March 19, 1996

Gary Gill, Director
Office of Environmental Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawaii  96813

SUBJECT: Negative Declaration of Impact
Hamakua Affordable Housing Project
North Hilo and Hamakua, Hawai’i

The Hawai‘i County Mayor’s Office has reviewed the comment
letters received during the thirty-day public comment period
which began on December 23, 1995. The agency has determined that
this project will not have significant environmental effects and
has issued a negative declaration of impact. Please publish this
notice in the next edition of the Environmental Notice.

We have enclosed a completed OEQC Environmental Notice
Publication Form and four copies of the Final Environmental
Assessment. Please call me at 808/961-8379 if you should have
any questions. Thank you for your attention to this matter.

Edwin S. Taira
Assistant Housing Administrator

Encls.
FINAL ENVIRONMENTAL ASSESSMENT
in ACCORDANCE WITH CHAPTER 343, HRS

A. Name of Project: Hamakua Affordable Housing Project
   North Hilo and Hamakua, Hawai'i Island

B. Type of Action: ______ applicant ______ agency
   
   Name of Applicant or Agency:
   Hawai'i County Office of Housing
   and Community Development
   50 Wailuku Drive
   Hilo, Hawaii  96720

C. Approving Agency:
   Office of the Mayor
   County of Hawai'i
   25 Aupuni Street
   Hilo, Hawaii  96720

Authorized Signatures

[Signature]
Housing Administrator
Office of Housing and Community Development

[Signature]
Virginia Goldstein, Director
Planning Department

[Signature]
Deputy Corporation Counsel
County of Hawai'i

[Signature]
Stephen K. Yamashiro, Mayor
County of Hawai'i

D. Environmental Assessment Prepared By:

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159 Haili Street  HCR 9575
Hilo, Hawai'i 96720  Kea'au, Hawai'i 9675

FILE COPY
APR 8 1996
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PART 1: ACTION DESCRIPTION

1.1 Project Location, Background and Description

1.1.1 Project Location

The Hawaii County Office of Housing and Community Development (OHCD) is coordinating a series of actions intended to assist tenants of ten plantation camps formerly part of the defunct Hamakua Sugar Company plantation camps in obtaining title to and upgrading the housing they occupy.

These camps are located between Papaaloa, North Hilo and Honokaa, Hamakua, County of Hawaii and are further identified as follows (new TMKs as of August 1995: former TMKs are indicated in braces):

<table>
<thead>
<tr>
<th>Tax Map Key</th>
<th>Camp Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. (3) 3-5-03: 63 [por. 35]</td>
<td>Kekoa</td>
</tr>
<tr>
<td>2. (3) 3-5-03: 60 [28 &amp; 60]</td>
<td>Papaaloa Skilled</td>
</tr>
<tr>
<td>3. (3) 3-6-04: 8 [por. 10]</td>
<td>Waipunalei</td>
</tr>
<tr>
<td>4. (3) 3-9-01: 41 [por. 11]</td>
<td>Niu Camp</td>
</tr>
<tr>
<td>5. (3) 3-9-01: 40 [por. 34]</td>
<td>Kukui Camp</td>
</tr>
<tr>
<td>6. (3) 3-9-01: 38 &amp; 39 [por. 34]</td>
<td>Ookala Skilled &amp; Store</td>
</tr>
<tr>
<td>7. (3) 4-3-01: 14 and 16 [por. 2]</td>
<td>Pauiilo</td>
</tr>
<tr>
<td>8. (3) 4-3-01: 17 [por. 2]</td>
<td>Nakalei</td>
</tr>
<tr>
<td>9. (3) 4-4-05: 10 [por. 1]</td>
<td>Paauhau</td>
</tr>
<tr>
<td>10. (3) 4-5-02: 54 &amp; 55 [por. 21]</td>
<td>Haina</td>
</tr>
</tbody>
</table>

(See Figure 1, Location Map, and Appendix 1, Camp Maps).

1.1.2 Project Background

The Hamakua Sugar Company (HSC) was at one time the largest sugar plantation on the island of Hawaii. It spanned the Hamakua Coast for a distance of over 35 miles and included over 40,000 acres of land. At its peak, it employed over 1,100 people and was by far the major employer in the region.

Hamakua Sugar Company was also unique among the Hawaii Island sugar companies in that until its demise through bankruptcy in 1992, it continued to provide rental housing for its employees. Prior to its closure, HSC provided over 400 employee housing units spread over 10 different camps or communities along the Hamakua Coast, including those listed in Section 1.1.1.
The majority of these housing units were built between 1911 and 1936. Since that time, no major renovations or improvements have been undertaken. As a result, the majority of the housing units are badly in need of repair and fail to comply with county building code requirements. In addition, the water systems, wastewater systems, roadways and drainage systems do not meet federal, state and county standards. Many of these systems require immediate repair and improvement just to continue service at minimal health and safety levels.

HSC provided these housing units as an employee benefit at nominal rates. The company subsidized the operational costs of the camp housing units with the income generated by the sugar business. At the time of closure, the average monthly rent was approximately 45 dollars. These rents did not even approach the costs of operating the private infrastructure systems servicing the camps and maintaining the housing units.

A court-approved bankruptcy settlement agreement provided that upon completion of the final harvest (in 1994), the housing areas previously maintained by HSC for its employees and former employees were to be transferred to a nonprofit entity, free of any liens. If the settlement agreement had not contained this provision, the most likely consequence under Hawaii law and the bankruptcy code would have been the eviction of the occupants, the demolition of the housing units and a liquidation sale of the housing areas. This action would have left over 400 families facing sudden homelessness. According to 1990 U.S. Census of Population and Housing data, the 400 units represent approximately 16 percent of the total number of occupied dwelling units in the North Hilo to Kukuihaele area, indicating the scale of the problem in the region.

Hamakua Housing Corporation (HHC) was formed after Hamakua Sugar Company filed for bankruptcy in order to address the housing needs of the employees of the company. HSC subsequently transferred control of the camps to HHC through a license agreement for bulk lot subdivision (accomplished in August 1995) and eventual conveyance of title to the occupants of the individual lots.

Given the dispersed locations, age and deteriorated physical condition of the housing units, as well as the desire of the occupants to continue living where many were born and raised, the board of directors of HHC has determine that the most economical and prudent alternative is to convey the houses to the occupants as quickly as possible in an "as is" condition. After the transfer of the individuals housing
units, the residents will need to maintain the camp infrastructure and upgrade systems as necessary and as available resources allow.

1.1.3 Project Description

The Hamakua Affordable Housing project, the subject of this Environmental Assessment, is intended to support HHC in its efforts to convey the former plantation camp areas to the current occupants and other former employees of Hamakua Sugar Company. To this end, the County Office of Housing and Community Development (OHCD) and HHC are seeking county, state and federal grants and aid to support infrastructure upgrades and improvements and rehabilitation of existing units to ensure provision of safe and sanitary living conditions now and in the future.

Planned improvements include the following:

- Connection of plantation water systems to the County system via master meters.
- Water line upgrades to permit sufficient pressure and capacity for fire protection and to meet County dedicable standards where feasible.
- Roadway and associated drainage improvements to provide reasonable access to the camps, including access by emergency vehicles.
- Renovation and rehabilitation including removal and/or containment of lead-based paints.
- Upgrade of housing electrical and plumbing systems to meet current building codes.
- Repair and maintenance of housing.
- Eventual relocation of wastewater lagoons for Paaehau and Paauilo/Nakalei.
- Replacement of wastewater collection system for Haina and connection to sewage system serving Honokaa Hospital.
- Miscellaneous improvements to wastewater systems to remaining camps.

In addition, it is proposed that up to approximately 96 lots may be created through subdivision of existing vacant areas of the camp that will not be used for infrastructure or common areas. This would provide housing opportunities for the former HSC employees who were not living in plantation housing at the time of closure. The scheduling of this subdivision would occur in coordination with infrastructure improvement necessary to support the plans. The minimum lot size is anticipated to be 10,000 square feet. Table 1 lists the number of new lots currently proposed for each camp.

4
Table 1  
Potential Number of New Lots  

<table>
<thead>
<tr>
<th>Camp</th>
<th>Number of New Lots</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kekoa</td>
<td>0</td>
</tr>
<tr>
<td>Papaaloa Skilled</td>
<td>0</td>
</tr>
<tr>
<td>Waipunalei</td>
<td>0</td>
</tr>
<tr>
<td>Niu</td>
<td>0</td>
</tr>
<tr>
<td>Kukui</td>
<td>9</td>
</tr>
<tr>
<td>Ookala Skilled</td>
<td>12</td>
</tr>
<tr>
<td>Store</td>
<td></td>
</tr>
<tr>
<td>Paauilo</td>
<td>4</td>
</tr>
<tr>
<td>Nakalei</td>
<td>0</td>
</tr>
<tr>
<td>Pauhau</td>
<td>63</td>
</tr>
<tr>
<td>Haina</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>96</strong></td>
</tr>
</tbody>
</table>

This Environmental Assessment addresses the impacts and mitigation measures for the activities funded under all activities described above.

Notice of the availability of the Draft Environmental Assessment for this project was published in the December 23, 1995 edition of the Environmental Notice. The 30-day comment period elapsed on January 22, 1996. One comment letter was received, from the Hawaii State Office of Environmental Quality Control (OEQC). The comment letter and response by OHCD are included in this EA as Appendix 4.

1.2 Funding

A number of funding sources have been and will be sought to implement this project. Currently, the only County or State Funds committed to this project is a $1.6 million Special Purpose Grant from the U.S. Department of Housing and Urban Development (HUD) and a Community Development Block Grant for $350,000. The following table lists the status of several existing and on-going efforts to secure funding for this project:

5
<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Purpose</th>
<th>Amount</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Purpose HUD Grant</td>
<td>Survey, Subdivision, Conveyance of Title to Occupants</td>
<td>$1,600,000</td>
<td>Committed</td>
</tr>
<tr>
<td>Community Development Block Grant</td>
<td>Haina Water System Improvements</td>
<td>$350,000</td>
<td>Committed</td>
</tr>
<tr>
<td>Legislative Appropriation through Housing Finance and Development Corporation</td>
<td>Various Infrastructure</td>
<td>$315,000</td>
<td>Appropriated/allocated</td>
</tr>
<tr>
<td>Rural Economic Community Development Block Grant/Loan</td>
<td>Paauilo/Ockala/ Paauhau Water System Improvements</td>
<td>$2,500,000</td>
<td>Application (County of Hawaii Department of Water Supply)</td>
</tr>
<tr>
<td>Community Development Block Grant</td>
<td>Kekoa/Waipunalei Water System Improvements</td>
<td>$350,000</td>
<td>Application</td>
</tr>
</tbody>
</table>

1.3 Ownership

The land involved was property of the former Hamakua Sugar Company, which entered Chapter 11 bankruptcy proceedings in August, 1992. Legal title to the land underlying the camps has been held by the Trustee for Hamakua Sugar company and Kualoa Ranch.

A Settlement Agreement between the Trustee of Hamakua Sugar Company the Western Credit Farm Bank (WFCB), and the State of Hawaii addressed the employee housing issue in the following manner:

"The bargaining unit employee housing areas identified in the attached "Exhibit 'A' shall be subdivided from the larger tax keys of which they are a part at no cost to WFCB and released to Trustee free of the Bank and State liens. Trustee shall receive all rents from employees...The bargaining unit employee housing areas will be transferred to a nonprofit entity to be administered by such entity upon completion of the harvest."

The Hamakua Housing Corporation was chartered to fulfill the role of the nonprofit entity described in the bankruptcy settlement. In October 1994 HHC took over the
responsibility of operating and maintaining the plantation housing under a license agreement with the Trustee.

The Trustee has subdivided the camp areas as bulk lots and will convey these lots to HHC shortly. The County of Hawaii has determined that the dwellings in the plantation camps were intended to be developed and rented as house and lot packages. These house lots were created prior to the adoption of the Comprehensive Subdivision Code on November 22, 1944. Consequently, the lots within the ten (10) plantation camps have been determined to be and are recognized as pre-existing lots of record.

The HHC is currently engaged in the process of assisting camp tenants in gaining fee simple title to the homes they occupy. HHC has also assisted each camp in setting up legally constituted Community Associations, which would own and maintain common areas within each camp and enforce restrictive covenants.

It is expected that by late 1995, title to all homes will reside with their occupants, common areas will belong to the Community Associations, with HHC retaining title to the vacant land areas within the camps that are proposed for future subdivision.
1.4 Land Use Designation and Controls

State Land Use Districts and County zoning are given in Table 2 below.

<table>
<thead>
<tr>
<th>Camp</th>
<th>TMK</th>
<th>State Land Use District</th>
<th>General Plan LUPAG Map</th>
<th>County Zoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papaaloa</td>
<td>3-5-03:60</td>
<td>Urban</td>
<td>Med. Dens.</td>
<td>RS-15</td>
</tr>
<tr>
<td>Waipunalei</td>
<td>3-6-04:08</td>
<td>Urban Conserv.</td>
<td>Low Dens.</td>
<td>A-20a</td>
</tr>
<tr>
<td>Niu</td>
<td>3-9-01:41</td>
<td>Agric.</td>
<td>Low Dens.</td>
<td>A-20a</td>
</tr>
<tr>
<td>Kukui</td>
<td>3-9-01:40</td>
<td>Urban</td>
<td>Low Dens.</td>
<td>RS-10</td>
</tr>
<tr>
<td>Ookala Store</td>
<td>3-9-01:38</td>
<td>Urban</td>
<td>Low Dens.</td>
<td>RS-10 CV-10</td>
</tr>
<tr>
<td>Ookala Skilled</td>
<td>3-9-01:39</td>
<td>Urban Agric.</td>
<td>Low Dens.</td>
<td>RS-10 A-20a</td>
</tr>
<tr>
<td>Paauilo</td>
<td>4-3-01:14 &amp; 16</td>
<td>Urban Low Dens. Med. Dens.</td>
<td>RS 7.5 RD 3.75</td>
<td></td>
</tr>
<tr>
<td>Nakalei</td>
<td>4-3-01:17 (por.)</td>
<td>Agric. Intensive Ag.</td>
<td>A-40a</td>
<td></td>
</tr>
<tr>
<td>Paauhau</td>
<td>4-4-05:10</td>
<td>Agric.</td>
<td>Intensive Ag.</td>
<td>A-40a</td>
</tr>
<tr>
<td>Haina</td>
<td>4-5-02: 54 &amp; 55</td>
<td>Urban Agric. Medium Density</td>
<td>A-1a RS-15</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Zoning codes: RS=Residential; RD=Double Family Residential; A=Agriculture, CV=Village Commercial. Numbers that follow refer to thousands of square feet (RS, RD and CV) or acres (A).

The portions of the camps within the Conservation District are parts of camp common areas near or on the sea cliffs. No site alternations or other activities are planned for these areas, and therefore no Conservation District Use Permits (CDUP) are necessary for the proposed project.

In addition to the above, all or portions of Kekoa, Papaaloa and Waipunalei Camps are with the County's Special
Management Area (SMA). As such, any "development" as defined by Chapter 205A, HRS, would require compliance with Rule 9 of the Planning Commission relating to the SMA.

1.5 Consultation With Agencies and Organizations

The following organizations and agencies have been contacted as part of the EA process.

**County:**

- Planning Department
- Office of the Mayor
- Department of Water Supply
- Department of Public Works
- Hawaii County Council
- Civil Defense

**State:**

- Department of Health
- Housing and Finance
- Development Corporation

Copies of replies from those agencies with substantive comments are provided in Appendix 2 and discussed in the appropriate sections of the Environmental Assessment.

**Community Associations**

- Papaaloa
- Paauilo
- Haina
- Ookala
- Paauhau

A series of more than ten public meetings with residents of the Hamakua and North Hilo districts have been conducted during the last six months with respect to the Hamakua Housing Project. During these meetings, the specific project components were described and discussed. In addition, community associations have been formed, which are responsible for the ownership and management of the roads, common areas and infrastructure systems. These associations will be responsible for the implementation of the specific improvements, with the continued assistance of the Hamakua Housing Corporation.
PART 2: ENVIRONMENTAL SETTING, IMPACTS AND PROPOSED MITIGATION MEASURES

2.1 Physical Environment Characteristics

2.1.1 Geology and Hazards

Environmental Setting

Surface geology on all sites is derived from Pleistocene-age Hamakua Series lava flows from Mauna Kea, mantled with a layer of Pahala Ash of variable thickness. Slopes average between 10 and 35 percent.

The elevations of the camps vary from as low as 250 feet above mean sea level (Papaioa) to as high as 600 feet (Haina).

Volcanic hazard as assessed by the United States Geological Survey is "B" on a scale of ascending risk 9 to 1 (Heliker 1980:23). The low hazard risk is based on the fact that only a few percent of surrounding areas have been covered by lava in the past 10,000 years.

Seismically the area shares with the entire island of Hawaii a Zone 3 rating on a scale of ascending risk 1 to 4 in the Seismic Probability Rating (Furumoto et al 1973:34). Major damage is possible.

Coastal sites in Hawaii, particularly those located on windward shores exposed to vigorous wave action, are subject to shoreline retreat associated with wave erosion. The rate of retreat is usually modest - 2 inches per year is one estimate of the average for Hawaii shorelines (MacDonald et al 1983:266). However, some locations may experience sudden and rapid retreat involving large and potentially life-threatening landslides.

Impacts

The proposed activities will not expose residents or structures to volcanic hazard. Any new structures will be subject to the current Building Code, which includes measures to reduce seismic damage.

Waipunalei Camp suffered the loss of most of its shoreline frontage during a landslide in 1994. It has the potential to suffer further from landslides associated with sea cliff collapse.

In response to the concerns about the safety of the remaining homes, the Hawaii County Civil Defense Agency
Director Harry Kim recommended evacuation of at-risk homes, which was subsequently accomplished (see Civil Defense 29 September 1994 letter, Appendix 2). In regard to the remaining homes, Kim advised:

"Homes in rows three and four are not considered to be at immediate risk. This assessment needs to be re-evaluated if additional cracks or slides occur. For long-term planning purposes, all of these homes should be considered for removal or evacuation."

The at-risk homes have been evacuated. The Hawaii County Department of Public Works Building Division (DPW-BD) proposed a setback of 160 feet from the edge of the cliff as a reasonable distance outside of which to allow homes (see DPW-BD letter 12 September 1994). Nine of the eleven homes remaining conform to the suggested 160-foot setback. The other two homes are approximately 80 feet and 140 feet from the cliff.

Mitigation Measures

In consideration of the remaining Waipunalei residents' potential concern about the safety of their camp, HHC offered the families in the highest risk zones in Waipunalei the option of obtaining a home or vacant lot in another camp. The families expressed a desire to stay in Waipunalei. As a condition of receiving the deed they will sign a full disclosure statement acknowledging and accepting the risk of landslides.

The Hamakua Housing Corporation (HHC) will install a permanent six-foot chain link fence to prevent entry into the hazard zone adjacent to the cliffs.

The HHC and Hawaii County agencies continue to monitor the potential for further erosion of the shoreline at Waipunalei. Although further collapses are not anticipated, all prudent precautions should be taken to prevent injuries and loss of life and property.

2.1.2 Soils and Agricultural Resources

Environmental Setting

The soil types found in the project area are all classified in the Kukaiau-Haina-Paahau Association, which consists of soils derived from volcanic ash. They are deep or moderately deep, acidic, well-drained silty clay loams with a moderately fine-textured subsoil. The specific series found are the Ookala, Paauhau and Kukaiau Soil Series.
The soils are very similar in their agricultural characteristics. All have a strongly acid surface with a medium acid subsurface, and when located on lower slopes they are grouped in Capability Class III—soils with severe limitations that reduce the choice of plants, require special conservation practices, or both. On higher slopes, limitations become even more severe. All were used for sugar cane cultivation.

All soils have low bearing strength, high compressibility and a high proportion of organic matter. Buildings with large foundations require special engineering consideration. Other engineering characteristics vary widely according to slope. On lower slopes, permeability tends to be rapid, runoff slow to moderate, and erosion hazards slight to medium. With higher slopes these characteristics deteriorate and erosion hazard becomes severe (U.S. Soil Conservation Service 1973).

The agricultural utility of the soil has been assessed by the U.S. Soil Conservation Service and mapped as part of map series "Agricultural Lands of Importance to the State of Hawaii" (ALISH). Three categories of valuable agricultural land are identified: Prime, Unique, and Other (Baker 1976:4). Prime Land "has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically when treated and managed ... according to modern farming methods" (Ibid:2). Island-wide, Prime Lands constitute about 4 percent of the surface, Unique Lands less than 1 percent, Other Lands about 18 percent, and Unclassified the remaining 78 percent.

All of the surface in seven of the plantation camps is considered "Urban" in the ALISH system and is therefore unclassified. The subdivision boundaries for three camps enclose land slated for future lot development that includes ALISH Prime Agricultural lands. Paauhau contains approximately 10 acres of such lands, and both Haina and Paaulo have approximately 2 acres.

**Impacts and Mitigation Measures**

Because all proposed activities involve areas with a history of settlement, use and disturbance, there is little potential for exposing the camps or surrounding areas to soil erosion. However, in order to ensure that erosion caused by the proposed project is reduced to negligible levels, all construction should meet requirements of the State Department of Health and incorporate best management practices.
The large existing inventory of Prime and Unique Agricultural lands on the island (over 100,000 acres, much of it along the Hamakua Coast) would be virtually undiminished by the proposed activities. No adverse impact on agricultural soils or lands would result.

2.1.3 Rainfall, Hydrology and Drainage

Environmental Setting

Annual rainfall along the coastal belt that contains the camps varies from approximately 60 to 120 inches (Giambelluca et al 1986), increasing in the Hilo (southeast) direction. Occasionally, large storms may yield abundant rainfall that produces high runoff and large stream flows.

Flood Insurance Rate Maps for the area (Map Panels 0205-C & 0225-C) classify all areas in and directly adjacent to present and future residential areas of the camps as Zone X, which is defined as areas of minimal or moderate flood hazard, outside the 100-year flood plain.

Impacts and Mitigation Measures

Because all proposed improvements to infrastructure (e.g., roads, water lines, and wastewater facilities) would be required to adhere to State, County and federal standards designed to avoid runoff, no adverse impacts to drainage would result.

2.1.4 Flora, Fauna and Ecosystems

Environmental Setting

Field reconnaissance and map consultation by the authors determined that all activities covered in this Environmental Assessment involve areas that have been intensely and repeatedly disturbed by cultivation, structures, roads or other human activities. No areas of natural vegetation remain. Today, the vegetation is a mixture of landscaping (lawns, gardens, etc.), untended weedy patches, and, on the camp fringes, vegetation associated with abandoned cane fields and gulch banks.

Impacts

No listed, candidate or proposed endangered animal or plant species are found on the property. In terms of conservation value, no botanical or zoological resources requiring special protection are present.
In botanical terms, the most interesting and valuable aspect in the camps are the residents' gardens, where edible and ornamental plants from around the world are cultivated. The proposed activities would secure the occupants' connection to the camps and would thus tend to encourage preservation of this living ethno botanical heritage.

2.1.5 Air Quality, Noise and Scenic Resources

Environmental Setting

Air pollution in the Hamakua area is minimal. When present, it is chiefly derived from volcanic emissions blown northwest due to occasional southerly winds.

Ambient noise in the area is low to moderate and is mainly derived from residences and streets.

Scenic resources in the camp include the internal visual environment of the camps themselves and the external surroundings. The camp landscapes are discussed in Section 2.4 below. Views from the camp have changed markedly in recent years because of the growth of weedy vegetation in the abandoned sugar cane fields. Depending on the particular land uses that succeed sugar cane on the lands surrounding each cane camp, the views are likely to continue to change.

Impacts

Project activities would not entail any increase in air pollution, only negligible increases in noise (due to a marginal increase in the number of homes in each camp), and would not affect the scenery surrounding the camps.

2.2 Social, Cultural and Economic Setting

2.2.1 Existing Land Use in Project Vicinity

Setting

For over a century the basic land use pattern in Hamakua has been intimately tied to sugar plantations: extensive tracts of monoculture sugar cane dotted with cane camp housing. However, since the closure of all sugar plantations on the coast, sweeping changes in land use are inevitable.

Likely trends in future land use include temporary abandonment of large acreage of formerly cultivated lands, large-scale forestry operations, smaller-scale diversified agriculture, expansion in ranching, and subdivision into "gentleman farm" tracts designed for the luxury market.
Impacts

The project would preserve housing and community for the traditional residents of the area. Although this would not forestall large-scale land use pattern transition, it would preserve a key social and land use element.

2.2.2 Population

Setting

U.S. Census data are not available for the individual camps but are present for the general areas. No official or unofficial censuses have been conducted for the plantation camps, but housing counts provide an approximation of population (Table 3).

<table>
<thead>
<tr>
<th>CENSUS AREAS</th>
<th>POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tract 219 - Honokaa Area</td>
<td>3,681</td>
</tr>
<tr>
<td>Paauilo Census Designated Place</td>
<td>620</td>
</tr>
<tr>
<td>Tract 221 - North Hilo</td>
<td>1,541</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PLANTATION CAMPS</th>
<th>NUMBER OF UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kekoa</td>
<td>23</td>
</tr>
<tr>
<td>Papsalao</td>
<td>7</td>
</tr>
<tr>
<td>Waipunalei</td>
<td>11</td>
</tr>
<tr>
<td>Niu</td>
<td>12</td>
</tr>
<tr>
<td>Kukui</td>
<td>21</td>
</tr>
<tr>
<td>Ookala Skilled/Store</td>
<td>10</td>
</tr>
<tr>
<td>Paauilo</td>
<td>121</td>
</tr>
<tr>
<td>Nakalei</td>
<td>26</td>
</tr>
<tr>
<td>Paauhau</td>
<td>87</td>
</tr>
<tr>
<td>Haina</td>
<td>50</td>
</tr>
</tbody>
</table>

Sources: 1990 U.S. Census of Population; Hamakua Housing Corporation.
Impacts

Increase in population in itself may sometimes be relatively minor but carry with it significant impacts to lifestyle and public services. The discussion in this section focuses on direct population impacts, while later sections take up the indirect impacts of population increase.

Population increase in the camps would ensue from the proposed actions. A number of former house-lots are now vacant because of past fires or house collapses. HHC is proposing that these lots be sold to former sugar employees for house lots. In addition, there are several camps with sufficient undeveloped area outside of common and infrastructure areas to allow subdivision of new lots. In order to comply with Department of Health regulations, these new lots would be required to have a minimum size of 10,000 sq. ft. Table 4 presents the potential number of residents who could inhabit houses built on these vacant lots.

<table>
<thead>
<tr>
<th>Camp</th>
<th>Potential New Homes (Existing Vacant/New Lots)</th>
<th>Number of Inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kekoa</td>
<td>0 / 0</td>
<td>0</td>
</tr>
<tr>
<td>Papaloa Skilled</td>
<td>0 / 0</td>
<td>0</td>
</tr>
<tr>
<td>Waipunaalei</td>
<td>0 / 0</td>
<td>0</td>
</tr>
<tr>
<td>Niu</td>
<td>0 / 0</td>
<td>0</td>
</tr>
<tr>
<td>Kukui</td>
<td>0 / 9</td>
<td>28</td>
</tr>
<tr>
<td>Ookala Skilled</td>
<td>1 / 12</td>
<td>40</td>
</tr>
<tr>
<td>Store</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paauiol</td>
<td>1 / 4</td>
<td>16</td>
</tr>
<tr>
<td>Nakalei</td>
<td>0 / 0</td>
<td>0</td>
</tr>
<tr>
<td>Paauhau</td>
<td>42 / 63</td>
<td>325</td>
</tr>
<tr>
<td>Haina</td>
<td>11 / 8</td>
<td>59</td>
</tr>
<tr>
<td>Total</td>
<td>55 / 96</td>
<td>468</td>
</tr>
</tbody>
</table>

Notes: Existing vacant lots include all lots of record of house-lot size (approx. 5,000 to 15,000 sq. feet). Number of inhabitants calculated by multiplying increase in total (new plus existing vacant) lots by 3.1, approximate average household size in region, assuming one house per lot (Multiple dwellings on one lot prohibited by covenant).
The total of 468 "new" residents should not be equated with population increase for either the camps or Hamakua/North Hilo. Because the lots would be sold to former Hamakua Sugar Company plantation workers (many of whom are currently on a waiting list for such lots), nearly all of the potential buyers already reside in Hamakua and North Hilo. Some proportion of these buyers would likely come from families that are currently doubled up in existing camp homes, meaning that a portion the camp population would simply be shifted, rather than significantly increased. A survey of former plantation employee households conducted by Pacific Area Consultants (1995) found that approximately 12 percent of households contained six or more members. 

As is apparent from the table, only in Pauhau and to some extent Haina would there be an appreciable increase in the number of units. Pauhau is currently the second largest camp (after Paulilo), containing 87 existing dwellings. Haina is third in size, with 50 existing homes. Development of existing vacant lots and new lots would increase current density by about 50 percent in Haina and over 100 percent in Paulilo.

2.2.3 Socio-Economic Characteristics

Setting

The cane camps have been an integral part of the social and economic landscape of the Hamakua Coast for over a century. Until at least the 1980's, most residents of Hamakua lived in the camps, especially outside of the towns of Honokaa and Laupahoehoe. Even today their residents account for at least half of the population of the area. Social data for the Hamakua Coast region from 1990 is available from published and electronic census reports (U.S. Bureau of the Census 1992, 1993). Table 5 below illustrates selected social characteristics for three census tracts and, for comparison, the city of Hilo.
<table>
<thead>
<tr>
<th></th>
<th>Tract 219 Honokaa Area</th>
<th>Tract 220 Paualo Area</th>
<th>Tract 221 North Hilo</th>
<th>Paualo CDP</th>
<th>City of Hilo</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERSONS</td>
<td>3,681</td>
<td>1,864</td>
<td>1,541</td>
<td>620</td>
<td>37,808</td>
</tr>
<tr>
<td>FAMILIES</td>
<td>941</td>
<td>490</td>
<td>403</td>
<td>162</td>
<td>9,715</td>
</tr>
<tr>
<td>HOUSEHOLDS</td>
<td>1,209</td>
<td>587</td>
<td>506</td>
<td>192</td>
<td>13,234</td>
</tr>
<tr>
<td>% FEMALE</td>
<td>49.3</td>
<td>48.0</td>
<td>47.3</td>
<td>47.7</td>
<td>51.2</td>
</tr>
<tr>
<td>ETHNIC %</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAUCASIAN</td>
<td>34.9</td>
<td>43.9</td>
<td>28.4</td>
<td>23.9</td>
<td>26.6</td>
</tr>
<tr>
<td>FILIPINO</td>
<td>25.9</td>
<td>25.6</td>
<td>30.8</td>
<td>44.8</td>
<td>9.5</td>
</tr>
<tr>
<td>HAWAIIAN</td>
<td>18.6</td>
<td>12.5</td>
<td>12.2</td>
<td>10.0</td>
<td>20.0</td>
</tr>
<tr>
<td>JAPANESE</td>
<td>16.6</td>
<td>13.1</td>
<td>21.2</td>
<td>15.2</td>
<td>35.2</td>
</tr>
<tr>
<td>OTHER</td>
<td>4.0</td>
<td>4.9</td>
<td>7.4</td>
<td>6.1</td>
<td>8.7</td>
</tr>
<tr>
<td>AGE %</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;18</td>
<td>28.8</td>
<td>30.7</td>
<td>39.8</td>
<td>28.7</td>
<td>27.3</td>
</tr>
<tr>
<td>18-29</td>
<td>15.2</td>
<td>13.1</td>
<td>12.0</td>
<td>15.3</td>
<td>15.0</td>
</tr>
<tr>
<td>30-59</td>
<td>34.8</td>
<td>38.4</td>
<td>36.1</td>
<td>36.8</td>
<td>37.8</td>
</tr>
<tr>
<td>&gt;59</td>
<td>21.5</td>
<td>17.8</td>
<td>23.1</td>
<td>19.2</td>
<td>19.9</td>
</tr>
<tr>
<td>FAMILY HOUSEHOLDS %</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOUSING UNITS</td>
<td>1,322</td>
<td>646</td>
<td>567</td>
<td>197</td>
<td>14,134</td>
</tr>
<tr>
<td>OWN-STATUS OCCUPIED</td>
<td>58.1</td>
<td>37.7</td>
<td>51.7</td>
<td>9.1</td>
<td>56.7</td>
</tr>
<tr>
<td>% VACANT</td>
<td>7.9</td>
<td>9.1</td>
<td>10.8</td>
<td>2.5</td>
<td>5.7</td>
</tr>
<tr>
<td>MEDIAN VALUE $</td>
<td>106,700</td>
<td>150,800</td>
<td>83,600</td>
<td>95,000</td>
<td>84,700</td>
</tr>
<tr>
<td>MEDIAN RENT $</td>
<td>329</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>371</td>
</tr>
<tr>
<td>MEDIAN FAMILY INCOME $</td>
<td>33,205</td>
<td>25,737</td>
<td>28,860</td>
<td>26,587</td>
<td>35,570</td>
</tr>
<tr>
<td>% IN LABOR FORCE</td>
<td>63.0</td>
<td>60.0</td>
<td>50.8</td>
<td>58.4</td>
<td>62.9</td>
</tr>
<tr>
<td>% WORK DISABILITY</td>
<td>10.8</td>
<td>9.4</td>
<td>13.8</td>
<td>20.4</td>
<td>9.4</td>
</tr>
<tr>
<td>% IN POVERTY</td>
<td>9.3</td>
<td>8.0</td>
<td>7.2</td>
<td>9.9</td>
<td>14.5</td>
</tr>
</tbody>
</table>
The census data illustrate the social characteristics of a region heavily influenced by the sugar plantation economy. Of particular interest are the high percentage of families, the large proportion of children and elderly relative to working age (particularly 20-30 year olds), the large representation of the Filipino ethnic group, and the slight under-representation of females as compared to Hilo.

The statistics for the census tracts are not wholly accurate representations of the plantation camps because of the inclusion of non-plantation related residents. Small-scale ranches have been the traditional settlement in the mauka sections of Hamakua, which now has a number of new, upscale homes as well.

Data for the Paauilo Census Designated Place (CDP), which includes primarily the center, plantation portion of Paauilo, provide a better portrait of plantation camp facts (see column 4, Table 5). The distinguishing characteristics of Hamakua are even more clearly evident in the Paauilo CDP. Only here is the relatively low value of the housing units evident.

The winding down and closure of Hamakua Sugar in 1993-1994 rendered the economic data from the 1990 census quite out of date. A recent survey of almost 90 percent of the 403 households potentially benefitted by the project provides a closer look at the socioeconomic status of the specific population (summarized in Table 6, below).

### Table 6
**Selected Results, Hamakua Plantation Camp Socioeconomic Survey**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>VALUE</th>
<th>CATEGORY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Household Size</td>
<td>3.3</td>
<td>Mean Annual Household Income</td>
<td>$23,944</td>
</tr>
<tr>
<td>Households With Children</td>
<td>49.1%</td>
<td>Households Relying on Employment Income</td>
<td>63.6%</td>
</tr>
<tr>
<td>Households With Members Over 65 Years</td>
<td>34.2%</td>
<td>Households Relying on Social Security</td>
<td>40.9%</td>
</tr>
<tr>
<td>Households With Member With Disability</td>
<td>19.7%</td>
<td>Households Relying on Public Assistance</td>
<td>15.5%</td>
</tr>
<tr>
<td>Plan to Reside in Hamakua &gt;1 Year?</td>
<td>98.4%</td>
<td>Desire to Own and Reside in Camp Home?</td>
<td>88.7%</td>
</tr>
</tbody>
</table>

The survey revealed a clear need and interest among former plantation workers in obtaining ownership of their homes or lots upon which to build homes. The survey also indicated that although the resources most households could devote to obtaining homes and lots was limited, ownership would be possible if legal and other costs associated with obtaining the homes or lots was less than $5,000.

Impacts

The provision of occupant-owned housing for current plantation camp residents would help retain the current community structure. Because housing is one of the key elements of a stable social environment, the project may also contribute to improvement in socio-economic conditions for the residents. As such, the socio-economic impacts of the project are essentially beneficial.

2.2.4 Lead-Based Paint

Environmental Setting, Regulations and Policies

Any renovation to homes built in Hawaii before 1978 is likely to involve lead-based paint. Lead may be contained in painted building materials such as walls, cabinets, floors, ceilings, stairs and railings as well as soil and dust contaminated with lead-based paint and leaded gasoline.

Lead may cause major health problems in both children and adults, but children under six years old are at greater risk because their bodies are still developing. Long term exposure may lead to mental retardation, learning disabilities, and behavioral problems. Lead exposure may be manifested in symptoms such as crankiness, loss of appetite, vomiting and headaches, or it may be asymptomatic. Blood tests are the only sure indicators of lead poisoning.

When dealing with potentially historic structures, such as plantation camp housing, there is a further objective—to create lead-safe homes but at the same time preserve the historic building materials and their historic appearance to the greatest extent possible.


20
Impacts and Mitigation Measures

In order to ensure comprehension of and compliance with lead-based abatement by contractors and residents actually affected by the renovation, a policy manual was specifically developed for the Hamakua Affordable Housing Project (Muranaka Environmental Consultants, Inc. 1995)

This policy includes detailed guidance for risk assessment, paint inspection, maintenance, dust control, paint stabilization, encapsulation, enclosure, paint removal, disposal and other issues. The policy includes instructions for coordination with the State Historic Preservation Division. The policy will also form an integral part of the design guideline process (discussed in Section 2.4 below).

Proper compliance with the guidelines developed in the policy will minimize exposure to lead as a result of project-related activities. The policy will probably reduce such exposure below levels currently experienced by the residents, who lack education and guidelines on the hazard.

2.3 Public Facilities and Services

A plan assessing the infrastructure and proposing improvements for the camps was developed for HHC by Reid & Associates (1994), consulting engineers. The description of existing and proposed infrastructure is taken from this document.

The camps were designed and built in the early 20th century to standards typical of plantation housing throughout the state. Therefore, many features considered standard in modern houses and subdivisions are lacking or modified in the camp communities.

Plans call for upgrading of this infrastructure commensurate with size of funding. However, it should be recognized that the existing layout of the plantation camps precludes attainment of truly modern infrastructure. Indeed, much of the charm that residents and visitors alike cherish about the camps has to do with the "non-standard" nature of the area. Nevertheless, certain improvements necessary for public health and safety are planned to be undertaken.

21
2.3.1 Roads and Traffic

Existing Setting

The existing camp roads consist of private plantation roads within the camps and connections to either plantation collector roads or County Roads. There are approximately 5.8 miles of plantation road within the camps and 2.0 miles of plantation access roads (which exist to Paauilo, Nakalei, and Paauhau). With the exception of 0.6 miles of unpaved roads in Waipunalei Camp and Haina Camp, plantation camp roads and access roads are paved. Most consist of asphalt concrete. Access roads are 15-24 feet wide, while camp roads are 10-15 feet wide. The pavement condition varies from poor to fair condition.

Drainage on access roads is discharged into roadside ditches. Within the camps, most roadways drainage is discharged as surface runoff to adjacent properties. In addition there are small drainage culverts, ditches, and storm drains within the camps.

Traffic volumes at roads connecting the camps with public highways have never been calculated by the plantation, the County or the State. In general, however, it can be stated that traffic volumes are modest and little or no delays occur at any intersections. Traffic within camps is restricted to low speeds by narrow lanes, frequently poor paving, speed bumps, and custom. Many camp roads are narrow enough to require vehicles to pull over when oncoming traffic approaches.

Impacts and Mitigation Measures

The improvements anticipated include road maintenance (patching and repairing potholes), checking and clearing of storm drains and culverts as necessary, repaving or chip sealing, and road widening.

The access road connecting Paauhau Camp to State Highway 240 (the Honokaa Road) will be closed. Road maintenance efforts will be focussed on the access road to State Highway 19.

Road repair and construction would entail potential for noise, fugitive dust, exhaust, and traffic disruption. Since construction will disturb only areas already occupied by roads, shoulders, and other already disturbed areas, no impact to historic sites, waterways, or natural vegetation communities would occur.

For mitigation of construction impacts, professional traffic control should be utilized as necessary. Dust and noise
control should be implemented during construction to reduce their impact. Best management practices should be observed to control excess runoff during construction.

2.3.2 Electricity and Phone

All camps currently have electricity and phone service. No improvements to these systems or effects on these services is expected as a result of the proposed project. Some poles may be relocated slightly during alteration of roads and water systems.

2.3.3 Water Supply

Existing Setting

Existing water systems in the camps consist of Department of Water Supply (DWS) service via master meter connections to public and private storage facilities and distribution lines. With a few exceptions, most of the plantation water facilities require replacement to meet the DWS standards.

In general, the plantation system distribution lines range in size from one to three inches and do not meet the minimum DWS size requirement of six inches or larger for distribution lines. As a result, the capacity of these lines is insufficient to meet fire flow demand requirements of 500 to 1,000 gallons per minute. With the exception of Haina Camp, there are no individual service meters on the plantation distribution systems.

Impacts and Mitigation Measures

The proposed improvements involve creation of dedicable distribution systems within the camp areas, including replacement of water lines and water storage facilities and installation of water meters and fire hydrants, to comply with standards necessary for eventual DWS dedication.

For existing homes with DWS service, no adverse impact to the current water supply situation in Hamakua is expected. New pipelines should considerably reduce loss from leakage.

For new services, DWS will schedule connections and impose facility charges, as customary. This would insure that existing resources are not exceeded and that if a need for additional water sources and facilities are anticipated as a result of the proposed project, these improvements are funded. This would mitigate any impact to water supply in the service areas around the camps.
Replacement of water infrastructure will entail construction impacts similar to that associated with roads (described above). Since construction will disturb only areas already occupied by roads and existing water lines and facilities, no impact to historic sites, waterways, or natural vegetation communities would occur.

Mitigation of construction impacts would be similar to that discussed for roads, above.

2.3.4 Wastewater

Existing Setting

The existing camp wastewater systems consist of private plantation collection systems and disposal to gang cesspools or sewage lagoons. In addition, several residences have individual cesspools.

The State Department of Health (DOH) regulations allow individual cesspools on lots greater than 10,000 square feet in the project area. The gang cesspools and sewage lagoons as constructed do not meet current DOH regulations, but are permitted since they were built prior to the regulations.

The wastewater collection systems for all of the camps consist of 4-inch or 6-inch steel and/or cast iron lines. Most of these lines do not have manholes or cleanouts. The collection systems do not meet Hawaii County Department of Public Works standards. However, they reportedly have not required major maintenance in recent years.

The wastewater collection systems and gang cesspools have required very little maintenance. Since the closure of the sugar plantation, the sewage lagoons have not been maintained and are overgrown with vegetation. However, all lagoons appear to be operating satisfactorily, as evidenced by green algal growth, lack of odors and the presence of small fish.
Impacts and Mitigation Measures

Proposed improvements to the wastewater systems would consist of relocating wastewater treatment facilities in some camps (particularly Paaulilo and Nakalei), potential connection of the Haina system to the wastewater system of Honokaa Hospital (operated by the State of Hawaii) and repair and maintenance of existing facilities.

Wastewater treatment for new lots would be vary according to the wastewater infrastructure present in the camp at the time the lots are subdivided. All new lots created would be 10,000 square feet or greater in size, and may be eligible for individual cesspools or septic tanks. Some new lots may connect to upgraded wastewater disposal systems. The State Department of Health will be consulted during the subdivision process and will impose wastewater treatment requirements.

2.3.5 Solid Waste

Existing Setting

No county or other collective solid waste collection exists in the project area. Until the late 1980s, the plantation collected rubbish from individual houses. Since that time, illegal dumping has been prevalent, and many roadside areas and gulches are now informal garbage dumps, despite posting of signs by the plantation and the Hamakua Housing Corporation.

Impacts and Mitigation Measures

The proposed improvements do not include a solid waste disposal component. Therefore, the situation would remain status quo.

In order to clean up existing informal dumps and prevent future dumping, it is recommended that a vigorous education program be implemented advising residents of the detrimental effects illegal dumping of household garbage has on health, wildlife and scenery.
2.4 Archaeology and Historic Sites

Pre-Contact and Early Historic Context

The Hamakua Coast, while less celebrated today than Hilo, Kohala or Kona, was the site of rich agriculture and significant population before Hawaii had contact with the West in the 18th century. In the words of Ross Cordy, who undertook a regional archaeological synthesis of the Hamakua District (which includes part of the project area):

"It was here that the complex political system arose which successfully dominated Hawaii Island and eventually the entire archipelago" (1994:6).

Agriculture consisted of dryland farming of taro, sweet potatoes, bananas and other crops. Houses were concentrated on the lower elevations of the uplands. Major trails also crossed this region. Many historical and legendary events occurred along the Hamakua Coast, both in Waipi'o Valley and outside, in the smaller stream valleys and uplands that make up most of the district.

The physical evidence of this heritage has largely been obscured and even erased by subsequent plantation agriculture. Sugar plantations operated from the mid-1800s until 1994, using most of the available land in Hamakua below 2,000 feet in elevation. Only the gulches escaped use, but here over a century of overgrowth, stream floods and landslides have taken their toll on the pre-historic landscape.

The Plantation Legacy

Over a century of plantation life has itself left a rich landscape expressed best in the many plantation towns scattered along with coast. Camp houses, stores, common buildings and streetscapes are charming and replete with cultural and historical information.

Three historic buildings in the plantation area are currently on the National and State Historic Registers. None are near or would be affected by any of the proposed activities.

Inventory studies undertaken in the 1970s as part of the State's Historic Preservation activities noted the historic resources of the general project area. Files at the State Historic Preservation Division (SHPD) contain information collected during the 1970s on Paauhau, Haina, Paaulo, Ookala and Papaaloa camps. In general, the evaluations concluded that none of the specific buildings affected by
the proposed project had outstanding merit individually. Rather, the style and atmosphere of a typical plantation camp was of value, particularly for the camps of Paauilo, Pauau, and Ockala.

Since that time, the State Historic Preservation Officer (SHPO) performed a windshield survey of the plantation camps in the company of the HHC officials. According to the SHPO, in a letter of 1 June 1995:

"All of the camps appear to be over fifty years of age. They retain a high degree of integrity and have strong associations with the housing of sugar industry workers. As a result our office believes these camps appear to meet the criteria for listing in the Hawaii and National Registers of Historic Places" (see Appendix 3 for full text).

Impacts

The areas affected by the proposed project are exclusively composed of existing residential lots or common areas (parks, roads, etc.) or former cane lands. No pre-1850 historic sites are known to exist in these areas. Therefore, impacts to such sites are not expected.

Several of the activities in the proposed project have the potential to alter the appearance of the plantation camps. This could occur in two major ways: through improvement and modernization of roadways and infrastructure, which would affect streetscapes, and through project-funded alteration of the exteriors of the houses associated with replacement of damaged siding, roofs, windows and lanais.

Mitigation Measures

A Memorandum of Agreement (MOA) (see Appendix 3) designed to minimize impacts to the character of the plantation camps was formulated through consultation among the Hamakua Housing Corporation, the Hawaii County Office of Housing and Community Development, and the State Historic Preservation Officer (SHPO). The MOA provides for photo documentation of the camp's streetscapes and selected individual houses. The MOA has been officially adopted and is effective as of July 17, 1995.

In addition, the Hamakua Housing Corporation and the individual camp associations have taken the following steps to protect the historic value of the homes and landscape in the camps:
Covenants that include design review guidelines to be used by the directors of the Community Associations in reviewing proposed improvements to the land within the camp.

Prior to the implementation of any program sponsored or funded by HUD, including roadway design or alteration of the exterior of homes, the SHPO shall concur with the program in accordance with Chapter 6E, HRS and Section 106 of the National Historic Preservation Act.

Guidelines for construction of new dwellings within camp areas shall be developed by the camps in consultation with the SHPO.

The SHPO shall be consulted during the development of the mitigation plan for lead-based paint abatement.

In response to a comment from the Office of Environmental Quality Control (see Appendix 4), the County of Hawaii contacted the State Historic Preservation Division to confirm one further element of the mitigation plan specifically addressing guidelines to safeguard potential surface or subsurface historic sites or material during land alteration activities. More specifically, the following has been agreed to:

The Office of Housing and Community Development will inform the State Historic Preservation Division (SHPD) prior to excavation associated with any Hamakua Affordable Housing activity support by County or State funds, including roadway and utility improvements, for monitoring purposes. If any artifacts, charcoal deposits or human remains are discovered during construction activities, work will immediately cease and the Planning Department and SHPD will be consulted to determine the appropriate mitigation actions.

2.5 Required Permits and Approvals

Hawaii County: Building Permits for Individual Home Rehabilitation

Possible 201e approval by Council Resolution to Establish Special Setbacks and Other Exemptions from Current Codes

State of Hawaii: Consultation with the State Historic Preservation Division in accordance with Chapter 6E, HRS.
PART 3: SUMMARY OF ADVERSE ENVIRONMENTAL IMPACTS
AND PROPOSED MITIGATION MEASURES

3.1 Short Term Impacts

Construction:

Impacts: Short term impacts will result from construction during improvement and maintenance of roadway, water and wastewater systems. Impacts will consist of temporary noise, dust and exhaust from machinery, along with minor traffic disruption.

Mitigation: Professional traffic control should be utilized as necessary. Dust and noise control should be implemented during construction. Best management practices should be observed to control excess runoff during construction.

3.2 Long Term Impacts

Geologic Hazard:

Impacts: The upgrade of housing and camp infrastructure at Waipunalei will encourage retention of housing in a location with some potential for landslide activity associated with seaciff collapse.

Mitigation: All housing judged to be endangered has been evacuated and the land will not be used for any residential purpose. The Hamakua Housing Corporation (HHC) will install a permanent 6-foot chain link fence to prevent entry of the hazard zone adjacent to the cliffs.

Nine of the eleven homes remaining conform to the suggested 160-foot setback. The other two homes are approximately 80 feet and 140 feet from the cliff. The HHC and Hawaii County agencies continue to monitor the potential for further erosion of the shoreline at Waipunalei. Although further collapses are not anticipated, all prudent precautions should be taken to prevent injuries and loss of life and property.

Population Increase:

Impacts: Development of housing on existing vacant and new lots proposed for subdivision has the potential to add a total of 468 "new" residents. However, this figure significantly overstates population increase because most buyers of the lots would be former Hamakua
Sugar Company plantation workers and their families already residing in Hamakua and North Hilo. Furthermore, some proportion of these buyers would likely come from families that are currently doubled up in existing camp homes, meaning that a portion of the camp population would simply be shifted, rather than significantly increased.

Only in Paauhau and to some extent Haina would there be an appreciable increase in the number of units. Paauhau is currently the second largest camp (after Puaulo), containing 87 existing dwellings. Haina is third in size, with 50 existing homes. Development of existing vacant lots and new lots would increase current density by about 50 percent in Haina and over 100 percent in Puaulo.

Mitigation: Since this increase will not adversely impact public services or facilities, no mitigation is proposed.

Provision of Housing:

Impacts: The provision of occupant-owned housing for current plantation camp residents is expected to encourage retention of the current community structure. Because housing is one of the key elements of a stable social environment, the project may also contribute to improvement in socio-economic conditions for the residents.

Mitigation: The socio-economic impacts of the project are essentially beneficial and require no mitigation.

Exposure to Lead:

Impacts: Renovation of homes has the potential to expose residents and workers to lead derived from lead-based paint.

Mitigation: In order to ensure comprehension of and compliance with lead-based abatement by contractors and residents actually affected by the renovation, a policy manual was specifically developed for the Hamakua Affordable Housing Project (Muranaka Environmental Consultants, Inc. 1995)

This policy includes detailed guidance for risk assessment, paint inspection, maintenance, dust control, paint stabilization, encapsulation, enclosure, paint removal, disposal and other issues. The policy includes instructions for coordination with the State
Historic Preservation Division and is included as part of the design guideline process.

Proper compliance with the guidelines developed in the policy will minimize exposure to lead as a result of project-related activities. The policy will probably reduce such exposure below levels currently experienced by the residents, who lack education and guidelines on the hazard.

**Historic Sites:**

**Impacts:** Pre-1850 historic sites are lacking in affected zones of the project area and will therefore not experience impacts.

Improvement and modernization of roadways and infrastructure and alteration of the exteriors of the house have the potential to alter the appearance of the plantation camps.

**Mitigation:** A Memorandum of Agreement (MOA) designed to minimize impacts to the character of the plantation camps was formulated through consultation among the Hamakua Housing Corporation, the Hawaii County Office of Housing and Community Development, and the State Historic Preservation Officer (SHPO). The MOA provides for photodocumentation of the camps' streetscapes and selected individual houses. The MOA has been adopted effective July 17, 1995.

In addition, the Hamakua Housing Corporation and the individual camp associations have taken the following steps to protect the historic value of the homes and landscape in the camps:

- Covenants that include design review guidelines to be used by the directors of the Community Associations in reviewing proposed improvements to the land within the camp.
- Prior to the implementation of any program sponsored or funded by HUD, including roadway design or alteration of the exterior of homes, the SHPO shall concur with the program in accordance with Chapter 6E, HRS and Section 106 of the National Historic Preservation Act.
- Guidelines for construction of new dwellings within camp areas shall be developed by the camps in consultation with the SHPO.
- The SHPO shall be consulted during the development of the mitigation plan for lead-based paint abatement.
The Office of Housing and Community Development will inform the State Historic Preservation Division (SHPD) prior to excavation associated with any Hanakua Affordable Housing activity support by County or State funds, including roadway and utility improvements, for monitoring purposes. If any artifacts, charcoal deposits or human remains are discovered during construction activities, work will immediately cease and the Planning Department and SHPD will be consulted to determine the appropriate mitigation actions.

**Water Supply**

**Impacts:** No impact to the current water supply situation in Hanakua is expected as a result of activities at existing homes with Department of Water Supply service. New pipelines should considerably reduce loss from leakage. Service to new vacant lots may induce the DWS to seek additional source (e.g., wells), storage and distribution facilities.

**Mitigation:** For new services, DWS will schedule connections and impose facility charges, as customary. This would insure that existing resources are not exceeded and that if a need for additional water sources and facilities is anticipated as a result of the proposed project, these improvements are funded. This would mitigate any impact to water supply in the service areas around the camps.

**PART 4: ALTERNATIVES**

**4.1 No Action**

If no action is taken, camp residents must themselves find a way to design and fund improvements to their homes and camp infrastructure. The residents have recently experienced social and economic displacement because of the closure of the only significant employer in the region, and are poorly positioned to accomplish these tasks. In all likelihood, most of the homes would deteriorate, the camp infrastructure would continue to degrade, and many former plantation camp residents would be obliged to leave. It is possible, but not considered likely, that historic preservation funds could be found to preserve the buildings and streetscapes for at least some camps as part of a museum or historic district. This might have the effect of more effectively preserving buildings and streetscapes. However, such preservation might be at the expense of the community which has inhabited the camps for several generations.
PART 5: DETERMINATION

The proposed project will not significantly alter the environment and impacts will be minimal. Therefore, the Hawai'i County Office of the Mayor has determined that the preparation of an Environmental Impacts Statement is not warranted.

PART 6: FINDINGS AND REASONS

1) The proposed project does not involve an irrevocable commitment or loss or destruction of any natural or cultural resources.

2) The proposed project does not curtail the range of beneficial uses of the environment.

3) The proposed project does not conflict with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions or executive orders.

4) The proposed project does not substantially affect the economic or social welfare of the community or State.

5) The proposed project does not substantially affect public health.

6) The proposed project does not involve substantial secondary impacts, such as population changes or effects on public facilities.

7) The proposed project does not involve a substantial degradation of environmental quality.

8) The proposed project is not one which is individually limited but cumulatively may have considerable effect upon the environment or involves a commitment for larger actions.

9) The proposed project does not substantially affect any rare, threatened or endangered species or its habitat.

10) The proposed project does not detrimentally affect air or water quality or ambient noise levels.

11) Although the proposed project is located in an zone exposed to some earthquake and volcanic hazard, there are no reasonable alternatives. The proposed action would not expose any person to unreasonable risks.

For the reasons above, the proposed project will not have any significant effect in the context of Chapter 343, Hawaii Revised Statutes and section 11-200-12 of the State Administrative Rules.
REFERENCES


APPENDIX 1

CAMP MAPS
APPENDIX 2

COMMENTS FROM AGENCIES AND ORGANIZATIONS
COUNTY OF HAWAI\I  STATE OF HAWAI\I

RESOLUTION NO. 328 94

WHEREAS, Senator Daniel K. Inouye and the United States Department of Housing and Urban Development (HUD) has advised the County of Hawaii that Congress has approved and President Clinton has signed the Departments of Veteran Affairs and Housing and Urban Development, and Independent Agencies Appropriation Bill, 1995, P.L. 103-327; and

WHEREAS, the objective of the Special Purpose Grant is for affordable housing activity along the Hamakua coast; and

WHEREAS, HUD will be inviting the County to submit an application for the $1,600,000 Special Purpose Grant; and

WHEREAS, the County wishes to apply for the $1,600,000 Special Purpose Grant for affordable housing activity along the Hamakua coast; and

WHEREAS, a timely submission of the application for Special Purpose Grant funds, in accordance with the appropriate federal requirements, is necessary.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE COUNTY OF HAWAI\I that the Mayor of the County of Hawaii or, in his absence, the Managing Director is hereby authorized to execute and submit the Special Purpose Grant application for affordable housing activity along the Hamakua coast and all other related
documents necessary to process and implement the Special Purpose
Grant application to the U.S. Department of Housing and Urban
Development in the amount of $1,600,000.

BE IT FURTHER RESOLVED that the Mayor is authorized to
negotiate and execute an agreement and other related documents
with HUD for the $1,600,000 Special Purpose Grant.

BE IT FURTHER RESOLVED that the Mayor or his authorized
representative is designated to act as the representative of the
County.

BE IT FURTHER RESOLVED that the County of Hawaii will comply
with the requirements of the Special Purpose Grant program and
application.

BE IT FURTHER RESOLVED that a copy of this resolution be
transmitted to the Office of Housing and Community Development.

Dated at Hilo, Hawaii, this 30th day of November, 1994.

INTRODUCED BY:

[Signature]
COUNCIL MEMBER, COUNTY OF HAWAII

ROLL CALL VOTE

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[Signature]
CLERK, CHAIRMAN, COUNTY OF HAWAII

[Signature]
CHIEF COUNCILLOR

Reference: C-1425

COUNTY COUNCIL
County of Hawaii
Hilo, Hawaii

[Signature]
CHIEF COUNCILLOR

[Signature]
CLERK, CHAIRMAN, COUNTY OF HAWAII

[Signature]
CHIEF COUNCILLOR
MEMORANDUM

TO: HARRY KIM, Civil Defense Administrator
FROM: WAYNE ONOMURA, Building Division Chief
SUBJECT: LANDSLIDE AT HAI'IPUNALEI

September 12, 1994

The subject site was observed from a helicopter on 9/12/94. The ocean was very dirty and the cliff looks like it is comprised of 90% dirt. The new cliff is nearly vertical. The existing nearby cliffs have large trees growing from them. The base of the cliff still has remnants of the landslide. This will slowly be eroded by wave action and also by the prevailing ocean current which is parallel to the shore in the Honoka'a direction. There is a shed at the edge of the cliff. The nearest house seems to be approximately 40' ± from the cliff.

The Laupahoehoe Stream is wide and the side slopes of the stream is at an approximately 1:1 angle. This is very different from the cliff at the ocean. Small streams in the area have sliced deep into the ground. The land is high above the ocean compared to Hilo. This may mean that the land is comprised of a larger amount of ash and is consequently weaker, but this is all conjecture.

It is impossible to predict when the next landslide will occur or how massive it will be. The prudent thing to do is to move away from the coast. Walter Lum, a noted soils engineer, suggests that any building along the Hamakua Coast be located at least a distance from the cliff equal to the height of the cliff.

The cliff height in this area is 320'. If Walter Lum's suggestion is followed then, no building should be within 320' of the cliff. We feel that the landslides in this area have occurred in smaller chunks and that 160' from the cliff would be reasonable. However, as the land moves inland in the future, so too should the 160' setback.

DHM:ju

cc: Riley Smith, Deputy Chief Engineer

Encl.

09-13-94 Faxed to Mr. Guss, Hamakua Eng.
September 29, 1994

Isaac Festa, Jr.
Business Agent
ILWU Local 142--Hawaii
100 W. Laniakua Street
Hilo, HI 96720

EVACUATION OF WAIPUNALEI HOMES

The evacuation of homes at Waipunalei was, in part, based on the observations and recommendations of Walter Lum (consulting engineer) and the Hawaii County Civil Defense Agency.

The following states the present guidelines and policies on the evacuation of homes in Waipunalei:

1. Listed homes are to be evacuated and the area abutting these homes are to be secured from any entry. Area and homes affected by this are:
   a. 1117 (Mercado)
   b. 1114 (Casem)
   c. 1107 (Delia Cruz)

2. Listed homes are identified as "in hazard area" that pose a potential risk and should be evacuated in the event residents feel endangered, cracks were to widen, new cracks appear or additional slides were to occur. As a precaution, all of the listed homes should be identified as "in risk area" and be evacuated in the next few months or sooner.
   a. 1118 (Cacabelos)
   b. 1113 (Dalsacio)
   c. 1108 (Anderson)
   d. 1103 (Navalta)
   e. 1104 (Jardine)
3. At this time, for reasons of "highest risk," the following homes are to be evacuated as priority:

1118, 1113, 1108

4. Homes in rows three and four are not considered to be at immediate risk. This assessment needs to be re-evaluated if additional cracks or slides occur. For long-term planning purposes, all of these homes should be considered for removal or evacuation.

Please call me if further clarification is needed on the policy.

HARRY KIM, ADMINISTRATOR
APPENDIX 3

HISTORIC PRESERVATION COMMUNICATIONS AND

MEMORANDUM OF AGREEMENT
June 1, 1995

Mr. Edwin S. Taira
Assistant Housing Administrator
County of Hawaii
Office of Housing and Community Development
50 Wailuku Drive
Hilo, Hawaii 96720

Dear Mr. Taira:

Tonia Moy and myself, accompanied by Roy Takemoto, undertook a windshield survey of the plantation camps at Papaaloa, Ookala, Paauilo, Paahau, and Haina. All of the camps appear to be over fifty years of age. They retain high degree of integrity and have strong associations with the housing of sugar industry workers. As a result our office believes these camps appear to meet the criteria for listing in the Hawaii and National Registers of Historic Places. We would appreciate a letter from your agency indicating your position with regards to whether these camps appear to meet the criteria for listing.

As federal moneys may be expended in upgrading these camps, and a potential for adverse effects exist we suggest that a programmatic Memorandum of Agreement be entered into between your agency, ours and the Advisory Council for Historic Preservation.

I look forward to working with your agency on this project.

Aloha!

Don Hibbard, Deputy
State Historic Preservation Officer

DH:jk
July 28, 1995

Don Hibbard, Administrator
State Historic Preservation Division
State of Hawai‘i
Department of Land and Natural Resources
33 South King Street
Honolulu, Hawai‘i 96813

SUBJECT: Hamakua Affordable Housing Project
Memorandum of Agreement

Enclosed, for your review and approval, is the Memorandum of Agreement for the County’s Hamakua Affordable Housing Project. As you are aware, the Hamakua Affordable Housing Project involves the conversion of approximately 400 former plantation employee housing to fee simple ownership by the existing tenants of Hamakua Sugar Company.

We have enclosed a brief description of the project, including a project need statement to provide some perspective of the importance of this project to the Hamakua area, as well as the County and State of Hawai‘i as a whole.

For your information, several site assessments were conducted of the plantation camps along the Hamakua Coast in the mid 70’s, including O’Okala (Site No. 10-09-7409), Pa‘aulo (Site No. 10-08-7412), Papa‘aloa (Site No. 10-16-7398) and Pa‘auhau Mill and Camp (Site No. 10-08-7185). In general, these assessments found that the individual houses were generally not historically or architecturally significant. However, they were a critical part of the overall fabric and context of the plantation in conjunction with the mills and surrounding activities.
More specifically, the architectural description of the various areas included the following:

**Paʻauhau Mill and Camp:** There is no outstanding merit other than the collective merit of the style and atmosphere of a typical plantation camp. It is this total environment that the district derives its significance.

**Paʻauilo District:** As a unit, the district presents a moderate architectural and historic statement. Individual structures have little interest as single entities but contribute to the overall feeling of the district.

**Papaʻaloa District:** The district presents one of the most well preserved plantation towns on the island, as well as in the State. Several structures, such as the manager’s house, have been destroyed, which prevents Papaʻaloa from being a true model of plantation life.

**Oʻokala District:** A well preserved and contained community representing plantation life. Of architectural interest is the residence adjacent to the store. Its late 19th century detailing and pleasing proportions distinguishes it from other structures in the district.

Since these assessments were conducted between 1973 and 1974, little or no maintenance has been conducted on these units, except for emergency repairs. The County, along with the Hamakua Housing Corporation, is supporting efforts to preserve the camps by transferring ownership to the former plantation employees. At the same time, without significant renovation and rehabilitation, these units will continue to deteriorate to the point where they will become unoccupiable.

Accordingly, we strongly believe the enclosed Memorandum of Agreement provides the best long-term solution by providing for the photographic documentation of the residences, while at the same time allowing the new owners opportunities to maintain and upgrade their units to meet their long-term housing needs.
We appreciate your understanding and cooperation in this regard. Please call me at 808/961-8379 if you have any questions on this matter.

Edwin S. Taira
Assistant Housing Administrator

Enclosures
MEMORANDUM OF AGREEMENT
SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
PURSUANT TO 16 CFR SECTION 800.6(a)

WHEREAS, the U.S. Department of Housing and Urban Development (HUD), will be providing financial assistance to County of Hawai‘i for the subdivision of existing plantation camps, including related infrastructure and the rehabilitation of the individual dwellings in the Hanakua District between Papaloa and Honokaa, and further identified as follows:

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<th>Tax Map Key</th>
<th>Camp Name</th>
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<td>Pasuilo Camp</td>
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<td>8. (3) 4-1-01: 17</td>
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<td>9. (3) 4-4-05: 10</td>
<td>Pasuahu Camp</td>
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<tr>
<td>10. (3) 4-5-02: 54 &amp; 55</td>
<td>Haina Camp</td>
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WHEREAS, the Hawai‘i State Historic Preservation Office (SHPO) concurs that the above plantation camps appear to meet the criteria for listing in the National Register of Historic Places; and

WHEREAS, County of Hawai‘i has determined that the expansion of the plantation camps and/or the renovation of structures within these camps may have an adverse effect upon a property eligible for inclusion in the National Register of Historic Places, and has consulted with the SHPO pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C.C. 470f); and
WHEREAS, County of Hawai‘i and the Hamakua Housing Corporation has participated in the consultation and has been invited to concur in this Memorandum of Agreement.

NOW, THEREFORE, County of Hawai‘i, Hamakua Housing Corporation, and SHPO agree that, in fulfillment of the requirements and obligations under Section 106, the expansion of the plantation camps and any rehabilitation, reconstruction, or demolition of any structures therein shall be in accordance with the following stipulations which take into account the effect of the undertaking on historic properties.

1. Prior to final subdivision approval of any individual parcel within any plantation camp, or of any renovation, reconstruction, or demolition of any existing house therein, the County of Hawai‘i will submit photographic documentation of the plantation camps which shall consist of one set of fiber-based paper contact prints from 4" x 5" Tri-x negatives. Both negatives and contact prints shall be processed with archival quality control methods. Photographic documentation shall include the following:
   a. Elevations of selected structures within each camp which are determined to be "typical" or representative of the architectural character of the camp as mutually agreed to by the County of Hawai‘i and SHPO.
b. Overview of each camp, including selected
   streetscapes as mutually agreed to by the County
   of Hawai‘i and SHPO.

   This Agreement shall be effective ___/___/1995.

ADVISORY COUNCIL ON HISTORIC PRESERVATION

Name
Executive Director, Advisory Council

Date: 9/28/95

HAWAII STATE HISTORIC PRESERVATION OFFICER

Don J. Lawhon
Deputy State Historic
Preservation Officer
State of Hawaii

Date: 9/1/95

COUNTY OF HAWAII

Stephen K. Yamashiro
Mayor, County of Hawaii

Date: 7/17/95

HAMAKUA HOUSING CORPORATION

Clarence Suda, President

Date: 7/10/95

RECOMMEND APPROVAL:

Housing Administrator
Office of Housing and
Community Development

Date: 7/14/95

APPROVED AS TO FORM AND
LEGALITY:

Deputy Corporation Counsel
County of Hawaii

Date: 7/14/95

OHCD/2671C/7-3-95
STATE OF HAWAII

COUNTY OF HAWAII

On this 17th day of February, 1995, before me, Pauina K. Kalei, the undersigned Notary Public, personally appeared STEPHEN K. YAMASHIRO, to me personally known, who, being by me duly sworn, did say that he is the Mayor of the COUNTY OF HAWAII, a municipal corporation of the State of Hawaii; that the seal affixed to the foregoing instrument is the corporate seal of said COUNTY OF HAWAII; that the foregoing instrument was signed and sealed on behalf of COUNTY OF HAWAII by authority given to said Mayor of the County of Hawaii by Section 5-1.3(g) of the County Charter, County of Hawaii (1991), as amended; and said STEPHEN K. YAMASHIRO acknowledged said instrument to be the free act and deed of said COUNTY OF HAWAII.

[Signature]
Notary Public, State of Hawaii

My commission expires: 2/14/97

L.S.
STATE OF HAWAII

COUNTY OF HAWAII

ss:

On this 17th day of July, 1995, before me, Pwylye K. Koba, the undersigned Notary Public, personally appeared STEPHEN K. YAMASHIRO, to me personally known, who, being by me duly sworn, did say that he is the Mayor of the COUNTY OF HAWAII, a municipal corporation of the State of Hawaii; that the seal affixed to the foregoing instrument is the corporate seal of said COUNTY OF HAWAII; that the foregoing instrument was signed and sealed on behalf of COUNTY OF HAWAII by authority given to said Mayor of the County of Hawaii by Section 5-1.3(g) of the County Charter, County of Hawaii (1991), as amended; and said STEPHEN K. YAMASHIRO acknowledged said instrument to be the free act and deed of said COUNTY OF HAWAII.

Notary Public, State of Hawaii

My commission expires: 2/14/17

L.S.
August 15, 1995

Edwin S. Taira
Assistant Housing Administrator
County of Hawaii
Office of Housing and Community Development
50 Wailuku Drive
Hilo, Hawaii 96720-2484

Dear Mr. Taira:

SUBJECT: Hamakua Affordable Housing Project
Memorandum of Agreement
TMK 3-5,6,9 & 4-3,4,5, Hamakua, Hawaii

Thank you for the letter dated July 28, 1995, and August 1, 1995, regarding the Hamakua Affordable Housing Project Memorandum of Agreement. Enclosed is the signed original Memorandum of Agreement, please send us a copy once all parties have signed.

The Hamakua Housing Corporation (HCC) and the County of Hawaii are providing an excellent opportunity for the Hamakua Sugar Company (HSC) employees. With home ownership comes many opportunities and responsibilities, we believe that there is the potential to preserve the character of the plantation camps and allow for the modern conveniences in the homes.

The information provided regarding the site assessments conducted in 1973 & 1974, reflect the evaluation of the camps at that time. In evaluation of the camps today, they would be considered of high preservation value. In the last 20+ years so many plantations have closed and many plantation camps lost. Because the Hamakua plantation camps have been under single ownership and have not been "improved," they maintain a high degree of historic integrity. Currently, the overall fabric and context of the plantation still remains and a well designed preservation plan could be an asset to the economy and the community.
The proposed repair or replacement of the current infrastructure should allow the camps to maintain their historic character, while providing minimal health and safety levels. While we understand the desire to provide the most opportunity to the residents, with minimal or no restrictions, guidelines that preserve the historic character of the camps may assist in repair and maintenance. Most of the historic preservation guidelines encourage repair rather than replacement, utilizing the existing materials as much as possible. We believe that these types of repairs some homeowners could do themselves at minimal cost. In rehabilitation many times the cost is in the labor.

Thank you for the opportunity to comment. Should you have any questions or if there is any way our office can assist you please have your staff contact myself, Tonia Moy or Carol Ogata at 587-0047.

Aloha,

DON HIBBARD, Deputy
State Historic Preservation Officer

CO:jk

enclosure
February 21, 1996

Don Hibbard, Administrator
State of Hawai‘i
Department of Land and Natural Resources
State Historic Preservation Division
33 South King Street, 6th Floor
Honolulu, Hawai‘i 96813

SUBJECT: Hamakua Affordable Housing Project
North Hilo and Hamakua, Hawai‘i

This is to follow up with respect to discussions with
Marc Smith, of your staff, regarding comments on the draft
Environmental Assessment (EA) from the Office of
Environmental Quality Control (OEQC).

More specifically, the OEQC requested that we consult with
your office regarding a mitigation plan in the event
archaeological remains surface during project alterations or
improvements. A question was also raised with respect to the
parcels involved in the Memorandum of Agreement (MOA)
regarding the subdivision and improvement of the plantation
camps along the Hamakua coast. A copy of the OEQC’s letter
is enclosed for your information.

Based on our discussion with your staff regarding mitigation
plans specifically addressing guidelines to safeguard
potential surface or subsurface historic sites or material
during land alteration activities resulting from the project
activities, the following has been agreed to:

The Office of Housing and Community Development will
inform the State Historic Preservation Division (SHPD)
prior to excavation associated with any Hamakua

339TC.ORG

EQUAL HOUSING OPPORTUNITY
AN EQUAL OPPORTUNITY EMPLOYER
affordable housing activity support by County or State funds, including roadway and utility improvements, for monitoring purposes. If any artifacts, charcoal deposits or human remains are discovered during construction activities, work will immediately cease and the Planning Department and SHPD will be consulted to determine appropriate mitigation actions.

Furthermore, the ongoing process of subdividing the former Hamakua plantation camps as bulk lots, and then creating Tax Map Keys (TMK), for the pre-existing subdivision composed of individual houses has made clear identification of the camp areas by TMK confusing. However, as stated clearly in the MOA and reaffirmed here, the areas covered by the MOA include the Ke'oa, Papa'aloa Skilled, Waipunailei, Niu Village, Kukui, Ookala Skilled, Ookala Store, Pa'auilo, Spanish, Nakalele, Pa'auhau and Haina Camps, as described in the Draft and Final EA.

If you have any questions, please call me at 808/961-8379.

Edwin S. Talia
Assistant Housing Administrator

Encl.

xc: Marc Smith, Historic Preservation Division (w/encl.)
    Gary Gill, Office of Environmental Quality Control (w/encl.)
    Roy Takemoto, Hamakua Housing Corporation (w/encl.)
December 20, 1995

Edwin Taira, Assistant Housing Administrator
Office of Housing & Community Development
50 Walluku Drive
Hilo, HI 96720

Dear Mr. Taira:

RE: Draft Environmental Assessment (EA) for Hamakua Affordable Housing Project, North Hilo and Hamakua; various TMKs

Please include the following in the final EA:

1. Table 2 lists all or portions of Kekoa and Waipunalei Camps as being in the Conservation District. What is the status of the Conservation District Use Permit(s)?

2. Amounts of State or County funds for this project are not indicated but need to be disclosed. How much will be spent on land purchases and who will the new owners be?

3. Please consult with State Historic Preservation Division and develop a mitigation plan in the event archeological remains surface during any project alterations or improvements. Also, in Appendix 3, the Memorandum of Agreement with State Historic Preservation Division, there are several TMKs that do not match those listed in the project description. Please verify the correct TMKs.
4. Figure 1 is incomplete. Please include a complete copy of this map in the final EA.

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

Sincerely,

[Signature]

GARY GILL
Director

GG/nh

c: William Moore Planning, Hilo
Ron Terry, Keaau
APPENDIX 4

COMMENTS TO THE DRAFT EA AND RESPONSES
December 20, 1995

Edwin Taira, Assistant Housing Administrator  
Office of Housing & Community Development  
50 Wailuku Drive  
Hilo, HI 96720

Dear Mr. Taira:

RE: Draft Environmental Assessment (EA) for Hamakua Affordable Housing Project, North Hilo and Hamakua; various TMKs

Please include the following in the final EA:

1. Table 2 lists all or portions of Kekoa and Waipunalei Camps as being in the Conservation District. What is the status of the Conservation District Use Permit(s)?

2. Amounts of State or County funds for this project are not indicated but need to be disclosed. How much will be spent on land purchases and who will the new owners be?

3. Please consult with State Historic Preservation Division and develop a mitigation plan in the event archeological remains surface during any project alterations or improvements. Also, in Appendix 3, the Memorandum of Agreement with State Historic Preservation Division, there are several TMKs that do not match those listed in the project description. Please verify the correct TMKs.
4. Figure 1 is incomplete. Please include a complete copy of this map in the final EA.

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

Sincerely,

[Signature]

GARY GILL
Director

GG/nh

c: William Moore Planning, Hilo
   Ron Terry, Keaau
March 19, 1996

Gary Gill, Director
Office of Environmental Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawai‘i 96813

Subject: Comments to Draft Environmental Assessment
Hamakua Affordable Housing Project
North Hilo and Hamakua, Hawai‘i

Thank you for your comments on the Draft Environmental Assessment (EA) for the Hamakua Affordable Housing Project. We are responding to the points raised in your letter as follows:

1. Conservation District Use Permits.

Although portions of Kakoa and Waipunalei Camps are within the Conservation District, no activity is planned for these areas under this project. They are part of the common area for the subdivisions. Because of the lack of activity, no permits are necessary, no applications will be made. The Final EA will clarify this situation.

2. Amount of County and State Funds.

A number of funding sources have been and will be sought to implement this project. Currently, the only County or State Funds committed to this project are a $1.6 million Special Purpose Grant from the U.S. Department of Housing and Urban Development (HUD) and a Community Development Block Grant for $350,000.
The following table lists the status of several existing and on-going efforts to secure funding for this project:

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Purpose</th>
<th>Amount</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Purpose HUD Grant</td>
<td>Survey, Subdivision, Conveyance of Title to Occupants</td>
<td>$1,600,000</td>
<td>Committed</td>
</tr>
<tr>
<td>Community Development Block Grant</td>
<td>Hana Water System Improvements</td>
<td>$350,000</td>
<td>Committed</td>
</tr>
<tr>
<td>Legislative Appropriation through Housing Finance and Development Corporation</td>
<td>Various Infrastructure</td>
<td>$315,000</td>
<td>Appropriated/ Allocated</td>
</tr>
<tr>
<td>Rural Economic Community Development Block Grant/Loan</td>
<td>Paʻauilo/Oʻokala/ Paʻaʻahau Water System Improvements</td>
<td>$2,500,000</td>
<td>Application (County of Hawaiʻi Department of Water Supply)</td>
</tr>
<tr>
<td>Community Development Block Grant</td>
<td>Kekoa/Waipunalei Water System Improvements</td>
<td>$350,000</td>
<td>Application</td>
</tr>
</tbody>
</table>

The Final EA will include this information in Section 1.

3. Historic Resources Mitigation Plan.

The County of Hawaiʻi contacted the State Historic Preservation Division (SHPD) to confirm one further element of the mitigation plan, specifically addressing guidelines to safeguard potential surface or subsurface historic sites or material during land alteration activities. More specifically, the following has been agreed to:

The Office of Housing and Community Development will inform the State Historic Preservation Division (SHPD) prior to excavation associated with any Hamakua Affordable Housing activity support by County or State funds, including roadway and utility improvements, for monitoring purposes. If any artifacts, charcoal deposits or human remains are discovered during construction activities, work will immediately cease and the Planning Department and SHPD will be consulted to determine the appropriate mitigation actions.
Furthermore, the ongoing process of subdividing the former Hamakua plantation camps as bulk lots and then creating Tax Map Keys for the pre-existing subdivision composed of individual houses has made clear identification of the camp areas by TMK confusing. However, in discussions with SHPD, they have agreed that the areas covered by the Memorandum of Agreement (MOA) include the Kekoa, Papa’aloa Skilled, Waipunalei, Niu Village, Kukui, O’okala Skilled, O’okala Store, Pa’auilo, Spanish, Nakalei, Pa’auhau and Haina Camps, as described in the Draft and Final EA.

4. Figure 1.

A complete copy of Figure 1 will be supplied on all copies of the Final EA.

Again, thank you for your thorough review of our document.

If you have any questions or need additional information please do not hesitate to call either Clyde M. Yoshida or me at (808) 961-8379.

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Assistant Housing Administrator
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4. **Figure 1.**

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