered on the north by the Hamakua Ditch and on the south by a subdivision road. The parcel incorporates approximately 70% of Maui Land and Pineapple (MLP) Field No. 280. Elevation of this parcel ranges from 1,100 to 1,180 ft AMSL. At the time of survey, the field was in mature pineapple. There was no surface visibility within the field plots, which were oriented NE-SW and averaged 25.0-30.0 m wide. The field roads were unvegetated, with 100% surface visibility. The crests of low knolls contained relatively high amounts of gravel intermixed with the silty clay loam soil; other areas of the field contained little to no gravel.

Parcel 2 (TMK 2-3-07:Por.1), Land of Makaeha, Kilohana Quad - This site is immediately east of the intersection of Highways 37 and 377, and fronts along the south side of Highway 377 (Upper Kula Road). The parcel incorporates approximately 30% of MLP Field No. 274. Elevation of this parcel ranges from 1,750-1,860 ft AMSL. At the time of survey, field plots were in mature pineapple, with no visibility between plants. The plots were oriented generally E-W and ranged in width from 10.0 to 30.0 m. The field roads were clear of vegetation, with 100% surface visibility. Soil in this parcel is very rocky, and areas of exposed bedrock are present at the crests of knolls.

At the eastern end of the parcel is an uncultivated woodlot, situated along the steep, eastern face of a hillside. This uncultivated area consists of 2-3 acres and is currently used for cattle pasture. The area has been affected by grubbing and livestock.

Parcel 3 (TMK 2-3-07:Por.8), Land of Hokuula, Haiku Quad - Parcel 3 is situated along the south side of Makawao Avenue, roughly midway between Pukalani and Makawao towns. It incorporates approximately 35% of MLP Field No. 273. Elevation of this parcel ranges from 1,590-1,620 ft AMSL. The eastern boundary of the parcel is c. 1.5 km west of Kailua Gulch. At the time of survey, the field was in mature pineapple with no visibility between plants. The field roads were clear, with 100% visibility, and were spaced 20.0-30.0 m between field plots. Plots were oriented generally NE-SW. Soil here is high in gravel content, particularly on the crests of low knolls and ridges.

Parcel 4 (TMK 2-3-09:Por.13), Land of Hokuula, Haiku and Paia Quads - This parcel is situated along the north side of Makawao Avenue, and the west side of Apana Road; it is immediately north of Parcel 3. The parcel incorporates approximately 50% of MLP Field No. 272. Elevation here ranges from 1,400-1,480 ft AMSL, and soils are generally clear of gravel, except on knoll and ridge crests. No exposed bedrock is present. At the time of survey, the field was in very young pineapple with good surface visibility between plants and along field roads. The plots were oriented NE-SW, and averaged 10.0 to 30.0 m wide.

Parcel 5 (TMK 2-4-01:Por.3), Land of Haliimaile, Haiku Quad - Parcel 5 is located along the west side of Baldwin Road, c. 0.5 km north from Makawao Town. It incorporates approximately 50% of MLP Field No. 254. Elevation ranges from 1,380-1,420 ft AMSL. The field had been recently plowed at the time of survey and was clear of all plants. Plots and most of the field roads were undefined, and visibility was 100% in all areas of the field. Soil in this parcel contains scattered gravels, with localizations of cobbles and boulders at the eastern (higher elevation) portion of the field, along Baldwin Road.

PREVIOUS ARCHAEOLOGICAL WORK

Very few archaeological field investigations have been conducted in the vicinity of the proposed project sites, and no prior studies have been conducted within the sites. The earliest field study in the vicinity was Walker's (1931) survey of Maui hejau sites, conducted in 1930. Walker field-verified the names and locations of hejau that had been previously compiled by Thrum and Stokes, and obtained new information from local residents as he conducted his survey.

Prior to Walker's survey, Thrum reported the presence of a sacrificial hejau somewhere between Makawao and

Kula, called Heiau Moomuku (Thrum 1918:126). Walker tentatively located this heiau in Omaopio (Site 224). Three additional heiau were located in Omaopio, just north of the Moomuku Heiau (Walker 1931:288).

During his survey, Walker located an unidentified heiau (Site 228) in Aapueo, "In the pineapple lands two miles from Makawao 100 yards east from the main road" (Walker 1931:291). This general location is approximately 1.50 km south of Parcel 2. The heiau was described as a small L-shaped enclosure, 66.0 ft (20.10 m) long and 47.0 ft (14.0 m) maximum width. Adjacent to the enclosure was a terraced platform 35.0 ft (10.7 m) square (Walker 1931:291).

Walker identified no heiau sites in Kailua, Haliimaile, or Hokuula, wherein the project parcels are located.

As early as 1920, archaeological investigations were conducted in the crater and summit area of Haleakala, primarily by staff from B.P. Bishop Museum. These studies are summarized by Rosendahl (1978), who provides a description of the 115 sites located to date in Haleakala National Park. Sites located in the park include cave shelters, burial caves, heiau, burial platforms and terraces, trails, and cairns. The study areas for the Haleakala surveys are generally above 4,000 ft AMSL, and in a distinctively different environmental zone than are the current project areas.

Only two systematic surveys conducted in the general vicinity of the project areas have been reported to the HHS/DLNR; both were in areas of prior historic period activities. An archaeological survey was conducted by Environmental Impact Statement Corporation (EISC) in 1980 for the Makawao Subdivision area, located northeast of Parcel 4, between Apana Road and Kailua Gulch (EISC 1980). According to the survey report appended to the Environmental Impact Statement, the subdivision project area had been the prior location of a plantation camp, and was in pasture at the time of the survey. The investigators found no surface cultural materials except broken asphalt and discarded structural concrete. No further work was recommended at the project area. In 1988, Estioko-Griffin conducted a surface survey of a waterline corridor located between the Olinda water treatment plant and the Waikamoi Reservoirs, at c. 4,200 ft AMSL. No sites or surface cultural materials were located along this corridor, which had been mostly affected by prior grubbing and pipeline construction (Estioko-Griffin 1988).

The State Inventory of Historic Places (SIHP) files include two sites within the general vicinity of the project areas. These are the Hamakua Burial Cave (50-50-05-1264*) and Puu Pane (50-50-11-1275). The Hamakua Burial Cave is located at the southwestern edge of Pukalani town, along the cliffs of Kalialinui Gulch, near its intersection with the Hamakua Ditch. It is 1.60 km south of the southern boundary of Parcel 1. The site was mapped and registered by Connolly in 1973. It is described as a 33.00 m long lava tube divided into two narrow chambers c. 3.0 m wide. The disarticulated remains of 30-50 individuals were estimated to be present in 1973. The site had been subjected to vandals, and nearly all crania had been removed at the time of Connolly's field inspection.

Puu Pane is located in Aapueo, on the crest of a hill of the same name. The site is approximately 2.50 km south of Parcel 2. The site was first described by M. Manu in an article in *Kuokoa* (Feb. 23, 1884). According to Manu, Puu Pane was a sacred hill and a heiau for the high chiefs that was reportedly visited by Kihapiilani. Connolly visited the site in 1973 and reported the presence of a few alignments that might be remnants of the heiau.

A few additional surveys have been conducted in upcountry Makawao District. The most extensive of these is a recent survey of 1,025 acres of uncultivated pastureland in Keokea and Waiohuli, between 1,800 and 3,000 ft AMSL (Brown 1989). Within the survey area, 159 sites with 335 features were located, including agricultural, residential, and ceremonial complexes (Brown 1989).

SUMMARY OF HISTORICAL DOCUMENTARY RESEARCH

Nineteenth century descriptions of Makawao District located by Wong Smith (Appendix) contain no specific references to the Lands of Kailua, Haliimaile, Hokuula, or Makaeha. These accounts include remarks on the plentiful rainfall of the district, the general weather and vegetation patterns, specific legendary personae, and important places, such as Alelele, a famous diving pool, the *kukui* grove of Liliko'i, and Wahine oma'o, where bird-catching ceremonies were conducted.

A literal translation for Makawao is "forest beginning," which aptly reflects the commencement of the upland forest vegetation zone at c. 2,000 ft AMSL. The four *ahupua'a*

* State Inventory of Historic Places (SIHP) designation system: four-digit site numbers prefixed by 50-50-05- or 50-50-11- (50=State of Hawaii; 50=Island of Maui; 05,11=USGS 7.5' series quad map ["Paia" or "Kilohana," respectively]).

wherin are located the study parcels, as well as other windward Makawao ahupua'a, do not conform to the general geographic pattern of extending from coast to mountain top. The makai boundaries of Kailua, Hokuula, and Makaeha are about 7.5 km from the coast, and abut the extensive Wailuku District, which was established prior to western contact. Haliimaile extends to within 1.5 km of the coast and abuts a coastal extension of the non-traditional Hamakuapoko lands.

Makawao District, as presently defined, consists of four traditional Hawaiian political districts. These include Honualua to the south, along the lee slopes of Haleakala; Kula, which overlooks Wailuku District and the Isthmus lands; and Hamakuapoko and Hamakualoa along the windward slopes of Haleakala. The Lands of Hokuula, Kailua, and Makaeha were within the Kula District, and Haliimaile was within Hamakuapoko (Spriggs and Tanaka 1988:xv).

Haliimaile literally translates to strewn or spread maile. Maile is a leafy vine used in lei-making for hula and other important social events. Maile is one of the plants of Laka, goddess of the hula, and its four varieties are believed to be sisters with human and plant forms (Pukui and Elbert 1986:223). A figurative use of the term halii is in reference to rain falling, in this case, over the maile vines.

Hokuula literally translates to red star, or royal star. Kailua is a place generally located at the sea (kai). The ahupua'a of Kailua does not presently extend to the coast; however, its name suggests that it may have at one time. Of the various literal translations of lua, it is difficult to determine which applies in this case. Lua can refer to a repetition or two, to a duplicate or copy, to a cave or crater, or to a companion or mate. There are several idioms of this word as well (Pukui and Elbert 1986:213).

Makaeha translates to sore or aching eyes. An alternative spelling of this ahupua'a is given by Keohokalole, who officially transferred this and other Makawao (Kula) Lands to the Government during the Mahele, and in the Indices of Land Commission Awards. In these sources, it is referred to as Makehu. Kehu is a variant spelling of ke ehu, meaning of the mist, or spray. Ehu of kehu may also refer to water mixed with fragrant herbs. 'Ehu as an adjective refers to people with ruddy, or reddish-brown complexions or reddish hair (Pukui and Elbert 1986:38).

Prior to the Mahele, in 1845 and 1846, land in the District of Makawao was offered for sale fee simple to Native Hawaiians. The land was sold at \$1.00 per acre, in parcels ranging from 5 to 100 acres (Appendix). These

parcels were registered as Grants, and are not listed in the Indices of Land Commission Awards, which begin in 1848 with the Mahele. It is uncertain at this time whether any of the pre-Mahele grants are within or near the project areas.

Kailua and Makaeha were among Kula Lands controlled by M. Keohokalole, mother of Kalakaua and Liliuokalani. During the Mahele, Keohokalole conveyed these ahupua'a to the Government. The portion of Kailua which contains Parcel 1 was sold as Grant 3085. The portion of Makaeha (Makaehu, Makehu) which contains Parcel 2 was sold to W. H. Bailey in 1877. Approximately 792 acres of this claim is now the property of Maui Land and Pineapple Company.

Hokuula was retained as Government Land during the Mahele, and was later subdivided by the Land Commission. The portion of Hokuula containing Parcel 3 is LCA Award 8452:7; this area is named Kukuiaeo and is currently owned by Haleakala Ranch and Maui Land and Pineapple Company. The portion of Hokuula containing Parcel 4 is subdivided into five grants, with the bulk contained within Grant 1468. Four small grants are located along Apana road, within Parcel 4. These are Grant 1455, a portion of Grant 1444, a portion of Grant 1445, and a portion of Grant 1523. The recipients of these grants have not been researched to date. These grants may be pre-Mahele land purchases by Native Hawaiians, and are possibly house or garden sites.

Haliimaile was awarded to M. Kekauonohi, the great granddaughter of Kekauliko, King of Maui. Parcel 5 is within Kekauonohi's LCA Award 11216. A 1,078 acre portion of this land is now the property of Maui Land and Pineapple Company.

No information concerning specific land use prior to the cultivation of pineapple could be located for the study parcels. Additional historic background information is presented in the Appendix.

FIELD METHODS AND PROCEDURES

A 100% coverage pedestrian survey of the study parcels was conducted on March 5, 6, and 8, 1990. In Parcels 1, 2, and 3 surface visibility was limited to the surfaces and banks of field roads, which averaged 5.0-8.0 m wide and were spaced at 10.0 to 30.0 m intervals. In Parcel 4, surface visibility was 100% on the field roads and 75-80% between the roads, where young pineapple plants were located. The sweeps in this field followed the roads; however, more surface could be viewed from the transects. In Parcel 5, which had total surface visibility, parallel sweeps oriented

east-west and spaced approximately 20.00 m apart were conducted. In this field, a very broad surface area could be viewed from the sweep lines.

All parcels were examined during or immediately after periods of rainfall, and the fields had been exposed to a period of extensive rain prior to the survey. These conditions greatly enhanced the visibility of portable remains on the soil surface. Lithic and ceramic items were literally washed clean and set atop small soil pedestals.

All traditional Hawaiian artifacts encountered during the surface survey were collected and their approximate locations were plotted on topographic maps of the parcels. The artifacts were individually numbered in order of discovery,

and bagged with the parcel number, project number (89-599) and date of collection. After cleaning, the artifacts were weighed, measured and drawn, and were marked with the Maui Land and Pineapple Field Number and artifact number (MLP 272-1).

Historic and recent artifacts observed were collected only if they were diagnostic or potentially diagnostic of nineteenth or early twentieth century production. Other historic or recent artifacts were described and their locations were recorded, but they were not collected.

No temporary site numbers were assigned during the survey and no subsurface testing was conducted.

FINDINGS

SURFACE FINDINGS

During the surface survey, no surface structural remains were located, and no archaeological sites were recorded. Portable remains were collected at Parcels 4 and 5. Four lithic artifacts and a ceramic sherd were collected from Parcel 4, and a single lithic artifact was collected from Parcel 5. The materials located and collected at Parcel 4 were widely dispersed across the field, with no indication of concentration or association (Figure 3). The historic ceramic sherd collected at Parcel 4 occurred in association with other non-diagnostic sherds; these tended to cluster along the Apana Road frontage, where the line of small land grants occurred.

Due to the dispersed nature of the lithic artifacts and absence of surface features, a site number was not assigned to the Parcel 4 area. If a site number were to be assigned on the basis of surface artifacts, the entire parcel would have to be included within the area of the site. Additional comments regarding the interpretation of the surface artifacts follows their descriptions.

A brief summary of remains observed and/or collected in each parcel follows:

Parcel 1 - Observed two whiteware sherds, a stoneware sherd with Albany and salt glaze, one porcelain sherd with blue transfer print, a few scattered pieces of glass. The ceramics were widely dispersed in the northeastern portion of the field. Also observed were items relating to the pineapple activities (metal machinery parts, PVC pipe, etc.).

Parcel 2 - Observed one horseshoe, three pieces of machinery metal. All items widely dispersed throughout the field.

Parcel 3 - Observed one small piece of waterworn coral near center of field. Also observed were widely scattered *Cellana* shells that were obviously of recent deposition.

Parcel 4 - Observed scattered whiteware and porcelain along Apana Road; collected one sponge-

stamped plate rim. Collected a biface, one ulu maika fragment, a complete small adze, and an adze fragment. Also observed recent refuse along Makawao Avenue.

Parcel 5 - Collected one complete small adze.

PORTABLE REMAINS

Lithic Artifacts

Five lithic artifacts were recovered during the surface survey. Four items were recovered from Parcel 4, and one item was recovered from Parcel 5. The artifacts are described below:

Parcel 4 (MLP 272) -1*: Length 64.5 mm, width 34.5 mm, thickness 16.4 mm, weight 49.8 g (Figure 4a)

This tool is manufactured from a fine-grained basalt flake. The ventral side of the flake has been modified along one edge (proximal), and the dorsal side is heavily flaked on the surface and along the edges. The resulting form is similar to an adze preform. The two ends of the tool exhibit steep edge retouch and wear flaking, indicating that it was used in its current form. Edge wear is also present along the sides of the biface, on both the dorsal and ventral surfaces.

Parcel 4 (MLP272) -2: Length 66.8 mm, width 66.0 mm, thickness 7.7 mm, weight 87.5 g (Figure 4b)

Approximately one-third of an ulu maika stone is represented by this fragment. The gamestone is made from fine-grained basalt, and is polished to a very smooth, regular surface on the remaining portion of the face and sides. Overall length of the item accurately reflects the diameter of the polished face. The thickness of the stone prior to breakage is indeterminate. The polished face is slightly convex and the side angle is approximately 115 degrees.

Parcel 4 (MLP272) -3: Length 51.3 mm, width 24.6 mm, thickness 9.0 mm, weight 9.4 g (Figure 4c)

* Artifact number

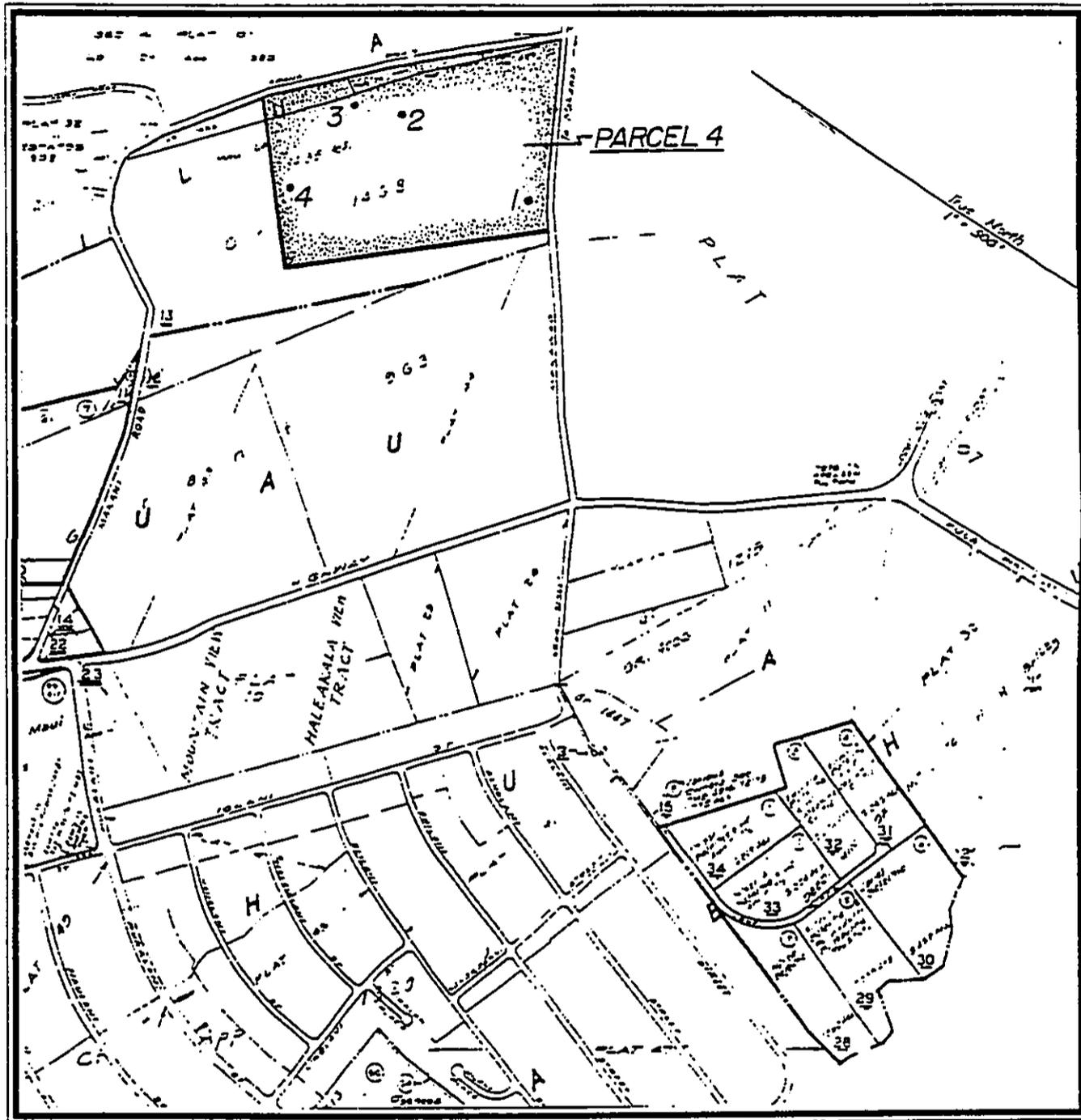


Figure 3. APPROXIMATE ARTIFACT LOCATIONS, PARCEL 4

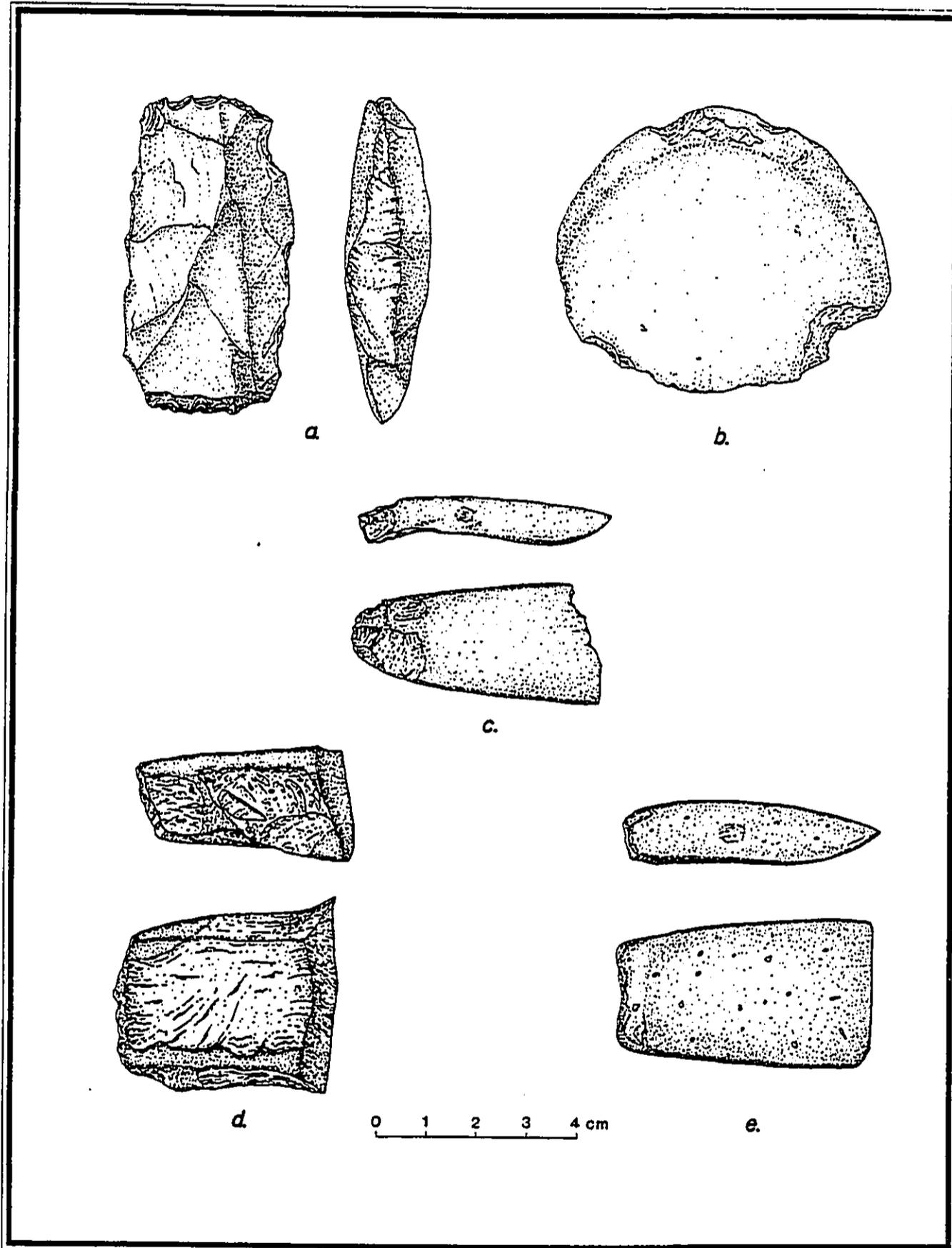


Figure 4. LITHIC ARTIFACTS, PARCELS 4 AND 5

This small adze is manufactured from very fine-grained basalt. It is quadrangular, with no indication of a tang. The bit end exhibits flake scars along the ventral side; these appear to be recent. At the butt end, the polished surface on the dorsal and ventral face is worn off by what appears to be small pecking marks. The polished surface around the sides of the adze is unaltered, except at the butt, where weathered flake scars and pecking marks occur.

Parcel 4 (MLP 272) -4: - Length 40.5 mm, width 36.7 mm, thickness 24.0 mm, weight 68.4 g (Figure 4d)

The butt end of quadrangular adze is represented by this artifact. It was manufactured from fine-grained basalt and has remnants of a highly polished surface on both sides and all edges, except the butt edge. The sides exhibit both flake scars and pecking marks, none of which appear to be recent plowscars. The major snap break across the short axis of the adze could have been made by cultivation machinery. Approximately 10% of the polished surface remains on this item.

Parcel 5 (MLP 254) -1: - Length 52.3 mm, width 30.4 mm, thickness 14.0 mm, weight 46.6 g (Figure 4e)

This complete quadrangular adze is made from light grey basalt that contains scattered holes where softer inclusions have weathered out. It is polished to a smooth, regular surface on both sides and all edges except the butt edge. The butt edge exhibits pecking and light battering scars. A small circular area of surface pecking occurs on one lateral edge; otherwise, the polished surface of the adze is unbroken. A small plowscar is present on the ventral side. The bit edge exhibits very minimal use wear.

Ceramic Artifacts

A single ceramic sherd was collected for observation and description. This sherd was recovered from Parcel 4, and represents the rim section of a plate. It is whiteware paste with a clear glaze and red sponge stamped decoration. A red painted band is present along the rim of the plate. The sherd is 4.7 mm thick at the break and 4.0 mm thick at the rim. The sponge decoration consists of at least two motifs; one is a solid pattern resembling a *fleur-de-lis*, and one is a very similar pattern, but in white relief inside a red outlining background. Sponge stamp decoration on whiteware is generally attributed to the period AD 1840-1900 (Price 1981:38).

CONCLUSION

DISCUSSION

No evidence of prehistoric or early historic period activities were identified in Parcels 1, 2, or 3. A scattering of twentieth century ceramics and glass was located in Parcel 1, but this scatter was too diffuse and thin to indicate the presence of a former house site. There is a possibility, however, that a historic residency was present along Haleakala Highway in Parcel 1. Any traces of a possible structure have since been removed from the field.

In Parcel 5, an isolated lithic adze was located. The general area of this find was closely examined, and no additional artifacts or structural remains could be located. Given the excellent surface visibility in this field at the time of survey, it is probably safe to assume that any nearby surface materials would have been identified if they were present. It should be noted that the eastern portion of the field contained cobbles and boulders that appeared to occur naturally in the soil. There is no way of knowing if some of these stones were once part of a surface structure.

The surface material recovered from Parcel 4 reflects both prehistoric and historic period activities. The lithic items suggest a relatively broad range of activities. The lithics include a biface, engineered for light-duty cutting or scraping, a small adze for light-duty woodworking and/or finishing work, a larger adze for heavier woodworking and/or digging, and a gamestone fragment indicating recreational activities. These items would most likely all occur in the same assemblage at a permanent habitation site. Since they are widely scattered, and are currently hundreds of meters apart, it is indeterminate as to whether the artifacts originated from the same site or assemblage. Since there is no pattern or clustering of the artifacts, even a general location of a possibly former habitation site is impossible. The interpretive potential of the artifacts is therefore limited to a consideration of individual function.

Historic period ceramics, including one sherd of likely late nineteenth century manufacture, were found along the northeast edge of Parcel 4, which fronts Apana Road. As mentioned earlier, this section of the field was divided into four small Land Grants, any of which could have been a house site. It is possible that a house or house sites were present here prior to the issue of the grants, and that the grants predated the Mahele. The association of lithic tools with early post-contact Hawaiian assemblages is quite feasible, and it is possible that the scattered lithic items were derived

from habitation sites that were in the same general area as the Land Grants. Unfortunately, there is no way to field test (by way of subsurface testing) this or any other postulation regarding the surface materials in Parcel 4. Additional surface studies may, however, be of utility. Additional archival research should likewise aid in determining if historic residencies were present along Apana Road.

GENERAL SIGNIFICANCE ASSESSMENTS AND RECOMMENDED TREATMENTS

Significance assessments for sites identified during the current project, if any, were to be based on the National Register criteria for evaluation, outlined in the Code of Federal Regulations (36 CFR Part 60). The Hawaii State DLNR-HSS uses these criteria for evaluating site significance. Sites determined to be potentially significant for information content (Categories A, X) fall under Criterion D, which defines significant resources as ones which "have yielded, or may be likely to yield, information important in prehistory or history." Sites potentially significant as representative examples of site types (Category B) are evaluated under Criterion C, which defines significant resources as those which "embody the distinctive characteristics of a type, period, or method of construction...or that represent a significant and distinguishable entity whose components may lack individual distinction.

Sites with potential cultural significance (Category C) were to be evaluated under guidelines prepared by the Advisory Council on Historic Preservation (ACHP) entitled "Guidelines for Consideration of Traditional Cultural Values in Historic Preservation Review" (ACHP 1985). The guidelines define cultural value as "...the contribution made by an historic property to an ongoing society or cultural system. A traditional cultural value is a cultural value that has historical depth" (1985:1). The guidelines further specify that "[a] property need not have been in consistent use since antiquity by a cultural system in order to have traditional cultural value" (1985:7).

In order to facilitate future client management decisions regarding site treatments, any sites identified were to be further evaluated in terms of PHRI CRM (Cultural Resource Management) value modes, which are derived from the previously mentioned state and federal evaluation criteria. Sites were to be evaluated in terms of potential scientific

research, interpretive, and/or cultural values. Research value refers to the potential of archaeological resources for producing information useful in the understanding of culture history, past lifeways, and cultural processes at the local, regional, and interregional levels of organization. Interpretive value refers to the potential of archaeological resources for public education and recreation. Cultural value refers to the potential of archaeological resources to preserve and promote cultural and ethnic identity and values.

On the basis of findings of the pedestrian survey, literature search, and limited historic documentary research, it appears that Parcels 1, 2, 3, and 5 contain no known or potential historic/archaeological sites or resources. If such sites were once present in these areas, they have since been destroyed beyond recognition by intensive pineapple cultivation. No additional field work or archival work appears to be necessary for a determination of no adverse

effect, should school construction occur in one of these four parcels.

If Parcel 4 is further considered as a construction site, it is recommended that additional archival work be conducted in order to determine (a) the applicants and dates of Land Grants 1444, 1445, 1455, and 1523, located within the parcel, (b) the nature of use, and possible presence of former residencies on these lands, and (c) any cartographic sources that would show early historic period residencies in the Pukalani/Makawao area. It is also recommended that prior to construction, Parcel 4 be plowed for 100% surface visibility, and be reexamined by way of a systematic total surface collection. This procedure should determine if any patterning in the distribution of surface artifacts is still discernible, and may permit the identification of a site area within the parcel.

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APPENDIX

HISTORICAL DOCUMENTARY RESEARCH

by Helen Wong Smith, B.A.

The five proposed sites for the New Upcountry Maui High School are in four different *ahupua'a* within Makawao District. According to the USGS 7.5 minute series quad maps ("Paia, Haiku, Puu o Kali and Kilohana, Hawaii"), Site 1 is located in the *ahupua'a* of Kailua; Site 2 in the *ahupua'a* of Makaeha; Sites 3 and 4 in the *ahupua'a* of Hokuula; and Site 5 in the *ahupua'a* of Haliimaile. These last two *ahupua'a* once defined the boundary between the ancient districts of Kula and Hamakuapoko, with all *ahupua'a* but Haliimaile being in Kula. In common with a number of others in this area, these are not typical *ahupua'a*, which usually run from the mountains to the sea. As presently depicted on maps, all four of the land divisions are cut off from the coast, and Makaeha is inland of Kailua. Kailua and Hokuula are denied access to the sea by intervening Wailuku, which is both the *ahupua'a* and modern district which lies below them. The boundary of Haliimaile, not impeded by Wailuku, ends about a mile short of the seacoast. To add to the duplication of names, Makawao also designates an *ahupua'a* inland of Haliimaile, but the name is applied more commonly to designate this general region of Maui.

Place Names of Hawaii (Pukui et al. 1974) was consulted for translations of the *ahupua'a* names. Haliimaile literally means "maile vines strewn"; Hokuula means "red star." No explanation is given for these names. Kailua, whose meaning is readily accepted as "two seas," is strong evidence that this now landlocked *ahupua'a* formerly reached the sea. Makaeha means "sore eye." Makawao itself literally means "forest beginning" according to Place Names. Inez Ashdown gives a different meaning and its interpretation: "Maka = eyes, wao = section: watchful eyes of Wa-o meaning timeless or God or eternity. Central Maui is the kula o ka ma'oma'o or land of mirages. Here, the lost souls wandered until they could find their way to rest" (Ashdown n.d.).

Unfortunately, very little could be found regarding the individual *ahupua'a*. For this reason, references to Makawao will constitute this report. Sterling notes that "Makawao includes the ancient districts of Hamakualoa and Hamakuapoko" (Sterling n.d.). As already noted above, Haliimaile was formerly within Hamakuapoko (Hamakuapoko is also the name of an *ahupua'a* abutting Haliimaile to the north). Historical citations pertaining to Hamakuapoko and Hamakualoa are thus included in this report for more complete coverage.

EARLY HISTORICAL ACCOUNTS

Early accounts concerning the Makawao District generally either describe the area or relate early historical events. Areal descriptions often concern the weather. The rain of Makawao is described by Mrs. Minerva Kalama to Sterling (n.d.) in this way: "ukiu rain = a soft drizzle (the ua Kama'aina of Makawao) when the kiu rain cloud from Makawao meets the Naulu rain cloud from Kula then the rain comes, the typical Makawao rain." Pukui mentions this rain as well, in Olelo No'eau (1983:#1602). In the same source, Pukui gives the following saying:

Keiki holoholo kuaua o Makawao
The lad of Makawao who goes about in the rain.

Said of a native of that place who is not afraid of being wet (ibid:#1705).

A passage in Edward G. Beckwith's Journal of a Tour on Maui also speaks of the unusual Makawao rain (Sterling n.d.):

We noticed a peculiar meteorological phenomenon through the whole ride. The trade wind which blows from the ocean across the Northwestern slope of Haleakala, is highly charged with vapor, which is condensed by the cool mountain air, and falls in abundant rains over the region of Makawao. Along the west side of the mountains about half way to the summit, lay a long line of cumulo stratus clouds, and between this and the nimbus there was but little space. The former lay along side of the mountain, apparently immovable, while the latter would advance and recede, now coming very near and coquettishly scattering its shining rain-drops beneath the very head of immovable cumulus, and now retreating as though afraid of its more dignified companion. While mentioning this latter peculiarity to a gentleman this evening, he remarked that it was this feature of the clouds which gave the place its name - Makawao, Mako = to be afraid, wao = a cloud. (Hawaiian Mission Childrens Society June 5, 1854) [Sterling notes that this is incorrect, stating that "afraid translates maka'u and ao is cloud."]

Notes of Sterling and Ashdown located in the Maui Historical Society's Collection also provide the following two descriptions of Makawao. Sterling's description is somewhat poetic; Ashdown's description is curiously intermixed with what may be a legend:

O native sons of those sections, the ones who watch for the dancing (haa) of the naked ones (olohe) on the plains of Kama'oma'o, where the iwa birds dwell in the ukiuku rain of Makawao....S. W. Nailiili, "E noho ana oe e oe e hoolono iki mai ana" Ke Au Okoa, Nov. 6, 1865, Hamakuapoko and Hamakualoa (Sterling n.d.).

In the area of Wahine'oma'o (now called the "Baseball Park" above the modern Poli-Poli camp) and nearby Lua-ma-ma-ne, was a structure said to be for bird catching ceremonies because that region was full of birds. The 'Oma'o bird is known as the Hawaiian Thrush, and they were plentiful and provided green feathers. The Woman of 'Omao' dwelt at Mamane and she was called Mamao because she was of such very high rank. She was so sacred that others must keep their distance. A handsome lesser chief fell in love with her beauty and tried to win her. Of course this was kapu. Her heart was heavy with the knowledge that because he came near to her shadow he had to be punished. A high priest conducted ceremonies of purification at the temple there and revived happiness. Today the Mamane trees are stunted and soon the foreign trees such as California Redwood, Norfolk Pines and others will be replacing the former green verdure (Ashdown 1971:46).

In 1873, Isabella Bird toured the Hawaiian Islands and wrote of her experiences to her sister back home in Edinburgh. These are her impressions of Makawao:

It is very pretty here, and I wish all invalids could revel in the sweet, changeless air. The name signifies "ripe bread-fruit of the gods." The plantation is 2000' above the sea, and is one of the finest on the islands; and owing to the slow maturity of the cane at so great a height, the yield is from 5 to 6 tons an acre. Water is very scarce; all that is used in the boiling-house and elsewhere has been carefully led into concrete tanks for storage, and even the walks in the proprietor's beautiful garden are laid with cement for the same purpose. He has planted many thousand Australian eucalyptus trees on the hillside in the hope of procuring a larger rainfall, so

that the neighbourhood has quite an exotic appearance. Below, the coast is black and volcanic-looking jutting into the sea in naked lava promontories, which nature has done nothing to drape (Bird 1974:228).

Early accounts which mention Makawao in relation to early historical events include those by historians Kamakau and Fornander:

When Kekaulike heard that Alapa'i, the ruling chief of Hawaii was at Kohala on his way to war against Maui, he was afraid and fled to Waituku in his double war canoe named Ke-aka-milo. He sailed with his wives and children..., his officers, war leaders, chiefs, and fighting men, including warriors, spearmen, and counselors. Some went by canoe and some overland, and the fleet landed at Kapa'ahu at the pit of 'Aihako'ko in Kula [old name for Makawao]. Here on the shore the chiefs prepared a litter for Kekaulike and bore him upland to Haleki'i in Kukahua (Kamakau 1961:69).

Ke-a-ulu-moku was another celebrated man of Kalaniopu'u's day. His father was the great chief Kau-ua-kahi-akua-nui, son of Lono-maka'i-honua and Kaha-po'ohiwi, but his mother belonged to Naohaku in Kohala. He was celebrated as a composer of war chants, chants of praise, love chants, prophetic chants, and genealogical chants. When he went back to Hawaii with Kalaniopu'u he was homesick for the two Hamakua districts of Maui [Hamakua is within Makawao District] where he had lived with Kamehameha-nui and Kahekili. His love for the place found expression in a chant he composed, of which the following is an excerpt:

Aloha, Aloha
 Affectionate longing, ibid
 Aloha wale o'u maku-a la
 Affection for my (foster) parents,
 e o'u makua,
 my parents,
 Aloha wale o'u makua
 Affection for my parents
 Mai na 'aina Hamakua,
 Who belong to Hamakua,
 He mau 'aina Hamakua elua,
 The two districts of Hamakua
 No'u mua kaikua'ana i noho ai
 Where my elder brothers live.

He ala pali na'u he mau ali'i ia
My hillside trails are theirs to rule
(Kamakau 1961:112).

During the fleeing of Kekaulike, [while] Kahekili was carrying on the war on Oahu and suppressing the revolt of the Oahu chiefs, (Kamakau dates this 1785) a serious disturbance on Maui had occurred which gave him much uneasiness. It appears that he had given the charge of his herds of hogs that were running in the Kula district and on the slopes of Haleakala to a petty chief named Kukeawe. This gentleman, not satisfied with whatever he could embezzle from his master's herds, made raids upon the farmers and country people of Kula, Honuaula, Kahikinui, and even as far as Kaupo, robbing them of their hogs, under pretext that they belonged to Kahekili. Indignant at this tyranny and oppression, the country people rose in arms and a civil war commenced. Kukeawe called the military forces left by Kahekili at Wailuku to his assistance; a series of battles were fought, and finally Kukeawe was killed at Kamaole-i-kai, near Palauea, and the revolted farmers remained masters of the situation (Fornander 1969:228).

This uprising of the country people was called the "Battle of the pig-eating Ku-keawe" ('Aipua'a-a-Ku-keawe) (Kamakau 1961:142).

In conclusion of this section, the following sayings, taken from Pukui, are offered:

E hu'e mai 'oe i ke koai'e o Makawao!
I defy you to tackle a lad of Makawao!
A boast from a native of Makawao, Maui.
(1983:#298)

O 'Alelele ke awa kaulana o Makawao.
'Alelele, the famous diving pool of
Makawao.
Refers to Makawao, Maui. (1983:#2355)

Ulu kukui o Liliko'i.
Kukui grove of Liliko'i. (1983:#2869)

This kukui grove, in Makawao, Maui, was much visited by travelers, for it was a favorite spot of the chiefs. The nuts gathered from the trees produced a fragrant, tasty relish.

LAND COMMISSION AWARDS

A discussion of LCA awards in Makawao must begin prior to the Mahele because Makawao was involved in a pre-Mahele experimental program of land awards. Kuykendall recounts the reasons for this trial fee ownership program:

It will be remembered that the year 1845, during which the new land law was written and in part enacted, was disturbed by an anti-foreign agitation, accompanied by a rather pointed suggestion that lands be given or sold to the common people and that the legislative committee, in its reply to the petitions of the people, approved the idea of selling land to Hawaiian subjects. This was directly in line with suggestions contained in Dr. Judd's report as minister of the interior, and there were frequent allusions to the subject in the proceedings of the legislature. The agitation among the people probably hastened the decision of the government to make an experimental beginning without waiting for the new law to go into operation. The places selected for the experiment were the Makawao district of Maui [emphasis own] and Manoa valley on Oahu.

During the King's tour of Maui in December, 1845, and January 1846, the party visited Makawao and it was announced that the entire district, with the exception of McLane's plantation, was to be offered for sale to the people in fee simple [emphasis own]. Rev. J.S. Green, pastor of the Hawaiian church at Makawao, undertook to manage the business of selling the land. In afterwards relating his experience in connection with the project, Green said he called the people together, showed them his instructions from the government, and explained the plan to them.

A few of them purchased at once, others had less confidence that lands thus purchased would be secure, but soon abandoned their scruples, while others still could not for a long time, be persuaded that there was not some catch about it—some design to enrich the chiefs at their expense. But nearly all of these were finally talked out of their suspicions & took up each a small piece of land (Letter in Polynesian, July 14, 1849).

Another missionary, Rev. Richard Armstrong, assisted the enterprise by making surveys. The land was sold at \$1 per acre, and nearly a 100 parcels were taken up, most of them ranging from 5 to 10 acres. Altogether about 900 acres were purchased by the people of the district. (Kuykendall 1968:283).

The inception and process of the Mahele in 1848 is described next, based on the works of Chinen.

During the reign of Kamehameha III, the most important event in the reformation of the land system was incorporated. "The Great Mahele" separated and defined the undivided land interests of the King and the high-ranking chiefs and konohiki (originally referred to the person in charge of a tract of land on behalf of the king or a chief; it is in the later statutes that the chiefs or landlords were referred to as "konohikis") (Chinen 1958:vii and Chinen 1961:13). More than 240 of the highest ranking chiefs and konohiki in the kingdom joined Kamehameha III in this division. The first mahele was signed on Jan. 27, 1848 by Kamehameha III and Princess Victoria Kamamalu by her guardians Mataio Kekuanaoa and Ione Ii. The last mahele was signed by the King and E. Enoka on March 7, 1848 (Chinen 1958:16).

The Mahele did not convey any title to any land. The chiefs and konohiki were required to present their claims to The Land Commission and to receive awards for the lands quitclaimed to them by Kamehameha III. Until an award for these lands was issued, title remained with the government. Because there were few surveyors at the time of the Mahele, the lands were divided by name only, with the understanding that the ancient boundaries would control until a survey of such lands could be made in the future. This was done to expedite the work of the Land Commission in awarding lands to the chiefs and konohiki. However, these chiefs and konohiki were still required to pay commutations to the government for them to receive Royal Patents on their awards. These lands awarded to the chiefs and konohiki became known as Konohiki Lands (Chinen 1961:13).

Lands were identified and separated in 1848 as Crown Lands (for the occupant of the throne), Government Lands, and Konohiki Lands. These were all "subject to the rights of native tenants" (Laws of Hawaii 1848:22). These rights were brought into question when the King, the government and konohiki began selling off parcels of land. To clarify the situation, the Privy Council, on December 21, 1849, adopted four resolutions as a means of protecting the rights of native tenants (Chinen 1958:29).

These resolutions authorized the Land Commission to award fee simple title to all native tenants who occupied and improved any portion of Crown, Government, or Konohiki Lands. Except for the houselots located in the districts of Honolulu, Lahaina, and Hilo, these awards were to be free of commutation (ibid).

Before receiving awards for their lands from the Land Commission, the native tenants were required to prove that they actually cultivated those lands for a living. They were not permitted to acquire waste lands or lands which they cultivated "with the seeming intention of enlarging their lots." Once confirmed, they were required to be surveyed before the Land Commission was authorized to issue any award. These lands became known as "Kuleana Lands" (ibid.). Until its dissolution on March 31, 1855, the Land Commission issued thousands of awards to the native tenants for their kuleana. Even so, less than 30,000 acres of land were awarded to the native tenants as kuleana lands.

The ahupua'a of Hokuula was retained as one of the Government Lands (Board of Commissioners 1929:13). The ahupua'a of Haliimaile was awarded to M. Kekauonohi. Kekauonohi was the great-granddaughter of Kekaulike, King of Maui; she was also the wife of A. Kealiihonui, who died June 23, 1849, and later the wife of L. Haalelea, who died June 2, 1851. This award of 4260 acres was encompassed in Land Commission Award (LCA) 11216 (ibid:12). Both the ahupua'a of Makaehu and Kailua are listed as "Land Surrendered for Commutation by A. Keohokalole" (ibid:51). Keohokalole was the mother of King Kalakaua, Queen Liliuokalani, Miriam Likelike Cleghorn and William Pitt Leleiohoku. In letters to the Minister of the Interior, Keohokalole names her holdings in Kula:

To His Highness, John Young
Minister of Interior
Greetings:

This is to inform you and the Privy council of my desire to convey some of my lands for the Governments one third in the land which remain as mine. Grant me this, of course, with the approval of the Privy Council. Below is a list of the lands I wish to convey to the government.

Aapueo ahupuaa Kula, Maui.
5 Omapio ahupuaa, Kula, Maui
Makehu [sic] ahupuaa, Kula, Maui.
Kuikuaeo ahupuaa, Kula, Maui.
2 Kailua ahupuaa, Kula, Maui.
2 Pukalani ahupuaa, Kula, Maui. (etc.)

The boundaries of all of these lands above have been established.

With appreciation, A. Keohokalole.
Honolulu, Jan 3, 1850

To His Highness, John Young
Minister of Interior
Greetings:

Here is a list of the names of my lands which has been left for me pending for an approval of its distribution.

Aapueo ahupuaa, Kula, Maui.
Kamehame ahupuaa, Kula, Maui.
Kuikuiaeo ahupuaa, Kula, Maui. (etc.)

With appreciation, A. Keohokalole.
Honolulu, Jan. 3, 1850

It should be noted that in the first letter above, and in the Indices, Makaehu is spelled "Makehu."

LAND USE AND TENURE

The Land Index File at the Hawaii State Archives includes a listing of available correspondence relating to lands in the project area. The correspondence provides individual names of those who possibly had an interest in land or land uses in this area and includes a method of monitoring land transactions.

Haliimaile

Privy Council, Vol. 3, pg. 405

Resolution requesting E. Bailey to survey & make a general outline map of the above ahupua'a.
[In the same document, an offer from Kekauonohi to John Young to sell Haliimaile.]

Interior Dept., July 3, 1847

Application by Wm. Crowningburg to Keoni Ana for the above ahupua'a.

Public Instruction, Oct 30, 1848, Thos B. Cummings to Minister of Pub Instruction

Applying to purchase or to lease 300 acres of the above land, on Maui. Offers \$0.25 an acre for lease & \$1.50 an acre for purchase.

Hokuula

Interior Dept., June 2, 1853, John T. Gower to Minister
Recommending the sale of 122.45 acres of land...to Thos. C. White at \$1 per acre.

Privy Council, Vol. 7, pg. 231

Resolution confirming the sale of 122.45 acres of the above ahupuaa to Thos. C. White.

Privy Council, Vol. 9, pg 101

Resolution directing the Minister of Interior to offer at public auction 732 acres...surveyed in five lots and applied for by five persons.

Interior Dept., March 15, 1855, Minister to J. T. Gower
Enclosing copy of resolution passed by the Privy Council, authorizing the sale of 732 acres in above.

Interior Dept., March 26, 1883, W.P.A. Brewer to Minister of Interior

Informing that since the firm of Brewer & Crowningburg has been formed into a joint stock company under the name of East Maui Stock Co., he now wishes to have the lease of the above Govt. land transferred to the new company as mentioned above.

Public Instruction Land, April 11, 1895, J.T. Gower to Minister of Public Instruction

Estimates that there are about 1000 acres in wheat and looking well and in re land sold by him in the above tract to various parties in 100 acre lots, which he asked the Privy Council to confirm, and partly paid for and improvements made thereon. Now, an order has gone forward to sell lands at Auction. Requesting that the Privy Council modify its Resolution &c.

EX & F.O., Nov. 22, 1904, Native of Waimea to Gov. Carter.

Petition, re homesteading above land, attached to letter from Gov to Comm of Public Lands of the above date.

The Interior Department file dated March 31, 1877 contains notes of a survey of Hokuula and Kailua. Unfortunately, it does not reveal any further clues to land use.

The Land of Hamakuapoko and those nearby are covered in this list of Land File documents:

Privy Council, Vol. 3, pg. 405

Resolution requesting E. Bailey to survey & make a general outline map of Hamakuapoko.

Privy Council, Vol. 6, pg. 222

Re. Resolution reserving the whole of the above land for educational purposes.

The Eastern 1/2 of Hamakuapoko

In list showing the above ahupuaa in Maui, was set aside to Kamehameha III, in the division made between Leleiohoku & the King.

The Western 1/2 of Hamakuapoko, Int. Dept., Doc. 375

In list showing that above ahupuaa in Hamakuapoko, Maui was set aside to Wm. P. Leleiohoku, in the division made between the King and the said Leleiohoku.

Interior Dept., Bk. 1, pg. 293, Sept. 9, 1846

In letter to Minister of Interior, John Young, Kekauonohi offers the above land for sale to the Govt for \$3500.

Interior Dept., Bk 1, pg. 294, Oct. 6, 1846

In letter of John Young, to Kekauonohi, price asked for too high, offers \$800. Govt. has 1/3 interest in above land.

[Translation copies in Interior Dept. files.]

Interior Dept., Bk.2, pg. 411, Aug. 21, 1849

In letter of the Minister of Interior (by Jones) to Wm. L. Lee. Informing him that his application, on behalf of John Richardson, for 150 acres of upland in Hamakuapoko, has been granted.

Interior Dept., May 27, 1850

In re. division of lands between the Hawn Govt. & the heirs of W. P. Leleiohoku, showing that 1/2 of the western portion of the above land was granted to the government, which was sanctioned by the Privy Council on May 27, 1850.

Interior Dept., Nov 20, 1850

Application by E. Bailey to the Minister of Interior (Young) for some land in the eastern part of the above place.

Interior Dept., Nov 21, 1850

In application by W.P. Alexander to the Minister of Interior (Young) for 300 acres of land in the eastern part of the above place, & also 500 acres in the same place for Rev. C. B. Andrews.

Public Instruction, March 19, 1851

E. Bailey to Minister of Public Instruction. Have finished up the survey of the above land, also survey of Makaehu, &c.

Public Instruction, May 24, 1851, Minister of Public Instruction from P.J. Gulick.

Replying to his note, relative to lands set apart for educational purposes. That 300 acres in the above tract have been sold to Mr. Stevens of the U.S. Navy. Papers for which have not yet made out & money not paid.

Public Instruction, Dec. 13, 1852, E. Bailey to Minister of Public Instruction

Cattle is running on the above land, & that Kiha is catching them up & squeezing owner to fill his own pockets.

Public Instruction, Jan. 6, 1853, E. Bailey to Minister of Public Instruction

Acknowledging receipt of his favor of the 28th ulto. To put a tax on cattle running in the above place at \$1.00 a head & that Malaihi be appointed Luna for that purpose, instead of Kiha.

Public Instruction, Jan. 19, 1854, E. Bailey to Minister of Public Instruction

Re matter of selling 1000 acres of the above land, to a company of natives at \$2.- [\$2,000] Payment to be made in 4 installments of \$500. each &c. Doc. relating thereto attached.

Public Instruction, June 4, 1855, J.S. Green to Minister of Public Instruction

That Kiha blames him as the cause of his being destitute of land. So strong was his desire for land in the above tract that he gave up all other lands, &c.

Public Instruction, Aug. 20, 1855

In list showing that 150 acres of the above school land on Maui had been sold, and that 5478 acres are unsold.

Interior Dept., Bk 7, pg. 342b, April 12, 1861

In letter from the Minister of Interior to S.N. Castle asking that his rental for a piece of land in the above place belonging to the Oahu College, be reduced to \$350 a year or that he be allowed to purchase said land in Fee Simple at \$1 per acre &c.

Interior Dept., Misc., April 13, 1861

Trustees Oahu College offering to L. Kamehameha the above land, subject to his lease and the rights of the natives therein, for the sum of \$6000.

Interior Dept., April 29, 1861

In letter from Sam'l N. Castle to Minister of Interior, in view of the withdrawal of the offer of one dollar per acre made by the Govt for the above land, the Trustees of the Oahu College have negotiated a sale of the same to the Wailuku Sugar Co. &c.

Interior Dept., Bk. 10, Pg. 195, June 27, 1870

In letter from the Minister of Interior to S.N. Castle informing him that the above land is placed in the Mahele Book as being among those granted for the purposes of Education at the Great Division of Lands - States that said land had been transferred to the Punahou College by the Dept of Education by name only & that its boundaries have not as yet been defined.

Interior Dept., June 17, 1873

In report by the Gov. of Maui on royal patents showing that \$5.25 had been received from Kaumauma for a piece of land in the above place under R.P. 2344.

Figure A-1 reproduces a portion of the map of Makawao by C. J. Lyons dated 1872 (Reg. Map 603) and shows the location of Site 5 in Haliimaile. Note the reference to Brewer Plantation in the vicinity. This may have been part of the holdings referred to above in the letter from W.P.A. Brewer to the Minister of Interior dated March 26, 1883 under the section regarding Hokuula lands.

A survey map by W. D. Alexander and S. E. Bishop dated 1885 shows that Paia Plantation land is located ma kai in Haliimaile (depicted as in Hamakuapoko District). The ma uka section is labeled Grove Ranch Plantation. Both the ahupua'a of Hokuula and Kailua are depicted as within Kula District. They are labeled as Government land and various grants are drawn in. The general area of Sites 3 and 4 in Makaehu is labeled "Warranty Deed to Ed Bailey." Unfortunately, a copy could not be made of the map (on file at the State Archives).

The proposed sites are on elevations from 1,000 ft AMSL (above mean sea level) to 1,800 ft AMSL. An in-depth report on land use regarding the kula zone to the uplands of the present project areas is described in Haun and

Brown (1989:Appendix C). LCA testimony for subject ahupua'a could not be found at the State Archives. But a look at testimony for the ahupua'a of Aapueo which abuts Makaeha reveals that the primary usage was pasturage (LCA 9026 Native Testimony vol. 7:53). This association with cattle provides Makawao with its reputation as a ranching town. The following excerpt from Mowee tells of the primary inhabitants of the area, the Portuguese:

Although the Portuguese on Maui are engaged in every type of business and industry, and in every part of the island, perhaps the most recognizable group are those living in Maui's so-called Upcountry where ranching and farming are the principal occupations. Portuguese residents there center their activities around the ranching town of Makawao, its Catholic St. Joseph's Church, and at Kula which is the location of the beautiful octagonal church whose altar was brought from Portugal itself. (Speakman 1978:145)

The town of Makawao lost its rural status during World War II when military troops stationed nearby encouraged the opening of various businesses to service the soldiers (Harden and Engledow 1988:91). After the war ended, so did most of the commerce and the town reverted to its slower pace (ibid).

All of the proposed sites are in pineapple cultivation owned by Maui Land and Pineapple Company (pers. comm., Bruce Gorst 3/12/90). Maui Land and Pine has its roots in Alexander and Baldwin, one of the original "Big 5" corporations in Hawaii. The inception of this company is documented in the book Mowee:

A company called Baldwin Packers was acquired by "H.P." along with its lands at Kapalua on the northwest coast of Maui. Baldwin Packers eventually became Maui Pineapple Company, the largest producer of pineapple on Maui. Its development was watched over carefully by J. Walter Cameron who had married Frances Baldwin, granddaughter of "H.P." Taking over Maui Pineapple, of which A & B owned controlling interest, he led the Maui company as it developed over the 1950s and 1960s. On his father's retirement, Colin C. Cameron became manager for A & B, then resigned from Maui Pineapple as a struggle for its control ensued. In a surprise move, a multimillion dollar deal in which the Camerons traded A & B stock and cash for controlling stock in the pineapple company, the Camerons won control. Colin became president,

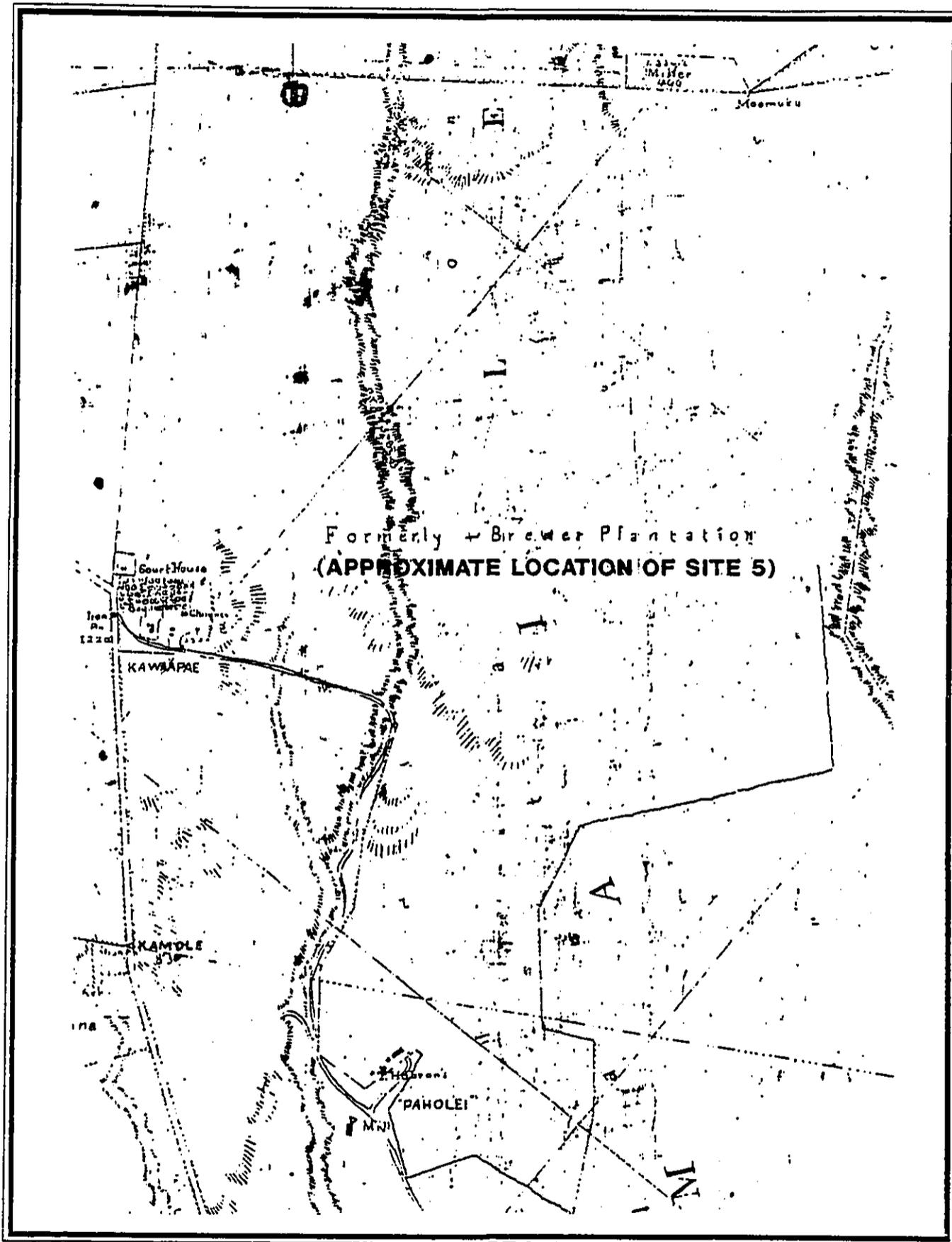


Figure A-1. MAP OF MAKAWAO BY C. J. LYONS

[and] the name was changed to Maui Land & Pineapple Company. (Speakman 1978:130-131)

In Hokuula, there are four small grants (Numbers 1455, 1444, 1445 and 1523?) which may be parcels awarded in the trial fee simple program which took place here prior to the Mahele. A search at the Land Management Office in Honolulu is necessary to confirm or deny this. A report

entitled "Archaeological Reconnaissance of the Paia Sewage System, Part 'A', Paia, Maui, Hawaii" by R.M. Bordner and C. Silva was not available at the time of this project. This work, which contains historical research conducted by Ms. Silva, would be a valuable addition to research in the area. Further historical research should make use of it, in addition to data at the Land Management Office.

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