June 23, 2000

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
State Office Tower
235 S. Beretania Street, Suite 702
Honolulu, Hawai‘i 96813

SUBJECT: Honoka‘a Knolls Senior Apartments
        TMK: 3rd/4-5-10: 120, 123 thru 128
        Final Environmental Assessment (EA)

The County of Hawai‘i, through it’s Office of Housing and Community Development (OHCD) has reviewed the comments received during the 30-day public comment period, which began on May 8, 2000. The OHCD has determined that this project will not have significant environmental effects and hereby issues a finding of no-significant impact. Please publish this notice in the July 8, 2000 Environmental Notice.

Enclosed are a completed OEQC Bulletin publication form and four copies of the Final EA. Please contact me at 961-8379 if there are any questions.

Edwin S. Taira
Assistant Housing Administrator

8470cmj
Final Environmental Assessment

(Honokaa Knolls Senior Apartments)
Honokaa Town, Namoku, Hamakua District, Hawaii
TMK: 3rd 4-5-10:120, 123 thru 128

Approving Agency/Accepting Authority:
Office of Housing and Community Development, County of Hawaii

Prepared for:
Hawaii Intergenerational Community Development Association (HICDA)

Prepared by:
Community 2010

June 2000
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*Final EA Honokaa Knolls Senior Apartments*
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SUMMARY

PROJECT NAME: Honokaa Knolls Senior Apartments

APPLICANT: Hawaii Intergenerational Community Development Association (HCDA), a Hawaii nonprofit 501(c)(3) corporation
1154 Fort Street Mall, #300
Honolulu, HI 96813

APPROVING AGENCY AND ACCEPTING AUTHORITY: Office of Housing and Community Development, County of Hawaii
50 Waikolu Drive, Hilo, HI 96720

LOCATION: Honokaa town in Namoku, Hamakua District, Island and County of Hawaii; corner of Hawaii Belt Highway (Route 19) and Plumeria Street, makai of the highway

TAX MAP KEY: 3rd/4-5-10:120, 123 to 128 (4.359 acres)

CLASS OF ACTION: Use of State funds

DETERMINATION: Finding of No Significant Impact

PROPOSED ACTION: 40-unit affordable senior rental apartment

ESTIMATED COST: $5,780,000

PURPOSE AND NEED: Provide affordable rental units for very low income seniors (50% of median household income and less).

MITIGATION MEASURES: Design Phase:
• Prepare erosion and sedimentation plans to minimize dust and erosion during construction.
• Consolidate and resubdivide the lots in accordance with the requirements of DWS in order to reallocate the existing water commitments.
• Provide landscape screen of the Project along the Belt Highway.

Construction Phase:
• Comply with noise standards.

Final EA Honokaa Knolls Senior Apartments  Summary-1
- Implement best management erosion control practices specified in construction documents.

UNAVOIDABLE IMPACTS OR UNRESOLVED ISSUES: None.

STATE LAND USE DISTRICT: Urban

GENERAL PLAN ZONING: Low Density Urban Residential (RS-10)

PERMITS REQUIRED: §201G Exemption from General Plan and Zoning requirements (County Council approval), Subdivision approval, Grading Permit, Building Permit

Summary-2

Final EA Honokaa Knolls Senior Apartments
1.0 INTRODUCTION

1.1 Applicant and Approving Agency

Hawaii Intergenerational Community Development Association (HICDA), a Hawaii nonprofit 501(c)(3) corporation, proposes to construct a 40-unit affordable senior apartment and other related facilities in Honokaa ("Project"). The use of State funds triggers the environmental review requirements under Hawaii Revised Statutes Chapter 343.¹ Since the proposed project is an affordable housing project, HICDA will seek an exemption from applicable land use approvals and standards pursuant to Hawaii Revised Statutes §201G-118.² The County of Hawaii Office of Housing and Community Development processes such requests for exemptions, and is therefore the approving agency for this environmental assessment.

1.2 Public Agencies and Organizations Consulted

HICDA presented and worked with local Honokaa residents at three community meetings, one safety committee meeting and six meetings with Council member Dominick Yagong. During that time HICDA also contacted the following public and private agencies (see APPENDIX A, "Pre-Consultation Comments"):

- Federal Agencies
  - U.S. Department of Housing and Urban Development
  - U.S. Department of Agriculture, Rural Development
- State of Hawaii
  - Department of Business, Economic Development & Tourism
  - Department of Education
  - Department of Land and Natural Resources, State Historic Preservation Division
  - Department of Health, Office of Environmental Quality Control
  - Hawaii Health Systems Corporation
  - House of Representative, Dwight T. Takamine
  - Housing and Community Development Corporation of Hawaii
  - Senators, David M. Matsuura and Lorraine R. Inouye
  - University of Hawaii, Environmental Center
- County of Hawaii
  - Department of Water Supply

¹ Hawaii Revised Statutes §343-5(a)(1) (use of State or County land or funds). See §2.5, "Project Schedule and Cost" in this EA for discussion on funding sources.

² The specific approvals and standards to be preempted are discussed in §6.2, "County of Hawaii - General Plan, Zoning, and Subdivision" of this EA.
2.0 DESCRIPTION OF PROPOSED ACTION

2.1 Location and Ownership

The project site is located makai of the Hawaii Belt Road (Route 19) at Honokaa town, Namoku, Hamakua District, island and County of Hawaii ("Site") (see Figure 1). The Site consists of six parcels and a roadway lot totaling 4.359 acres (TMK: 3rd/4-5-10:120, 123 to 128) (see Figure 2). HICDA will own the Site in fee simple.
2.2 Existing Uses

Site. The Site is vacant land that was formerly used for sugarcane cultivation. The Site had been subdivided into six residential lots, and a private roadway with water improvements had been installed to serve the six lots (see Figure 3).
Surrounding Uses. The surrounding uses are as follows:

• North: Vacant parcel owned by the State Hawaii Housing Authority;
• South: Hawaii Belt Road (Route 19) with a residential subdivision across the highway;
• East: Vacant parcel owned by Pheasant Ridge (planned approximately 100 single family homes on lots averaging roughly 12,500 square feet);
• West: Plumeria Road with residences across the road.

One noticeable advantage to these proposed senior apartments are their proximity to Highway 19, Honokaa Hospital & Nursing Home (Hale Ho'ola Hamakua), Our Lady of Lourdes Roman Catholic Church, and the large Honokaa Community Park. Approximately three quarters of a mile from the proposed site is the center of Honokaa where the main grocery store is located, the U.S. Post Office, and other stores. Therefore, Honokaa Knolls Senior Apartments will provide a convenient location and safe environment for the seniors age 62 years and older living on the Hamakua Coast of the Big Island.

2.3 Project Description

Site Plan. The Project, accessed from Plumeria Street, consists of a one-story wing (5 units) along Plumeria Street and a two-story wing (35 units) with a view of the ocean running towards the back of the property along Highway 19 (see Figure 4). The total of 40 units breakdown to 20 one-bedroom/one-bath and 20 two-bedroom/two-bath units evenly distributed throughout this affordable apartment complex (see Figure 5 and Figure 6). The Project includes 44 off-street parking stalls and 4 guest stalls. A Resident Manager’s Office and small conference/community room will be centrally located on the ground floor of the two-story building. A future larger community center is proposed, subject to raising the appropriate funds, next door to the two-story apartment. This larger community center would include a Neighborhood Network Computer Learning Center. Both apartment residents and individuals located in the neighboring residential community will have access to this center. Initial training will be provided with no charge and additional training will have a nominal charge depending on the income of the individual applying. Also being considered for future development is an Adult Residential Care Home Type I with kitchen facilities. With these facilities, senior renters would be able to transition from the apartments to the care home units as they require more assistance.

Building Design. Sturdily designed, these one and two-story buildings will be made of concrete walls with a stucco finish and a monier tile or slate roof (see Figure 7). Not only will these structures withstand high winds but termites will not be a devastating issue, noticeable in many wood constructed buildings. Also, noise will not penetrate the interior concrete wall systems which commonly occurs in most apartments, and will especially attenuate noise for those units located along Highway 19. Configured as flats, with all units designed on one floor, any apartment unit can be retrofitted to become accessible for persons with disabilities. Besides stairways, one elevator will service all of the upper units within the two-story building.
FIGURE 7. Section Elevation of 2-Story Building
2.4 DESCRIPTION OF PROPOSED ACTION

Unit Plans. The one-bedroom apartments will be approximately 541 square feet and the two-bedroom apartments approximately 800 square feet in size (see Figure 8). Unit design is spacious for an affordable apartment complex. The kitchen includes a disposal, microwave oven, and refrigerator. Lower apartment units will have a fenced in yard while upper units will have one balcony to take advantage of the excellent gully and ocean view. All units will accommodate air conditioning units that will be provided by the resident. Two additional features located in each apartment are ceiling fans and window coverings or drapes. Although the building will include a central laundry room, some of the two-bedroom units might have washer and dryers located within the apartment unit. Although the Building Plans (Figure 5) show the laundry room as part of the proposed community room, the plans will be revised to move the laundry room next to the elevator for improved convenience and accessibility.

Eligible Tenants. All units will be rented to elderly households aged 62 years or older with incomes between 30% and 50% of the area median household income for the County of Hawai‘i. The U.S. Department of Housing and Urban Development (HUD) will be providing funds for 5 of the 40 units—these units will be rented at 30% of the resident’s income. Rental rates might average approximately $201 for the 4 HUD one bedroom units and $297 for 1 HUD two bedroom unit. Rental rates are between $286 to $476 for the other 16 one-bedroom apartment and from $343 to $572 for the other 19 two-bedroom apartments.

<table>
<thead>
<tr>
<th>% County Median Income</th>
<th>2-Member Household Income</th>
<th>No. of Units</th>
<th>% Total Units</th>
<th>Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-bdrm</td>
<td>2-bdrm</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>35,360.00</td>
<td>0</td>
<td>0</td>
<td>0.0%</td>
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<tr>
<td>80%</td>
<td>28,288.00</td>
<td>0</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>60%</td>
<td>21,216.00</td>
<td>0</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>50%</td>
<td>17,680.00</td>
<td>6</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>30%</td>
<td>10,808.00</td>
<td>10</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Subtotal</td>
<td>16</td>
<td>19</td>
<td>35</td>
<td>50.0%</td>
</tr>
<tr>
<td>30% renter's income</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>12.5%</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>20</td>
<td>40</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

2.4 Project Need

Currently, Honokaa has one senior apartment project that serves individual seniors who have restrictive incomes. This project, called Hale Hauoli, is a Hawaii Housing Authority public housing project with 40 units. All units in this project are set-asides for eligible seniors who pay only 30% of their income. The higher quality units proposed for the Project, compared to this public housing project, will provide more choice to the senior population at affordable rates.

Census data indicates that the 60+ population on the Big Island was 20,755 or 17.25% of the overall residential population in 1990. By the year 2010, the number of senior adults age 60+ is estimated to grow to 29,056 or 22% of the Big Island projected population. That means by the year 2010 one in four and a half of the Big Island’s projected population will be a senior adult. It is estimated to grow even further by the year 2020 to one in three and three quarters. Honokaa, North Hilo, and the South Kohala division had an estimated 2,090 senior adults 60+ in 1990 that are projected to grow to over 3,153 by the year 2020.

3. See APPENDIX B, “Market Study”.

Final EA Honokaa Knolls Senior Apartments
FIGURE 8. 1- and 2-Bedroom Unit Plans

1 BEDROOM UNIT
541 SF

2 BEDROOM UNIT
800 SF

UNIT PLANS

1/4" = 1'-0"
Mean retirement income for the Big Island seniors age 65 years and older was $8,423 as recorded by the 1990 Census in 1989 dollars; the Social Security income for the Big Island seniors was a mean of $8,221. Ten years later, it is estimated that the retirement income for seniors including Social Security might average roughly $14,701 in retirement income in 1998 dollars, which is less than 50% of the median household income.

From the Census 1990, it was determined that approximately 634 persons from Laupahoehoe to Waimea (census tracts 220, 219, 217) were senior residents age 55 to 75+ with incomes at or below 80% of the area median household income (see Figure 9). Of these 634 senior adults, 55% had incomes less than $14,999. If you include Census Tract 221 & 218, North Hilo and North Kohala, the total number of low income seniors age 55 to 75+ increases to 1,030. Consequently, many lower income seniors will be unable to afford market rents along the Hamakua Coast with their current retirement incomes. In some cases, when one spouse passes away the other might not have enough income to maintain their home, and few apartments are available to rent which might force them to leave for areas like Hilo where apartments are more plentiful. These 40 income and age restricted apartments will assist many of the these seniors to continue to reside in the Hamakua area. Also, when built Honokaa Knolls Senior Apartments are estimated to represent less than 6.0% of the overall low income seniors living in that market.

2.5 Project Schedule and Cost

Honokaa Knolls Senior Apartments is anticipated to complete preliminary financing commitments by June of 2000 and final financing commitments November 2000. This would include required studies, this EA, the new Limited Liability Corporation with Members, Rental Housing Trust Fund Project Award, Syndication Underwriting, Consolidation and Subdivision of the parcel and working architectural plus civil drawings. Construction would commence in February 2001. Construction would continue for roughly ten months with occupancy anticipated to start in the fourth quarter of the year 2001.

Total project development costs to build these apartments are estimated at $5,780,000, subject to working drawings. At this total cost, the average cost per unit for the 40 units is $144,500. For a total building area of 35,400 square feet, the total development costs break down to $165 per square foot, with construction costs (including sitework and furnishings/furnitures) ($3,979,300) at approximately $115 per square foot.

The funding sources include:

<table>
<thead>
<tr>
<th>Source</th>
<th>Construction Financing</th>
<th>Permanent Financing</th>
<th>Type of Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Rental Housing Trust Fund</td>
<td>$780,000</td>
<td>$780,000</td>
<td>low interest loan</td>
</tr>
<tr>
<td>Low Income Housing Tax Credits (Federal and State)</td>
<td>754,000</td>
<td>3,772,000</td>
<td>equity</td>
</tr>
<tr>
<td>Federal Home Land Bank of Seattle</td>
<td>176,450</td>
<td>176,450</td>
<td>grant</td>
</tr>
<tr>
<td>Weisberg Foundation</td>
<td>275,450</td>
<td>275,450</td>
<td>grant</td>
</tr>
<tr>
<td>HUD Section 202</td>
<td>698,100</td>
<td>698,100</td>
<td>grant</td>
</tr>
<tr>
<td>American Savings Bank</td>
<td>3,096,000</td>
<td>0</td>
<td>loan</td>
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<tr>
<td>HICDC</td>
<td>0</td>
<td>78,000</td>
<td>equity</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$5,986,076</td>
<td>$5,986,076</td>
<td></td>
</tr>
</tbody>
</table>

During the operational phase, the U.S. Department of Housing and Urban Development (HUD) has committed to a five year Project Rental Assistance contract of $82,500 with the Section 202 Fund Reservation.
### Age Distribution

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>60+</th>
<th>All ages</th>
<th>% 60+</th>
</tr>
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<tbody>
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<td>217</td>
<td>844</td>
<td>9,140</td>
<td>10%</td>
</tr>
<tr>
<td>218</td>
<td>767</td>
<td>4,291</td>
<td>18%</td>
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<tr>
<td>219</td>
<td>790</td>
<td>3,681</td>
<td>21%</td>
</tr>
<tr>
<td>220</td>
<td>332</td>
<td>1,864</td>
<td>18%</td>
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<tr>
<td>221</td>
<td>355</td>
<td>1,541</td>
<td>23%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,189</td>
<td>20,517</td>
<td>16%</td>
</tr>
<tr>
<td><strong>County</strong></td>
<td>20,756</td>
<td>120,317</td>
<td>17%</td>
</tr>
<tr>
<td><strong>% County</strong></td>
<td>12%</td>
<td>17%</td>
<td></td>
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</tbody>
</table>

### Income Distribution

<table>
<thead>
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<th>$0 to 4,999</th>
<th>5,000 to 9,999</th>
<th>10,000 to 14,999</th>
<th>15,000 to 24,999</th>
<th>$0 median or less</th>
<th>$15,000 median or less</th>
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<tbody>
<tr>
<td>217</td>
<td>61</td>
<td>244</td>
<td>233</td>
<td>478</td>
<td>535</td>
<td>568</td>
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<tr>
<td>218</td>
<td>37</td>
<td>86</td>
<td>34</td>
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<td>95</td>
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<td>221</td>
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<td>44</td>
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<td>23</td>
<td>67</td>
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<tr>
<td><strong>Total</strong></td>
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<td>468</td>
<td>435</td>
<td>896</td>
<td>635</td>
<td>1,070</td>
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</table>
3.0 DESCRIPTION OF THE EXISTING ENVIRONMENT, IMPACTS AND MITIGATION MEASURES

3.1 Geology and Soils

The island of Hawaii is the youngest and most southeasterly of the main Hawaiian islands. The island is composed of five large shield volcanoes: Kohala, Hualalai, Mauna Kea, Mauna Loa, and Kilauea. The project site is restricted to rocks of the Mauna Kea Volcano which includes the Hamakua Volcanics overlain by the Laupahoehoe Volcanics, and the Pahala Ash. The Hamakua Volcanics consist of tholeiitic and alkaline lavas. The Laupahoehoe Volcanics are alkaline. The only sediments in this region are recent alluvium.

According to the Soil Survey (USDA SCS, 1972), the site is located in an area of Kukuiau series soils which consist of well-drained silty clay loams that formed in volcanic ash (Pahala Ash). These soils are gently sloping to steep. They occur on uplands at an elevation of 500 to 1,500 feet and receive from 70 to 100 inches of rain annually. The natural vegetation consists of kilowgrass, kaimi clover, guava, and ohia.

Kukuiau silty clay loam, 12 to 20 percent slopes (KuD) is very dark grayish-brown clay loam about 10 inches thick. The subsoil is dark-brown silty clay loam and about 40 inches thick. It is underlain by basalt. The surface layer is extremely acid, and the subsoil is medium to medium and the erosion hazard is moderate. Kukuiau silty clay loam, 20 to 35 percent slope (KuE) is similar to KuD except for steeper slopes and more rapid runoff and severe erosion. The Kukuiau soils have high shrink-swell capacity.

Mitigation measures used to reduce the potential for distress to future slab-on-grades resulting from swelling of the near-surface expansive soils would be to provide a non-expansive select granular capping layer of 30 to 36 inches. In addition, proper slab subgrade preparation includes scarification, moisture-conditioning, and recompaction prior to placement of slab concrete (see APPENDIX C, “Environmental Assessment Phase I Study”).

HICDA will apply for a grading permit. The permit will require erosion control measures during construction.

3.2 Climate

The project site generally receives abundant sunshine during most of the year. Northeasterly trade winds are the prevailing winds during most of the year. Average annual rainfall for Honokaa is approximately 60 inches. Average daily temperature ranges between the high 70's to the high 80's. This project will not be expected to alter the existing micro-climatic conditions.

3.3 Flood and Lava Flow Hazard

The Site is not within the special flood hazard zone; nevertheless, HICDA will insure these apartments with a flood insurance policy. The Site is within lava flow hazard zone 8, on a scale of 1 through 9 with 9 having the lowest risk.
3.4 Flora and Fauna or Feral Mammals

Since the Site was formerly cultivated in sugarcane, it is not a habitat for any endangered plant or animal species. Much of the site is overgrown with tall grass, sugar cane, and ironwood trees. This site is probably inhabited by rodents, stray cats and mongoose.

There are no wildlife preserves either on the site or in the immediate vicinity that are affected by the proposed development.

3.5 Archaeological/Historic Resources

Since the Site has been previously disturbed by sugarcane cultivation, archaeological resources are unlikely. The State Department of Land and Natural Resources (DLNR), State Historic Preservation Division, has confirmed that there are no records of historic sites on the Site (see APPENDIX A, "Pre-Consultation Comments").

During construction, HICDA will contact the State Historic Preservation Division in the event that historic remains, including human burials, are uncovered and all work in the vicinity will stop.

3.6 Energy Resources

During the conceptual design of this proposed project, it was determined that the reduction in energy resources was a prime concern for HICDA. Several alternative energy solutions have been adopted for this project, e.g. use of solar panels for hot water and a backup heat pump, use of ultra-low flush toilets and flow restricted shower heads for water conservation and use of special energy efficient lighting. HICDA will also be promoting monthly the use of all forms of energy conservation with the residents of these 40 apartments.

3.7 Traffic and Traffic Mitigation Measures

Plumeria Street, a two-lane 80-foot roadway, serves this Project. From Plumeria Street, there is an existing private 30‘ wide roadway extending into the Site. This private road is located approximately 400‘ from the intersection of Highway 19 and Plumeria Street.

Since many of the seniors residing at Honokaa Knolls will be age 62 years and older on limited incomes, many will not be driving regularly. Many of the remaining seniors who work part-time might be partially or completely retired which means that they will not travel during peak hours. Consequently, the proposed project is not anticipated to create any significant traffic issues for Honokaa or Highway 19. Therefore, no traffic mitigation measures will be required for this proposed project of 40 senior apartment units.

3.8 Noise and Air Quality

Temporary adverse noise impacts on adjacent commercial and residential properties will occur during the construction of the proposed project. Noise from the construction equipment such as backhoes and dump trucks will be within the noise limits specified in the Department of Health's Community Noise Control regulations.4

As with noise impacts, temporary adverse impacts on air quality will occur during the construction period. Heavy construction equipment that will be used during the construction phase will emit
exhaust and airborne particulates. The construction work will also produce dust. These impacts will be reduced through the use of approved mitigative measures, such as construction dust screens and watering the soil, enforced through the grading permit. After completion of construction, no significant adverse impacts on ambient air quality are anticipated for the occupancy phase.

3.9 Surface Water and Drainage

There are no streams flowing through the Site. Offsite rainfall surface runoff flowing through the Site will be directed to an open drainage ditch to the east and north of the site. Onsite runoff caused by the increased impervious surfaces of the Project’s buildings and pavement will be handled onsite by drywells or other means approved by the Department of Public Works in accordance with the County’s drainage standards.

3.10 Visual and Aesthetics Character

The Project’s architectural design will fit with Honokaa’s rural character-- the low-scale design will be a modern Hawaiian style with lush landscaping. Because of the elevation difference, the two-story building will not obstruct makai views from Highway 19. Perimeter landscaping will further screen the buildings from the highway.

4.0 PUBLIC SERVICES AND FACILITIES IMPACT FROM THIS PROJECT

4.1 Drainage

The Project will not interfere with or be affected by the three large drainage culverts that cross under Highway 19 in the vicinity of the Site. The civil engineer for the Project will design the drainage system to accommodate the changes created by the proposed development without increasing runoff to downstream owners.

4.2 Water Supply

As a result of the previous subdivision of the Site, the Site has six existing 5/8 inch meters served by an 8" main along Plumeria Street. The Department of Water Supply will allow the consolidation of these meters into a larger 1-inch meter or other configurations, provided the total water commitments do not exceed the equivalent of the existing six 5/8-inch meters at 600 gpd per meter (maximum day demand), or a total of 3,600 gallons per day (see letter from the DWS in APPENDIX A, “Pre-Consultation Comments”). The available amount is adequate to serve the proposed 40 apartment units based on the consumption records of the comparable HHA senior rental apartment in Honokaa. Any further development beyond the 40 units, however, would require additional water commitments. Until another well is placed in service, the Honokaa water system is at capacity and DWS is not issuing any new water commitments. The civil engineer and architect for the Project will work with the Fire Department to provide adequate fire protection in terms of fire hydrant locations, building design, and other applicable requirements.

4.3 Wastewater System

The State of Hawaii, through the Hawaii Health Systems Corporation, operates a sewer system for the Honokaa Hospital & Nursing Home (Hale Ho'ola Hamakua). Currently, the hospital is the only user of the wastewater system. A large main travels from the hospital north toward the ocean to a series of leaching ponds. HICDA has requested permission from Hawaii Health Systems Corporation to tap into this sewer system versus developing a private septic tank system on-site. Access to this sewer main is approximately 1500' from the Site. The design capacity of the sewage treatment facility is 60,000 gallons per month. The current flow averages 12,000 gallons per month. The estimated Project flow is 3,600 to 4,000 gallons per month. With the Project, the total flow will average 16,000 gallons per month or 27% of the design capacity. Although final approval is pending, because the present sewage flow is very low relative to the design capacity of the system, approval for the requested hook-up seems favorable.

4.4 Solid Waste

HICDA will hire private trash pickup service. To reduce the trash volume, recycling will be encouraged by having separate bins for recyclable materials.

4.5 Electrical and Telephone

Underground and overhead electrical and telephone service is provided from Plumeria Street through the new private road. Hawaii Electric Light Company and GTE Hawaiian Telephone have sufficient power and telephone capacity for the proposed project of 40 units. The Project will include emergency electric power for the elevator and some walkway lights.

4.6 Police, Fire Department, Hospitals and Health Care

The County of Hawaii Honokaa police station will provide protection services to the development. Adequate lighting, security camera and fences will enhance the overall security for the Site. Additional steps will be taken, such as an evening roving security guard, when all 40 units and larger community center are fully operational.

The County Fire Department is located within two miles from the Site (approximately four minute response time). The fire department is a 24-hour facility with emergency medical services in addition to fire fighting.

The Honokaa Hospital & Nursing Home (Hale Ho'ola Hamakua) and Hamakua Health Center, the local health clinic, are located approximately three blocks from the proposed development. Acute care and surgeries will require seniors to travel to Waimea, North Hawaii Community Hospital or to Hilo, to visit Hilo Medical Center.

4.7 Recreation Facilities

The County park facilities are located within walking distance of the Site. Existing recreation facilities are adequate to serve the existing population as well as the future Project residents.

4.8 Schools and Library

Honokaa has one elementary school, intermediate, and high school with a combined enrollment of approximately 1,400 students. All three facilities are located roughly one mile from the proposed

Final EA Honokaa Knolls Senior Apartments
apartments. There should be no impact from this 40 unit apartment development since all of the residents are seniors age 62 years and older.

The public library is located one mile and a half on Mamane Street and near the fire station. This quaint facility will be slightly impacted by the proposed development. The library will have more daily visitors from these senior residents.

5.0 SOCIO-ECONOMIC CONDITIONS AND PROJECT IMPACTS

5.1 Social Consideration

Overall for Honokaa District the Census 1990 shows that Census Tracts 219 & 220 had a Median Household Income of $31,431 versus County of Hawaii with a Median Household Income of $29,712, in 1989 dollars. During that same period the average retirement income for 20,755 Big Island seniors was $8,423 and for the Honokaa District $8,665, in 1989 dollars. Mean Social Security income for Honokaa District seniors was $8,499, in 1989 dollars. Per the 1990 Census, the Hamakua Coast and South Kohala had 1,030 low income senior residents. Therefore, it is very important to provide rental units for seniors below the median income to help offset their lower incomes after retirement. Honokaa Knolls Senior Apartment rents would provide retirees with low income, an option to stay in Honokaa and not be forced to move to other areas with more affordable housing available on Big Island. Seniors with incomes between $8,040 to $20,350 will find the $201 to $572 a month rents reasonable for their incomes. By providing more affordable rental units, Honokaa Knolls Senior Apartment will not only help meet some of the income considerations of retired Honokaa seniors, but provide a safe and secure living experience.

Lifestyles and character of the community lends itself to a rural and an outdoor environment surrounded by the foothills of Mauna Kea to the South and the vast Pacific Ocean to the North. Retirement lifestyles fit well within this less congested rural community of Honokaa with its large parks and several recreational facilities.

5.2 Economic Considerations

Honokaa Senior Apartments will do more than provide a place to live. The Neighborhood Network Computer Learning Center will enable individual residents to improve there computer and job skills. Access will be provided to log on to other important services such as the educational and worldwide databases that can be used to further ones own goals and aspirations. Also, these apartments will create construction trade jobs initially and then provide a home to individuals with purchasing capacity. When the apartments are completed approximately three permanent full-time jobs will be created. The proposed project appears to have only a positive impact on the economic conditions in Honokaa. Therefore, when these apartments are finished there will be no negative economic considerations.

6.0 LAND USE POLICIES

6.1 State Land Use

The Hawaii Land Use Law (Hawaii Revised Statutes Chapter 205), classifies all lands in the State into four land use districts: Urban, Agricultural, Conservation and Rural. The Site is within the Urban District. The counties control land use within the Urban district.
6.2 County of Hawaii - General Plan, Zoning, and Subdivision

The General Plan Land Use Pattern Allocation Guide (LUPAG) Map designation for the Site is Low Density Urban (see Figure 10). The General Plan describes the intent of the Low Density Urban designation as follows: “Single family residential in character, ancillary community and public uses, and convenience type commercial uses.” The Site is zoned single-family residential with minimum lot size of 10,000 s.f. (RS-10).

The proposed multi-family units are not “single family residential in character,” and are not permitted uses in the RS zoning district. However, to promote affordable housing, the State may preempt county land use laws under Hawaii Revised Statutes §201G-118. Under this preemption procedure, the legislative body of the county in which the project is to be situated must approve the project. Provided the final plans and specifications do not substantially deviate from the preliminary plans and specifications, the final plans and specifications constitute the zoning, building, construction, and subdivision standards for the project. Other than the General Plan LUPAG and zoning, the Project will conform to all other standards including the subdivision, grading, and building code standards.

HICDA plans to consolidate and resubdivide the existing six lots (plus roadway lot) into two lots (plus roadway lot) (see Figure 11). The single-story, 5-unit wing will be on one lot to facilitate separate financing under the HUD 202 program. The two-story, 35-unit building will be on a consolidation of five lots, together with the future community center/adult residential care home. The existing water commitments would be reallocated to the two lots with probably a 5/8" meter serving the smaller lot and a 1" meter serving the larger lot.

In short, the requested §201G exemptions for the Project include:

- General Plan LUPAG (allowing multi-family residential use in Low Density Urban instead of requiring General Plan Amendment to Medium Density Urban);
- Zoning
  - Permitted uses—allowing multi-family residential use in RS-10 instead of requiring rezoning to RM-2.0;
  - Minimum yards— the Project will meet the RS side yard requirement of 8', but may require an exemption from the front and rear yard requirement of 15';
  - Parking—at the required 1.25 parking stalls per unit for multi-family dwellings, 50 stalls would be required; the Project requires an exemption for the total number of stalls (48 spaces proposed) as well as the location of the parking stalls in terms of lot boundaries (the 5-unit parcel has excess parking, while the 35-unit parcel has deficient parking, but the parking would be available to the Project as a whole rather than by wing).

7. Hawaii County Code §25-5-7 (RS minimum yards); §25-5-36 (RM minimum front/rear yard is 20', and 10' for a 2-story building).
§6.3

ALTERNATIVES TO THE PROPOSED ACTION

The Project will meet the zoning code RS requirements for height limits (the two-story height will be 24', see Figure 7 on page 10, whereas the RS height limit is 35'). Plan approval is not required for the RS district.

The Project will meet the subdivision code requirements for private dead-end streets (minimum 16' pavement within minimum 20' right-of-way). The road will not be dedicated to the County.

HICDA will apply for and comply with the standards for grading and building permits.

6.3 Special Management Area

This proposed project is not located within a Special Management Area (SMA), therefore no SMA permit is required.

7.0 ALTERNATIVES TO THE PROPOSED ACTION

7.1 No Action Alternative

The "no action" alternative would mean that this land would remain vacant. Rentals units for senior adults with income restrictions are limited in Honokaa. Many seniors, over 44%, over the age of 60+ live on fixed incomes. Therefore, the community would be well served by building these proposed 40 apartments. The "no action" alternative will allow this parcel to go underutilized thereby resulting in a probable loss of economic benefit to the residents in the way of quality rentals.

7.2 Alternative Concepts & Locations

No higher density or other types of development were explored for this Site. No other locations were considered for this proposed project.

8.0 DETERMINATION WITH SUPPORTING FINDINGS AND REASONS

The proposed Project is not expected to cause significant impacts to the environment, pursuant to the significance criteria established by the Environmental Council as discussed below; therefore, the approving agency/accepting authority has issued a Finding of No Significant Impact.

(1) This Project does not involve an irrevocable commitment to loss or destruction of any natural or cultural resource. A spot assessment of flora and fauna, and historic and archaeological sites at and near the project area found no presence of natural or cultural resources that would be jeopardized by the proposed project. A preliminary review by the Department of Land and Natural Resources, State Historic Preservation Division has indicated that the proposed subdivision and subsequent development, as described, will have "no effect" on significant historic sites.

(2) Honokaa Knolls Senior Apartments does not curtail the range of beneficial uses of the environment for the State of Hawaii residents. The proposed project site is vacant subdivided land. The site is currently unused and has some grass and small trees. Development of the site will not displace any structures or activities and will not detract from the function or use of the environment.

(3) The 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. The project complies with policies and standards relating to air, noise, and water quality.

(4) This Project does not substantially affect the economic or social welfare of the community or state. The proposed senior apartments will provide senior citizens on restrictive incomes in Honokaa a safe, well appointed, and affordable living environment. When completed, these apartments will provide approximately two to three full-time jobs for Honokaa and create another two jobs in related companies doing business with this complex. For senior citizens, both the economic or social welfare of the community will be enhanced when Honokaa Knolls is completed, consequently no adverse effects to the community are anticipated.

(5) This Project does not substantially affect public health. Factors affecting public health, including air quality, water quality, and noise levels, were assessed and determined to be only minimally affected or unaffected by the construction and use of the proposed senior project. Appropriate mitigation measures for short-term, construction related impacts to noise levels, air quality, and water quality will be followed by the project contractor.

(6) This Project does not involve substantial secondary impacts, such as population changes or effect on public facilities. The apartments and condominiums will not effect or create a strain on public facilities. Since most of these residents will have no children in grade school to high school there will be no impact to the local school system. It is anticipated that many of the individuals who will reside at the 40 unit complex will live and come from the surrounding area of Honokaa. Impacts on local streets and highways will be further mitigated by the driving patterns of these seniors which will typically be off peak hours. Hospitals will not be impacted by the change in location of these residents. Therefore, the only minor impact to the streets and roads will be mitigated by the age of the residents.

(7) The Project does not involve a substantial degradation of environmental quality. After reviewing the air and water quality, noise levels, and land use associated with the construction of this retirement community, it has been determined that the proposed project will not substantially degrade environmental quality.

(8) The overall Project is not individually limited but cumulatively does not have considerable effect upon the environment or involves a commitment for larger actions. The Site has vacant area to accommodate additional affordable units. The County General Plan and zoning has planned the Site and surrounding areas for residential uses. Future phases on the Site as well as future development of the surrounding land conforms with the planning for this area.

(9) The Project does not substantially affect a rare, threatened, or endangered species, or its habitat. Site visits have identified no species that are listed as rare, threatened, or endangered by the State of Hawaii or the Federal government. Past activities, including sugar cane growing at the Site, would have destroyed any natural habitat.

(10) This Project does not detrimentally affect air or water quality or ambient noise levels other than slightly during construction. Short-term impacts to air quality and ambient noise levels will result
from construction activities, however these effects would be minimal and would cease when construction is complete. No surface watercourses occur in the project area and development of the proposed site will not involve activities or future planned uses that would ordinarily impact ground water sources.

(11) This Project will not affect or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters. All structures proposed for this project will meet or exceed County of Hawaii, Planning Department, Building Division requirements for seismic, drainage on the site, and hurricane construction techniques.

(12) This Project will not substantially affect scenic vistas and view planes identified in county or state plans or studies. The two apartment buildings will maintain a maximum height of 25 feet per the building. All buildings along Highway 19 will be two-stories or less and one-story along Plumeria Street. Under this development plan no scenic vistas and view planes will be substantially affected.

(13) This Project will not require substantial energy consumption, but will require normal electric power from Hawaii Electric Light Company. Energy consumption will be reduced at this project since it will have low-flush toilets, flow resistors in shower heads, and solar water heating for hot water. Hawaii Electric Light Company has sufficient capacity for this project and all 40 proposed units.
APPENDIX A

Pre-Consultation Comments
November 24, 1999

Mr. Mike Klein
Hawaii Intergenerational Community Development Association
1154 Fort Street Mall, Suite 300
Honolulu, HI 96813

WATER AVAILABILITY
HONOKAA KNOLLS
TAX MAP KEY 4-5-010:123 THROUGH 128

This is in response to your letter of October 29, 1999.

Please be informed that we find your anticipated demand of 3,600 gallons per day for the 40 senior apartments acceptable based on the consumption for the existing Hale Hawai‘i’s 40 senior apartments. We are enclosing a copy of the consumption analysis for your information.

For your information, there are existing service laterals that will accommodate a 5/8-inch meter and 600 gallons of water per day for each of the lots in the subject property for a total of 3,600 gallons per day.

However, the 6 lots within the subdivision must be consolidated into one parcel/lot, the existing 6-inch distribution waterline disconnected from the existing 6-inch waterline along Plumeria Road, and a 1-inch meter installed. The Hawaii County Fire Department should be consulted for fire-flow protection.

Submit installation plans prepared by a professional engineer, registered in the State of Hawaii, for review and approval.

Should there be any questions, please call our Water Resources and Planning Branch at 961-8665.

Sincerely yours,

Milton D. Pavao, P.E.
Manager

Enc.

...Water brings progress...
January 21, 2000

Mr. Mike Klein
Hawai‘i Intergenerational Community
Development Association
1154 Fort Street Mall, Suite 300
Honolulu, HI 96813

Dear Mike:

Aloha from Honoka‘a on the Big Island!

As the Councilmember of the Hamakua District, I want to express my continued enthusiasm and support for your project at the Honoka‘a Knolls property. I have had the opportunity to share your plan with several civic and business organization in the area, and everyone agrees that your project is a good fit within our community.

I want to thank you for the wonderful presentation of your project to the Hamakua Safety Committee. As you know, they are instrumental in keeping our community safe and your commitment to providing safety improvements to benefit our town was greatly appreciated. I also want to thank you for meeting with the board members of Hale Ho‘ola of Honoka‘a. It was great to see that your prospective neighbors are very supportive of the project at the Honoka‘a Knolls.

As you know, the Honoka‘a area continues to reel from the closure of the Hamakua Sugar Plantation. It has been a difficult transition that has affected the entire region. Our unemployment rate is slowly declining, although we continue to hover around the 9% unemployment rate in Hamakua. Nearly 65% of our students that attend Honoka‘a High and Elementary School are on the free and reduced lunch program due to low family income. Recent Department of Health statistics reflects that Hawai‘i County leads the state in food stamp recipients (28.4% households in county), persons below federal poverty level (15%), and household receiving financial aid (11.5%). The closure of the Hamakua Sugar Plantation and the Hamakua District in general contributes greatly to these Big Island figures.
These staggering statistics effect affordable housing opportunities, and there is a great need for Assisted Living and Low Rental Assistance Programs. There is no question that your project would serve a segment of our community that has grown due to our woeful economic conditions. The 40 proposed units would provide affordable opportunities to those families and members of our community that desperately needs assistance.

The Honoka'a's Knolls proximity to medical services, churches, school, parks and businesses makes this project extremely attractive. This $4 - $5 million-dollar project would provide a much-needed economic boost that is desperately needed in our island economy. This type of development would serve our community well.

Once again, thank you very much for your efforts in helping to serve our community here in Honoka'a. If there is anything that I can do to assist the process, please do not hesitate to call on me at any time. Together, we can bring a quality project that will greatly increase the quality of life here in Hamakua.

Warmest Aloha,

Dominic Yagong, Council member
Hawai'i County Council

DY:ia
June 30, 1999

Mr. Mike Klein  
Hawaii Intergenerational Community Development Association  
1154 Fort Street Mall, Suite 300  
Honolulu, HI 96813

Dear Mr. Klein,

It was a pleasure seeing your plans for the Honoka’a Knolls Senior Apartments proposed for Honoka’a. This project’s concept is very much needed in Honoka’a and will greatly benefit the community. There are many seniors here who would benefit from apartment style living and want to remain near their families.

I have two concerns. The design of the buildings looks really great and will enhance the community aesthetically, however, I see two problems, (1) the parking lots seem too far from the units for seniors to carry groceries, etc. and (2) laundry facilities should be in each unit. Stackable washer and dryer would be ideal. Many seniors will not take their clothes to laundry facilities or it may be too difficult. I understand that you are looking into providing sidewalks into town, which will be a great assistance to our seniors.

I hope these comments will be of help in your planning of this project.

Sincerely,

Kathleen F. Baker  
President

P. O. Box 309  
Honoka’a, HI 96727  
(808)775-0043
February 10, 2000

Mike Klein
HICDA
1154 Fort Street Mall, Ste. 300
Honolulu, HI 96813

Dear Mr. Klein:

Thank you for meeting with me on February 9, 2000. I appreciate your taking the time from your busy schedule to inform me of your Proposed Development.

I would like to let you know that I do support your project in Honoka'a. Please let me know if I can be of any further assistance to you.

Alaka,

David M. Matsuura
State Senator
2nd Senatorial District

DMM/mll
July 27, 1999

Mr. Mike Klein  
Hawaii Intergenerational Community Development Association  
1134 Fort Street Mall, Suite 300  
Honolulu, Hawaii 96813

Dear Mr. Klein:

SUBJECT: Proposed Housing Project  
Honokaa, Hamakua, Hawaii Island  
TMK: 4-5-10:1 and 121

Thank you for your letter of May 12, 1999 and our apologies for the late response.

We have no records of historic sites on the subject parcels, which, as you noted in your letter, used to be planted in sugar cane. Based on this information we think it is highly unlikely that significant historic sites would be found in the process of constructing the proposed housing. Thus, we believe that the project will have "no effect" on significant historic sites.

If you have any questions please contact Patrick McCoy (692-8029).

Aloha,

DON HIBBARD, Administrator  
State Historic Preservation Division

PM:Im
Honokaa Knolls Senior Apartments
Executive Summary
For Community Meeting at Honokaa
June 29, 1999

Developer: Hawaii Intergenerational Community Development Association (HICDA)
1154 Fort Street Mall, Suite 300
Honolulu, HI 96813
Phone: (808) 524-0552
Fax: (808) 599-5004
Contact: Mike Klein
Cell: (808) 371-2567

Proposed Development:
(20) One Bedroom One Bath, 541 Square Feet
(20) Two Bedroom Two Bath, 800 Square Feet
Total: (40) Affordable Senior Rental Units

Age restricted to 62 years and older for primary renter.

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<th>Income Range</th>
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Location: Near Hale Ho'ola Hanakua on Lehua Street.

Proposed Construction Date: August 2000
Proposed Completion Date: May 2001

Zoning: RS-10,000 Square Feet (Requires a zone change)

Proposed Additional Development: Low-Income or Affordable Assisted Living

Proposed Development on the Rest of the Property: Single Family Homes
Community Meeting
Honokaa School Cafeteria

Date: June 2, 1999 – Wednesday
Time: 6:00 P.M.

Community Meeting to cover the following topic – We need your input on (40) Senior Apartments proposed in Honokaa
Please attend – Thank you.

1. Who is Hawaii Intergenerational Community Development Association (HICDA)
2. Proposed Location off of Lehua Street near the Honokaa Hospital
3. How the $5.5 Million Dollar Project is Financed
4. Need for Affordable Senior Housing for Senior Citizens Age 62 Years and Older
5. Very Preliminary Proposed Site Plan & Rendering – Community Suggestions
6. Specific Community Input, Concerns and Mitigation of Impacts within the Community
Meeting for the 40 Senior Apartment that will be built next to the Honokaa Hospital

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kiyoshi Murakami</td>
<td>P. O. Box 35 Honokaa, HI 96727</td>
<td>775-7176</td>
</tr>
<tr>
<td>Mr. James W. Lukzen</td>
<td>P. O. Box 744 Honokaa, HI 96727</td>
<td>775-0674</td>
</tr>
<tr>
<td>Mr. Romel Dela Cruz</td>
<td>P. O. Box 28 Honokaa, HI 96727</td>
<td>775-7211</td>
</tr>
<tr>
<td>Officer Vance Fujii</td>
<td>P. O. Box 1399 Honokaa, HI 96727</td>
<td>775-0626</td>
</tr>
<tr>
<td>Ms. Dee Coates</td>
<td>P. O. Box 5099 Kukuihale, HI 96727</td>
<td>775-9727</td>
</tr>
<tr>
<td>Lola Makinster</td>
<td>P. O. Box 1766 Honokaa, HI 96727</td>
<td>775-7701</td>
</tr>
<tr>
<td>Ms. Fujie Matsumani</td>
<td>P. O. Box 1278 Honokaa, HI 96727</td>
<td>775-712</td>
</tr>
<tr>
<td>Mr. Sakai Ujiki</td>
<td>P. O. Box 159 Honokaa, HI 96727</td>
<td>775-0586</td>
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<tr>
<td>Mr. Augustos Elliott</td>
<td>P. O. Box 910 Honokaa, HI 96727</td>
<td>775-0206</td>
</tr>
<tr>
<td>Ms. Lali Acdal</td>
<td>P. O. Box 955 Honokaa, HI 96727</td>
<td>775-0948</td>
</tr>
<tr>
<td>Mr. Paul Takamatsu</td>
<td>P. O. Box 1634 Honokaa, HI 96727</td>
<td>775-9255 wk. 775-9566</td>
</tr>
<tr>
<td>Ms. Kathleen Baker</td>
<td>P. O. Box 309 Honokaa, HI 96727</td>
<td>775-0043</td>
</tr>
<tr>
<td>Ms. Gloria Lukzen</td>
<td>P. O. Box 744 Honokaa, HI 96727</td>
<td>775-0674</td>
</tr>
<tr>
<td>Mr. Lorenzo A. Valesa</td>
<td>P. O. Box 1187 Honokaa, HI 96727</td>
<td>775-9719</td>
</tr>
<tr>
<td>Tyrus Higa</td>
<td>P. O. Box 815 Honokaa, HI 96727</td>
<td>775-0328</td>
</tr>
<tr>
<td>Mr. Jacob Thomas</td>
<td>P. O. Box 799 Honokaa, HI 96727</td>
<td>775-0445</td>
</tr>
<tr>
<td>Ms. Lorraine Acdal</td>
<td>P. O. Box 955 Honokaa, HI 96727</td>
<td>961-8491</td>
</tr>
<tr>
<td>Ms. Esther Pacyao</td>
<td>P. O. Box 365 Honokaa, HI 96727</td>
<td>775-7126</td>
</tr>
<tr>
<td>Ralph Cordoban</td>
<td>P. O. Box 76 Honokaa, HI 96727</td>
<td>775-0918</td>
</tr>
<tr>
<td>Ms. Jeannie Graham</td>
<td>P. O. Box 1526 Honokaa, HI 96727</td>
<td>775-9434</td>
</tr>
</tbody>
</table>
Community Meeting
Honokaa School Cafeteria – with Councilmember
Dominic Yagong

Date: June 29, 1999 – Wednesday
Time: 6:00 P.M.
Community Meeting to cover the following topic – We need your
input on (40) Senior Apartments proposed in Honokaa
Please attend – Thank you.

1. Who will qualify and how income levels are figured to qualify for these apartments.
2. Proposed Location of Sidewalks for Lehua Street near the Honokaa Hospital
3. Update on the $5.5 Million Dollar Project is Financing
4. Need for Affordable Senior Housing for Senior Citizens Age 62 Years and Older
5. Revised Proposed Site Plan & Rendering — Community Suggestions
6. Specific Community Input, Concerns and Mitigation of Impacts within the Community
APPENDIX B

Market Study
April 12, 1999

Mr. Mike Klein
Hawaii Intergenerational Community Development Association
1154 Fort St. Mall, Suite 330
Honolulu, HI 96813

RE: Honokaa Knolls Apartment Rentals in Honokaa for the Frail Elderly

Dear Mr. Mike Klein,

I have reviewed your proposed project and have contacted Realtors in Honokaa and along the Hamakua Coast to determine the current market for your project. Rental rates average approximately $450 to $500 for a (1) Bedroom (1) Bath and $575 to $650 for a (2) Bedroom (2) Bath.

Enclosed with this letter are several pages explaining the current market condition, number of senior citizens in the area and the projected demand for this forty unit apartment complex.

If you need additional work done please feel free to contact me at our Honokaa office at (808) 775-9566.

Sincerely,

[Signature]

Paul K. Takamatsu PB GRI
Pacific Coast Properties, Inc.
Honokaa Market Report
April 1999

Honokaa District on the Big Island comprises of 5,545 individuals and is part of the Hamakua Coast. This district borders on the South Kohala District which includes Waimea and the North Hilo District which includes Laupahoehoe. These two districts have an additional 10,681 individuals. Table 1.12 Resident Population of Districts and Census Designated Places, Hawaii County, By Sex: 1990 shows these numbers.

Honokaa District has only one medical facility called Hale Ho'ola Hamakua which is a 50 bed hospital. Acute care represents 2 of the beds and long term care represents 48 beds. Table 2.9 Acute Care and Long Term Care Bed Capacity, Hawaii County: 1996 references both of these bed counts. Both of the buildings are one block from the proposed Honokaa Senior Apartments. Honokaa has no senior apartments at this time and there are no senior apartments on the Hamakua Coast. Our population is aging fast and many of our children have left Honokaa since the sugar plantations have closed.

Table 1.13 Resident Population of County Divisions and Census Designated Places (CDPs), Hawaii County, By Age 1990 references each division and area by senior age group. North Hilo division, Honokaa-Kukuihaele Division and South Kohala division have over 2,000 senior citizens, 60 years and older. Today, eight years later, that number might be closer to 2,500 seniors. Many of the them are living in larger single family homes that are too large for them.

In Hawaii County the average Retirement Income was $8,423, adjusted to 1998 using CPI conversion factors. Also, the percentage of Homeowners 65 years and older was only 44.47%. Reference Selected Data, United States, Hawaii, Counties.

Overall the Big Island needs help with its aging population. A growing senior population, low retirement income and low home ownership within this group leaves us with high demand. Honokaa has the unfortunate situation of a declining job base. Therefore, these 2,000 plus senior need additional help with housing since incomes are low and the overall numbers high.

The proposed development of 40 Senior Apartments would be a well received and needed addition to the Hamakua Coast.

Please Note: This report has five attached pages.
<table>
<thead>
<tr>
<th>Division and place</th>
<th>60 to 64</th>
<th>65 to 74</th>
<th>75 to 84</th>
<th>85 and over</th>
</tr>
</thead>
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<td>5,669</td>
<td>9,364</td>
<td>4,541</td>
<td>1,181</td>
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<td>2,081</td>
<td>3,494</td>
<td>1,789</td>
<td>538</td>
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<td>Hilo</td>
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<td>1,704</td>
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<td>146</td>
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<td>22</td>
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<td>Papaikou-Hailea division</td>
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<td>564</td>
<td>332</td>
<td>83</td>
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<td>Papaikou</td>
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<td>24</td>
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<td>79</td>
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<td>69</td>
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<td>173</td>
<td>70</td>
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<td>Kahalu-Kaahu</td>
<td>124</td>
<td>215</td>
<td>118</td>
<td>34</td>
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<tr>
<td>Kailua</td>
<td>338</td>
<td>502</td>
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<td>9</td>
<td>9</td>
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<td>Honaunau-Napoopoo</td>
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Continued on next page.
Table 2.9-- ACUTE CARE AND LONG TERM CARE BED CAPACITY, HAWAII COUNTY: 1996

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<tr>
<th>Hospital</th>
<th>Location</th>
<th>Total</th>
<th>Acute care</th>
<th>Long term care</th>
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<td>257</td>
<td>736</td>
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<td>Hilo</td>
<td>120</td>
<td></td>
<td>120</td>
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<tr>
<td>Keauhou Rehab. &amp; Healthcare</td>
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<td>120</td>
<td></td>
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<td>Hilo</td>
<td>276</td>
<td>156</td>
<td>120</td>
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<tr>
<td>Hale Ho'ola Hamakua</td>
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<td>50</td>
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<td>48</td>
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<td>Kau Hospital</td>
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<td>21</td>
<td></td>
<td>15+6 1/</td>
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<td>65</td>
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<td>Life Care Center</td>
<td>Hilo</td>
<td>252</td>
<td></td>
<td>252</td>
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<td>North HI Comm Hospital</td>
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<td>50</td>
<td>30</td>
<td>20</td>
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</table>

Source: Hawaii State Health Planning and Development Agency, Utilization of Inpatient Facilities by County, 1996 (June 1997), pp.4, 5, 10 and 11, and records.

Table 2.10-- OCCUPANCY CHARACTERISTICS OF ACUTE CARE AND LONG TERM CARE HOSPITALS, HAWAII COUNTY: 1991 TO 1996

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of beds</th>
<th>Average daily % occupancy</th>
<th>Average daily census</th>
<th>Admissions</th>
<th>Average length of stay (days)</th>
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<td>168</td>
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<td>239</td>
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<td>251</td>
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<td>148</td>
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<td>252</td>
<td>58.8</td>
<td>146</td>
<td>11,340</td>
<td>4.8</td>
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<td>1995</td>
<td>260</td>
<td>61.4</td>
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<td>257</td>
<td>52.9</td>
<td>124</td>
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<td>LONG TERM CARE</td>
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<tr>
<td>1991</td>
<td>474</td>
<td>98.8</td>
<td>468</td>
<td>403</td>
<td>424</td>
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<tr>
<td>1992</td>
<td>487</td>
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<td>508</td>
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<td>1993</td>
<td>517</td>
<td>106.7</td>
<td>519</td>
<td>385</td>
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<td>108.8</td>
<td>530</td>
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<tr>
<td>1995</td>
<td>734</td>
<td>106.8</td>
<td>519</td>
<td>448</td>
<td>411</td>
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<tr>
<td>1996</td>
<td>736</td>
<td>97.7</td>
<td>537</td>
<td>651</td>
<td>291</td>
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<table>
<thead>
<tr>
<th>District and place</th>
<th>Total population</th>
<th>Sex</th>
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<td></td>
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<td>Honou</td>
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<td>Papaikou</td>
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<td>812</td>
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<td>Paukkaa</td>
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<td>236</td>
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<td>Pepeekeo</td>
<td>1,813</td>
<td>912</td>
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<tr>
<td>Makakau</td>
<td>1,243</td>
<td>614</td>
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<tr>
<td>North Hilo district</td>
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<td>Laupahoehoe</td>
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<td>259</td>
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<td>Hamakua district</td>
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<td>1,079</td>
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<tr>
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<td>316</td>
<td>164</td>
</tr>
<tr>
<td>Paauilo</td>
<td>620</td>
<td>324</td>
</tr>
<tr>
<td>North Kohala district</td>
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<td>Haaula</td>
<td>496</td>
<td>268</td>
</tr>
<tr>
<td>Hawi</td>
<td>924</td>
<td>453</td>
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<tr>
<td>Kapaau</td>
<td>1,083</td>
<td>561</td>
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<td>4,732</td>
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<td>1,220</td>
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<td>Waimea</td>
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<td>3,021</td>
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<td>1,974</td>
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<td>Honalo</td>
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<td>963</td>
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<tr>
<td>Kahalu-Kaauhau</td>
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<td>1,016</td>
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<td>Kalua</td>
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<td>4,536</td>
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</table>

Continued on next page.
## Selected Statistical Data, United States, Hawaii, Counties

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<th>Hawaii State</th>
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<th>Maui County</th>
<th>Hawaii County</th>
<th>Kauai County</th>
<th>Hilo Area</th>
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<td>18.35%</td>
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<td>65 to 74 Years</td>
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<td>7.01%</td>
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<td>3.62%</td>
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<td>5,669</td>
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<td>0.68%</td>
<td>0.87%</td>
<td>1.09%</td>
<td>1.33%</td>
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<td>27,288</td>
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<td>22.42%</td>
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<td>23.31%</td>
<td>22.68%</td>
<td>20.80%</td>
<td>21.48%</td>
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<td>11.30%</td>
<td>8.52%</td>
<td>8.84%</td>
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<td>4.59%</td>
<td>5.05%</td>
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<td>3.25%</td>
<td>2.54%</td>
<td>3.00%</td>
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<td>In Nursing Homes</td>
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<td>2,454</td>
<td>2,17</td>
<td>340</td>
<td>219</td>
<td>249</td>
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<tr>
<td>Percentage, 65+</td>
<td>5.59%</td>
<td>2.60%</td>
<td>2.94%</td>
<td>1.91%</td>
<td>2.26%</td>
<td>3.26%</td>
<td>2.51%</td>
</tr>
<tr>
<td><strong>Limitations, 65 to 74</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobility &amp; Self Care</td>
<td>741,996</td>
<td>2,513</td>
<td>1,935</td>
<td>207</td>
<td>219</td>
<td>145</td>
<td>140</td>
</tr>
<tr>
<td>% Limited, 65 to 74</td>
<td>4.07%</td>
<td>3.17%</td>
<td>3.30%</td>
<td>2.86%</td>
<td>2.33%</td>
<td>3.67%</td>
<td>2.24%</td>
</tr>
<tr>
<td><strong>Limitations, 75 +</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobility and Self Care</td>
<td>1,317,971</td>
<td>4,993</td>
<td>3,630</td>
<td>578</td>
<td>555</td>
<td>230</td>
<td>378</td>
</tr>
<tr>
<td>% Limited, 75+</td>
<td>10.16%</td>
<td>10.99%</td>
<td>14.54%</td>
<td>14.06%</td>
<td>9.80%</td>
<td>8.28%</td>
<td>10.28%</td>
</tr>
<tr>
<td><strong>Limitations, 65 +</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobility and Self Care</td>
<td>2,059,967</td>
<td>7,506</td>
<td>5,565</td>
<td>785</td>
<td>774</td>
<td>375</td>
<td>518</td>
</tr>
<tr>
<td>% Limited, 65+</td>
<td>6.60%</td>
<td>6.02%</td>
<td>6.66%</td>
<td>6.92%</td>
<td>5.14%</td>
<td>5.58%</td>
<td>5.22%</td>
</tr>
<tr>
<td>Income*</td>
<td>$39,084</td>
<td>$50,492</td>
<td>$52,771</td>
<td>$49,077</td>
<td>$38,637</td>
<td>$48,667</td>
<td>$33,453</td>
</tr>
<tr>
<td>------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Median Household</td>
<td>$18,752</td>
<td>$20,507</td>
<td>$21,139</td>
<td>$19,767</td>
<td>$17,125</td>
<td>$18,535</td>
<td>$14,155</td>
</tr>
<tr>
<td>Per Capita</td>
<td>$8,126</td>
<td>$7,013</td>
<td>$6,967</td>
<td>$6,568</td>
<td>$9,848</td>
<td>$3,867</td>
<td>$10,362</td>
</tr>
<tr>
<td>Institutionized</td>
<td>3,780,585</td>
<td>9,701</td>
<td>6,888</td>
<td>825</td>
<td>1,383</td>
<td>591</td>
<td>1,072</td>
</tr>
<tr>
<td>Poverty Status, 65+</td>
<td>12.12%</td>
<td>7.78%</td>
<td>8.24%</td>
<td>7.27%</td>
<td>9.18%</td>
<td>8.79%</td>
<td>10.80%</td>
</tr>
<tr>
<td>Poverty %</td>
<td>14,353,202</td>
<td>71,005</td>
<td>53,219</td>
<td>5,973</td>
<td>8,423</td>
<td>3,341</td>
<td>5,686</td>
</tr>
<tr>
<td>% Retirement</td>
<td>15.60%</td>
<td>19.90%</td>
<td>20.04%</td>
<td>18.02%</td>
<td>20.26%</td>
<td>20.46%</td>
<td>22.99%</td>
</tr>
<tr>
<td>(Number of Homes with Retirement Income)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Value</td>
<td>$102,081</td>
<td>$315,475</td>
<td>$366,060</td>
<td>$259,558</td>
<td>$144,863</td>
<td>$221,326</td>
<td>$163,849</td>
</tr>
<tr>
<td>Homeowners over 65</td>
<td>11,418,713</td>
<td>42,601</td>
<td>28,611</td>
<td>4,526</td>
<td>6,703</td>
<td>2,812</td>
<td>4,602</td>
</tr>
<tr>
<td>% Homeowners</td>
<td>36.60%</td>
<td>34.17%</td>
<td>34.22%</td>
<td>39.90%</td>
<td>44.47%</td>
<td>41.81%</td>
<td>46.38%</td>
</tr>
</tbody>
</table>

Mental Health Association in Hawaii County
P.O. Box 1304, Hilo, Hawaii 96720
(808) 965-6801 Fax: 965-9528
e-mail: grocan@hawaii.net

Hawaii County has the highest rate of free/reduced lunch in high school. (4)

In 1997 and 1998, respectively, Hawaii County had 13.6% and 14% of all the SSI recipients in the state. (6)

Food Stamps -- percentages of households in each county

- Maui: 13.1%
- Oahu: 13.8%
- Kauai: 16.8%
- Hawaii Co: 28.4% (up from 25.2% in 1996 and from 23% in 1993) (3)

As of October, 1998, 11,750 households in Hawaii County were receiving food stamps.

(6)

2,500 homeless persons in Hawaii County were provided services in 1998. (12)

The Family

Hawaii County has the highest incidence of teen pregnancy, increasing every year since 1980, although the rate of increase has slowed. (4)

- 17% of all births to teens in the state (3)
- 10.5% of all non-marital births in the state (5)

The highest rate of births to mothers with pre-existing medical conditions. (3)

The highest rate of those over 18 with no high school diploma.
Population (1)

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total state</td>
<td>1,186,802</td>
<td></td>
</tr>
<tr>
<td>City &amp; Co. Hon.</td>
<td>889,557</td>
<td>73.7%</td>
</tr>
<tr>
<td>Hawaii Co.</td>
<td>141,488</td>
<td>11.8%</td>
</tr>
<tr>
<td>Maui Co.</td>
<td>110,664</td>
<td>9.4%</td>
</tr>
<tr>
<td>Kauai Co.</td>
<td>56,243</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

In looking at the subsequent figures and the percentages, it is important to return to the total population ratios, as above, to figure the weight of the relative proportionate issues we are addressing.

Poverty

Unemployment and Income

Kauai unemployment continues to be slightly greater than Hawaii County's (11% vs 10%), BUT:

Median income for both family and non-family households in Hawaii County is the lowest in the state. (2)

Persons below federal poverty level:

<table>
<thead>
<tr>
<th></th>
<th>9.6%</th>
<th>15.0%</th>
<th>8.9%</th>
<th>8.8%</th>
<th>8.6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>State-wide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(2)</td>
</tr>
<tr>
<td>Oahu</td>
<td>5.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maui</td>
<td>5.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kauai</td>
<td></td>
<td>6.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(All percentages have increased since 1989, but Hawaii County was, and is, the highest)

Households receiving financial aid:

<table>
<thead>
<tr>
<th></th>
<th>8.6%</th>
<th>5.7%</th>
<th>5.0%</th>
<th>6.0%</th>
<th>11.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>State total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(3)</td>
</tr>
<tr>
<td>Maui</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oahu</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kauai</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawaii Co.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(3)</td>
</tr>
</tbody>
</table>
Mental Health Association in Hawaii County
P.O. Box 1304, Pahoa, Hawaii 96778
(808) 965-6601 fax: 965-3826
e-mail: propan@hawaii.net

Child Abuse and Neglect

<table>
<thead>
<tr>
<th></th>
<th>percentage of confirmed cases (Hawaii County) in 1997 up 53.8% from 1994</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>45%</td>
</tr>
<tr>
<td>Maui</td>
<td>17%</td>
</tr>
<tr>
<td>Kauai</td>
<td>6%</td>
</tr>
<tr>
<td>Hawaii Co</td>
<td>30%</td>
</tr>
</tbody>
</table>

(Actual number of confirmed cases (Hawaii County) in 1997 up 53.8% from 1994) (9)

In the last three years (FYs 1995-96, 1996-97, 1997-98) an average of 4,800 Children's referrals are made to Family Court each year, over half each year for law violations, 22% of all the Children's Referrals in the state. This means that 12% of Hawaii County children each year are exposed to court proceedings. (7)

Hawaii County has 30.8% of all Domestic Abuse Protective Orders in the state. (7)

Health and Mental Health

The entire County of Hawaii has been federally designated as a Dental Health Professional Shortage Area (HPSA). Most of the county has been designated as a Mental Health HPSA. (9)

National surveys have established an expected rate of 18.2 persons per thousand who have a serious mental illness. (10) Using Hawaii County’s population, that would mean over 2,500 residents here. Currently:

520 are being served at the HC Community Mental Health Center
70 at Community Care Services (Bidyne)
22 at Hawaii State Hospital (9)

"Both the prevalence of serious mental illness and the resulting disability were clearly related to poverty status. In addition, lower educational achievement was strongly related to prevalence and disability from serious mental illness." (10)

Under the Federal Consent Decree, children who need mental health services are facing better than they used to. At this time, 2,200 children in Hawaii County are registered with the Family Guidance Center (Department of Health, Child and Adolescent Mental Division) as being eligible for mental health services. (11) Using expected prevalence rates from the federal Center for Mental Health Services, however, the number needing those services is close to double that.
Re: Sources for 1998 Survey of Social Indicators

(1) Data Book, County of Hawaii, 1997
(2) Data Book, State of Hawaii, 1997
(3) Primary Care Needs Assessment Databook, DOH, 1996
(4) Hawaii Kids Count, 1997
(6) Dept of Human Services, State of Hawaii, 1999
(7) Juiciary, State of Hawaii, 1999
(8) Social Security Administration, USA, 1989
(9) Adult Mental Health Division, DOH, 1999
(10) State Plan For Mental Health, DOH, FY 1998
(11) Child and Adolescent Mental Health Division, DOH, 1999
(12) Care-A-Van, Catholic Social Ministries, 1999
APPENDIX C

Environmental Assessment Phase I Study
PRELIMINARY
ENVIRONMENTAL SITE ASSESSMENT
PHASE I

Honokaa Knolls Project
Tax Map Key: 4-5-10: parcels 1 & 121
Honokaa, Island of Hawaii, State of Hawaii

Prepared For:
Zane Development Group, Inc.
1001 Bishop Street, Pauahi Tower, Suite 1400
Honolulu, HI 96813

Prepared By:
EnviroServices & Training Center, LLC
Gentry Pacific Design Center, Suite 101 E
560 N. Nimitz Highway
Honolulu, Hawaii 96817

Project No.: 59-0-1003

April 30, 1999
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I EcoSearch Environmental Resources, Inc. Priority Risk Reports
II Request for Information from Hawaii County Building Department
III Photographic Documentation
I. CERTIFICATIONS AND LIMITATIONS

EnviroServices and Training Center, LLC (ETC) has completed this Phase I Environmental Site Assessment Report for the project site. ETC's findings are based on research, visual site inspections, and government regulations at the time and location of the study. Even with extensive investigative efforts, ETC cannot dismiss the possibility that parts of the site may be chemically affected.

ETC makes no guarantee or warranty; either expressed or implied, except that our services are consistent with good commercial or customary practices designed to conform to acceptable industry standards.

This report is exclusively for the use and benefit of Zane Development Group, Inc. and is not for the use or benefit of, nor may it be relied upon by, any other person or entity. The contents of this report may not be quoted in whole or in part or distributed to any person or entity other than the Zane Development Group, Inc. without, in each case, the written consent of the undersigned.

Prepared By: Michael Yee
Project Manager

Phase I Environmental Site Assessment
Zane Development Group, Inc.
Honokaa Knolls
II. EXECUTIVE SUMMARY

This report presents the results of ETC's Phase I Preliminary Environmental Site Assessment (ESA), performed in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Practice E-1527, for 59 acres known as Tax Map Key: 4-5-10: parcels 1 & 121 located in Honokaa, island of Hawaii, State of Hawaii.

The following summarizes the independent conclusions representing ETC's best professional judgment based on information and data available to us. Factual information regarding operational conditions and data provided by the Client, owner, or their representatives have been assumed to be correct and complete. The conclusions presented are based on the conditions that existed at the time of the assessment.

The project site is comprised of 59 acres of overgrown sugar cane land mauka (mountain side) of the town of Honokaa. No buildings are located on the project site. The only improvements on the project site pertain to drainage ways for three intermittent streams that cross the site, a rock wall on the northern property boundary, and a roadway on the southwestern portion of the property.

ETC's field survey of the project site did not reveal any obvious visual or olfactory evidence of chemical contamination. ETC noted several bags of trash on the north and northeast portions of the property. No other evidence of dumping was noted.

ETC's research into the history of the project site indicates that the land was used for sugar cane cultivation by the Hamakua Sugar Company for approximately 100 years and was sold to Zane Development in 1989. The land has been undeveloped and fallow since 1989.

ETC's research did not indicate the presence of any underground storage tanks (USTs) at the project site. A review of federal, state, and local databases reveal the presence of six UST and six LUST sites within a 1/4 and 1/2 mile radius of the project site, respectively. UST and LUST sites have the potential for adversely impacting soil and groundwater at and around those sites by the migration of contaminants through the soil and groundwater. However, all of the sites are located down gradient from the project site; therefore, it is unlikely that these sites would pose a risk to the project site.

ETC recognizes that the agricultural chemicals including chlorinated pesticides were probably applied to the sugar cane crops at the project site. No evidence of chemical contamination was observed at the project site. Proper and judicious use of agricultural chemicals should have minimal impact on the property. If the Client has concerns over residual chemicals (although they may not be regulated), near surface soil sampling and analysis could be performed.
ETC personnel noted a pole mounted transformer located on telephone pole 134 on the south side of the site (off of Mamalahoa Highway). ETC personnel contacted Hawaii Electric Light Company to determine the PCB status of the transformer; and HELCO personnel told ETC that all HELCO pole-mounted transformers are PCB-free.

It is ETC's professional opinion that, based on historical review, site inspection, and the current use, the project site does not suggest or exhibit insuperable environmental problems discovered within the scope of this assessment. Table 1 presents a summary of ETC's findings.
Table 1: Project Summary  
Zane Development Group, Inc.  
Honokaa Knolls- Tax Map Key 4-5-10: Parcels 1 & 121  
Honokaa, Hawaii, Hawaii

<table>
<thead>
<tr>
<th>Assessed Component</th>
<th>No Further Action</th>
<th>Preventative Action</th>
<th>Reference Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical Review</td>
<td>X</td>
<td></td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Regulatory Review</td>
<td>X</td>
<td></td>
<td>VI</td>
<td></td>
</tr>
<tr>
<td>USTs</td>
<td>X</td>
<td></td>
<td>VI</td>
<td></td>
</tr>
<tr>
<td>Hazardous Materials</td>
<td>X</td>
<td></td>
<td>VII-A</td>
<td></td>
</tr>
<tr>
<td>PCB’s</td>
<td>X</td>
<td></td>
<td>VII-B</td>
<td></td>
</tr>
<tr>
<td>Asbestos Materials</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Lead-Based Paint</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Operational Activities</td>
<td>X</td>
<td></td>
<td>IX</td>
<td></td>
</tr>
<tr>
<td>Facility Storage</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanks and Containers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storm Water Control</td>
<td>X</td>
<td></td>
<td>XI</td>
<td></td>
</tr>
<tr>
<td>Surface Areas</td>
<td>X</td>
<td></td>
<td>XII</td>
<td></td>
</tr>
<tr>
<td>Adjacent Properties</td>
<td>X</td>
<td></td>
<td>XII</td>
<td></td>
</tr>
</tbody>
</table>

NA = not applicable or not in the scope of this project

1 = Based on this preliminary study, it appears that further investigation in this area is not a priority concern for this site at the present time.

2 = Preventive measures should be taken as a part of standard operating procedures.
III. SURVEY SCOPE

ETC performed an on-site inspection of the project site on April 20, 1999. The scope of the on-site inspection consisted of a walk-through visual reconnaissance for hazardous chemicals, indicators of USTs, obvious chemical or petroleum contamination, and PCB containing electrical transformers and capacitors. Only readily accessible areas were inspected.

ETC also reviewed available federal, state, and local records to identify sites of known or suspected hazardous waste activity located at or near the sites which could have an adverse impact on the property. In an attempt to determine whether historical uses of the properties and adjacent properties have had an environmental impact on the sites, ETC conducted interviews and reviewed available records and documents. This assessment is based on the evaluation of the information gathered and the visual site inspection, as it appeared at the time of the assessment.

The purpose of this report is limited to providing the Client an assessment concerning environmental conditions (limited to those issues identified in the report) as they currently exist at the project site. This assessment was conducted using generally accepted Phase I industry protocol as described in the ASTM E-1527 standard. The scope of work included an evaluation of the following for the site:

- Site background;
- Physical characteristics of the site;
- Historical site conditions; and
- Current site conditions (as applicable) including compliance with appropriate regulations as they pertain to the presence of: 1) facility storage tanks, drums, and containers; and 2) transformers and other electrical equipment potentially containing PCB.

Additionally, the assessment included the following:

- A review of building permit records for the project site in an attempt to identify any possible uses that would suggest an impact to the environmental integrity of the project site;
- An evaluation of information contained in programs such as the National Priority List (NPL), Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), Facility Index System (FINDS), Emergency Response Notification System (ERNS), Resource Conservation and Recovery Information System (RCRIS), and other governmental information systems within a specific radius of the project site to identify any sites that would have the potential to impact the integrity of the project site; and
- Visual observations of the adjacent properties to identify high-risk neighbors and the potential for a chemical to migrate onto the properties.
The regulatory agency report provided is based on an evaluation of the data collected and compiled by a contracted data research company (Appendix I). The report is a radius search report, which focuses on both the project sites, and adjacent sites which may impact the project sites. Adjacent sites listed in governmental environmental records are identified within a specific search radius. The search radius varies depending on the particular record being researched. The search is designed to meet the requirements of the current industry approach and ASTM E-1527 standard. The information provided is assumed to be correct and complete, unless noted otherwise.
IV. SITE DESCRIPTION

This ESA pertains to 59 acres located in Honokaa, Hawaii known as Tax Map Key 4-5-10: parcels 1 & 121 (Figure 1, Site Location Map; Figure 2, Site Layout Map). The project site is located on the north shore of the island of Hawaii, State of Hawaii. The site spans two parcels occupying 59 acres of land and is owned by Honokaa Partners/Pheasant Ridge Corporation (personal communication, Sheldon Zane, 1999). The project site is situated on the mauka (mountain side) of the town of Honokaa.

The project site is bounded on the north by Honokaa Health Center, Hale Ho'ola Honokaa (the new Honokaa Hospital), the Community Playground, and the Honokaa Community Park. South of the site is Lehua Street, Mamalahoa Highway (Highway 19), and beyond the highway a few houses and undeveloped land. East of the site is the Community Playground, Honokaa Community Park, Tex's Drive-In, Honokaa Visitor Center, Bad Ass Coffee Outlet, Pakalana Street, single-family houses, and Lehua Street. West of the property is Plumeria Street and beyond that are single-family houses, a county refuse transfer station, a HELCO substation, and a cemetery.

Current improvements include concrete drainage pipes located on the uplands of each of the three intermittent streams that cross the property, a rock wall on the northern property boundary, and small road located on the southwestern portion of the site. The ground elevation at the project site ranges from 1,400 feet above mean sea level (msl) on the southern portion of the site to 1,200 feet above msl on the northern portion of the site. The topography of the site varies drastically across the site. Vegetation at the site is dense. Much of the site is overgrown with tall grass, sugar cane, and ironwood trees.
<table>
<thead>
<tr>
<th>EnviroServices &amp; Training Center</th>
<th>Site Location Map</th>
<th>ETC Job #: 99-0-1003</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Honokaa Knolls</td>
<td>April 27, 1999</td>
</tr>
<tr>
<td></td>
<td>Honokaa, Hamakua, Hawaii</td>
<td>Figure 1</td>
</tr>
</tbody>
</table>
V. HISTORICAL/RECORDS REVIEW

Historical uses of the project site were investigated through the review of documentation available from public land records and State of Hawaii archive information. Additionally, available aerial photography, plat maps, and topographic maps were reviewed.

A. Chain of Title

The project site is currently owned by Zane Development Group, Inc. The land was purchased from the Hamakua Sugar Company in 1989 (personal communication, Sheldon Zane, 1999). Hamakua Sugar Company cultivated sugar cane on the project site for approximately 100 years (Masa Fujioka & Associates, 1992). ETC has requested information from the County of Hawaii, Building Division, Department of Public Works regarding the past presence of buildings or structures at the site; however, a reply has not been received at this time. Appendix II presents a copy of ETC's written request.
B. Prior Use Interviews

Interviews with people familiar with the site also provided information. The following are individuals interviewed by ETC to obtain information related to the use of the property:

Mr. Sheldon Zane, Honokaa Partuers/Pheasant Ridge Corporation
Mr. Sheldon Zane, a representative of Honokaa Partners/ Pheasant Ridge Corporation owners of the project site, provided ETC with the following information:

- The project site is unimproved and has no water source and no sewage system, septic tanks, or cess pools.
- The project site is owned by Honokaa Partners LP/ Pheasant Ridge Corporation.
- Mr. Zane is the president of Pheasant Ridge Corporation.
- Hamakua Sugar previously owned the land and used the site for sugar cane cultivation.
- The site is not currently in use.
- There are no underground storage tanks (UST's) at the project site.
- There are no aboveground storage tanks (AST's) at the project site.
- There are no known chemical releases on or around the property.
- There have been no wastewater discharge permits for the site.
- The project site is not a generator of hazardous waste under the Resource Conservation and Recovery Act (RCRA) of 1976
- Mr. Zane is not aware of any polychlorinated biphenyl (PCB) containing equipment at the project site.
- Mr. Zane indicated that agricultural chemicals were probably used on the site when the land was used for sugar cane cultivation.

Mr. F. Green, formerly of Hamakua Sugar and Mr. Scott Earight, former cultivation superintendent for Hamakua Sugar
Mr. F. Green and Mr. Scott Earight, formerly with Hamakua Sugar, were interviewed by Masa Fujioka and Associates as part of an ESA completed in 1992 for the project site. The following summarizes the interview reported in the 1992 ESA report (Masa Fujioka and Associates, 1992).

- The project site was known as Field 10020.
- Field 10020 was last planted in September 1987.
- Sugar cane from Field 10020 was last harvested in September 1989.
- The project site had been in use for sugar cane production for 100 years or more.

C. Sanborn Maps

A search for Sanborn fire insurance maps was conducted at the University of Hawaii Hamilton Library. Sanborn coverage does not exist for the project site. Additionally, VISTA Information Solutions, Inc. was contracted to perform a search of historical maps (including
Sanborn Fire Insurance Maps) for the project site and the surrounding area. No historic map coverage was available for the area.

D. Aerial Photographs

Aerial photographs were examined at the University of Hawaii Hamilton Library Map Collection for the years 1954, 1964, 1977, and 1992. The 1954 photograph indicated the presence of the old Honokaa Hospital site. No development or structures were apparent on the project site. The 1964 aerial photograph clearly shows that the land was under agricultural cultivation. Gullies are clearly visible on the project site. The old Honokaa Hospital, Lehua Road, Plumeria Road, and Mamalahoa Highway are apparent. The Honokaa Community Park was present. The 1977 aerial photograph clearly shows that no structures are present on the site and the site is under cultivation. The old Honokaa Hospital is present and the Honokaa Community Park is under construction. The 1992 aerial photograph clearly shows the presence of the Honokaa Health Center (under construction) and the building that houses Tex's Drive-Inn. There are houses located north of the Tex's Drive-Inn site and houses west of the project site.

E. Topographic Maps

Topographic map coverage of the project site is provided by United States Geological Survey (USGS) 7.5 Minute Honokaa Quadrangle map. The ground elevation at the project site ranges from 1,400 to 1,200 feet above msl and is generally moderately to steeply sloping. The nearest surface water is the Pacific Ocean located approximately two miles to the north. ETC examined topographic maps of the area for the years 1995, 1983, 1957, and 1921-30 and an orthophoto map for the year 1977. These maps indicate that the project site has contained no structures and was apparently in use for agricultural purposes in 1977 (as visible in the orthophotoquad map). The 1921-1930 map shows the surrounding area and the project site as undeveloped land with no buildings or structures surrounding the immediate area except for roads. The 1957 map indicates that old Honokaa Hospital, a church, and a cemetery were present north of the site and Mamalahoa Highway was present south of the project site. The 1977 map clearly shows the old Honokaa Hospital, the Honokaa Community Park, the cemetery, and church north of the site as well as Lehua and Plumeria Roads and Mamalahoa Highway. The 1983 map is similar to the 1977 map. The 1995 map indicates three streams across the project site, a building at the current location of Tex's Drive-Inn, the Honokaa Health Center, old Honokaa Hospital, and the Honokaa Community Park.

F. Geology/Hydrogeology

Regional geology

The island of Hawaii is the youngest and most southeasterly of the main Hawaiian islands. The island is composed of five large shield volcanoes: Kohala, Hualalai, Mauna Kea, Mauna Loa, and Kilauea. The project site is restricted to rocks of the Mauna Kea Volcano which includes the Hamakua Volcanics overlain by the Laupahoehoe Volcanics, and the Pahala Ash. The Hamakua Volcanics consist of tholeiitic and alkalic lavas. The Laupahoehoe Volcanics are alkalic. The only sediments in this region are recent alluvium.
site geology

According to the United States Department of Agriculture Soil Conservation Service (USDA SCS, 1972), the site is located in an area of Kukaiau series soils which consist of well-drained silty clay loams that formed in volcanic ash (Pahala Ash). These soils are gently sloping to steep. They occur on uplands at an elevation of 500 to 1,500 feet and receive from 70 to 100 inches or rain annually. The natural vegetation consists of kilogram, kaimi clover, guava, and ohia.

Kukaiau silty clay loam, 12 to 20 percent slopes (KuD) is very dark grayish-brown clay loam about 10 inches thick. The sub soil is dark-brown silty clay loam and about 40 inches thick. It is underlain by basalt. The surface layer is extremely acid, and the subsoil is medium to slightly acid. This soil dehydrates reversibly into aggregates the size of fine sand. Runoff is medium and the erosion hazard is moderate. Kukaiau silty clay loam, 20 to 35 percent slope (KuE) is similar to KuD except for steeper slopes and more rapid runoff and severe erosion. Both soil types (KuD) and KuE occur on the project site.

regional hydrogeology

The primary drinking water in the Hawaiian Islands is drawn from basal groundwater. Basal groundwater is formed by rainwater percolating down through the residual soils and permeable volcanic rock. All of the island situated below sea level, except within rift zones of the volcanoes, is saturated with ocean salt water and thus forms a basal lens called the “Ghyben-Herzberg” lens. A zone of transition between the fresh groundwater and the ocean salt water occurs due to the constant movement of the interface as a result of tidal fluctuations, seasonal fluctuations in recharge and discharge and aquifer development (Macdonald, et al., 1983).

Downward percolation of rainwater may be stopped by impermeable layers such as dense lava flows, alluvial clay layers and volcanic ash. The groundwater then forms a perched or high level aquifer, which is not in contact with salt water. Recharge of the aquifer occurs in areas of high rainfall, which are the interior mountainous areas. The groundwater flows from the recharge areas to the areas of discharge along the shoreline. Frictional resistance to groundwater flow causes it to pile up within the island until it attains sufficient hydraulic head to overcome friction. Thus, basal groundwater tends to slope toward the shoreline.

site hydrogeology

The project site is located below the underground injection control (UIC) line in the Honokaa Aquifer System of the East Mauna Kea Aquifer Sector (Mink and Lau, 1993). The average annual rainfall is about 60 inches. It increases to 120 inches at higher elevations (3,500 feet) and diminishes to 20 inches at lower elevations (500 feet). Streams are perennial in the upper reaches where they are fed by perched water, but most are non-perennial at the coast.

Perched groundwater occurs on ash beds and dike water at considerable depths probably as the rift zones are approached. However, the principal resource is the basal groundwater. The zone of basal water is about 10 miles wide. It is fresh and easily developed in deep wells (Mink and Lau, 1993).
The two aquifer codes assigned to the site are 80201214 (21111) and 80201111 (11112). The first indicates that there is high level, unconfined, perched water with potential use as drinking water with low salinity (less than 250 mg/l) and is irreplaceable with high potential for contamination. The second code indicates that there is basal, unconfined water within flank lava flows that is currently used as a drinking water source. This water is fresh with low salinity with moderate potential for contamination.

The State of Hawaii Department of Health indicates that drinking water in the site vicinity is drawn from Haina Well Number 8-6528-01, approximately 3,000 feet down gradient from the site. A new well, Honokaa Well A is located across Plumeria Road at an elevation of 1,420 feet.
VI. REGULATORY REVIEW

A. Federal Database Search

Federal databases were reviewed. Upon reviewing the search, ETC concludes that the project site is not a listed site. The area search for the site listed on the following databases did not identify other facilities within the defined search. The databases reviewed meet or exceed the 90-day updating requirements of the ASTM Standard. Appendix I presents the EcoSearch Environmental Resources, Inc.'s report describing the results of the database search.

NPL Listing
The National Priorities List (Superfund) is the Environmental Protection Agency (EPA) database of uncontrolled or abandoned hazardous waste sites, which are considered to pose an immediate threat to human health and the environment. These sites are identified for priority remedial response actions under the Superfund Program. No NPL sites were listed within a 1¼ mile radius of the project site or at the project site.

CERCLIS Listing
The Comprehensive Environmental Response Compensation and Liability Information System (Superfund) database contains information on various aspects of potentially uncontrolled or abandoned hazardous waste sites from initial screening and assessment phases to listing on the NPL. There are no CERCLIS sites identified at the project site or within a 1¼ mile radius.

ERNS Listing
The Emergency Response Notification System tracks the initial notification of reported oil and hazardous material spills. The database contains information regarding the discharger, release date, material, amount released, incident location and release action taken. No ERNS listings were identified for the project site or within a ½ mile radius.
RCRA TSD Facilities Listing

The EPA's Resource Conservation and Recovery Act (RCRA) program identifies and tracks hazardous waste from the point of generation to the point of final disposal. The RCRA TSD database compiles those reporting facilities that treat, store, or dispose of hazardous waste. The project site and the area within a 1¼ mile radius did not contain any sites identified as a RCRA TSD facility.

RCRA Generator Listing

The RCRA Generator database is a compilation by EPA's RCRIS of regulated facilities that generate hazardous waste. The project site was not identified as a RCRA generator facility nor were there any RCRA generator sites within a ¼ mile radius of the project site.

B. State of Hawaii Database Search

The State of Hawaii databases were also reviewed. The area search for sites listed on the following databases did identify other facilities within the defined search. The databases reviewed meets or exceeds the 90-day updating requirement of the ASTM Standard. Appendix I presents the EcoSearch Environmental Resources, Inc.'s report describing the results of the database search.
SWF/LF
The State of Hawaii has on record, all facilities that have received a solid waste management permit, including solid waste landfills, transfer stations, and incinerators. No SWF/LF facilities were identified at the project site or within a 1/4 mile radius of the project site.

Registered Underground Storage Tanks
The State of Hawaii Department of Health’s Underground Storage Tank Program registration system tracks known and registered UST systems. The registration database identified six UST sites within a 1/4 mile radius of the project site. The UST systems identified within a 1/4 mile radius of the project site are presented in Table 2.

Table 2: Registered UST Sites Identified Within a 1/4 Mile Radius of the Project Site

<table>
<thead>
<tr>
<th>Company</th>
<th>Address</th>
<th># of UST’s</th>
<th>Contents</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of Hawaii-Hale Ho’ola Hamakua (the old Honokaa Hospital)</td>
<td>43-547 Plumeria Street, Honokaa, HI 96727</td>
<td>1</td>
<td>Diesel</td>
<td>Permanently out of Use</td>
</tr>
<tr>
<td>Ted’s Garage</td>
<td>Mamane Street, Honokaa, HI 96727</td>
<td>3</td>
<td>Two gasoline, one diesel</td>
<td>Currently in use</td>
</tr>
<tr>
<td>Honokaa Garage</td>
<td>P.O. Box 465, Honokaa, HI 96727</td>
<td>2</td>
<td>Gasoline</td>
<td>Temporarily out of use</td>
</tr>
<tr>
<td>Fujimoto Super Service, Inc.</td>
<td>P.O. Box 245, Honokaa, HI 96727</td>
<td>4</td>
<td>Gasoline</td>
<td>Permanently out of use</td>
</tr>
<tr>
<td>Honokaa Health Center</td>
<td>P.O. Box 645, Honokaa, HI</td>
<td>1</td>
<td>Gasoline</td>
<td>Permanently out of use</td>
</tr>
<tr>
<td>Haina Service Station</td>
<td>Off State Route 240</td>
<td>2</td>
<td>One diesel, one gasoline</td>
<td>Permanently out of use</td>
</tr>
</tbody>
</table>

Reported Leaking Underground Storage Tanks
The State of Hawaii Department of Health’s Underground Storage Tank Program also maintains a listing of all reported leaks and releases from USTs. No leaking UST systems were identified at the project site; however, six LUST sites were identified within a 3/4 mile radius of the project site. Table 3 presents a listing of the LUST sites with in 3/4 mile radius of the project site.
Table 3: Reported LUST Sites Identified Within a 3/4 Mile Radius of the Project Site

<table>
<thead>
<tr>
<th>Facility</th>
<th>Address</th>
<th>Identification Number</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hale Ho'ola Hamakua (old Honokaa Hospital)</td>
<td>45-547 Plumeria Street, Honokaa, HI 96727</td>
<td>9-603399</td>
<td>Confirmed Release (10/15/98)</td>
</tr>
<tr>
<td>Fujimoto Super Service, Inc.</td>
<td>P.O. Box 245, Honokaa, HI 96727</td>
<td>9-600705</td>
<td>Site Cleanup Completed</td>
</tr>
<tr>
<td>Haina Service Station</td>
<td>Off State Route 240, Honokaa, HI 96727</td>
<td>9-601639</td>
<td>Site Cleanup Completed</td>
</tr>
<tr>
<td>Coastline 76 Service L-4483</td>
<td>45-3333 Mamane Street, Honokaa, HI 96727</td>
<td>9-600104</td>
<td>Site Cleanup Completed</td>
</tr>
<tr>
<td>Motor Vehicle Storage Building-OM</td>
<td>P.O. Box 807, Honokaa, HI 96727</td>
<td>9-601841</td>
<td>Disconfirmed Release</td>
</tr>
<tr>
<td>DOT-Highways Division</td>
<td>Honokaa Baseyard, Honokaa, HI 96727</td>
<td>9-601040</td>
<td>Site Cleanup Completed</td>
</tr>
</tbody>
</table>
VII. REGULATED SUBSTANCES

A. Chemicals, Hazardous Materials, and Hazardous Wastes

Visual observation for the use and/or storage of chemicals, hazardous materials, and hazardous waste was performed. No hazardous materials or wastes were observed on the project site.

A visual inspection for manways, vent pipes, fill connections, and concrete pads was performed. ETC personnel did not find any evidence of vent pipes, fill connections, and concrete pads at the project site.

B. Dielectric Fluid Containing Equipment (PCB)

Visual observation for electrical equipment or electrical components that use dielectric fluid that may contain PCBs was conducted. One pole-mounted transformer was observed on pole number 134 along Mamalahoa Highway. The transformer number was partially visible (10 SS). No evidence of leaks or spills was noted from the transformer. This same transformer was also noted during the ESA completed in 1992 by Masa Fujioka and Associates. At that time, Hawaii Electric Light Company (HELCO) personnel were contacted. According to the report, HELCO personnel indicated that the transformer was installed in October 1983 and had been purchased shortly before installation; therefore, HELCO believes that the transformer is free of PCBs. In addition, ETC personnel contacted Mr. Paul Eugnio of HELCO. Mr. Eugnio told ETC that all HELCO distribution transformers including the pole-mounted transformer on pole 134 do not contain PCBs and are labeled "PCB-free".

Additionally, HELCO maintains a substation west of the project site on Plumeria Road. No evidence of spills or contamination were noted in that area.
VIII. BUILDING SYSTEMS

There are no buildings located on the project site. The only improvements on the site are drainage ways for the three intermittent streams that cross the project site. Additionally, there is a rock wall along the north side of the property and a road along the southwest portion of the property. ETC also noted three signs along the periphery of the property indicating that the project was the future site of the Honokaa Knolls.
IX. OPERATIONAL ACTIVITIES

The project site is unimproved, undeveloped land that was formerly used to cultivate sugar cane. There are no current operational activities at the site.
X. FACILITY STORAGE TANKS & CONTAINERS

Visual inspection for manways, vent pipes, fill connections, and concrete pads was performed at the project site. No USTs or other storage containers were evident at the project site. ETC did notice bags of trash and minor household waste on the northern and northeastern property boundaries. No other "containers" were observed.
XI. STORM WATER CONTROL

The subject property was inspected for evidence of discharge sources. ETC personnel noted three drainage pipes located on the south slope of the property. These are apparent improvements that allow water from intermittent streams located upgradient from the property to flow beneath Mamalahoa Highway and into the stream beds located on the property. The intermittent streams were dry at the time of the site visit. No trash or chemical contamination was observed in the stream beds. The intermittent streams flow north across the property and appear to be channeled under the rock wall at the northern property boundary.
XII. SURFACE AREA & ADJACENT PROPERTIES

Visual observation of the project site and adjacent properties did not identify evidence of surface migration of petroleum releases or hazardous materials onto or off of the subject property. No visible evidence of on-site pits, dry wells, or illegal chemical dumping was observed. Bags of trash and small quantities of discarded materials were noted in the tall grass on the north and northeast portions of the property.

The project site is surrounded bounded by the Honokaa Health Center, Hale Ho'ola Honokaa (new Honokaa Hospital), single family homes, park land, school buildings, a commercial building (Tex Drive Inn, Honokaa Visitor Center, and Bad Ass Coffee), a HELCO substation, a county refuse transfer station, and undeveloped lands. No evidence of surface migration of petroleum releases or hazardous materials onto or off of the surrounding properties was observed.
XIII. CONCLUSIONS & RECOMMENDATIONS

ETC's field survey of the project site did not reveal any obvious visual or olfactory evidence of chemical contamination. Despite the relatively easy access to open areas, only minor dumping of household trash was observed at the project site.

ETC's research into the history of the project site indicates that the land was used for sugar cane cultivation for approximately 100 years. Sugar cane was last harvested from the project site in 1989. The project site has been owned by Honokaa Partners/Pheasant Ridge Corporation since 1989. The land has been undeveloped and unused since 1989.

A pole-mounted transformer was noted on pole 134 along Mamalahoa Highway. According to HELCO representatives, this transformer does not contain PCBs.

A review of available federal, state, and local records concluded that the project site is not listed on any of the environmental databases. Further review of records indicates that there are six UST sites within a ¼ mile radius of the project site. Additionally, there are six LUST sites within a ¼ mile radius of the site.

The past land use of the project site indicates that agricultural chemicals including chlorinated herbicides were probably applied to the land during sugar cane cultivation. No obvious or olfactory indications of gross site contamination by agricultural chemicals were observed during the site reconnaissance. Proper and judicial use of currently permitted agricultural chemicals should have minimal impact on the project site. If the Client has concerns over residual chemicals (although they may not be regulated), near surface soil sampling and analysis could be performed on the property.

The presence of UST and LUST sites in the vicinity of the project site indicate a potential source of soil and groundwater contamination at the project site. However, the project site is located up gradient of the UST and LUST sites and would not likely contribute to or be impacted by actual pollutants resulting from those sources. It is ETC's professional opinion that, based on historical review, site inspection, and the current use, the project site does not suggest or exhibit insuperable environmental problems discovered within the scope of this assessment.
XIV. REFERENCES

Appendix I

EcoSearch Environmental Resources, Inc.
Priority Risk Report
Honokaa Knolls Project
EcoSearch Environmental Resources, Inc.
9365 Counselors Row Suite 104
Indianapolis, Indiana 46240
ph: (317) 574-8830 fax: (317) 574-8840

EcoSearch Environmental Site Assessment

<table>
<thead>
<tr>
<th>Type of Report:</th>
<th>Priority Risk Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Location:</td>
<td>Honoka'a Knolls Project</td>
</tr>
<tr>
<td></td>
<td>State Highway 19 Site</td>
</tr>
<tr>
<td></td>
<td>Honoka'a, HI 96727</td>
</tr>
<tr>
<td>Date:</td>
<td>April 16, 1999</td>
</tr>
<tr>
<td>Report ID Number:</td>
<td>1714-2001</td>
</tr>
<tr>
<td>Especially Prepared For:</td>
<td>Mr. Mike Yee</td>
</tr>
<tr>
<td></td>
<td>Enviro Services &amp; Training Center</td>
</tr>
<tr>
<td>PO Number:</td>
<td>99-1003</td>
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Thank you for choosing EcoSearch.
Introduction

We want to thank you for your order requesting the enclosed site assessment.

EcoSearch makes every effort possible to combine the most accurate environmental data available into an understandable and easy-to-use format.

While every attempt has been made to ensure accuracy of the information presented, we cannot guarantee the accuracy of the data from the original sources, nor can we guarantee that no transcription or plotting errors have occurred.

If any concerns arise from your review of the databases in this report, please call the appropriate agency involved. As a service, we have included phone numbers in the database description section of this report to help you in your evaluation.

The enclosed maps present a working approximation of the location of surrounding environmental sites based primarily on available accurate site addresses. These maps should not be used for purposes more correctly handled by surveys.

EcoSearch is driven by its mission to present the most responsive, technically sound, and cost-effective environmental data services available to our customer.
Read Me First

The following suggestions are offered in an attempt to help you in using and understanding this site assessment from EcoSearch:

1. Skim over the entire report to familiarize yourself with its contents and layout.

2. You will notice that the information is presented following this general concept: we begin by giving sections that summarize data and then give detailed information about those summaries as you proceed further into the report.

3. Then refer to the section titled "Statistical Overview". You will need to take a moment to read the column headings and the data below them. Also, as you go down the first column (left side) you will probably need to look back at the preceding section titled "Database Descriptions". Please pay particular attention to the radius searched as they vary according to the database. These are ASTM standards that we meet and exceed. Your site's datum is the third, shaded column. Also, the next column showing database hits within the first radius is important as it will include data about adjoining properties. The unmappable sites have their own section with a cover page explaining them.

4. The next section titled "Maps" is important as it gives a very clear visual presentation of the site, and which database(s) are at the site itself or within the study radii.

5. The site summary page tells you by map ID which database is at that location as well as the site's name and distance/direction from your study site. You will notice that the numbering corresponds to the distance from the subject site—eg. #1 is your site itself or the site closest to it, #2 is further away. This continues until all database hits have been summarized within the largest study radius. Your report may extend further than one mile if you asked us to extend the radii.

6. As you will recall our format goes from summary-type pages to detailed information. Therefore, the next section is "Detailed Data". Here extensive data is given about each database hit. The map ID#, distance, and direction are in the top left corner. Further data follows.

7. The "Unmappable" section was referred to earlier. In this summary you will find those sites. Please read the cover page as it describes unmappable sites and our efforts to minimize and/or eliminate them from all of our site assessments.

8. The last two divisions -- "Radon" and "Glossary/Acronyms" are self-explanatory and often helpful to our customers.

If you would like further help in understanding our reports please call as our intention is to have this report helpful to you.

EcoSearch
Environmental Resources, Inc.

Report ID: 1714-2001
Date of Report: April 16, 1999
### Database Descriptions -- Federal Databases

**NPL**

National Priorities List  
US Environmental Protection Agency  
Office of Solid Waste and Emergency Response  
(703) 603-8881  
*Data Date:* October 7, 1998  
*Release Date:* November 18, 1998  
*Active Date:* December 9, 1998

The NPL is a subset of the CERCLIS and lists over 1,150 of the nation's most dangerous sites of uncontrolled or hazardous waste which require cleanup. Also known as the Superfund List, the sites are scored according to the hazardous ranking system.

**CERCLA (Active)**

Comprehensive Environmental Response, Compensation, and Liability Information System (Active)  
US Environmental Protection Agency  
Office of Solid Waste and Emergency Response  
*Data Date:* October 7, 1998  
*Release Date:* November 18, 1998  
*Active Date:* December 9, 1998

CERCLIS maintains information on over 15,000 sites nationally identified as hazardous or potentially hazardous which may require action. These sites are currently being investigated or an investigation has been completed regarding the release of hazardous substances. The most serious of this list as ranked by the hazardous ranking system are transferred to the NPL.

**CERCLA (INFRAP Archive)**

Comprehensive Environmental Response, Compensation, and Liability Information System (INFRAP Archive)  
US Environmental Protection Agency  
Office of Solid Waste and Emergency Response  
*Data Date:* October 7, 1998  
*Release Date:* November 18, 1998  
*Active Date:* December 9, 1998

For more complete information purposes we include sites which have been reclassified as No Further Remedial Action Planned (INFRAP) by the EPA. This action was taken by the EPA beginning February 1995 as a part of the Brownfields Redevelopment Program. These former CERCLIS sites, also known as the CERCLIS Archive, have been delisted because a lack of significant contamination was found.

**RCRA TSD**

Resource Conservation and Recovery Information System -- Treatment, Storage, and Disposal Facilities  
US Environmental Protection Agency  
Office of Solid Waste and Emergency Response  
(202) 260-4348  
*Data Date:* January 1, 1999  
*Release Date:* February 2, 1999  
*Active Date:* April 5, 1999

RCRIS contains information on hazardous waste handlers regulated by the US Environmental Protection Agency under the Resource Conservation and Recovery Act (RCRA). It is a national system used to track events and activities which fall under RCRA. The TSD database is a subset of the complete RCRIS file which includes facilities which treat, store, dispose, or incinerate hazardous waste. Additionally, compliance and corrective action (CORRACTS) information is included.
RCRA Generator

Resource Conservation and Recovery Information System – Large and Small Quantity Generators

US Environmental Protection Agency
Office of Solid Waste and Emergency Response
(202) 260-4610

Data Date: January 1, 1999
Release Date: February 2, 1999
Active Date: April 5, 1999

RCRIS contains information on hazardous waste handlers regulated by the US Environmental Protection Agency under the Resource Conservation and Recovery Act (RCRA). It is a national system used to track events and activities which fall under RCRA. The generators database is a subset of the complete RCRIS file which includes hazardous waste generators which create more than 100kg of hazardous waste per month or meet other requirements of RCRA. We also include RCRA Notifiers, Transporters, and formerly regulated RCRA Sites for more complete hazardous waste information. Additionally, compliance and corrective action information is included.

RAATS

RCRA Administrative Action Tracking System

US Environmental Protection Agency
Office of Enforcement and Compliance Assurance
(202) 564-4104

Data Date: April 14, 1995
Release Date: Not Available
Active Date: April 17, 1995

The RCRA Administrative Action Tracking System contains additional information on RCRA enforcement actions. Data includes the type of action, proposed penalty, and final penalty amount.

CORRACTS

Resource Conservation and Recovery Information System – Corrective Action Sites

US Environmental Protection Agency
Office of Solid Waste and Emergency Response
(202) 260-4610

Data Date: January 1, 1999
Release Date: February 2, 1999
Active Date: April 5, 1999

The CORRACTS database includes RCRIS (Resource Conservation and Recovery Information System) sites with reported corrective action. This information is also reported in the standard RCRIS detailed data.

ERNS

Emergency Response Notification System

US Environmental Protection Agency
Office of Solid Waste and Emergency Response
(202) 260-2342

Data Date: January 19, 1999
Release Date: January 19, 1999
Active Date: March 8, 1999

ERNS is a national database which contains information on specific notification of releases of oil and hazardous substances into the environment. The system stores data regarding the site of the spill, the material released, and the medium into which it occurred. As a joint effort, the Department of Transportation and the Environmental Protection Agency have collaborated to compile more than 290,000 records.

PADS

PCB Activity Database System

US Environmental Protection Agency
Office of Pollution Prevention and Toxics
(202) 260-3992

Data Date: March 26, 1997
Release Date: Not Available
Active Date: July 14, 1998

This database stores information about facilities which handle PCBs and file EPA form 7710-53. It is divided into storage facilities, disposers, generators, and transporters.
TRI
Toxic Release Inventory

US Environmental Protection Agency
Office of Pollution Prevention and Toxics
(202) 260-1531

Data Date: October 1995
Release Date: Not Available
Active Date: August 10, 1998

TRI contains information from facilities which manufacture, process, or import any of the over 300 listed toxic chemicals which are released directly into air, water, or land or are transported off-site. The database includes facts on amounts of chemicals stored and emitted from the facility. This database is released on an infrequent basis by the US EPA. EcoSearch includes information from 1987 through the 1995 reporting year.

SSTS
Section Seven Tracking System

US Environmental Protection Agency
Office of Prevention, Pesticides, and Toxic Substances
(202) 564-5008

Data Date: July 31, 1998
Release Date: Not Available
Active Date: August 27, 1998

Formerly FATES, this system tracks the registration of pesticide-producing establishments and tracks the types and amounts of pesticides, active ingredients, and devices which are sold, produced, or distributed annually.

DOCKET
Civil Enforcement Docket

US Environmental Protection Agency
Office of Enforcement
(202) 564-4114

Data Date: September 3, 1998
Release Date: Not Available
Active Date: February 3, 1999

The Civil Enforcement Docket is information on civil and administrative actions filed by the Department of Justice for the US Environmental Protection Agency. This record has been continually updated since 1972 and includes data regarding facility name, dates, laws violated, and penalties assessed.

TSCA
Toxic Substances Control Act Inventory

US Environmental Protection Agency
(202) 554-1404

Data Date: May 14, 1986
Release Date: Not Available

The Toxic Substances Control Act Inventory includes the locations and chemical production information of more than 7000 processors and manufacturers of chemicals. This database is no longer released to the public by the US EPA.
### Database Descriptions -- State Databases

#### HWS
**Hawaii Hazardous Waste Sites List (CERCLA)**

- **US Environmental Protection Agency**
- **Office of Solid Waste and Emergency Response**
  - **Data Date:** N/A
  - **Release Date:** N/A
  - **Active Date:** N/A

The CERCLIS list is a compilation of known or suspected uncontrolled or abandoned hazardous waste sites. These sites have either been investigated, or are currently under investigation by the EPA for the release, or threatened release of hazardous substances. Once a site is placed in CERCLIS, it may be subjected to several levels of review and evaluation and ultimately placed on the National Priorities List. Due to the fact that the State of Hawaii does not have a formal "State Superfund" program, the federal EPA’s CERCLIS database is considered to be the equivalent of a State Hazardous Waste Sites list.

#### SWF
**Hawaii Solid Waste Facilities List**

- **Hawaii Department of Health**
- **Solid and Hazardous Waste Branch**
  - **Data Date:** September 10, 1998
  - **Release Date:** September 10, 1998
  - **Active Date:** October 15, 1998

The Hawaii Solid Waste Facilities List contains summary information pertaining to all permitted landfills located within the State of Hawaii.

#### LUST
**Hawaii Leaking Underground Storage Tank List**

- **Hawaii Department of Health**
- **Solid and Hazardous Waste Branch**
  - **Data Date:** February 2, 1999
  - **Release Date:** February 2, 1999
  - **Active Date:** February 25, 1999

The Hawaii LUST report is a comprehensive listing of all reported leaking underground storage tanks located within the State of Hawaii.

#### UST
**Hawaii Underground Storage Tank List**

- **Hawaii Department of Health**
- **Solid and Hazardous Waste Branch**
  - **Data Date:** February 2, 1999
  - **Release Date:** February 2, 1999
  - **Active Date:** February 25, 1999

The Hawaii UST Report contains summary information pertaining to all registered underground storage tanks located within the State of Hawaii.
# EcoSearch Statistical Overview

## Property Information
- **State Highway 19 Site**
- **Honokaa, HI 96727**
- **Latitude**: 20.07636 **Longitude**: 155.47249 W

## Search Parameters
- **Report**: Priority Risk Report
- **Radii**: ASTM<sup>*</sup>
- **Zip Codes**: 96727 96775
- **City**: Honokaa Punaauia Kukuihaele Pasilo
- **County**: Hawai'i

### FEDERAL DATABASES

<table>
<thead>
<tr>
<th>Database</th>
<th>Radius (miles)</th>
<th>Mappable Sites</th>
<th>Unmappable Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total Site</td>
<td>0-0.50 M.</td>
</tr>
<tr>
<td>NPL</td>
<td>1.250</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CERCLA (Active)</td>
<td>1.250</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CERCLA (INFRAP Archive)</td>
<td>1.250</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>RCRA TSD</td>
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<td>0</td>
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<tr>
<td>RCRA Generator</td>
<td>0.500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CORRACS</td>
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</tr>
<tr>
<td>ERNS</td>
<td>0.500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PADS</td>
<td>1.250</td>
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<td>0</td>
</tr>
<tr>
<td>TRI</td>
<td>0.750</td>
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<tr>
<td>SSTS</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>DOCKET&lt;sup&gt;+&lt;/sup&gt;</td>
<td>1.250</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TSCA</td>
<td>1.250</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### STATE DATABASES

<table>
<thead>
<tr>
<th>Database</th>
<th>Radius (miles)</th>
<th>Mappable Sites</th>
<th>Unmappable Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total Site</td>
<td>0-0.50 M.</td>
</tr>
<tr>
<td>HWS</td>
<td>1.250</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SWF</td>
<td>1.250</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LUST</td>
<td>0.750</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>UST</td>
<td>0.500</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

### MANUAL GEOCODING:<sup>+</sup>

* For this city/township, 35 sites were manually plotted by EcoSearch.

- This database search and study radii meets or exceeds the ASTM (American Society of Testing and Materials) standards for a government records review.

- Manual Geocoding: Plotting environmental site data using paper maps and phone calls to properly place the information on the map.

Accurate street addresses are required for records to be found at the study property.

Mappable Sites are environmental sites which were located and appear on the enclosed EcoSearch Map, Site Summary, and Detailed Data sections of the report. These sites are summarized based on proximity to the study site.

Unmappable Sites are governmental records with incomplete or inaccurate address information. These sites could not be located on the street map, but have been searched by the Zip Codes, Cities, and County specified in the search parameters. Further investigation of these sites and their relationship to your study site is necessary.

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EcoSearch Environmental Resources, Inc.

Report ID: 1714-2001

Date of Report: April 16, 1999

Page 7
<table>
<thead>
<tr>
<th>Map ID#</th>
<th>Database / Agency ID#</th>
<th>Site Name, Address, and County</th>
<th>Distance/Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>LUST Hawaii Leaking Underground Storage Tank 9-603389 990014</td>
<td>HALE KDLA HAMAKUA 45-547 PLUMERIA ST HONOKAA, HI 96727</td>
<td>0.26612 mi N Manually Geocoded*</td>
</tr>
<tr>
<td>1B</td>
<td>UST Hawaii Leaking Underground Storage Tank 9-603389</td>
<td>HALE KDLA HAMAKUA 45-547 PLUMERIA ST HONOKAA, HI 96727</td>
<td>0.26612 mi N Manually Geocoded*</td>
</tr>
<tr>
<td>2</td>
<td>UST Hawaii Leaking Underground Storage Tank 9-602206</td>
<td>TED'S GARAGE MAMANE ST HONOKAA, HI 96727</td>
<td>0.41795 mi NNE Manually Geocoded*</td>
</tr>
<tr>
<td>3</td>
<td>UST Hawaii Leaking Underground Storage Tank 9-600648</td>
<td>HONOKAA GARAGE PO BOX 469 HONOKAA, HI 96727-0465 HAWAII</td>
<td>0.42538 mi NNE Manually Geocoded*</td>
</tr>
<tr>
<td>4A</td>
<td>LUST Hawaii Leaking Underground Storage Tank 9-600705 910018</td>
<td>FUJIMOTO SUPER SERVICE, INC. PO BOX 249 HONOKAA, HI 96727-0245 HAWAII</td>
<td>0.42778 mi N Manually Geocoded*</td>
</tr>
<tr>
<td>4B</td>
<td>UST Hawaii Leaking Underground Storage Tank 9-600705</td>
<td>FUJIMOTO SUPER SERVICE, INC. PO BOX 249 HONOKAA, HI 96727-0245 HAWAII</td>
<td>0.42778 mi N Manually Geocoded*</td>
</tr>
<tr>
<td>5</td>
<td>UST Hawaii Leaking Underground Storage Tank 9-601651</td>
<td>HONOKAA HEALTH CENTER P.O. BOX 845 HONOKAA, HI 96727</td>
<td>0.42921 mi NNE Manually Geocoded*</td>
</tr>
<tr>
<td>6A</td>
<td>UST Hawaii Leaking Underground Storage Tank 9-601639</td>
<td>HAINA SERVICE STATION OFF STATE ROUTE 240 HONOKAA, HI 96727</td>
<td>0.46572 mi N Manually Geocoded*</td>
</tr>
<tr>
<td>6B</td>
<td>LUST Hawaii Leaking Underground Storage Tank 9-601639 950113</td>
<td>HAINA SERVICE STATION OFF STATE ROUTE 240 HONOKAA, HI 96727</td>
<td>0.46572 mi N Manually Geocoded*</td>
</tr>
<tr>
<td>7</td>
<td>LUST Hawaii Leaking Underground Storage Tank 9-600104 970063</td>
<td>COASTLINE 76 SERVICE L-4483 PO BOX 275 HONOKAA, HI 96727-0275 HAWAII</td>
<td>0.56767 mi ENE Manually Geocoded*</td>
</tr>
<tr>
<td>8A</td>
<td>LUST Hawaii Leaking Underground Storage Tank 9-601841 900125</td>
<td>MOTOR VEHICLE STORAGE BUILDING - CMS P.O. BOX 807 HONOKAA, HI 96727</td>
<td>0.57564 mi NE Manually Geocoded*</td>
</tr>
<tr>
<td>8B</td>
<td>LUST Hawaii Leaking Underground Storage Tank 9-601040 920125</td>
<td>DOT - HIGHWAYS DIVISION HONOKAA BASEYARD HONOKAA, HI 96727</td>
<td>0.57564 mi NE Manually Geocoded*</td>
</tr>
</tbody>
</table>

---

* -- Manually Geocoded: Site plotted or corrected using paper maps, phone calls, and other resources to properly place the site on the map.
** -- Agency Provided Lat/Long: Site plotted using the latitude and longitude given by the federal or state government agency.
*** -- Area Manually Plotted: Area manually drawn using digital and paper maps.

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EcoSearch Environmental Resources, Inc.

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Page 8
Detailed Data

The following pages contain the detailed data concerning the sites plotted on the map and included in the site summary.

Please Note: Pages are not included for databases not found within the search radii.

These pages are arranged as follows:

Hawaii LUST Data
Hawaii UST Data
<table>
<thead>
<tr>
<th>Map ID#</th>
<th>Distance (mi):</th>
<th>Agency ID</th>
<th>Status</th>
<th>Name</th>
<th>Address</th>
<th>City, State Zip</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>0.26612</td>
<td>9-603399</td>
<td>Confirmed Release</td>
<td>HALE Hoola Hamakua</td>
<td>48-547 Plumeria ST</td>
<td>HONOKAA, HI 96727</td>
</tr>
<tr>
<td>4A</td>
<td>0.42778</td>
<td>9-600705</td>
<td>Site Cleanup Completed</td>
<td>Fujimoto Super Service, Inc.</td>
<td>P.O. BOX 246</td>
<td>HONOKAA, HI 96727</td>
</tr>
<tr>
<td>6B</td>
<td>0.46572</td>
<td>9-601639</td>
<td>Site Cleanup Completed</td>
<td>Honai Service Station</td>
<td>Off State Route 240</td>
<td>HONOKAA, HI 96727</td>
</tr>
<tr>
<td>7</td>
<td>0.56767</td>
<td>9-600104</td>
<td>Site Cleanup Completed</td>
<td>Coastline 76 Service L4483</td>
<td>45-3633 Mamane ST</td>
<td>HONOKAA, HI 96727</td>
</tr>
<tr>
<td>8A</td>
<td>0.57564</td>
<td>9-601841</td>
<td>Disconfirmed Release</td>
<td>Motor Vehicle Storage Building - O M</td>
<td>P.O. BOX 807</td>
<td>HONOKAA, HI 96727</td>
</tr>
<tr>
<td>8B</td>
<td>0.57564</td>
<td>9-601040</td>
<td>Site Cleanup Completed</td>
<td>DOT - Highways Division</td>
<td>HONOKAA Baseyard</td>
<td>HONOKAA, HI 96727</td>
</tr>
<tr>
<td>Map ID</td>
<td>Distance (mi)</td>
<td>Direction</td>
<td>Agency ID</td>
<td>Name</td>
<td>Address</td>
<td>City, State Zip</td>
</tr>
<tr>
<td>--------</td>
<td>--------------</td>
<td>-----------</td>
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<td>---------</td>
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<tr>
<td>1B</td>
<td>0.28612</td>
<td>N</td>
<td>9-603339</td>
<td>HALE HOOLA HAMAKUA</td>
<td>46-547 PLUMERIA ST</td>
<td>HONOKAA, HI 96727</td>
</tr>
<tr>
<td>2</td>
<td>0.41795</td>
<td>N</td>
<td>9-602206</td>
<td>TED'S GARAGE</td>
<td>MAMANE ST</td>
<td>HONOKAA, HI 96727</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3</td>
<td>0.42638</td>
<td>N</td>
<td>9-606648</td>
<td>HONOKAA GARAGE</td>
<td>P.O. BOX 466</td>
<td>HONOKAA, HI 96727</td>
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<tr>
<td>4B</td>
<td>0.42778</td>
<td>N</td>
<td>9-600705</td>
<td>FUJIMOTO SUPER SERVICE, INC.</td>
<td>P.O. BOX 245</td>
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</tr>
<tr>
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</tr>
<tr>
<td>5</td>
<td>0.42921</td>
<td>N</td>
<td>9-601651</td>
<td>HONOKAA HEALTH CENTER</td>
<td>P.O. BOX 916</td>
<td>HONOKAA, HI 96720</td>
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<tr>
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<td>HAINA SERVICE STATION</td>
<td>OPP STATE ROUTE 240</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Unmappable Sites

A limitation of many records of governmental databases is incomplete or incorrect address information. Without proper addresses, it is more difficult to locate and map these sites.

Instead of leaving these potentially important sites out of the EcoSearch report, we implement a painstaking manual geocoding strategy aimed at plotting these unmappable sites by looking at zip codes, city names, and county names identified with the radius around your study site. The zip codes, cities, and counties searched are identified on the EcoSearch Statistical Overview page.

Our sophisticated mapping software, enhanced TIGER street maps, and address correction database processing methods find and plot most environmental sites. We then perform manual geocoding, plotting those sites the computer fails to find using a variety of resources. These include using our in-house collection of paper maps, directories, cross-referencing database information, and calling post offices, local government, or the sites themselves to accurately locate environmental records. We also correct obvious TIGER street map errors and omissions.

This effort at manual geocoding results in a short or non-existent orphan/unmappable list and increases accuracy and reliability of the data in our reports. We have elected not to computerize this part of our report due to the importance of presenting all data as completely and accurately as humanly possible. When this function is computerized it is impossible to produce a report as accurate as one where manual geocoding has taken place.

The limited number of sites which could not be reasonably found through our geocoding strategy are presented in this section for further review to assess their impact on your study site.

After the summary unmappable site information, detailed data follows.
## Unmappable Sites

<table>
<thead>
<tr>
<th>Database</th>
<th>Agency ID#</th>
<th>Site Name and Address</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>UST</td>
<td>9-600567</td>
<td>HONOKAA CENTRAL OFFICE MAMANE ST &amp; SPENGER RD HONOKAA, HI 96727</td>
<td></td>
</tr>
<tr>
<td>UST</td>
<td>9-600640</td>
<td>ROBERT R. PERREIRA PO BOX 25 HONOKAA, HI 96727-0026</td>
<td>HAWAII</td>
</tr>
<tr>
<td>UST</td>
<td>9-601305</td>
<td>ISAMI OKUNAMI PO BOX 435 HONOKAA, HI 96727-0435</td>
<td>HAWAII</td>
</tr>
<tr>
<td>UST</td>
<td>9-602928</td>
<td>KAY HIGASHI MAMANE ST HONOKAA, HI 96727</td>
<td></td>
</tr>
<tr>
<td>Map ID#</td>
<td>Distance (mi)</td>
<td>Direction</td>
<td>Substance</td>
</tr>
<tr>
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<td>---------------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
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<td>1UN</td>
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</tr>
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</tr>
<tr>
<td>3UN</td>
<td>0.00000</td>
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</tr>
<tr>
<td>4UN</td>
<td>0.00000</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GASOLINE</td>
</tr>
</tbody>
</table>
EcoSearch Radon Risk Map for Hawaii

US EPA Residential Radon Survey
Sample Homes over 4pCi/L Radon Concentration

- Over 50%
- 20% to 50%
- 5% to 19%
- Under 5%

SOURCE: EPA Map for Radon Zones (Hawaii), September 1993. The data is based on the State/EPA Residential Radon Survey which was conducted in Hawaii during the winters of 1989-90. This map shows the percentage of homes in each county registering over 4 pCi/L (picocuries per liter) radon concentration. For additional information on this survey, consult the next page.

Note: The information provided on this map is subject to the general disclaimer. This map is NOT intended to determine if a property in a given county should be tested for radon. Properties with elevated levels of radon have been found in all counties. If or when radon is a concern, all properties should be tested regardless of the county designation.
# EPA Residential Radon Survey for Hawaii

<table>
<thead>
<tr>
<th>County</th>
<th>Sample Size</th>
<th>Homes over 4pCi/L</th>
<th>Homes over 20pCi/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaii</td>
<td>139</td>
<td>0 / 0.00%</td>
<td>0 / 0.00%</td>
</tr>
<tr>
<td>Oahu</td>
<td>257</td>
<td>0 / 0.00%</td>
<td>0 / 0.00%</td>
</tr>
<tr>
<td>Kauai</td>
<td>49</td>
<td>0 / 0.00%</td>
<td>0 / 0.00%</td>
</tr>
<tr>
<td>Maui</td>
<td>75</td>
<td>0 / 0.00%</td>
<td>0 / 0.00%</td>
</tr>
</tbody>
</table>

**SOURCE:** U.S. EPA Map of Radon Zones for Hawaii, September 1993

This EPA/Scaled survey was conducted in Hawaii during the winter of 1989-90. 533 homes were tested with short term (3-7 day) charcoal canisters placed in the lowest living area of the home. These tests determine the radon concentration, measured in pCi/L (picocuries per liter). The average radon concentration measurement in the U.S. is between 1 and 2 pCi/L. The EPA has established the guideline of 4 pCi/L as an "acceptable" indoor radon level.

**NOTE:** The sample size in each county may not be sufficient to show statistical significance. This information is NOT intended to determine if a property in a given county should be tested for radon. If radon is a concern, all properties should be tested regardless of the county statistics.
<table>
<thead>
<tr>
<th><strong>Environmental Glossary</strong></th>
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Heavy Metals
Certain metal elements having a high density and generally toxic, e.g., lead, silver, mercury, and arsenic.

Immediate Removal
Actions undertaken to prevent or mitigate immediate and significant risk of harm to human life or health or the environment. As set forth in the National Contingency Plan, these actions shall be terminated after $1 million has been obligated or six months have elapsed from the date of initial response.

Incident
The release or potential release of a hazardous substance into the environment.

Inert
Exhibiting no chemical activity; totally unreactive.

Innocent Land Owner's Defense
The defense of a purchaser of real property that he or she exercised due diligence in having hazards assessed prior to purchase.

Interim Status
Allow owners and operators of TSDFs that were in existence, or for which construction had commenced, prior to November 19, 1980 to continue to operate without a permit after this date pending final issuance from RCRA.

Joint and Several Liability
Under federal law each party that contributed to damage may be held liable for all damages, but each has the right to compel the others to contribute and indemnify.

Liability
Being subject to legal action for one's behavior.

MSDS Material Safety Data Sheet
Required by OSHA of owners to alert employees to hazards, their effect, and protective action.

Manifest
Form which indicates generator, quantity, and type of waste for each shipment of hazardous wastes disposed in off-site facilities.

National Contingency Plan
Policies and procedures that the Federal Government follows in implementing responses to incidents involving hazardous substances.

P Wastes
A federal waste list comprised of substances categorized as acutely hazardous.

Part A
The first part of a two part application that must be submitted by a TSD to receive a permit. It contains general facility information.

Part B
The second part of a two part application that must be submitted by a TSD to receive a permit. It contains highly technical and detailed information.

Planned Removal
The removal of released hazardous substances from the environment within a non-immediate, long term time period. Under CERCLA: Actions intended to minimize increases in exposure such that time and cost commitments are limited to six months and/or $1 million.

Poison, Class A
A DOT term for extremely dangerous poisons, that is, poisonous gases or liquids of such nature that a very small amount of the gas, or vapor of the liquid, mixed with air is dangerous to life. Some examples: phosphine, cyanogen, and hydrocyanic acid.

Poison, Class B
A DOT term for liquid, solid, paste, or semisolid substances, other than Class A poisons, which are known to be toxic to man as to afford a hazard to health during transportation.

Pollutant
A substance or mixture which after release into the environment and upon exposure to any organisms will or may reasonably be anticipated to cause adverse effects in such organisms and their offspring.

Priority Pollutants
A list of chemicals selected from the list of toxic pollutants by the EPA as priority toxic pollutants for regulation under the Clean Water Act.

Remedial Actions
Responses to releases of hazardous substances on the NPL that are consistent with a permanent remedy which would prevent or mitigate the migration of materials into the environment.

Risk
The probability that an unwanted event will occur.

Second Responders
Those personnel required to assist or relieve first responders at a hazardous material incident due to their specialized knowledge, equipment, or experience. These include State environmental protection or health officials, commercial response, cleanup companies, and appropriate industry representatives.

Strict Liability
Holds a party responsible for damages irrespective of the amount of care taken in handling a hazardous substance.

Subtitle C
The part of RCRA which pertains to the management of hazardous waste.

Subtitle I
The part of RCRA which pertains to the storage of petroleum products and hazardous substances, other than waste, in USTs.

Superfund
See CERCLA.

Synergistic
The action of two materials together which is greater in effect than the sum of the individuals actions.

TIGER Files
The US Census Bureau's TIGER files provide a nationwide computerized map with address range information.

Tort
A legal wrong, sometimes referred to as negligence.

Toxicty
The ability of a substance to produce injury by non-mechanical means once it reaches a susceptible site in or on the body.

U Wastes
A federal list of hazardous wastes which consists of substances deemed to be hazardous for hazards other than acute hazards.

EcoSearch Environmental Resources, Inc.
Report ID: 1714-2001
Date of Report: April 16, 1999

— Adapted from Lincoln Graduate Center, 1993. Real Estate Environmental Screening. San Antonio, Texas.
Acronyms and Abbreviations

- AIRS  Aerometric Information Retrieval System
- AST  Aboveground Storage Tank
- ASTM  American Society for Testing and Materials
- BLM  Bureau of Land Management
- BNA  Bureau of National Affairs
- CAA  Clean Air Act
- CDC  Centers for Disease Control
- CERCLA  Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CERCLIS  CERCLA Information System
- CICIS  Chemicals in Commerce Information System
- COE  U.S. Army Corps of Engineers
- CWA  Clean Water Act
- DDT  Dichloro-diphenyl-dichloroethane
- DOC  Department of Commerce
- DOCKET  Enforcement Docket System–Office of Enforcement and Compliance Monitoring
- DOE  Department of Energy
- DOT  Department of Transportation
- EPA  Environmental Protection Agency
- ERCS  Emergency Response Cleanup Services
- ERNS  Emergency Response Notification System
- ESA  Environmental Site Assessment
- FIFRA  Federal Insecticide, Fungicide, and Rodenticide Act
- FINDS  Facility Index System
- FOIA  Freedom of Information Act
- FWPCA  Federal Water Pollution Control Act
- HHS  Department of Health and Human Services
- HSWA  Hazardous and Solid Waste Amendments of 1984
- HUD  Department of Housing and Urban Development
- LUST  Leaking Underground Storage Tank
- MSDS  Material Safety Data Sheet
- NEPA  National Environment Policy Act
- NESHAP  National Emission Standards for Hazardous Air Pollutants
- NFRA  No Further Remedial Action Planned (Delisted CERCLA Site)
- NOI  Notice of Intent
- NOV  Notice of Violation
- NPDES  National Pollution Discharge Elimination System
- NPL  National Priorities List
- NRC  Nuclear Regulatory Commission
- NRIS  Nuclear Regulatory Information System
- OSHA  Occupational Safety and Health Administration

EcoSearch
Environmental Resources, Inc.

Report ID: 1714-2001
Date of Report: April 16, 1999
Acronyms and Abbreviations

- PADS  PCB Activity Database System
- PCB  Polychlorinated Biphenyls
- POTW  Publicly-Owned Treatment Works
- PPM  Parts Per Million
- PRP  Potentially Responsible Parties
- RAATS  RCRA Administrative Action Tracking System
- RCRA  Resource Conservation and Recovery Act of 1976
- RCRIIS  Resource Conservation and Recovery Information System
- RFA  RCRA Facility Assessment
- RFI  RCRA Facility Investigation
- RI  Remedial Investigation (CERCLA)
- SARA  Superfund Amendments and Reauthorization Act of 1986
- SCS  Soil Conservation Service
- SDWA  Safe Drinking Water Act
- SETS  Superfund Enforcement Tracking System
- SSSTS  Section Seven Tracking System
- SWF/LF  Solid Waste Facilities / Landfills
- TIGER  Topologically Integrated Geographic Encoding and Referencing System
- TRI  Toxic Release Inventory
- TSCA  Toxic Substances Control Act
- TSD  Treatment, Storage, or Disposal Facility
- USDA  U.S. Department of Agriculture
- USGS  U.S. Geological Survey
- UST  Underground Storage Tank
- WWTP  Wastewater Treatment Plant
Appendix II

Request For Information From
Hawaii County Building Department
Department of Public Works
BUILDING DIVISION - DPW

COUNTY OF HAWAII - 25 ALAPUNI STREET - Hilo, Hawaii 96720
Hilo Office (808) 961-6331 FAX (808) 961-8410
Kona Office (808) 327-3530

SUBJECT: REQUEST FOR INFORMATION - TMC or Permit No. Required
(Note: One (1) Request Form Per TMC)

Please check ☑ information requested. (DO NOT WRITE IN SPACES EXCEPT TO SPECIFY UNDER 2.d. & 3.b.)

1. IDENTIFICATION OF PROJECT:
   ◯ a. Owner's Name _______________________________________
   ◯ b. Construction Site ____________________________________
   ◯ c. Tax Map Key No. 4-5-10- parcels 1 & 121
   ◯ d. Permit No. _________________________________________

2. PERMIT APPLICATION INFORMATION:
   ☑ a. Date of Issuance ______________________________________
   ◯ b. Builder _____________________________________________
   ◯ c. Engineer of Record ___________________________________
   ◯ d. Others (Specify) Type of project (e.g., building, road, etc.)

3. STATUS OF PROJECT:
   ◯ a. Completion Date _____________________________________
   ◯ b. Others (Specify) _____________________________________

Requestor's Name (Print) Martha Spenyo Mailing Address 44-204 Hikiolia Dr.
Address _____________________________________________
Kaneohe, HI 96744

☑ Martha R. Spenyo Phone 808-235-6418 Fax 808-235-6418
Signature

NOTE: PRIOR APPROVAL FROM THE COUNTY'S CORPORATION COUNSEL MUST BE OBTAINED FOR INQUIRIES INVOLVING LITIGATION OR LEGAL PROCEEDINGS.

COMPLETED BY: __________________________________________

BUILDING DIVISION 19
Appendix III

Photographic Documentation
Photograph 1: A view of the east side of the project site, Honokaa Knolls sign in the center of the photo.

Photograph 2: Facing west along the northern property boundary, Honokaa Health Center on right side.

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Photograph 3: Facing north, view of interior of site, the roof top of Honokaa Health Center is visible.

Photograph 4: Facing east, view of interior of project site.

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<th>EnviroServices &amp; Training Center</th>
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Mr. Michael Allison
President
Hawaii Intergenerational Community Development Association
1154 Fort St. Mall, Suite 300
Honolulu, HI 96813

Dear Mr. Allison:

SUBJECT: Notification of Selection for a Section 202 Fund Reservation
Location: 278 Lehua St.   No. of Units: 5
Project No. 140-EE020-WAH/HI10-S91-002
City and State: Honolulu, HI 96727

I am pleased to advise you that your application for a Fund Reservation construct 5 units of housing for the elderly under the Section 202 Supportive Housing Program has been approved for 5 units.

Capital Advance authority in the amount of $698,100 has been reserved for this project, along with Project Rental Assistance contract and budget authority of $16,500 and $82,500, respectively.

In accordance with the HUD Appropriation Act of 1999, the amount of Project Rental Assistance contract authority reserved for this project is based on 75 percent (rather than on 100 percent) of the current operating cost standards applicable to Section 202 projects in Hawaii. This takes into account the average tenant contribution toward rent. In addition, the term of the Project Rental Assistance Contract is 5 (five) years.

Please indicate by signing in the space provided whether or not you accept this Notification including the special conditions or requirements that are specified herein and certify to your understanding that the project must be developed in accordance with the terms set forth in this Notification. Return by Certified Mail—Return Receipt Requested, two signed copies of this Notification, along with the original of a completed Form HUD-2530, Previous Participation Certificate, and resume for the consultant (if a consultant has been/will be used) to this Office within 14 days from the date you receive this letter. If the Sponsor will be the consultant, the submission of these documents on the consultant may be deferred until after formation of the Owner corporation. If such is the case, the documents on the consultant must be submitted to this Office immediately upon completion of the contractual arrangements. Please advise this Office whether or not a consultant has been/will be used and the type of consultant by completing the following:

☐ Sponsor/Consultant  ☐ Independent Professional Consultant  ☒ No Consultant has been or will be used
FUND RESERVATION TERMS AND CONDITIONS

Your acceptance of this Notification constitutes a certification and agreement by the Sponsor that:

(1) There will not be made any sale, assignment, conveyance, or any other form of transfer of this Notification, the Fund Reservation, the property or project, or any interest therein, except transfer from the Sponsor to an approved single-purpose Owner organized by it.

(2) The Fund Reservation will be canceled if construction, rehabilitation or acquisition has not commenced within 18 months from the date of this Notification, unless limited extensions of up to 24 months are approved by HUD. Such extensions will be based upon HUD’s determination that the Owner has established a reasonable schedule and is making sufficient progress toward the start of construction.

(3) The Section 202 Capital Advance and Project Rental Assistance funds reserved for the project identified herein may not be used in connection with any other project unless approved by HUD.

(4) This Fund Reservation will be subject to cancellation, at HUD’s option, in the event there comes into existence or HUD becomes aware of a pre-existing conflict of interest involving the project on the part of the officers or directors of either the Sponsor or Owner organization (including affiliates).

(5) An attempt will be made to obtain exemption from State and/or local real and/or personal property taxes. Evidence of filing, together with the response received from the taxing authority, must be submitted with the Application for Firm Commitment in one of the following forms:

   a. Tax exemption
   b. Tax abatement
   c. Payment in lieu of taxes (PILOT)
   d. Ineligibility for any tax relief

Eligibility for (a), (b), or (c) must be supported by a copy of the appropriate legislation or ordinance.

(6) HUD will not amend the amount of the Fund Reservation approved for this project before initial closing has occurred. Therefore, based on HUD’s review of the Firm Commitment Application, the Sponsor will be liable for the cost of any front-end cash requirement should the cost to develop the project exceed the Fund Reservation amount. After initial closing, HUD may consider an amendment to the Fund Reservation, if necessary, but only for increases resulting from approved change order items during construction subject to the availability of funds.

(7) HUD will not consider any increases in the Project Rental Assistance Contract reservation approved herein until after one full year of project operation.

(8) Special Conditions or Requirements.

   This Notification of Selection is issued subject to:

   a. Formation of a legally acceptable single-purpose Owner corporation within 30 days
from the date of this Notification.

b. Capitalization of the Owner corporation in a sufficient amount to permit the Owner to meet its obligations in connection with the project. This includes the minimum capital investment, start-up costs, excess land costs, ineligible amenities, excessive construction costs and any other funds the Sponsor specifically commits to the projects.

c. Evidence that the site is under the Owner’s control at the time the Application for Firm Commitment is submitted.

d. Submission of Forms HUD-2530, Previous Participation Certificate, for all officers and directors of the boards of the Sponsor and Owner within 90 days and subsequent clearance thereof.

e. Credit investigation clearance of Owner’s officers of the board.

f. Submission of an Application for Firm Commitment in full compliance with HUD’s design and cost standards and programmatic requirements within 180 days from the date of this letter. The design and cost standards apply to all projects regardless of the proposed operating cost level. The design must not include any prohibited features and must be cost efficient.

g. Submission of Conflict of Interest and Disclosure Certifications for each officer and director of both the Sponsor and Owner and Identity of Interest and Disclosure Certification for all known development team members.

Note: Any time a new development team member is identified or changed, an Identity of Interest and Disclosure Certification must be submitted. Likewise, at any time the Sponsor or Owner changes any officers or directors, a Conflict of Interest and Disclosure Certification must be submitted for the new persons.

h. Submission of the land appraisal within 30 days from the date of this Notification.

i. Other Conditions, if any (listed below).

To provide you and your architect with assistance in the development of a project which meets HUD’s design and cost standards, immediately contact Clarita Mijares, Architect, at (415) 436-8332, to discuss the design of the project.

In addition, HUD has developed new procedures applicable to the submission, review and processing of Section 202 Applications for Firm Commitments through final closing. To inform you of these new procedures, we have enclosed Notice 96-102. Please read the Notice carefully as the revised procedures will affect not only your project fund reservation but also your responsibilities for project completion.

If two copies of this Notification indicating acceptance are not returned within 14 days of your receipt of this letter, or if you accept and a single purpose Owner fails to submit an Application for Firm Commitment within the specified period, HUD may rescind this Notification and cancel the Fund Reservation.

If you have any questions regarding the requirements for submission of the Application for Firm Commitment and to obtain information about your required attendance at the Office’s Project
Planning Conference, please contact Cheryl Fukunaga at (808) 522-8190 ext. 232.

We look forward to working with you toward the successful completion of this project.

Sincerely,

Janet L. Browder
Director
San Francisco Multifamily Hub

Enclosure

Accept: ____________________________
(Signature of Authorized Officer)

Not Accept: ____________________________
(Signature of Authorized Officer)

Title: PRESIDENT

Date: 12/21/99
APPENDIX D

Comments and Responses to the Draft EA
COMMENTS AND RESPONSES TO THE DRAFT EA

The Draft EA was published in the May 8, 2000 OEQC Environmental Notice. This publication date triggered the start of the thirty day Review Period, which officially ended on June 7, 2000. The Draft EA was sent to various agencies, organizations, and individuals listed below, as well as the Hilo Regional Library. The written comments and respective responses are reproduced in this Appendix. Those letters with "no comment" or "no impact", or those letters that merely provided information rather than raising a concern, are grouped together at the end of the Appendix and were not sent a response.

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Mr. Mike Klein  
Hawaii Intergenerational Community Development Association  
1154 Pan Street, Suite 300  
Honolulu, Hawaii 96813

Dear Mr. Klein,

We have reviewed a draft environmental assessment (DEA) for the Honolulu Kealua Senior Apartments, Honolulu Hawaiian District, Island of Hawaii, Tax Map Key: 3rd A-6-010-120, 123-118, and offer the following comments for your consideration and response.

1. Water System Design Capacity: In Section 4.3 of the DEA, please specify the design capacity of the Hawaii Health Systems Corporation wastewater system and the expected amount of wastewater from the Honolulu Kealua Senior Apartments in this system.

2. Emergency Electrical Power: Is there any backup generator for emergency electrical power?

3. Proximity of Laundry Area to Residence: Please discuss the possible alternatives for any accessibility of the laundry area given that the mainers of the project are elderly.

4. Cultural Resources: While we recognize that the State Historic Preservation Division has been consulted concerning historic and cultural resources, please consult with the Office of Hawaiian Affairs for information concerning potential historic and cultural resources, such as native gathering in the region, and the effects the project may have on these cultural resources. A copy of cultural impact assessment guidelines is enclosed for your information.

5. Sustainable Building Design: Enclosed for your reference are guidelines for sustainable building design adopted by the Environmental Council in 1997. Please consider using these methods in designing the facility.

Should you have any questions, please call Leslie Segado of my staff at 346-4185.

Sincerely,

GENEVIEVE SALMONSON
Director

Enclosures

Ms. Elvin Tena, Office of Housing & Community Development  
Ms. Roy Takanoda, Roy R. Takanoda, Land Use Consultant

June 19, 2000
Ms. Genevieve Salmonson, Director  
Office of Environmental Quality Control  
236 South Beresford Street, Suite 102  
Honolulu, Hawaii 96813
Re: Draft Environmental Assessments for Honolulu Kealua Senior Apartments, Honolulu, Hawaii (TMC: 3rd A-6-010-120, 123-118)

Dear Ms. Salmonson:

Thank you for your letter dated June 7, 2000 regarding the subject draft environmental assessment. On behalf of the owner, Hawaii Intergenerational Community Development Association, the following respond to your comments.

1. Water System Design Capacity: The Final EA section 4.3 Water Systems will specify the design capacity of the Hawaii Health Systems Corporation (60,000 gallons per month), the current average flow (12,000 gallons per month), and the expected Project flow 18,000 gallons per month.

2. Emergency Electrical Power: The Final EA section 4.5 (Electrical and Telephone) will state that the Project will include emergency electrical power for the elevators and some walls/doors.

3. Proximity of Laundry Area to Residence: The Final EA section 2.3 (Project Description) will state that the laundry area will be moved and suitably located near to the elevators for improved convenience and accessibility.

4. Cultural Resources: The Draft EA has been sent to OHA for their review and comments.

5. Sustainable Building Design: Thank you for a copy of the sustainable building design guidelines. Since the Project showns the same objectives set forth in the guidelines, the Applicant has forwarded the guidelines to the architect and engineers and will use its best efforts to incorporate the suggestions into the design.

Please call me if you have any questions.

Respectfully,

Roy R. Takanoda

cc: Office of Housing and Community Development, City of Hawaii HICDA
To: Office of Housing & Community Development  
From: Edward Bumatai, Fire Chief  

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT  
HONOLULU METRO SENIOR APARTMENTS  
TAX MAP KEY: 3” 4-5-10: 125, 126 thru 138  

Fire apparatus access roads shall be in accordance with UFC Section 10.207:  

Fire Apparatus Access Roads  
Sec. 10.207. (a) General. Fire apparatus access roads shall be provided and maintained in accordance with the provisions of this section.  

(b) Where Required. Fire apparatus access roads shall be required for every building hereafter constructed when any portion of an exterior wall of the first story is located more than 150 feet from fire department vehicle access as measured by an unobstructed route around the exterior of the building.  

EXCEPTION: 1. When buildings are completely protected with an approved automatic fire sprinkler system, the provisions of this section may be modified.  

2. When access roadways cannot be installed due to topography, waterways, inescapable grades or other similar conditions, the chief may require additional fire protection as specified in Section 10.101 (b).  

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Fire Chief  

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"3. When there are not more than two Group R, Division 3 or Group M Occupancies, the requirements of this section may be modified, provided, in the opinion of the chief, fire-fighting or rescue operations would not be impaired.  

"More than one fire apparatus road may be required when it is determined by the chief that access by a single road may be impaired by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.  

"For high-piled combustible storage, see Section 81.109.  

"(c) Width. The unobstructed width of a fire apparatus access road shall meet the requirements of the appropriate county jurisdiction.  

"(d) Vertical Clearance. Fire apparatus access roads shall have an unobstructed vertical clearance of not less than 13 feet 6 inches.  

Exception: Upon approval vertical clearance may be reduced, provided such reduction does not impair access by fire apparatus and approved signs are installed and maintained indicating the established vertical clearance.  

"(e) Permissible Modifications. Vertical clearances or widths required by this section may be increased when, in the opinion of the chief, vertical clearances or widths are not adequate to provide fire apparatus access.  

"(f) Surfacing. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be provided with a surface so as to provide all-weather driving capabilities." (20 tons)  

"(g) Turning Radius. The turning radius of a fire apparatus access road shall be as approved by the chief." (45 feet)  

"(h) Turnarounds. All dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with approved provisions for the turning around of fire apparatus.  

"(i) Bridges. When a bridge is required to be used as access under this section, it shall be constructed and maintained in accordance with the applicable sections of the Building Code and using designed live loading sufficient to carry the imposed loads of fire apparatus."
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**[J] Grade.** The gradient for a fire apparatus access road shall not exceed the maximum approved by the chief.* (194)

**(k) Obstruction.** The required width of any fire apparatus access road shall not be obstructed in any manner, including parking of vehicles. Minimum required widths and clearances established under this section shall be maintained at all times.*

**(l) Signs.** When required by the fire chief, approved signs or other approved notices shall be provided and maintained for fire apparatus access roads to identify such roads and prohibit the obstruction thereof or both.*

Water supply shall be in accordance with UFC Section 10.301:

"**Sec. 10.301.** *(a)* Type Required. The chief shall designate the type and number of fire appliances to be installed and maintained in and upon all buildings and premises in the jurisdiction other than private dwellings. This shall be done according to the relative severity of probable fire, including the rapidity with which it may spread. Such appliances shall be of a type suitable for the probable class of fire associated with such building or premises and shall have approval of the chief.

**(b) Special Hazards.** In occupancies of an especially hazardous nature or where special hazards exist in addition to the normal hazard of the occupancy, or where access for fire apparatus is unduly difficult, additional safeguards may be required consisting of additional fire appliance units, more than one type of appliance, or special systems suitable for the protection of the hazard involved. Such devices or appliances may consist of automatic fire alarm systems, automatic sprinkler or water spray systems, standpipes and hose, fixed or portable fire extinguishers, suitable asbestos blankets, breathing apparatus, manual or automatic covers, carbon dioxide, foam, halogenated and dry chemical or other special fire-extinguishing systems. Where such systems are installed, they shall be in accordance with the applicable Uniform Fire Code Standards or standards of the National Fire Protection Association when Uniform Fire Code Standards do not apply.

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"**(c) Water Supply.** An approved water supply capable of supplying required fire flow for fire protection shall be provided to all premises upon which buildings or portions of buildings are hereafter constructed, in accordance with the respective county water requirements. There shall be provided, when required by the chief, on-site fire hydrants and mains capable of supplying the required fire flow.*

"Water supply may consist of reservoirs, pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required fire flow.*

"The location, number and type of fire hydrants connected to a water supply capable of delivering the required fire flow shall be protected so that they shall be accessible to the fire department apparatus by means meeting the requirements of Section 10.207.*

"**(d) Fire Hydrant Markers.** When required by the chief, hydrant locations shall be identified by the installation of reflective markers.*

"**(e) Timing of Installation.** When fire protection facilities are to be installed by the developer, such facilities including all surface access roads shall be installed and made serviceable prior to and during the time of construction. When alternate methods of protection, as approved by the chief, are provided, the above may be modified or waived.*

"**(f) All fire alarm systems, fire hydrant systems, fire extinguishing systems (including automatic sprinklers), Class I, II, III (combination standpipe system) and combined systems, basement inlet pipes, and other fire protection systems and appurtenances therefor shall meet the approval of the fire department as to installation and location and shall be subject to periodic tests as required herein. Plans and specifications shall be submitted to the fire department for review and approval prior to installation.*

_Edward Murray, Fire Chief_  
EB/EO  
Office of Environmental Quality Control  
Roy R. Takenaka, Land Use Consultant
June 8, 2000

Mr. Edward Bumashy, Fire Chief
County of Hawaii Fire Department
777 Kiawe Avenue, Mail Lane, Room 6
Hilo, Hawaii 96720-4239

Re: Draft Environmental Assessment for Honokaa Knolls Senior Apartments, Honokaa, Hawaii (TMK: 3*4-5-10:125, 123 through 128)

Dear Mr. Bumashy:

Thank you for your letter dated May 23, 2000 regarding the subject draft environmental assessment. On behalf of the owner, Hawaii Intergenerational Community Development Association, the following responds to your comments.

1. Fire apparatus access roads. The project will include fire access roads where required.

2. Water supply. All necessary fire appliances will be included in the project.

3. Plans and specifications. The owner will submit the plans and specifications relating to the fire protection for review and approval by the fire department as part of the building permit process.

Please call me if you have any questions.

Respectfully,

Roy Takemoto

cc: Office of Housing and Community Development, County of Hawaii
HICDA
June 6, 2000

Civil Works Technical Branch

Mr. Edwin Taipo
Office of Housing and Community Development
County of Hawaii
10 Wailuku Drive
Hilo, Hawaii 96720

Dear Mr. Taipo:

Thank you for the opportunity to review and comment on the Draft
Environmental Assessment (DEA) for the Honokaa Kookua Senior
Apartments Project, Honokaa, Hawaii (THDA 4-5-10: 123 thru 128).
The following comments are provided in accordance with Corps of
Engineers authorities to provide flood hazard information and to
issue Department of the Army (DA) permits.

a. Based on the information provided, a DA permit will not be
required for the project.

b. The flood hazard information provided on page 15 of the DEA
is incorrect.

Sincerely,

James Fennas, P.E.
Chief, Civil Works
Technical Branch

Copies Furnished:
Ms. Genevieve Salmonson, Director
State of Hawaii
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Mr. Roy Takenoto
P.O. Box 10217
Hilo, Hawaii 96721
Dear Mr. Taira:

The U.S. Fish and Wildlife Service (Service) has reviewed the Draft Environmental Assessment (DEA) for the Honokaa Kaihila Senior Apartments, Honokaa, Hamakua District, Hawaii. The project sponsor is the Hawaii Intergenerational Development Association (HICDA). This letter has been prepared under the authority of and in accordance with provisions of the Fish and Wildlife Coordination Act of 1934 (16 USC 661 et seq.; 48 Stat. 401), as amended, the Endangered Species Act of 1973 (16 USC 1531 et seq.; 87 Stat. 884), as amended, and the National Environmental Policy Act of 1969 (42 USC 4321 et seq.; 83 Stat. 383), as amended. Based on these authorities, the Service offers the following comments for your consideration.

The proposed project includes construction of 40 residential units, an office, a small conference room, and provisions for 48 parking stalls on the 4-acre site. The purpose of the project is to provide housing for senior citizens.

We have reviewed the information provided in the DEA and in our files. To the best of our knowledge, no federally endangered, threatened, or candidate species, significant wetlands, or other Federal trust resources occur at the immediate project site. Although the federally endangered Hawaiian duck (Anas wiliwili), Hawaiian Hawks (Buteo solitarius), and Hawaiian honey bat (Eumops cinereus seminonatus) may occur in the vicinity of the proposed project site, no adverse impacts to these species are anticipated.

In view of this, the Service will concur with your determination that the proposed actions are not likely to adversely affect federally listed species. Based on this determination, we believe that the requirements of section 7 of the Act have been satisfied. However, obligations under section 7 of the Act must be reconsidered if (1) new information reveals impacts of this defined action that may affect listed species or critical habitat in a manner which was not previously considered in this assessment; (2) this action is subsequently modified in a manner not considered in this assessment; or (3) a new species is listed or critical habitat determined that may be affected by the identified actions.

The project description states that the proposed site was previously cultivated in sugarcane, thus no removal of native vegetation is anticipated. No other impacts to fish and wildlife resources are expected to result from the proposed project. Therefore, the Service will concur with a determination of Finding of No Significant Impact for the proposed project.

The project description also mentions the possibility for future construction of a larger community center and an additional Adult Residential Care Home Type 1 with kitchen facilities. The current DEA does not address the details of the future construction. Since our comments do not address the future construction, we would request the opportunity to review any additional construction activities.

We appreciate the opportunity to comment on the proposed project. If you have questions regarding these comments, please contact Fish and Wildlife Biologist James Kroen by telephone at 808/541-3441 or by facsimile transmission at 808/541-3470.

Sincerely,

[Signature]

Paul Bennett
Field Supervisor
Ecological Services

cc: Roy Takemoto, Land Use Consultant
OEQC, Honolulu
DSFAW, Hawaii
June 1, 2000

TO: Mr. Edwin Taira, Assistant Housing Administrator
Office of Housing and Community Development

FROM: Milian D. Pavoa, Manager

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR HONOKAA KNOLLS SENIOR APARTMENTS
HONOKAA, HAMAKUA DISTRICT, ISLAND OF HAWAII
TAX MAP KEY: 3rd 4-5-016:120, 123-128

We have reviewed the subject assessment and our comments follow.

Water availability from the Haina water system and proposed project water use have been reviewed by the Department and found to be adequate. This is presented in Section 4.2, Water Supply, of the draft environmental assessment.

If you have any questions, please contact our Water Resources and Planning Branch at 961-8663.

Sincerely yours,

Milian D. Pavoa, P.E.
Manager

BCM:psa

copy - Office of Environmental Quality Control
Mr. Ray R. Takemoto

-- Water brings progress --