

for use in irrigation. There are five municipal sewage systems with treatment plants that serve limited areas. As a result, only a small portion of the County's sewage is treated. Most sewage is disposed of in private cesspools, septic systems, or private ~~waste-water-treatment-plants~~ (WWTPs) that must meet the State DOH water quality standards. The State DOH intends to promulgate rules that will prohibit the installation of cesspools.

Loud noises are known to have adverse physiological and psychological effects on people. Residential and resort areas near airports are particularly affected. Increased air transportation activity and changes in aeronautical technology could change the "noise contours" that affect lands surrounding the Kona International Airport at Keāhole and Hilo International Airport. The County recommends appropriate easements and/or covenants be required in conjunction with land use approvals for lands in the vicinity of the airports to eliminate the likelihood of surrounding land use development conflicting with future airport activity and/or expansion.

5.3.7.3 Conformance ~~to~~ with the Goals of the Plan

The Keahuolu Affordable Housing ~~P~~project is relevant to the State Health Function Plan in two ways. First, construction will conform to DOH regulations concerning erosion control, fugitive dust, solid waste disposal, and noise controls. Second, the project will develop on-site and off-site infrastructure systems that will connect to regional infrastructure systems. Infrastructure will be constructed to applicable State, DOH and County standards, rules and regulations, thereby fulfilling the goal of improving environmental health and protection.

5.3.8 State Historic Preservation Functional Plan (1991)

5.3.8.1 Goals of the Plan

The State Historic Functional Plan identifies issues, policies, and implementing actions that seek to preserve and protect the unsurpassable beauty, history, and culture of the Hawaiian Islands. Hawai'i's natural scenic beauty, clean environment, and rich multi-cultural heritage (including historic/cultural sites) are reasons why so many people have made Hawai'i their home, and why so many visit the State.

5.3.8.2 Historic Preservation Sites in the County of Hawai'i

According to the DLNR's SHPD, an estimated 11,500 archeological and historic sites have been identified on the island of Hawai'i. However, only 5 percent of the island has been surveyed, and the other 95 percent of the island contains an undeterminable number of historic and archeological sites. The abundance of historic sites can be attributed to the fact that much of the early history of the Hawaiian islands had its setting on the island of Hawai'i. Archeological data indicates that Polynesian voyagers may have settled there as early as 600 A.D.

5.3.8.3 Conformance ~~to~~ with the Goals of the Plan

Archaeological inventory survey work has been conducted on the subject property and a cultural impact assessment CIA has been prepared. Together, these documents provide a greater understanding of project area's historic, archaeological and cultural resources. Sites conforming to the significance criteria established under state and federal regulations will be preserved in coordination and consultation with the SHPD.

5.3.9 State Housing Functional Plan (1989, 1990)

5.3.9.1 Goals of the Plan

The 1990 State Housing Functional Plan identified a need to develop affordable housing throughout the State, and found that the housing needs of lower income households would not be adequately met in future residential developments. Obstacles identified to the development of affordable housing include (1) the lack of infrastructure, particularly on the neighbor islands; (2) the high cost of zoned land, high development costs, and the regulatory system (particularly on O'ahu); (3) government policies that have created a shortage of urban land zoned for housing; (4) lack of government funds to develop rental housing; (5) building codes and subdivision standards that constrain innovative, cost-saving technologies; and (6) current labor wages. The Plan recommended increased densities in residential developments where feasible, smaller and basic units, funding for rental developments, and state subsidies.

5.3.9.2 Housing in the County of Hawai'i

The population of the County has been growing for decades, but the rate of growth has been slowing. North Kona has seen a faster rate of increase than the island as a whole, although Puna's and South Kohala's populations have increased at even faster rates.

In Hawai'i County in 2006, 9.9 percent of single family properties and 16 percent of residential condominiums had out-of-state owners. Non-residents are also disproportionately involved in real estate purchases. From 2001 to 2005, about 35 percent of Hawai'i County single-family house sales and 75 percent of condominium sales had out-of-state buyers. Consequently, market prices reflect both local and non-local buying power, and the median home price is much higher than the average household can afford. In short, many of the homes sold at prices that only a few local families – and many more offshore buyers – could afford. However, evidence of resident demand for new housing units is abundant. The housing market continues to be active, even though prices have reached levels that many families cannot afford.

About a third of Hawai'i County respondents expecting to move named North Kona as their preferred destination. Total demand for housing in North Kona from Hawai'i residents statewide as of 2006 is estimated at about 7,200 households, including all those expecting to move at some time in the future.

5.3.9.3 Conformance ~~to~~ with the Goals of the Plan

The HHFDC Keahuolu project is planned as a response to the regional needs for housing and the desire to reduce congestion on regional highways due to residents' traveling long distances between home and work. Future residents of Keahuolu are likely to come from West Hawai'i, ranging from Ocean View in Ka'u to North Kohala. Thus, the Keahuolu Affordable Housing Pproject is supportive of the Housing Functional Plan's goals of providing more homes for Hawai'i's population. The project will directly address the demand for affordable homes near employment centers in West Hawai'i.

5.3.10 State Human Services Functional Plan (1989)

5.3.10.1 Goals of the Plan

The Human Services Functional Plan addressed: (1) elder abuse; (2) child abuse and neglect; and (3) spouse/domestic abuse and violence. The plan details statistics, causes, and prevention measures that can help to combat very pressing societal issues.

5.3.10.2 Conformance ~~to~~ with the Goals of the Plan

The petition for a boundary amendment will have a negligible effect on this plan.

5.3.11 State Recreation Functional Plan (1991)

5.3.11.1 Goals of the Plan

The 1991 State Recreation Functional Plan focused on six issue areas: (1) ocean and shoreline recreation; (2) mauka, urban, and other recreation; (3) public access to the shoreline and upland recreation areas; (4) resource conservation and management; (5) management of recreation programs and facilities; and (6) wetlands protection and management.

5.3.11.2 Recreation in West Hawai'i

The County expects heavy demand on recreational resources as a result of an expanding population and a growing number of visitors in West Hawai'i. According to the County General Plan, existing recreational areas and facilities in the North Kona district are being targeted for improvements and expansion as the area is generally inadequate. In 2005, approximately 28,500 residents of North Kona were served by only nine County parks. Improved and expanded recreational facilities that support the proper ratio of 5.0 acres of recreation area for every 1,000 people are a part of the County's goals.

Some of the new or improved areas in the region include Kealakehe High School, which offers facilities that are open to the public during non-school hours. The Kailua Park (Old Kona Airport) consists of 34 acres and provides lighted fields for baseball, softball, and football. Baseball and soccer fields were constructed. Also situated here are four lighted tennis courts, the

old terminal building houses restrooms, offices, and a meeting place. A multipurpose gymnasium was completed in 1993 and a 50-meter olympic-size swimming pool was completed in 1999. The County has three developed beach parks in North Kona. There are three small boat harbors in the district: Kailua Bay, Keauhou, and Honokohau. Honokohau harbor has a capacity for 450 small boats and has other facilities to accommodate boat repair, a restaurant, dry storage, etc.³

5.3.11.3 Conformance ~~to~~ with the Goals of the Plan

The conceptual plans for the proposed project include approximately 25 acres of open space, which includes area for the creation of neighborhood parks to address the recreational needs of the residents.

5.3.12 State Tourism Functional Plan (1991)

5.3.12.1 Goals of the Plan

The 1991 State Tourism Functional Plan focused on six issues: (1) the positive and negative impacts of tourism growth on the community; (2) physical development in terms of product quality, product diversity, land use planning, adequate infrastructure, and visitor use of public services; (3) environmental resources and cultural heritage; (4) community, visitor, and industry relations; (5) employment and career development; and (6) effective marketing.

The plan primarily sought to strengthen tourism, while developing other industries to diversify the State's economic base in order to reduce its vulnerability from the fluctuations of a single market.

5.3.12.2 Tourism in West Hawai'i

Current growth in the County in terms of employment, population, income, and economic activity has been more closely tied to the visitor industry than any other sector of the economy. Employment opportunities spurred by the growth of tourism has been the catalyst for economic

³ Data from this section obtained from the 2001 County of Hawai'i Proposed General Plan.

growth in the County. A substantial amount of investor interest continues to flow into West Hawai'i, primarily the Kohala and Kona districts, which according to the Hawai'i County General Plan continues to accommodate the majority of the visitor market within the County. Over \$1 billion of planned construction of resort-residential complexes have been announced, in addition to the substantial investment already in place. Various resort and resort-residential complexes are currently under construction or are planned for construction in the near future. Continued investor interest in resort and resort-residential development in the County suggests an economic future that promises new jobs and more commercial, recreational, and cultural activities.⁴

5.3.12.3 Conformance with the Plan

While the Keahuolu Affordable Housing project has no direct relationship with the visitor industry, it plays an important indirect role. The availability of new housing opportunities in reasonable proximity to the visitor destination areas of North and South Kona is vital to the health of the industry because the project can provide employee housing near the region's job centers.

5.3.13 State Transportation Functional Plan (1991)

5.3.13.1 Goals of the Plan

The 1991 State Transportation Functional Plan sought to (1) construct facility and infrastructure improvements in support of Hawai'i's thriving economy and growing population base; (2) develop a transportation system balanced with an array of new alternatives; (3) implement Transportation Systems Management to maximize the use of existing facilities and systems; (4) foster innovation and use of new technology in transportation; (5) maximize joint efforts with the private sector; (6) pursue land use initiatives which help reduce travel demand; and (7) encourage resident quality-of-life improvements through improved mobility opportunities and travel reduction.

⁴ Data for this section obtained from the 2001 County of Hawai'i Proposed General Plan and the Hawai'i Tourism Authority (HTA) 2002 Annual Report to the Legislature.

5.3.13.2 Transportation Conditions in West Hawai'i

Kona International Airport at Keahole occupies 3,450 acres of land about seven miles northwest of Kailua-Kona and the Keahuolu project site.

The major traffic arteries serving the North Kona district are the Hawai'i Belt Highway (Mamalaho^a), connecting Kona with South Kohala and Ka'u, Queen Ka'ahumanu Highway, Kuakini Highway, connecting Kailua with the mauka Keauhou area, and Ali'i Drive, serving the shoreline areas between Kailua and Keauhou. The latter of these systems is the only access to areas along the shoreline between Kailua and Keauhou. Mauka-makai access between Mamalahoa Highway and the Queen Ka'ahumanu Highway is provided by Kaiminani Drive, Hina Lani Drive and Palani Road. Mamalahoa Highway is the only arterial roadway currently serving all of the South Kona District. Many portions of this roadway are narrow and winding. Lands mauka and makai of this roadway are served by private and County-owned collector roadways, many in poor condition.

The Hawai'i County Mass Transit Agency provides public transportation around the island on the Hele-On bus. In addition, the Transit Agency offers a Shared Ride Taxi program that provides inexpensive door-to-door transportation within the urbanized area of Hilo and Kona.

Recent economic growth and prosperity in West Hawai'i have brought traffic congestion, which has worsened appreciably on Queen Ka'ahumanu Highway and on the Hawai'i Belt Road between Kailua and South Kona. However, plans are under way for highway improvements for both State and County roads, including widening of Queen Ka'ahumanu Highway between Kailua-Kona and the airport. The County's planned Ane Keohokalole Highway is adjacent to the project site's makai boundary. The new highway, which will provide primary access to the project site, is envisioned by the County to serve as a transit corridor between Kailua-Kona and the airport.

5.3.13.3 Conformance with the Plan

The Keahuolu project will become an integral component of the regional transportation network. The project's conceptual plans provide for transit-oriented development with bus stops along

Ane Keohokalole Highway, high density housing within one-quarter mile walking distance from transit stops, and feasible roadway connections to existing and future development on adjacent lands. This provides alternative routes and transportation modes to Queen Ka‘ahumanu and Mamalahoa Highways, which will help to reduce congestion on these regional serving arterials.

5.3.14 State Water Resources Development Functional Plan (1984)

5.3.14.1 Goals of the Plan

The 1984 State Water Resources Development Functional Plan set objectives to: (1) clarify the State water policy and improve management framework; (2) maintain the long-term availability of freshwater supplies while considering environmental values; (3) improve management of flood plains; (4) assure adequate municipal water supplies for planned urban growth; (5) assure the availability of adequate water for agriculture; (6) encourage and coordinate development of self-supplied industrial water and the production of water-based energy; (7) provide for the protection and enhancement of Hawai‘i’s freshwater and estuarine environment; (8) improve state grant and loan procedures for water programs and projects; and (9) pursue water resources data collection and research to meet changing needs.

5.3.14.2 Water Conditions in West Hawai‘i

Over the past 15 years, West Hawai‘i has experienced tremendous growth in population and resort development, accompanied by a reliance on the available ground-water resources. In the early 1990s, there was fierce competition for water resources among landowners, developers, and other water purveyors in the region. The State Commission on Water Resource Management (CWRM) stepped in and found they needed to gather pertinent data on baseline water levels in order to mediate the problem and avoid major disputes. A 1991 – 2002 report, *A Study of the Ground-Water Conditions in North and South Kona and South Kohala Districts, Island of Hawaii* is ongoing and presents over 10 years of baseline water level data. Many wells were drilled in the region during the past 10 years by private landowners, public utilities, and the State, who invested large sums of money to drill these wells for the economic benefit of the

island and the State. The CWRM credited these entities for allowing access to their wells for data collection and sampling used in the report.⁵

The Keahuolu project is located on the western flank of Hualalai, where the ground surface is highly permeable and storm water runoff does not occur. Two modes of groundwater occur in the general vicinity: (1) a thin, brackish to saline basal lens underlying the entire coastal zone, and (2) high-level groundwater near the vicinity of Mamaloahoa Highway and extending 20 miles from Kalaoa to Kealakekua.

5.3.14.3 Conformance with the Plan

The Keahuolu project will include the development of at least one new regional potable water well and multiple storage reservoirs, depending on the total number of housing units to be constructed. The potable water transmission system will be integrated into the County's regional distribution system, significantly improving water supply, storage, and transmission in the vicinity of the project. In so doing, the Keahuolu project is in conformance with many of the goals of the State Water Functional Plan.

5.4 HAWAI'I WATER CODE

In 1987, the State Legislature adopted the Hawai'i Water Code as HRS Chapter 174C, as amended, to "protect, control, and regulate the use of Hawai'i's water resources for the benefit of its people." The CWRM administers the water code. The Code's policies include the (1) protection of water resources, maintenance of ecological balance and scenic quality with regard to the development of new resources, (2) improvement of water quality, and (3) the establishment of comprehensive water planning statewide. A major element of the code is the development of the Hawai'i Water Plan.

The State Water Code pursuant to HRS 174-2(c) allows "maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses." Furthermore, the Code shall be

⁵ Data obtained from DLNR website (<http://www.hawaii.gov/dlnr/cwrn/data/reports/pr200301.pdf>)

liberally interpreted and applied in a manner, ~~which~~ that conforms to intentions and plans of the counties in terms of land use planning.

5.5 STATE OF HAWAI'I WATER PLAN

The Hawai'i Water Plan, under HRS §174C-31, consists of four parts: (1) a water resource protection plan prepared by the water commission; ~~;~~ , (2) water use and development plans for each county prepared by each separate county and adopted by ordinance, setting forth the allocation of water to land use in that county; ~~;~~ , (3) a state water projects plan prepared by the agency ~~which~~ that has jurisdiction over such projects in conjunction with other state agencies; ~~;~~ , and (4) a water quality plan prepared by the DOH.

All water use and development plans shall be conditioned upon and be consistent with: (1) water resource protection and water quality plans; ~~;~~ , (2) respective county land use plans and policies including general plan and zoning as determined by each respective county; ~~;~~ and (3) state land use classification and policies.

To prepare the water resource protection and water quality plans, the LUC shall assess the quantity and quality of water needed for existing and contemplated uses, including irrigation, power development, geothermal power, and municipal uses.

5.6 STATE UIC PROGRAM

The Safe Drinking Water Act of 1974 legislated the protection of all aquifers, portions of aquifers, and any potential aquifer capable of yielding consumable drinking water sources. This mandate was based on increased evidence of contamination of this valuable resource and on a national concern for the quality of groundwater.

In 1976, the State Legislature enacted Act 84, relating to Safe Drinking Water, which required the State DOH to establish ~~a~~ n UIC program to protect the quality of underground sources of drinking water. The UIC program identifies aquifers that should be protected from subsurface disposal of wastewater through injection wells, and designates areas now being used or that

could potentially be used for drinking water. The underground sources of drinking water (USDW) are protected and the program prohibits the construction of new injection wells that may pollute the USDW. Injection wells are allowed in exempted areas. The boundary lines, known as the UIC line, between the USDW and the exempted areas have been developed, with a 1,000-foot setback of wastewater systems from all public drinking water wells and springs.

The subject property is situated mauka of the UIC line and injection wells are not permissible in this area, ~~without thereby not~~ affecting USDW.

5.7 STATE ENVIRONMENTAL POLICY

HRS Chapter 344 establishes an environmental policy that (1) encourages productive and enjoyable harmony between people and their environment; ~~;~~ (2) promotes efforts to prevent or eliminate damage to the environment and biosphere; ~~;~~ (3) stimulates the health and welfare of humanity; ~~;~~ and (4) enriches the understanding of the ecological systems and natural resources important to the people of Hawai‘i.

HRS §344-2 defines “environment” as the complex of physical and biological conditions that influence human well-being, including land, air, water, minerals, flora, fauna, energy, noise, and places of historic or aesthetic significance.

~~The following table, identified as~~ Table 5-3, contains the policies of the State Environmental Policy, HRS §344, and ~~discusses~~ makes note of the relationship and applicability, if any, of the policy to the Keahuolu project’s petition for a boundary amendment.

Table 5-3: State Environmental Policy

SECTION	STATE ENVIRONMENTAL POLICY	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant’s objectives NA = goal is not applicable		
344-3	ENVIRONMENTAL POLICY. It shall be the policy of the State, through its programs, authorities, and resources to:	
(1)	Conserve the natural resources, so that land, water, mineral, visual, air and other natural resources are protected by controlling pollution, by preserving or augmenting natural resources, and by safeguarding the State’s unique natural environmental characteristics in a manner which will foster and promote the general welfare, create and maintain conditions under which humanity and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of the people of Hawai‘i.	C

SECTION	STATE ENVIRONMENTAL POLICY	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable		
(2)	Enhance the quality of life by:	
(A)	Setting population limits so that the interaction between the natural and artificial environments and the population is mutually beneficial;	C
(B)	Creating opportunities for the residents of Hawai'i to improve their quality of life through diverse economic activities which are stable and in balance with the physical and social environments;	C
(C)	Establishing communities which provide a sense of identity, wise use of land, efficient transportation, and aesthetic and social satisfaction in harmony with the natural environment which is uniquely Hawaiian; and	C
(D)	Establishing a commitment on the part of each person to protect an enhance Hawai'i's environment and reduce the drain on nonrenewable resources.	NA
344-4	GUIDELINES. In pursuance of the state policy to conserve the natural resources and enhance the quality of life, all agencies, in the development of programs, shall, insofar as practicable, consider the following guidelines:	
(1)	POPULATION.	
(A)	Recognize population impact as a major factor in environmental degradation and adopt guidelines to alleviate this impact and minimize future degradation;	C
(B)	Recognize optimum population levels for counties and districts within the State, keeping in mind that these will change with technology and circumstance, and adopt guidelines to limit population to the levels determined.	C
(2)	LAND, WATER, MINERAL, VISUAL, AIR, AND OTHER NATURAL RESOURCES.	
(A)	Encourage management practices which conserve and fully utilize all natural resources;	C
(B)	Promote irrigation and waste water management practices which conserve and fully utilize vital water resources;	C
(C)	Promote the recycling of waste water;	C
(D)	Encourage management practices which conserve and protect watersheds and water sources, forest, and open space areas;	C
(E)	Establish and maintain natural area preserves, wildlife preserves, forest reserves, marine preserves, and unique ecological preserves;	NA
(F)	Maintain an integrated system of state land use planning which coordinates the state and county general plans.	C
(G)	Promote the optimal use of solid wastes through programs of waste prevention, energy resource recovery, and recycling so that all our wastes become utilized.	C
(3)	FLORA AND FAUNA.	
(A)	Protect endangered species of indigenous plants and animals and introduce new plants or animals only upon assurance of negligible ecological hazard;	C
(B)	Foster the planting of native as well as other trees, shrubs, and flowering plants compatible to the enhancement of our environment.	C
(4)	Parks, recreation, and open space.	
(A)	Establish, preserve and maintain scenic, historic, cultural, park and recreation areas, including the shorelines, for public recreational, educational, and scientific uses;	C

SECTION	STATE ENVIRONMENTAL POLICY	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable		
(B)	Protect the shorelines of the State from encroachment of artificial improvements, structures, and activities;	NA
(C)	Promote open space in view of its natural beauty not only as a natural resource but as an ennobling, living environment for its people.	C
(5)	ECONOMIC DEVELOPMENT.	
(A)	Encourage industries in Hawai'i which would be in harmony with our environment;	C
(B)	Promote and foster the agricultural industry of the State; and preserve and conserve productive agricultural lands;	NA
(C)	Encourage federal activities in Hawai'i to protect the environment;	NA
(D)	Encourage all industries including the fishing, aquaculture, oceanography, recreation, and forest products industries to protect the environment;	NA
(E)	Establish visitor destination areas with planning controls which shall include but not be limited to the number of rooms;	NA
(F)	Promote and foster the aquaculture industry of the State; and preserve and conserve productive aquacultural lands.	NA
(6)	TRANSPORTATION.	
(A)	Encourage transportation systems in harmony with the lifestyle of the people and environment of the State;	A
(B)	Adopt guidelines to alleviate environmental degradation caused by motor vehicles;	NA
(C)	Encourage public and private vehicles and transportation systems to conserve energy, reduce pollution emission, including noise, and provide safe and convenient accommodations for their users.	A
(7)	ENERGY.	
(A)	Encourage the efficient use of energy resources.	A
(8)	COMMUNITY LIFE AND HOUSING.	
(A)	Foster lifestyles compatible with the environment; preserve the variety of lifestyles traditional to Hawai'i through the design and maintenance of neighborhoods which reflect the culture and mores of the community;	A
(B)	Develop communities which provide a sense of identity and social satisfaction in harmony with the environment and provide internal opportunities for shopping, employment, education, and recreation;	A
(C)	Encourage the reduction of environmental pollution which may degrade a community;	A
(D)	Foster safe, sanitary, and decent homes;	A
(E)	Recognize community appearances as major economic and aesthetic assets of the counties and the State; encourage green belts, plantings, and landscape plans and designs in urban areas; and preserve and promote mountain-to-ocean vistas.	A
(9)	EDUCATION AND CULTURE.	
(A)	Foster culture and the arts and promote their linkage to the enhancement of the environment;	NA
(B)	Encourage both formal and informal environmental education to all age groups.	NA
(10)	CITIZEN PARTICIPATION.	
(A)	Encourage all individuals in the State to adopt a moral ethic to respect the natural environment; to reduce waste and excessive consumption; and to fulfill the responsibility as trustees of the environment for the present and succeeding generations; and	NA

SECTION	STATE ENVIRONMENTAL POLICY	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable		
(B)	Provide for expanding citizen participation in the decision making process so it continually embraces more citizens and more issues.	NA

5.8 WEST HAWAI'I REGIONAL PLAN (1989)

In 1989, under former Governor John Waihee, the Office of State Planning produced the West Hawai'i Regional Plan to guide the development of the region. The State formulated the plan to (1) coordinate State activities in West Hawai'i and respond effectively to emerging needs and critical problems; (2) address areas of State concern; (3) coordinate the Capital Improvements Program; and (4) provide guidance in the State land-use decision-making process. Contributors to the plan included the West Hawai'i community, and Federal, State, and County agencies.

The following table, identified as Table 5-4, presents the general goals of *The Vision for West Hawai'i Plan*, and two pertinent sections, *Urban Expansion Planning Areas*, and *Highways and Roadways*. A project-specific commentary is included for each.

Table 5-4: West Hawai'i Regional Plan

GENERAL GOALS AND OBJECTIVES FOR THE VISIONS OF WEST HAWAI'I	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable	
Plan and maximize benefits for Hawai'i's people.	A
Optimize the use of State-owned lands.	A
Promote a diversified economic base which maximizes job choice and opportunities.	A
Ensure access to and adequacy of health, education, job-training, and human service programs.	NA
Ensure provision and adequacy of affordable housing.	A
Minimize adverse impact of new development on local lifestyles, historic and cultural resources and community values.	C
Provide a wide range of outdoor recreational opportunities.	C
Protect scenic areas, natural landmarks, open space, and viewsheds.	C
Ensure that existing and proposed developments can be adequately accommodated.	C
Support urban developments that maintain the unique character of the West Hawai'i region.	C
Protect State investments of the Natural Energy Laboratory of Hawai'i, the Hawai'i Ocean Science and Technology Park, Keahole Airport, and the Mauna Kea observatories.	NA
Ensure that new development does not adversely impact:	
agricultural resource activities;	C

GENERAL GOALS AND OBJECTIVES FOR THE VISIONS OF WEST HAWAI'I	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable	
aquacultural resource activities;	C
the quality of the aquifer	C
the quality of nearshore waters (including anchialine ponds)	C
the quality of offshore and deep ocean waters	NA
the quality of air	C
the watersheds	C
Ensure that the servicing of resort development does not result in unnecessary in-migration.	C
Ensure the clustering of resorts in order to minimize public service costs.	NA
Promote quality and diversity in future resort developments.	NA
Develop only within infrastructure capacities and constraints.	C
Maintain the diversity of the region's natural and cultural assets.	C
Maintain the diversity and character of existing communities.	NA
Ensure that development does not lead to deterioration in the quality of life.	C
Maintain opportunities for community participation during plan implementation.	C
COMMENTARY: The Keahuolu project is consistent with and supportive of the goals of the West Hawai'i Regional Plan.	
URBAN EXPANSION PLANNING AREAS	
PROBLEM STATEMENT	
The Urban Expansion Planning Areas are sub-regions that will be planned by the County's Planning Department. The County's planning process will include the State, existing landowners, and affected governmental agencies. As part of this planning effort, infrastructure requirements of all landowners will be determined and "sized" in order to attend to existing and anticipated problems. Opportunities for joint infrastructure financing, economies of scale, and creative urban design will be explored and developed in order to provide an environment that can support the "preferred" quality of life.	
STRATEGY	
Concentrate future regional urbanization in designated Urban Expansion Planning Areas and provide for their planning and future development in a manner which optimizes or mitigates sub-regional problems, issues, and opportunities.	C
ACTIONS	
Direct future regional urbanization to designated Urban Expansion Planning Areas at Kailua-Kona to Keāhole and Kawaihae to Waimea.	C
Formulate a joint public/private sector community development plan for each Urban Expansion Planning Area.	NA
Encourage in-fill of urban areas between Kailua-Kona and Keauhou.	NA
COMMENTARY: The Keahuolu project area is located within the Urban Expansion Planning Area between Kailua-Kona and Keahole.	
HIGHWAYS AND ROADWAYS	
PROBLEM STATEMENTS	
Increased traffic flow which will occur as a result of workers commuting from support communities to the resort areas is another problem which must be anticipated.	
STRATEGY	

GENERAL GOALS AND OBJECTIVES FOR THE VISIONS OF WEST HAWAII	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable	
Anticipate and provide relief for traffic hazards and congestion on a timely basis.	C
ACTIONS	
Support the DOT's Countywide Transportation Planning Process (CTPP)	C
Investigate the feasibility of a mass transit for the region.	NA
COMMENTARY: One of the key elements of the proposed project is its contribution to improvements in the regional roadway network. The project is to provide feasible roadway connections to existing and/or future developments on adjacent lands, thereby helping to improve regional traffic circulation and provide alternate routes to Queen Ka'ahumanu and Mamalahoa highways. Another key element of the project is that it is to be transit-oriented, which means the development is to accommodate multiple transit stops (bus or other modes) along the planned Ane Keohokalole Highway. The conceptual design of the project promotes a walkable, bikable community with high density residential areas within a one-quarter mile walking radius of proposed transit stops along Ane Keohokalole Highway.	

5.9 STATE ENVIRONMENTAL IMPACT STATEMENT REQUIREMENTS SIGNIFICANCE CRITERIA

HAR, §11-200-12, establishes thirteen significance criteria ~~which~~ that agencies shall use in evaluating an action's impacts. Following is a discussion of how the proposed action relates to the thirteen criteria.

Pursuant to subparagraph 12, ...an action shall be determined to have a significant effect on the environment if it:

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

Discussion: The SHPD has approved the archaeological inventory survey and the archaeological mitigation plan for the project area. Data recovery work needs to take place at eleven of the twelve sites within the project boundary. Seven of the twelve sites are recommended for "preservation with some level of interpretive development recommended". Four of the twelve sites are recommended for "preservation as is." A preservation plan detailing preservation treatments for all preservation sites needs to be prepared and approved by the SHPD. The archaeologist has recommended "no further work" for the six sites found on the proposed reservoir site. No ongoing cultural practices were identified relative to the project site and the reservoir site.

(2) *Curtails the range of beneficial uses of the environment:*

Discussion: The range of beneficial uses of the property's environment is guided by the County's General Plan, which designates the undeveloped property primarily for Urban Expansion and the remainder for Low Density Urban uses. The proposed project is consistent with the planned beneficial use of the area. The proposed project increases the range of beneficial uses for the environment by providing affordable and market-priced housing units, parks and open space, a site reserved for a future school facility, integration of future transit components, and increased connectivity with surrounding roads, infrastructure, services, and public facilities.

(3) *Conflicts 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;*

Discussion: The stated purpose of Chapter 344 is to establish a state policy ~~which~~ that will encourage productive and enjoyable harmony between people and their environment, promote efforts ~~which~~ that will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humanity, and enrich the understanding of the ecological systems and natural resources important to the people of Hawai'i. The proposed project complies with the policies, goals and guidelines of Chapter 344. The project proposes to create a master planned mixed-use residential community that will be integrated with regional transportation network and infrastructure systems, and improve the quality of life for residents by providing affordable housing near employment centers. ↪

(4) *Substantially affects the economic or social welfare of the community or State;*

Discussion: Development of the property for residential purposes is consistent with the County's desire to focus growth in West Hawai'i in the region between Keahole and Kailua-Kona. The project will have positive impacts on the social welfare of the North Kona community by providing affordable housing opportunities for area residents to live close to employment centers in West Hawai'i. The project will also have positive impacts on the

economic welfare of the community and the State through the creation of jobs and property tax revenue base.

(5) *Substantially affects public health;*

Discussion: The proposed project is anticipated to have negligible impact on public health. Infrastructure systems will be constructed to comply with applicable State, DOH, and County standards and regulations.

(6) *Involves substantial secondary impacts such as population changes or effects on public facilities;*

Discussion: The alternative concept plans provide for up to a maximum of 2,330 new housing units or less. The final development scheme will be provided by the developer selected by the HHFDC. The addition of this population is anticipated to increase demand on public facilities, including the area's schools. The project site has an approximately ~~12~~-12-acre area reserved for a school facility.

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

Discussion: The proposed project will involve extensive ground disturbance, including clearing, grubbing, and grading of the property. The site development activities are necessary for the development. Grading and construction activities will be required to comply with applicable regulations.

(8) *Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;*

Discussion: It is anticipated that there is a cumulative effect related to the total residential development in the region, both positive in terms of creating affordable residential housing opportunities and locating residents closer to major urban centers, and potentially negative in terms of the cumulative traffic impacts. Chapter 4 discusses the traffic impacts of the Keahuolu Affordable Pproject and the proposed measures to mitigate traffic impacts to acceptable levels.

(9) *Substantially affects a rare, threatened, or endangered species, or its habitat;*

Discussion: No rare, threatened, or endangered species or related habitats have been identified on the subject property or the reservoir site.

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

The project will generate increased motor vehicle use in the area, which may affect air quality but not significantly. Wastewater from the project site will be disposed of at the Kealakehe ~~Sewage Treatment Plant~~ WWTP. Ambient noise levels may be impacted in the project area, but are not expected to exceed acceptable levels due to the residential community nature of the development.

(11) *Affects 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;*

Discussion: The subject property is situated within a Zone 4 volcanic hazard zone (on a scale of 1 to 9 with 1 representing the most hazardous and 9 the least hazardous), which covers all of Hualalai volcano. The property is also situated within a Zone 4 seismic zone, which is the highest zoning designation on a scale of 0 to 4. Proposed structures in the subject development will conform to all relevant building code requirements, including applicable seismic design standards.

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

Discussion: The subject property is not identified as scenic vistas or viewplanes on county or the state plans or studies.

(13) *Requires substantial energy consumption.*

Discussion: Energy consumption will be increased in relation to the proposed residential development. The project's design should include features to conserve energy and water usage.

FEDERAL LAWS AND CONTROLS

5.10 COASTAL ZONE MANAGEMENT ACT (HRS CHAPTER 205A)

Federal Coastal Zone Management (CZM) enforcement authority (Public Law 92-583), as amended, has been delegated to the State and enacted as HRS Chapter 205A. The Hawai'i CZM Program was promulgated in 1977 in response to the Federal CZM Act of 1972. Other than the review of federal applicants, federal permits, or federal activities, the State CZM review authority has been delegated to the county level through the Special Management Area (SMA) controls for development along the shoreline.

The CZM area encompasses the entire State including all marine waters seaward to the extent of the State's police power and management authority, including the 12-mile U.S. territorial sea and all archipelagic waters. The CZM Act is comprised of a number of objectives primarily related to (1) protecting and preserving the coastal zone; (2) improving the quality of coastal scenic and ~~open~~ open-space resources and ensuring that ~~coastal~~ coastal-dependent development such as harbors and ports, and coastal-related development such as visitor industry facilities and ~~energy~~ energy-generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and (3) encouraging research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.

Following is a summary of the project's conformance with the ten objectives of the coastal zone management program.

1A Provide coastal recreation opportunities accessible to the public.

Not applicable, as the project site is about one mile upslope and away from the coastline.

2A Protect, preserve, and where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Archaeological sites determined to be significant will be preserved.

- 3A *Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.*

As the proposed project is located about 1 mile from the shoreline, it is not applicable to this objective.

- 4A *Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.*

As discussed under Objective ~~2A-3A~~ above, the proposed project will not have a significant adverse impact on the coastal ecosystem.

- 5A *Provide public or private facilities and improvements important to the State's economy in suitable locations.*

The development of the Keahuolu project will provide on-site and off-site infrastructure systems that will integrate with regional public and private facilities. The project's internal roadways are to connect up with existing and future developments on adjacent lands. This is consistent with regional transportation policies established by the County. The project also has an approximately ~~12-12~~-acre area reserved for a future school facility.

- 6A *Reduce hazard to life and property from tsunamis, storm waves, stream flooding, erosion, subsidence, and pollution.*

Due to its location, the project area is not exposed to tsunamis, storm waves, subsidence or stream flooding. Grading and site design at the project area will conform to all regulatory requirements and ensure that storm drainage is retained on site to minimize erosion potential for surrounding properties. As a primarily residential development, the project will not have a significant negative impact on air quality.

- 7 *Improve the development review process, communication, and public participation in the management of coastal resources and hazards.*

While the coastal element of this objective is not relevant to the project, the public participation aspect is. This EIS was specifically prepared to be as “user friendly” as possible to ensure that the project is understood by the general population.

- 8 *Stimulate public awareness, education, and participation in coastal management.*

As this project is not situated near the coastline, this objective is not applicable.

- 9 *Protect beaches for public use and recreation.*

As this project is not situated near the coastline, this objective is not applicable.

- 10 *Promote the protection, use, and development of marine and coastal resources to assure their sustainability.*

As discussed above, the proposed project will have no significant negative impact upon the coastal resources of North Kona. Therefore, it is consistent with the intent of this objective.

5.11 FEDERAL EMERGENCY MANAGEMENT AGENCY NATIONAL FLOOD INSURANCE PROGRAM

The Federal Emergency Management Agency (FEMA) assists states through disasters both natural and manmade, and has over the years undergone numerous changes. FEMA is a former independent agency that in March 2003 became a part of the new Department of Homeland Security (DHS). FEMA responds to, plans for, recovers from and mitigates against disasters.

The Congressional Act of 1803 is generally considered the first piece of disaster legislation, followed in the next century by ad hoc legislation passed more than 100 times in response to hurricanes, earthquakes, floods and other natural disasters. FEMA in 2001 had to focus on issues of national preparedness and homeland security following the terrorist attacks of September

11th. Billions of dollars of new funding were directed to FEMA to help communities face the threat of terrorism. FEMA began actively directing its “all-hazards” approach to disasters toward homeland security issues. FEMA in March 2003 joined 22 other federal agencies, programs, and offices in becoming the DHS. The new department, headed by Secretary Tom Ridge, brought a coordinated approach to national security for emergencies and disasters both natural and man-made. Today, FEMA is one of four major branches of DHS, with 2,500 full-time employees in the Emergency Preparedness and Response Directorate, and supplemented by more than 5,000 stand-by disaster reservists.

The National Flood Insurance Program (NFIP) is just one of FEMA’s mitigative measures to assist communities in time of flood disaster. The U.S. Congress in 1968 established the program to enable property owners in participating communities to purchase insurance as a protection against flood losses. States and communities must first establish floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the federal government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the federal government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. The NFIP identifies and maps the Nation’s floodplains.

In 1988, FEMA prepared ~~Federal Insurance Rate Maps (FIRMs)~~ for the island of Hawai‘i to delineate flood hazard zones and base flood elevations lines. The subject property is located about 1 mile inland from the shoreline. Per FIRM Map No. 1551660711C, the subject property is in Zone X, Other Areas Outside the 500 Year Floodplain. Flood requirements and restrictions of the program do not apply.

COUNTY OF HAWAI‘I PLANS AND CONTROLS

5.12 COUNTY OF HAWAI‘I GENERAL PLAN

In 1971, the County adopted its first comprehensive General Plan for the island of Hawai‘i. This General Plan reflected a departure from previous regional plans that had little island-wide integrative efforts and were primarily land use or physically oriented. The General Plan set forth a policy of comprehensive development for the entire island, and incorporated an awareness of the relationship between social, physical, and economic environments. The plan called for five- and ten-year comprehensive reviews and updates to maintain the dynamism and flexibility of the plan, and also, to accommodate major changes and trends that may occur. The County initiated a review of the LUPAG in 1978 that led to several changes to the map, which included the addition of an energy element and procedures for specific amendments to the General Plan.

The first comprehensive 10-year review of the General Plan occurred in the mid-1980s, and was adopted in November 1989 by the County Council. This comprehensive revision program resulted in various revisions to supporting data, individual study elements, and LUPAG and Facilities maps. The LUPAG map serves as a guide for the direction of future developments, and indicates the general location of various land uses in relation to each other. A second 10-year review of the General Plan began in 1999, and was completed in February 2005, when the plan was approved by the County Council. The plan consists of 12 major elements that are further broken down into sub-elements.

~~The following table (Table 5-5)~~ presents the goals and policies of the current Hawai‘i County General Plan and ~~discusses notes~~ by element the relationship and applicability, if any, to the petition for a boundary amendment. Project-specific commentaries are also included.

Table 5-5: County of Hawai'i General Plan

ELEMENTS OF THE HAWAI'I COUNTY GENERAL PLAN		RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable		
GENERAL PLAN – ECONOMIC		
GOALS		
Provide residents with opportunities to improve their quality of life through economic development that enhances the County's natural and social environments.		C
Economic development and improvement shall be in balance with the physical, social, and cultural environments of the island of Hawai'i.		C
Strive for diversity and stability in the economic system.		C
Provide an economic environment that allows new, expanded, or improved economic opportunities that are compatible with the County's cultural, natural, and social environment.		C
Strive for an economic climate that provides its residents an opportunity for choice of occupation.		C
Strive for diversification of the economy by strengthening existing industries and attracting new endeavors.		C
Strive for full employment.		C
Promote and develop the island of Hawai'i into a unique scientific and cultural model, where economic gains are in balance with social and physical amenities. Development should be reviewed on the basis of total impact on the residents of the County, not only in terms of immediate short run economic benefits.		C
POLICIES		
Assist in the expansion of the agricultural industry through the protection of important agricultural lands, development of marketing plans and programs, capital improvements, and continued cooperation with appropriate State and Federal agencies.		NA
Encourage the expansion of the research and development industry by working with and supporting the University of Hawai'i at Hilo and West Hawai'i, the Natural Energy Laboratory at Hawai'i Authority, and other agencies' programs that support sustainable economic development in the County of Hawai'i.		NA
Encourage the development of a visitor industry that is in harmony with the social, physical, and economic goals of the residents of the County.		NA
Require a study of the significant cultural, social and physical impacts of large developments prior to approval.		C
Encourage the sustainable development of the fishing industry, various forms of aquaculture, and other fresh and sea water-based activities.		NA
Support all levels of educational, employment and training opportunities and institutions.		NA
Capital improvements program shall improve the quality of existing commercial and industrial areas.		NA
The land, water, air, sea, and people shall be considered as essential resources for present and future generations and should be protected and enhanced through the use of economic incentives.		C
Continue to encourage the research, development and implementation of advanced technologies and processes.		NA
Support the development of high technology industries.		NA
Continue to encourage development and utilization of by-products from alternate energy conversion projects.		NA
Identify and encourage primary industries that are consistent with the social, physical, and economic goals of the residents of the County.		NA

ELEMENTS OF THE HAWAII COUNTY GENERAL PLAN	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable	
Encourage active liaison with the private sector with respect to the County's requirements for establishing businesses on the island.	NA
Encourage the development of the retirement industry.	NA
Promote a distinctive identity for the island of Hawai'i to enable government, business and travel industries to promote the County of Hawai'i as an entity unique within the state of Hawai'i.	NA
Identify the needs of the business community and take actions that are necessary to improve the business climate.	NA
Support research and development that would lead to the removal of marketing restrictions on Hawaiian fruits and other perishables.	NA
Assist in the development of a film and video industry program to market Big Island sites and coordinate film and video activities on the Big Island.	NA
Assist the further development of agriculture through the protection of important agricultural lands.	NA
Assist in the promotion of the agriculture industry whose products are recognized as being produced on the island of Hawai'i.	NA
Encourage the establishment of open farmers markets to allow local agricultural producers to market their products.	NA
Assist in cooperative marketing and distribution endeavors to expand opportunities for local agricultural products for export as well as to the local market.	NA
Encourage the further development of the overseas capacity of Hilo International Airport for the exportation of agricultural crops.	NA
Encourage the health/wellness industry.	NA
Encourage new industries that provide favorable benefit-cost relationships to the people of the County. Benefit-cost relationships include more than fiscal considerations.	NA
COURSES OF ACTION North Kona	
Resort development in the area shall be in balance with the social and physical goals as well as economic desires of the resident of the district. Necessary pollution controls shall be available prior to development. Other necessary support facilities such as transportation and nursery facilities shall also be provided.	C
Assist in the further development of agriculture, including forestry and aquaculture activities. Necessary capital improvements that will aid agriculture, such as water, should be given priority for funding.	NA
Continue to encourage development of the Natural Energy Laboratory of Hawai'i Authority as a marine research and commercial facility.	NA
Encourage and support the development of Hawai'i Community College in West Hawai'i, including the University of Hawai'i Center.	NA
Assist the fishing and boating industry through a cooperative effort with State and Federal agencies.	NA
Recognize the natural beauty of the area as a major economic and social asset. This resource should be protected through appropriate review processes when development is proposed.	C
Improve Kailua Village to maintain its viability as a popular visitor destination.	NA
Increase affordable housing opportunities in the Kailua-Kona area.	A

ELEMENTS OF THE HAWAI'I COUNTY GENERAL PLAN		RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable		
COMMENTARY: The Keahuolu project is primarily a residential community, which also has a commercial mixed-used component. The project's ability to directly influence the economy is more of a supportive role – through the provision of new housing – in an area designated for urban expansion, thereby supporting the larger economy.		
GENERAL PLAN – ENERGY		
GOALS		
Strive towards energy self-sufficiency.		C
Establish the Big Island as a demonstration community for the development and use of natural energy resources.		NA
POLICIES		
Encourage the development of alternate energy resources.		NA
Encourage the development and use of agricultural products and by-products as sources of alternate fuel.		NA
Encourage the expansion of energy research industry.		NA
Strive to educate the public on new energy technologies and foster attitudes and activities conducive to energy conservation.		C
Ensure a proper balance between the development of alternative energy resources and the preservation of environmental fitness and ecologically significant areas.		NA
Strive to assure a sufficient supply of energy to support present and future demands.		C
Provide incentives that will encourage the use of new energy sources and promote energy conservation.		C
Seek funding from both government and private sources for research and development of alternative energy resources.		NA
Coordinate energy research and development efforts of both the government and private sectors.		NA
Encourage the continuation of studies concerning the development of power that can be distributed at lower costs to consumers.		NA
Strive to diversify the energy supply and minimize the environmental impacts associated with energy usage.		C
Continue to encourage the development of geothermal resources to meet the energy needs of the County of Hawai'i.		NA
Encourage the use of solar water heating through the continuation of state tax credit programs, through the Building Code, and in County construction.		A
Encourage energy-saving design in the construction of buildings.		A
Support net-metering and other incentives for independent power producers.		A
COMMENTARY: The Keahuolu project supports improving energy efficiency. To the extent possible, the project's design is to include features that will conserve energy and water usage.		
GENERAL PLAN - ENVIRONMENTAL QUALITY		
GOALS		
Define the most desirable use of land within the County that achieves an ecological balance providing residents and visitors the quality of life and an environment in which the natural resources of the island are viable and sustainable.		C

ELEMENTS OF THE HAWAI'I COUNTY GENERAL PLAN	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable	
Maintain and, if feasible, improve the existing environmental quality of the island.	C
Control pollution.	C
POLICIES	
Take positive action to further maintain the quality of the environment.	C
Reinforce and strengthen established standards where it is necessary, principally by initiating, recommending, and adopting ordinances pertaining to the control of pollutants that affect the environment.	NA
Advise the public of environmental conditions and research undertaken on the island's environment.	C
Encourage the concept of recycling agricultural, industrial, and municipal waste material.	C
Encourage the State to establish air and water quality monitoring stations in areas of existing and potential urban growth.	NA
Encourage the State to continue aircraft noise abatement strategies at Hilo International Airport and the Kona International Airport at Keahole.	NA
Participate in watershed management projects to improve stream and coastal water quality and encourage local communities to develop such projects.	NA
Work with the appropriate agencies to adopt appropriate measures and provide incentives to control point and nonpoint sources of pollution.	C
Support programs to prevent harmful alien species from becoming established.	C
Require golf courses to implement best management practices to limit leaching of nutrients to groundwater in areas where they may affect streams or coastal ecosystems.	NA
Require implementation of the management measures contained in Hawai'i's Coastal Nonpoint Pollution Control Program as a condition of land use permitting.	NA
Review the County grading and grubbing ordinances to ensure that they adequately address potential erosion and runoff problems.	C
COMMENTARY: Although the developer is not able to directly influence governmental policies concerning environmental quality, the developer will comply with all applicable regulations.	
GENERAL PLAN - FLOODING AND OTHER NATURAL HAZARDS	
GOALS	
Protect human life.	C
Prevent damage to man-made improvements.	C
Control pollution.	C
Prevent damage from inundation.	NA
Reduce surface water and sediment runoff.	C
Maximize soil and water conservation.	C
POLICIES	
Enact restrictive land use and building structure regulations in areas vulnerable to severe damage due to the impact of wave action. Only uses that cannot be located elsewhere due to public necessity and character, such as maritime activities and the necessary public facilities and utilities, shall be allowed in these areas.	NA

ELEMENTS OF THE HAWAI'I COUNTY GENERAL PLAN	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable	
Review land use policy as it relates to flood plain, high surf, and tsunami hazard areas.	NA
Update and improve the Flood Insurance Rate Maps and other flood maps in compliance with the National Flood Insurance Program (NFIP) as needed.	NA
Any development within the Federal Emergency Management Agency designated flood plain must be in compliance with Chapter 27.	NA
Promote and provide incentives for participation in the Soil and Water Conservation Districts' conservation programs for developments on agricultural and conservation lands.	NA
The "Drainage Master Plan for the County of Hawai'i" shall be reviewed and updated to incorporate new studies and reflect newly identified priorities.	NA
Development-generated runoff shall be disposed of in a manner acceptable to the Department of Public Works, and in compliance with all State and Federal laws.	C
Develop a comprehensive program for the coordinated construction of a drainage network along a single drainage system.	NA
Explore new methods of funding for the provision of adequate drainage systems and regulating potential flood inundation areas.	NA
The County and the private sector shall be responsible for maintaining and improving existing drainage systems and constructing new drainage facilities.	C
Develop an integrated shoreline erosion management plan that ensures the preservation of sandy beaches and public access to and along the shoreline, and the protection of private and public property from flood hazards and wave damage.	NA
Continue to promote public education programs on tsunami, hurricane, storm surge, and flood hazards.	NA
Encourage grassed shoulder and swale roadway design where climate and grade are conducive.	C
Develop drainage master plans from a watershed perspective that considers non-structural alternatives, minimizes channelization, protects wetlands that serve drainage functions, coordinates the regulation of construction and agricultural operation, and encourages the establishment of floodplains as public green ways.	C
Encourage and provide incentives for agricultural operators to participate in Soil and Water Conservation District Programs.	NA
Where applicable, natural drainage channels shall be improved to increase their capacity with special consideration for the practices of proper soil conservation, and grassland and forestry management.	C
Consider natural hazards in all land use planning and permitting.	C
Discourage intensive development in areas of high volcanic hazard.	C
COURSES OF ACTION North Kona	
Drainage systems for the Keopu/Hienaloli, Waiaha, Kaumalumu and the Holualoa/Horseshoe Bend drainageways shall be studied and remapped to determine the actions necessary to mitigate negative impacts.	NA
Establish and maintain appropriate vegetative cover in high rainfall, sediment and debris producing areas.	A
Encourage the mapping of the floodways in North Kona to develop more effective flood control programs.	NA
Encourage the use of natural drainageways as greenways in the development of the region.	C

ELEMENTS OF THE HAWAI'I COUNTY GENERAL PLAN	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable	
Maintain and re-establish forest cover in mauka areas to improve the capacity of the ground to absorb heavy rainfall.	NA
COMMENTARY: The design and construction of a storm water drainage system that will retain project runoff on site is an important element of the proposed project.	
GENERAL PLAN - HISTORIC SITES	
GOALS	
Protect, restore, and enhance the sites, buildings, and objects of significant historical and cultural importance to Hawai'i.	C
Appropriate access to significant historic sites, buildings, and objects of public interest should be made available.	C
Enhance the understanding of man's place on the landscape by understanding the system of <i>ahupua'a</i> .	C
POLICIES	
Agencies and organizations, either public or private, pursuing knowledge about historic sites should keep the public apprised of projects.	C
Amend appropriate ordinances to incorporate the stewardship and protection of historic sites, buildings and objects.	NA
Require both public and private developers of land to provide historical and archaeological surveys and cultural assessments, where appropriate, prior to the clearing or development of land when there are indications that the land under consideration has historical significance.	C
Public access to significant historic sites and objects shall be acquired, where appropriate.	C
Embark on a program of restoring significant historic sites on County lands. Assure the protection and restoration of sites on other public lands through a joint effort with the State.	C
Encourage the restoration of significant sites on private lands.	C
Collect and distribute historic sites information of public interest and keep an inventory of sites.	C
Aid in the development of a program of public education concerning historic sites.	NA
Signs explaining historic sites, buildings and objects shall be in keeping with the character of the area or the cultural aspects of the feature.	C
Develop a continuing program to evaluate the significance of historic sites.	NA
Develop policies to protect Hawaiian rights as identified under judicial decisions.	C
Support the establishment of Hawaiian Heritage Corridors.	NA
All new historic sites placed on the State or Federal Register after the adoption of the general plan shall be included in the General Plan.	NA
Consider requiring Cultural Assessments for certain developments as part of the rezoning process.	C
Recognize the importance of certain natural features in Hawaiian culture by incorporating the concept of "cultural landscapes" in land use planning.	C
COURSES OF ACTION North Kona	
Establish suitable visual buffers for the Keakealaniwahine and Keolanahi complexes as a condition of rezoning or Special Management Area permits, for nearby properties.	NA

ELEMENTS OF THE HAWAI'I COUNTY GENERAL PLAN	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable	
COMMENTARY: Archaeological sites determined to be significant will be preserved.	
GENERAL PLAN - NATURAL BEAUTY	
GOALS	
Protect, preserve and enhance the quality of areas endowed with natural beauty, including the quality of coastal scenic resources.	C
Protect scenic vistas and view planes from becoming obstructed.	C
Maximize opportunities for present and future generations to appreciate and enjoy natural and scenic beauty.	C
POLICIES	
Increase public pedestrian access opportunities to scenic places and vistas.	C
Develop and establish view plane regulations to preserve and enhance views of scenic or prominent landscapes from specific locations, and coastal aesthetic values.	NA
Maintain a continuing program to identify, acquire and develop viewing sites on the island.	NA
Access easement to public or private lands that have natural or scenic value shall be provided or acquired for the public.	NA
Develop standard criteria for natural and scenic beauty as part of design plans.	NA
Consider structural setback from major thoroughfares and highways and establish development and design guidelines to protect important viewplanes.	C
Maintain a continuing program to identify exceptional trees or tree masses.	C
Protect the views of areas endowed with natural beauty by carefully considering the effects of proposed construction during all land use reviews.	C
Do not allow incompatible construction in areas of natural beauty.	C
COMMENTARY: The Keahuolu project's conceptual plan is consistent with protecting the natural beauty of the region and ensuring that the character of the project is consistent with that of the surrounding communities.	
GENERAL PLAN – NATURAL RESOURCES AND SHORELINE	
GOALS	
Protect and conserve the natural resources from undue exploitation, encroachment and damage.	C
Provide opportunities for recreational, economic, and educational needs without despoiling or endangering natural resources.	C
Protect and promote the prudent use of Hawai'i's unique, fragile, and significant environmental and natural resources.	C
Protect rare or endangered species and habitats native to Hawai'i.	C
Protect and effectively manage Hawai'i's open space, watersheds, shoreline, and natural areas.	C
Ensure that alterations to existing land forms, vegetation, and construction of structures cause minimum adverse effect to water resources, and scenic and recreational amenities and minimum danger of floods, landslides, erosion, siltation, or failure in the event of an earthquake.	C
POLICIES	

ELEMENTS OF THE HAWAI'I COUNTY GENERAL PLAN	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable	
Require users of natural resources to conduct their activities in a manner that avoids or minimizes adverse effects on the environment.	C
Encourage a program of collection and dissemination of basic data concerning natural resources.	NA
Maintain the shoreline for recreational, cultural, educational, and/or scientific uses in a manner that is protective of resources and is of the maximum benefit to the general public.	NA
Protect the shoreline from the encroachment of man-made improvements and structures.	NA
Coordinate programs to protect natural resources with other government agencies.	NA
Investigate methods of beach replenishment and sand erosion control.	NA
Promote sound management and development of Hawai'i's land and marine resources for potential economic benefit.	NA
Encourage public and private agencies to manage the natural resources in a manner that avoids or minimizes adverse effects on the environment and depletion of energy and natural resources to the fullest extent.	C
Encourage an overall conservation ethic in the use of Hawai'i's resources by protecting, preserving, and conserving the critical and significant natural resources of the County of Hawai'i.	C
Encourage the protection of watersheds, forest, brush, and grassland from destructive agents and uses.	C
An identification and inventory of forest lands suitable for watershed purposes should be conducted jointly by County, appropriate State and Federal agencies, and private landowners.	NA
Work with the appropriate State, Federal agencies, and private landowners to establish a program to manage and protect identified watersheds.	C
Encourage appropriate State agencies to review and designate forest and watershed areas into the conservation district during State land use boundary comprehensive reviews.	NA
The installation of utility facilities, highways and related public improvements in natural and wildland areas should avoid the contamination or despoilment of natural resources where feasible by design review, conservation principles, and by mutual agreement between the County and affected agencies.	C
Encourage the continued identification and inclusion of unique wildlife habitat areas of native Hawaiian flora and fauna within the Natural Area Reserve System.	C
Encourage the use of native plants for screening and landscaping.	C
Develop policies by which native Hawaiian gathering rights will be protected as identified under judicial decisions.	C
Ensure public access is provided to the shoreline, public trails and hunting areas, including free public parking where appropriate.	C
Establish a system of pedestrian access trails to places of scenic, historic, cultural, natural, or recreational values.	C
Preserve and protect significant lava tube caves.	C
Ensure that activities authorized or funded by the County do not damage important natural resources.	C

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Within the Kona high rainfall/fog-drip belt, ground disturbing activities such as excessive soil compaction and excessive removal of vegetative cover should be minimized and mitigated consistent with management strategies that encourage the retention of existing forested and pasture areas, reforestation, minimal coverage by impervious surfaces and other strategies that encourage effective infiltration to groundwater.		C
Implement Council Resolution Nos. 330-96 and 58-97 in land use approvals. ⁶		NA
Create incentives for landowners to retain and re-establish forest cover in upland watershed areas with emphasis on native forest species.		NA
COMMENTARY: Development of the project will conform with applicable Federal, State and County standards and regulations.		
GENERAL PLAN – HOUSING		
GOALS		
Attain safe, sanitary, and livable housing for the residents of the County of Hawai'i.		A
Attain a diversity of socio-economic housing mix throughout the different parts of the County.		A
Maintain a housing supply that allows a variety of choices.		A
Create viable communities with affordable housing and suitable living environments.		A
Improve and maintain the quality and affordability of the existing housing inventory.		NA
Seek sufficient production of new affordable rental and fee-simple housing in the County in a variety of sizes to satisfactorily accommodate the needs and desires of families and individuals.		A
Ensure that housing is available to all persons regardless of age, sex, marital status, ethnic background, and income.		A
Make affordable housing available in reasonable proximity to employment centers.		A
Encourage and expand home ownership opportunities for residents.		A
POLICIES		
Encourage a volume of construction and rehabilitation of housing sufficient to meet growth needs and correct existing deficiencies.		A
Encourage the construction of specially designed facilities or communities for elderly persons needing institutional care and small home care units for active elderly persons.		NA
Encourage corporations and nonprofit organizations to participate in Federal, State and private programs to provide new and rehabilitated housing for low and moderate income families.		C
Support the construction of housing for minimum wage and agricultural workers.		C
Continue to review codes and ordinances for overly stringent restrictions that may impose unnecessary hardship and adopt amendments if warranted.		C

⁶ Resolution No. 330-96 (1996): No lands in North or South Kona above 2,500 feet in elevation (except in the existing Kaloko Mauka Subdivision) should be rezoned to lot sizes less than 20 acres, without a corresponding reduction in density on contiguous lands. In Kaloko Mauka, the Council found that the concerns could be mitigated by specific rezoning conditions which would require that at least 80 per cent of the property be kept in forest cover, in the area above 3,000 feet in elevation (Resolution No. 58-97).

ELEMENTS OF THE HAWAI'I COUNTY GENERAL PLAN	RATING
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Continue to study and implement appropriate measures to curb property speculative practices that result in increased housing costs.	NA
Large industries or developments that create a demand for housing shall provide employee housing based upon a ratio to be determined by an analysis of the locality's needs.	NA
Formulate a program for housing that identifies specific mechanisms to implement the housing goals.	C
Utilize housing powers and programs to accomplish housing goals and seek out new programs and resources to address the housing needs of the residents.	A
Initiate and participate in activities with the private sector including the provision of leadership and expertise to neighborhoods and nonprofit organizations in the development of housing and community development projects.	C
Increase rental opportunities and choices in terms of quality, cost, amenity, style and size of housing, especially for low and moderate income households.	A
Support programs that improve, maintain, and rehabilitate the existing housing inventory to maintain the viability of existing communities.	NA
Accommodate the housing requirements of special need groups including the elderly, handicapped, homeless and those residents in rural areas.	NA
Investigate, develop, and promote the creation of new innovative and timely financing techniques and programs to reduce the cost of housing.	C
Encourage the use of suitable public lands for housing purposes in fee or lease.	A
Encourage the construction of homes for lease or lease with option to purchase.	C
Promote research and development of methods, programs, and activities including the review of regulatory requirements and procedures as they affect housing, to reduce the costs consistent with the public health, safety and welfare.	C
Adopt appropriate ordinances and rules as necessary to implement its housing programs and activities.	NA
Utilize financing techniques that reduce the cost of housing, including the issuance of tax-exempt bonds and the implementation of interim financing programs.	C
Ensure that adequate infrastructure is available in appropriate locations to support the timely development of affordable housing.	C
Investigate the use of the County's taxing powers as a possible means to increase the supply of affordable housing.	NA
Work with, encourage and support private sector efforts in the provision of affordable housing.	A
Encourage the development of affordable retirement communities.	NA
Vacant lands in urban areas and urban expansion areas should be made available for residential uses before additional agricultural lands are converted into residential uses.	A
Aid and encourage the development of a wide variety of housing to achieve a diversity of socio-economic housing mix.	A
COURSES OF ACTION North Kona	
Encourage the use of innovative types of housing developments, such as cluster and planned unit developments that take advantage of the steep topographic conditions.	C

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Require developments that create a demand for employee housing provide for that need.	NA
Increase affordable housing opportunities in the Kailua-Kona area.	A
COMMENTARY: One of the primary objectives of the Keahuolu project is to provide a variety of unit types and densities of affordable housing units in a location that is in close proximity to West Hawai'i employment centers, which fulfills an aspect of the General Plan's housing goals.	
GENERAL PLAN – PUBLIC FACILITIES	
GOALS	
Encourage the provision of public facilities that effectively service community and visitor needs and seek ways of improving public service through better and more functional facilities in keeping with the environmental and aesthetic concerns of the community.	NA
POLICIES	
Continue to seek ways of improving public service through the coordination of service and maximizing the use of personnel and facilities.	NA
Coordinate with appropriate State agencies for the provision of public facilities to serve the needs of the community.	NA
Develop short and long-range capital improvement programs and operating budgets for public facilities and services.	NA
Develop and adopt an Impact Fees Ordinance.	NA
Capital Improvement and Operating budgets shall reflect the goals and policies of the County General Plan.	NA
Require a six-year, long-term, capital improvements budget by County Departments and agencies that shall be reviewed for consistency with the General Plan.	NA
COMMENTARY: As the project is primarily a residential community, the General Plan's Public Facility goals and policies are not directly applicable. The project site does, however, include an approximately 12-acre area reserved for a future school facility.	
GENERAL PLAN –PUBLIC FACILITIES EDUCATION	
POLICIES	
Encourage continuous joint pre-planning of schools with the Department of Education and the University of Hawai'i to ensure coordination with roads, water, and other support facilities and considerations such as traffic and safety, and access for vehicle, bicycle, and pedestrian. Encourage master planning of present and proposed public and private institutions.	C
Encourage combining schoolyards with county parks and allow school facilities for afterschool use by the community for recreational, cultural, and other compatible uses.	C
Encourage joint community-school library facilities, where a separate community library may not be feasible, in proximity to other community facilities, affording both pedestrian and vehicular access.	NA
Encourage implementation of the Department of Education's 'Educational Specifications and Standards for Facilities.'	NA
Encourage the Hawai'i State Library system to seek alternate sites for public libraries located on the campuses of public schools.	NA
COURSES OF ACTION North Kona	

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Encourage expansion of the Holualoa school complex to meet school district needs.	NA
Encourage the State Department of Education to add facilities as the need arises.	NA
Improve basic school facilities to meet current standards.	NA
Encourage construction of a new library facility to serve the Kailua-Keauhou area.	NA
COMMENTARY: The project site includes an approximately 12-12-acre area reserved for a future school facility.	
GENERAL PLAN –PUBLIC FACILITIES PROTECTIVE SERVICES	
POLICIES	
Development of police and fire facilities should entail joint use structures when-ever feasible.	NA
The establishment of a fire/police facility shall consider site size and locations that permit quick and efficient vehicular access.	NA
Development of volunteer fire facilities with proper planning to be replaced or to co-exist with full time Fire/EMS personnel.	NA
Police headquarters shall be near the geographic center of the service area and near concentrations of commercial and industrial use.	NA
Stations in outlying districts shall be based on the population to be served and response time rather than on geographic district.	NA
Correctional facilities should emphasize rehabilitation. Establish additional rehabilitation and counseling centers, including drug and behavioral treatment facilities in secure settings, when necessary.	NA
Encourage the further development and expansion of community policing programs and neighborhood and farm watch programs in urban, rural and agricultural communities.	C
The County of Hawai'i Emergency Operations Center shall be improved to meet the requirements set forth by federal and State regulations.	NA
Maintain funding of two emergency medical helicopters.	NA
Mitigate hazards through the preparation of disaster assessment reports and appropriate follow-up on the assessment recommendations.	NA
Educate the public regarding disaster preparedness and response, especially proper responses for sudden impact hazards.	C
Encourage the State to evaluate the disaster shelters' ability to withstand various natural disasters.	NA
Consider the proximity to fire stations in approving any rezoning to permit urban development.	C
The Fire Department, in cooperation with other related governmental agencies and the involved land owners, shall prepare a fire protection and prevention plan for forest reserves and other natural areas.	NA
COURSES OF ACTION North Kona	
Service facilities shall be improved to meet needs.	NA
GENERAL PLAN –PUBLIC FACILITIES HEALTH AND SANITATION	
POLICIES	
Encourage the development of new health care facilities or the improvement of existing health care facilities to serve the needs of Hamakua, North and South Kohala, and North and South Kona.	NA

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Develop and implement a cemeteries master plan for the siting of future cemeteries.	NA
Appropriately designed and cost-effective solid waste transfer station sites shall be located in areas of convenience and easy access to the public.	NA
Encourage the State to continue operation of the rural hospitals.	NA
Encourage the establishment or expansion of community health centers and rural health clinics.	NA
Continue to encourage programs such as recycling to reduce the flow of refuse deposited in landfills.	C
Investigate the possibility of developing new landfill sites on the island.	NA
Encourage the full development and implementation of green waste recycling program.	C
COURSES OF ACTION North Kona	
New privately owned cemetery sites to serve future needs shall be sought.	NA
COMMENTARY: The project's compliance with public facility policies are generally limited to the programs that can be implemented within the project site, including solid waste collection, wastewater treatment, neighborhood watch, and fire prevention.	
GENERAL PLAN - PUBLIC UTILITIES	
GOALS	
Ensure that properly regulated, adequate, efficient and dependable public and private utility services are available to users.	C
Maximize efficiency and economy in the provision of public utility services.	C
Design public utility facilities to fit into their surroundings or concealed from public view.	C
POLICIES	
Public utility facilities shall be designed to complement adjacent land uses and shall be operated to minimize pollution or disturbance.	C
Provide utilities and service facilities that minimize total cost to the public and effectively service the needs of the community.	C
Utility facilities shall be designed to minimize conflict with the natural environment and natural resources.	C
Improvement of existing utility services shall be encouraged to meet the needs of users.	C
Encourage the clustering of developments in order to reduce the cost of providing utilities.	C
Develop short and long range capital improvement programs and plans for public utilities within its jurisdiction that are consistent with the General Plan.	NA
COMMENTARY: Master planning the Keahuolu community enables the provision of utilities to be carefully coordinated in the development of the project, which helps to lower costs and maximize connectivity with the regional system.	
GENERAL PLAN - PUBLIC UTILITIES - WATER	
POLICIES	
Water system improvements shall correlate with the County's desired land use development pattern.	C
All water systems shall be designed and built to Department of Water Supply standards.	C
Improve and replace inadequate systems.	NA

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Water sources shall be adequately protected to prevent depletion and contamination from natural and man-made occurrences or events.	C
Water system improvements should be first installed in areas that have established needs and characteristics, such as occupied dwellings, agricultural operations and other uses, or in areas adjacent to them if there is need for urban expansion	C
A coordinated effort by County, State and private interests shall be developed to identify sources of additional water supply and be implemented to ensure the development of sufficient quantities of water for existing and future needs of high growth areas and agricultural production.	C
The fire prevention systems shall be coordinated with water distribution systems in order to ensure water supplies for the fire protection purposes.	C
Develop and adopt standards for individual water catchment units.	NA
Cooperate with the State Department of Health to develop standards and/or guidelines for the construction and use of rainwater catchment systems to minimize the intrusion of any chemical and microbiological contaminants.	NA
Cooperate with appropriate State and Federal agencies and the private sector to develop, improve and expand agricultural water systems in appropriate areas on the island.	NA
Promote the use of ground water sources to meet State Department of Health water quality standards.	C
Continue to participate in the United States Geological Survey's exploratory well drilling program.	NA
Seek State and Federal funds to assist in financing projects to bring the County into compliance with the Safe Drinking Water Act.	NA
Develop and adopt a water master plan that will consider water yield, present and future demand, alternative sources of water, guidelines and policies for the issuing of water commitments.	C
Expand programs to provide for agricultural irrigation water.	NA
COURSES OF ACTION North Kona	
Continue to pursue groundwater source investigation, exploration and development in areas that would provide for anticipated growth and an efficient and economic system operation.	C
Continue to evaluate growth conditions to coordinate improvements as required to the existing water system in accordance with the North Kona Water System Master Plan.	C
Explore and develop a well in Waiaha.	NA
COMMENTARY: The Keahuolu project includes the privately funded development of a new regional well, storage reservoirs, and a transmission system that will not only serve the project but will also provide linkages to the regional system.	
GENERAL PLAN – PUBLIC UTILITIES -TELECOMMUNICATIONS	
POLICIES	
Encourage underground telephone lines where they are economically and technically feasible.	C
Work with the telecommunications industry to increase the availability of emergency telephones throughout the island.	NA
Develop standards for the construction of wireless telecommunication facilities.	NA
Work closely with the telephone company to provide all users with efficient service.	C

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GENERAL PLAN – PUBLIC UTILITIES - ELECTRICITY	
POLICIES	
Power distribution shall be placed underground when and where practical. Encourage developers of new urban areas to place utilities underground.	C
Route selection for high voltage transmission lines should include consideration for setbacks from major thoroughfares and residential areas. Where feasible, delineate energy corridors for such high voltage transmission lines.	C
Continue to advise the electrical utility companies on the future revisions of their comprehensive Integrated Resource Plans.	C
Conform to safety standards as established by appropriate regulatory authorities.	C
GENERAL PLAN – PUBLIC UTILITIES - GAS	
POLICIES	
Gas storage facilities shall be located to minimize danger to commercial and residential areas.	C
COMMENTARY: If it is determined that a gas storage facility is needed at the project site, it will comply with this policy.	
GENERAL PLAN – PUBLIC UTILITIES SEWER	
POLICIES	
The "Sewerage Study for All Urban and Urbanizing Areas of the County of Hawai'i, State of Hawai'i," December 1970, and the "Water Quality Management Plan for the County of Hawai'i," December 1980, shall be updated and used as guides for the general planning of sewerage disposal systems.	C
Private systems shall be installed by land developers for major resort and other developments along shorelines and sensitive higher inland areas, except where connection to nearby treatment facilities is feasible and compatible with the County's long-range plans, and in conformance with State and County requirements.	C
Immediate steps should be taken to designate treatment plant sites, sewerage pump station sites, and sewer easements according to the facility plans to facilitate their acquisition.	C
Continue to seek State and Federal funds to finance the construction of proposed sewer systems and improve existing systems.	NA
Plans for wastewater reclamation and reuse for irrigation and biosolids composting (remaining solids from the treatment of wastewater is processed into a reusable organic material) shall be utilized where feasible and needed.	C
Require major developments to connect to existing sewer treatment facilities or build their own.	C
COURSES OF ACTION North Kona	
Expand the existing sewer collection system.	C
Upgrade the Kealakehe Wastewater Treatment Plan to produce tertiary (R-1) quality effluent.	NA
COMMENTARY: The Keahuolu project will construct wastewater transmission lines that will eventually link with the Kealakehe Wastewater Treatment PlantWWTP. The development of Alternative B or Alternative C would require the development of additional capacity at the Kealakehe WWTP.	
GENERAL PLAN RECREATION	
GOALS	

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Provide a wide variety of recreational opportunities for the residents and visitors of the County.	C
Maintain the natural beauty of recreation areas.	C
Provide a diversity of environments for active and passive pursuits.	C
POLICIES	
Strive to equitably allocate facility-based parks among the districts relative to population, with public input to determine the locations and types of facilities.	C
Improve existing public facilities for optimum usage.	NA
Recreational facilities shall reflect the natural, historic, and cultural character of the area.	C
The use of land adjoining recreation areas shall be compatible with community values, physical resources, and recreation potential.	C
Develop short and long range capital improvement programs and plans for recreational facilities that are consistent with the General Plan.	NA
The "County of Hawai'i Recreation Plan" shall be updated to reflect newly identified recreational priorities.	NA
Facilities for compatible multiple uses shall be provided.	C
Provide facilities and a broad recreational program for all age groups, with special considerations for the handicapped, the elderly, and young children.	C
Coordinate recreational programs and facilities with governmental and private agencies and organizations. Innovative ideas for improving recreational facilities and opportunities shall be considered.	C
Develop local citizen leadership and participation in recreation planning, maintenance and programming.	C
Adopt an on-going program of identification, designation, and acquisition of areas with existing or potential recreational resources, such as land with sandy beaches and other prime areas for shoreline recreation in cooperation with appropriate governmental agencies.	NA
Public access to the shoreline shall be provided in accordance with an adopted program of the County of Hawai'i.	NA
Develop a network of pedestrian access trails to places of scenic, historic, natural or recreational values. This system of trails shall provide at a minimum, an islandwide route connecting major parks and destinations.	C
Establish a program to inventory ancient trails, cart roads and old government roads on the island in coordination with appropriate State agencies.	NA
Develop facilities and safe pathway systems for walking, jogging and biking activities.	A
Develop a recreation information dissemination system for the public's use.	NA
Revise the ordinance requiring subdivisions to provide land area for park and recreational use or pay a fee in lieu thereof.	NA
Develop and adopt an Impact Fees Ordinance.	NA
Consider alternative sources of funding for recreational facilities.	NA
Develop best management practices for the development of golf courses in coordination with developers, State Department of Health, and other government agencies.	NA
Provide access to public hunting areas.	NA

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COURSES OF ACTION North Kona	
Encourage the development of community and district recreational facilities, a gymnasium and community center with easy access for residents.	NA
Encourage the development of Ali'i Drive within the Kailua Village area as a pedestrian mall with open space areas for passive recreation.	NA
Improve facilities at Laaloa Bay Beach Park and Kahaluu Beach Park.	NA
Implement the development of the Kailua Park (Old Kona Airport) as a major regional or district park.	NA
Encourage the development of a major multi-purpose regional recreational and sports complex.	NA
Acquire, and/or encourage the development of additional public shoreline recreation areas.	NA
Establish public access to and the development of shoreline regions along the North Kona Coast in areas such as Keawaiki, Kiholo Bay, Kaupulehu, Kukio and Kapapa Bays, Kua Bay, Kaho-iawa, Makalawena, and Honokohau.	NA
Encourage the State to continue with the establishment of Kekaha Kai State Park reaching into Mahaiula, Awakee, and Maniniowali Ahupauaa.	NA
Protect the marine life at Kahaluu Bay.	NA
Protect Opa'eula, Kaloko, and Honokohau (Aimakapa) Ponds as natural areas.	NA
Encourage the development of historic trails.	NA
Develop a municipal golf course.	NA
Encourage the establishment of historic park at Kamo'a Point.	NA
Encourage the acquisition and establishment of the summit area of Hualālai as a wilderness park.	NA
Increase <i>mauka</i> park lands.	A
COMMENTARY: The Keahuolu project includes the development of neighborhood parks, open spaces and green spaces.	
GENERAL PLAN – TRANSPORTATION	
GOALS	
Provide a transportation system whereby people and goods can move efficiently, safely, comfortably and economically.	C
Make available a variety of modes of transportation that best meets the needs of the County.	C
POLICIES	
A framework of transportation facilities that will promote and influence desired land use shall be established by concerned agencies.	C
The agencies concerned with transportation systems shall provide for present traffic and future demands, including the programmed development of mass transit programs for high growth areas by both the private and public sectors.	NA
The improvement of transportation service shall be encouraged.	C
Consider the provision of adequate transportation systems to enhance the economic viability of a given area.	C
Develop a comprehensive, islandwide multi-modal transportation plan that identifies the location and	NA

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operation of automobile, mass transit, bicycle and pedestrian systems, in coordination with appropriate Federal and State agencies.	
Work with various non-profit agencies to coordinate transportation opportunities.	NA
GENERAL PLAN – TRANSPORTATION ROADWAYS	
GOALS	
Provide a system of roadways for the safe, efficient and comfortable movement of people and goods.	A
Provide an integrated State and County transportation system so that new major routes will complement and encourage proposed land policies.	A
POLICIES	
Encourage the programmed improvement of existing roadways by both public and private sectors.	C
Investigate various methods of funding road improvements, including private sector participation, to meet the growing transportation needs of the island.	C
Encourage the State to establish a continuous State highway system connecting the County's major airports and harbors.	NA
Support the development of programs to identify and improve hazardous and substandard sections of roadway and drainage problems.	NA
Coordinate with appropriate Federal and State agencies for the funding of transportation projects for areas of anticipated growth.	C
Consider the development of alternative means of transportation, such as mass transit, bicycle and pedestrian systems, as a means to increase arterial capacity.	C
There shall be coordinated planning of Federal, State, and County street systems to meet program goals of the other elements such as historic, recreational, environmental quality, and land use.	C
Provisions for on-street parking shall be incorporated into the design of street systems.	C
Encourage the State Department of Transportation to establish special scenic routes within and between communities.	C
Transportation and drainage systems shall be integrated where feasible.	C
Support the development of an efficient transit route between east and west Hawai'i.	NA
Adopt street design standards that accommodate, where appropriate, flexibility in the design of streets to preserve the rural character of an area and encourage a pedestrian-friendly design, including landscaping and planted medians.	C
Develop minimum street standards for homestead and other currently substandard roadways that are offered for dedication to the county to ensure minimal levels of public safety.	C
Encourage the development of walkways, jogging, and bicycle paths within designated areas of the community.	C
Explore means and opportunities to enhance the shared use of the island's roadways by pedestrians and bicyclists, in coordination with appropriate government agencies and organizations.	C
The Bikeway Plan for the County of Hawai'i (1979) shall be updated to include the development of a safe and usable bikeway system throughout the island.	C

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Work in conjunction with the State to establish a clear agreement of the ownership and maintenance of the old homestead roads.	NA
Develop short and long range capital improvement programs and plans for transportation that are consistent with the General Plan.	NA
COURSES OF ACTION North Kona	
Develop a roadway network circulation plan in cooperation with the State Department of Transportation and affected communities. Upon adoption of the plan, the plan recommendations shall be incorporated on the zone district maps.	C
Encourage the State to widen Queen Ka'ahumanu Highway as necessary to accommodate increases in traffic flows, in particular between Kona International Airport and Keāhole and Kailua-Kona.	C
Widen Palani Road between the proposed Keanalehu (Waena) Drive and the Queen Ka'ahumanu Highway or construct the proposed Palani Bypass Highway.	C
Encourage the State to extend Kealakehe Parkway mauka to connect with the Māmalahoa Highway.	NA
Construct the following north-south collector roadways from Palani Drive and extending north to the proposed University Drive: 1) Ane Keohokalole Highway (Mid-level Road); 2) Keanalehu (Waena Drive); and 3) Kealaka'a Street.	C
Construct the proposed University Drive between the Māmalahoa and Queen Ka'ahumanu Highways.	NA
Widen Hina Lani Drive to four lanes between the Queen Ka'ahumanu Highway to the proposed Ane Keohokalole Highway.	NA
Construct the proposed Shore Drive from the Old Kona Airport Park to the Kealakehe Drive intersection.	NA
Construct the Kahului-Keauhou Parkway (Ali'i Highway) from Queen Ka'ahumanu Highway to Keauhou.	NA
Construct a scenic road from Keauhou above the Kealakekua cliffs to Napoopoo.	NA
Provide vertical connectors from Ali'i Drive to Kuakini Highway.	NA
Improve that portion of the Mamalahoa Highway extending from the North Kona to the Ka'u Districts.	NA
Support the installation of suitable bikeways and/or jogging paths.	C
Develop a roadway circulation plan for the area between Palani Road and Kamehameha III Road, in cooperation with the State Department of Transportation, Federal Highway Administration, and the affected communities.	NA
Extend Lako Street to connect to Ali'i Drive.	NA
Work with the State and the adjacent landowners in establishing the old railroad right-of-way as pedestrian and bicycle right-of-way.	NA
GENERAL PLAN – TRANSPORTATION TERMINALS: AIRPORTS & HARBORS	
GOALS	
Provide transportation terminals and related facilities for the safe, efficient and comfortable movement of people and goods.	NA
POLICIES	
Encourage the programmed improvement of existing terminals, including adequate provisions for control of pollution and appropriate and adequate covered storage facilities for agricultural products.	NA

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The State Department of Transportation should continue to implement its plans for transportation terminals and related facilities to promote and influence desired land use policies.	NA
Transportation terminals should be developed in conjunction with the different elements of the overall transportation system.	NA
Encourage maximum use of the island's airport and harbor facilities.	NA
Encourage the development, maintenance, and enhancement of Hilo and Kawaihae Harbors as detailed within the State's Hawai'i Commercial Harbors 2020 Master Plan.	NA
Support the State's objectives to acquire rights within the runway clear-zones, limit heights within approach zones, and restrict noise-sensitive uses within designated noise contours determined by the State.	NA
COURSES OF ACTION North Kona	
Future land uses in the vicinity of the Kona International Airport at Keahole should be compatible with the anticipated aircraft noise exposure levels for that vicinity.	NA
The State Department of Transportation should continue to improve and expand Kona International Airport at Keahole in accordance with the recommendations of the Keāhole-Kona International Airport Master Plan Update Study (1997).	NA
Encourage the State to renovate the Kailua-Kona Wharf or to seek alternative facilities to accommodate the cruise ship industry.	NA
GENERAL PLAN – TRANSPORTATION MASS TRANSIT	
GOALS	
Provide residents with a variety of public transportation systems that are affordable, efficient, accessible, safe, environmentally friendly, and reliable.	NA
POLICIES	
Improve the integration of transportation and land use planning in order to optimize the use, efficiency, and accessibility of existing and proposed mass transportation systems.	C
Support and encourage the development of alternative modes of transportation, such as enhanced bus services and bicycle paths.	C
Incorporate, where appropriate, bicycle routes, lanes, and paths within road rights-of-way in conformance with The Bikeway Plan for the County of Hawai'i.	C
Provisions to enhance the mobility of minors, non-licensed adults, low-income, elderly, and people with disabilities shall be made.	NA
COMMENTARY: The Keahuolu project accommodates future transit stops along the planned Ane Keohokalole Highway. The conceptual plans promote a walkable, bikeable, livable mixed-used community with high density residential development within a quarter-mile walking distance of bus stops. The internal roadways are to make feasible connections with existing and future developments on adjacent lands. →	
GENERAL PLAN - LAND USE	
GOALS	
Designate and allocate land uses in appropriate proportions and mix and in keeping with the social, cultural, and physical environments of the County.	C
Protect and encourage the intensive and extensive utilization of the County's important agricultural lands.	C

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Protect and preserve forest, water, natural and scientific reserves and open areas.	C
POLICIES	
Zone urban types of uses in areas with ease of access to community services and employment centers and with adequate public utilities and facilities.	C
Promote and encourage the rehabilitation and use of urban areas that are serviced by basic community facilities and utilities.	C
Allocate appropriate requested zoning in accordance with the existing or projected needs of neighborhood, community, region and County.	C
Conduct a review and re-evaluation of the real property tax structure to assure compatibility with land use goals and policies.	NA
Incorporate innovations such as the "zone of mix" and "mixed use zones" into the Zoning Code.	NA
Encourage the development and maintenance of communities meeting the needs of its residents in balance with the physical and social environment.	C
Establish a program of continuing review of the Zoning Code in light of emerging new industries and technologies and incorporate revisions to land use regulations as necessary.	NA
Develop community development or regional plans for all of the districts or combinations of districts in cooperation with community residents and periodically review and amend these documents as necessary or as mandated.	C
Ensure that condominium property regimes (CPR) comply with the requirements of the Zoning Code, Subdivision Control Code and other applicable rules and regulations.	NA
Encourage urban development within existing zoned areas already served by basic infrastructure, or close to such areas, instead of scattered development.	C
COMMENTARY: The reclassification of the subject property from the State Agricultural District to the State Urban District and a change in County zoning would be in accordance with the existing and projected needs of the neighborhood, community, region, and the County.	
GENERAL PLAN - LAND USE AGRICULTURE	
GOALS	
Identify, protect and maintain important agriculture lands on the island of Hawai'i.	C
Preserve the agricultural character of the island.	C
Preserve and enhance opportunities for the expansion of Hawai'i's Agricultural Industry.	C
POLICIES	
Implement new approaches to preserve important agricultural land.	NA
Assist in the development of basic resources such as water, roads, transportation, and distribution facilities for the agricultural industry.	NA
Assist other State agencies, such as the University of Hawai'i, College of Tropical Agriculture and Human Resources, University of Hawai'i at Hilo, College of Agriculture, Forestry and Natural Resources Management, Department of Business, Economic Development and Tourism, Office of Planning, Department of Land and Natural Resources and Department of Agriculture, on programs that aid agriculture.	NA
Agricultural land may be used as one form of open space or as green belt.	NA

ELEMENTS OF THE HAWAI'I COUNTY GENERAL PLAN	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable	
Coordinate and encourage efforts to solve the problems of the agricultural industry in the County of Hawai'i.	NA
In order to minimize the potential conflicts between agricultural and non-agricultural uses, standards and guidelines for the establishment of well defined buffer areas as part of new, non-agricultural developments that are located adjacent to important agricultural lands shall be developed.	NA
Land zoned for use in the Rural District shall be expanded, where appropriate.	NA
Develop subdivision standards that make a distinction between agricultural and urban land uses.	NA
Designate, protect and maintain important agricultural lands from urban encroachment.	C
Ensure that development of important agricultural land be primarily for agricultural use	C
Support the development of private and State agricultural parks to make agricultural land available for agricultural activities.	NA
Assist in the development of agriculture.	NA
Assist in the development of water for agricultural purposes.	NA
Investigate possibilities to prevent non-agricultural uses that could interfere with potential or existing agricultural activities on important agricultural lands.	NA
Support efforts to provide tax relief and other incentives to enhance competitive capabilities of commercial farms and ranches, thereby insuring long-term preservation, enhancement, and expansion of viable agricultural lands.	NA
Ensure that condominium property regimes (CPR) on agricultural-designated lands comply with the requirements of the Zoning Code and other applicable laws, rules and regulations.	NA
Farm labor housing projects shall be developed in a manner that minimizes the use of important agricultural lands and is consistent with the character of surrounding land uses.	NA
Encourage, where appropriate, the establishment of visitor-related uses and facilities that directly promote the agriculture industry.	NA
Important agricultural lands shall not be rezoned to parcels too small to support economically viable farming units.	C
Discourage speculative residential development on agricultural lands.	C
Encourage other compatible economic uses that complement existing agricultural and pastoral activities.	C
COURSES OF ACTION North Kona	
Protect important agricultural lands within the Kona Coffee Belt from urban encroachment through the use of zoning and other mechanisms.	C
Encourage the University of Hawai'i at Hilo to accelerate research on agricultural, aquaculture and forestry products that are or could be of economic value to Kona.	NA
Encourage buffer zones or compatible uses between important agricultural land and adjacent uses of land.	NA
COMMENTARY: The Keahuolu property is classified in the State Agricultural District, but is of limited agricultural productivity due to its poor soil quality. It is designated by the State and County for urban expansion and a smaller portion is designated Low Density Urban by the County. Therefore, its proposed reclassification to the Urban District is not anticipated to have a significant impact upon agricultural productivity in the region.	
GENERAL PLAN - LAND USE COMMERCIAL DEVELOPMENT	

ELEMENTS OF THE HAWAI'I COUNTY GENERAL PLAN	RATING
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GOALS	
Provide for commercial developments that maximize convenience to users.	C
Provide commercial developments that complement the overall pattern of transportation and land usage within the island's regions, communities, and neighborhoods.	C
POLICIES	
Urban renewal, rehabilitation, and/or redevelopment programs shall be undertaken in cooperation with communities, businesses and governmental agencies	NA
Commercial facilities shall be developed in areas adequately served by necessary services, such as water, utilities, sewers, and transportation systems. Should such services not be available, the development of more intensive uses should be in concert with a localized program of public and private capital improvements to meet the expected increased needs.	C
Distribution of commercial areas shall meet the demands of neighborhood, community and regional needs.	C
Existing strip development shall be converted to more appropriate uses when and where it is feasible.	NA
Encourage the concentration of commercial uses within and surrounding a central core area.	C
The development of commercial facilities should be designed to fit into the locale with minimal intrusion while providing the desired services. Appropriate infrastructure and design concerns shall be incorporated into the review of such developments.	C
Applicable ordinances shall be reviewed and amended as necessary to include considerations for urban design, aesthetic quality and the protection of amenities in adjacent areas through landscaping, open space and buffer areas.	C
Require developers to provide basic infrastructure necessary for development.	C
Encourage commercial areas to develop on an axis perpendicular to the highway.	C
COURSES OF ACTION North Kona	
Controls to prevent speculative practices on commercially zoned lands may be established.	NA
Implementation of programs to correct existing deficiencies shall be undertaken.	NA
Appropriately zoned lands shall be provided as the need arises.	NA
COMMENTARY: The proposed commercial floor area for the project is consistent with the goals, policies and courses of action stated above.	
GENERAL PLAN - LAND USE - INDUSTRIAL	
GOALS	
Designate and allocate industrial areas in appropriate proportions and in keeping with the social, cultural, and physical environments of the County.	NA
Promote and encourage the rehabilitation of industrial areas that are serviced by basic community facilities and utilities.	NA
POLICIES	
Support the creation of industrial parks in appropriate locations as an alternative to strip development.	NA
Achieve a broader diversification of local industries by providing opportunities for new industries and strengthening existing industries.	NA

ELEMENTS OF THE HAWAI'I COUNTY GENERAL PLAN	RATING
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Locate industrial areas convenient to transportation facilities, and provide a variety of industrial zoned districts and lot sizes, depending on the needs of the industries and the communities.	NA
Improve the aesthetic quality of industrial sites and protect amenities of adjacent areas by requiring landscaping, open spaces, buffer zones, and design guidelines.	NA
Industrial development shall be located in areas adequately served by transportation, utilities, and other essential infrastructure.	NA
Provide flexibility within the Zoning Code to accommodate emerging new industries.	NA
Industrial-commercial mixed use districts shall be provided in appropriate locations.	NA
Require developers to provide basic infrastructure necessary for development.	NA
COURSES OF ACTION North Kona	
Identify sites suitable for future industrial activities.	NA
Additional industrial acreage should be provided at the Kona International Airport at Keāhole for support facilities for the airport.	NA
Industrial development should be in harmony with surrounding uses and the environment.	NA
Industrial-commercial mixed-use districts may be provided in appropriate locations.	NA
Service oriented Limited Industrial and/or Industrial-Commercial uses may be permitted in the Kainaliu-Honalo area although the area is not currently identified on the LUPAG map.	NA
COMMENTARY: No industrial land uses are proposed within the Keahuolu project site.	
GENERAL PLAN – LAND USE - MULTIPLE RESIDENTIAL	
GOALS	
To provide for multiple residential developments that maximize convenience for its occupants.	C
To provide for suitable living environments that accommodate the physical, social and economic needs of the island residents.	C
To enhance the overall quality of life in our residential communities.	C
POLICIES	
Appropriately zoned lands shall be allocated as the demand for multiple residential dwellings increases. These areas shall be allocated with respect to places of employment, shopping facilities, educational, recreational and cultural facilities, and public facilities and utilities.	C
Incorporate reasonable flexibility in applicable codes and ordinances to achieve a diversity of socio-economic housing mix.	C
Encourage flexibility in the design of residential sites, buildings and related facilities to achieve a diversity of socio-economic housing mix and innovative means of meeting the market requirements.	C
The rehabilitation and/or utilization of multiple residential areas shall be encouraged.	C
To assure the use of multiple residential zoned areas and to curb speculation and resale of undeveloped lots only, the County may impose incremental and conditional zoning, which shall be based on performance requirements.	C
Applicable codes and ordinances shall be reviewed and amended as necessary to include consideration for urban design, and aesthetic quality through landscaping, open space, and buffer areas.	C

ELEMENTS OF THE HAWAI'I COUNTY GENERAL PLAN	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable	
Support the rezoning of those multiple residentially zoned lands that are used for other purposes to a more appropriate zoning designation.	C
Require developers to provide basic infrastructure necessary for development.	C
COURSES OF ACTION North Kona	
Re-evaluation of existing zoned areas and re-allocation of lands in appropriate locations shall be undertaken.	C
Appropriately zoned lands shall be allocated as the need for multiple residential development increases.	C
COMMENTARY: The majority of the Keahuolu property is designated as Urban Expansion with the remainder as Low-Density Residential by the General Plan's Land Use Pattern Allocation Guide. The ultimate configuration of the units is not yet determined as-at the time of this writing. However, the conceptual plans provide multi-unit high density development near the core of the community, which could be a mixed-use configuration with commercial floor area.	
GENERAL PLAN – LAND USE - SINGLE-FAMILY RESIDENTIAL	
GOALS	
To maximize choices of single-family residential lots and/or housing for residents of the County.	C
To ensure compatible uses within and adjacent to single-family residential zoned areas.	C
To rehabilitate and/or rebuild deteriorating single-family residential areas.	NA
To provide single-family residential areas conveniently located to public and private services, shopping, other community activities and convenient access to employment centers that takes natural beauty into consideration.	C
To enhance the overall quality of life in our residential communities.	C
POLICIES	
To assure the orderly use of single-family residential zoned areas and to curb speculation and resale of undeveloped lots, the County may impose incremental and conditional zoning, which would be based on performance requirements. This is to assure that a certain percentage of buildings will be constructed.	C
Encourage innovative uses of land with respect to geologic and topographic conditions through the use of residential cluster and planned unit development.	C
Encourage and coordinate with the State in providing fee simple and leasehold single-family residential lots to the residents through State and/or County Housing Programs.	C
Incorporate reasonable flexibility in codes and ordinances to achieve a diversity of socio-economic housing mix and to permit aesthetic balance between single-family residential structures and open spaces.	C
Re-evaluate existing undeveloped single-family residential zoned areas and reallocate zoned lands in appropriate locations.	NA
Designate and allocate single-family residential zoned lands at varying densities for future use in accordance with the needs of the communities and the stated goals, policies, and standards.	C
Rural-style residential-agricultural developments, such as new small scale rural communities or extensions of existing rural communities, shall be encouraged in appropriate locations.	NA
Review and amend land use ordinances and codes to include considerations for rural-style residential subdivisions in appropriate locations. Standards and criteria for the establishment of these areas shall be developed.	NA
Require developers to provide basic infrastructure necessary for development.	A

ELEMENTS OF THE HAWAI'I COUNTY GENERAL PLAN	RATING
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COURSES OF ACTION North Kona	
Encourage the development of appropriately located and serviced privately-held and State-owned lands for houselots.	A
Improve and develop roadways, water and sewerage systems, and other basic facilities necessary to encourage development of lands suitable for residential use.	A
Encourage the concentration of residential structures to avoid strip residential development	A
Encourage the use of more innovative types of housing development, such as zones of mix and cluster and planned unit developments.	A
COMMENTARY: The Keahuolu project may include a variety of housing unit types and densities with the emphasis on providing the maximum number of affordable housing units in the shortest amount of time. The Keahuolu project is consistent with and is intended to implement the General Plan's housing policies.	
GENERAL PLAN - LAND USE RESORTS	
GOALS	
Maintain an orderly development of the visitor industry.	NA
Provide for resort development that maximizes conveniences to its users and optimizes the benefits derived by the residents of the County.	NA
Ensure that resort developments maintain the cultural and historic, social, economic, and physical environments of Hawai'i and its people.	NA
POLICIES	
The County may impose incremental and conditional zoning that would be based on performance requirements.	NA
Promote and encourage the rehabilitation and the optimum utilization of resort areas that are presently serviced by basic facilities and utilities.	NA
Lands currently designated Resort should be utilized before new resorts are allowed in undeveloped coastal areas.	NA
Zoning of resort areas shall be granted when the proposed development is consistent with and incorporates the stated goals, policies and standards of the General Plan.	NA
Continue to seek funds from the State Capital Improvement Program to help develop visitor destination areas in accordance with the County's General Plan.	NA
Designate and allocate future resort areas in appropriate proportions and in keeping with the social, economic, and physical environments of the County.	NA
Evaluate resort areas and the areas surrounding existing resorts to insure that viable quality resorts are developed and that the surrounding area contributes to the quality, ambience and character of the existing resorts.	NA
Encourage the visitor industry to provide resort facilities that offer an educational experience of Hawai'i as well as recreational activities.	NA
Coastal resort developments shall provide public access to and parking for beach and shoreline areas.	NA
Re-evaluate existing undeveloped resort designated and/or zoned areas and reallocate these lands in appropriate locations.	NA

ELEMENTS OF THE HAWAI'I COUNTY GENERAL PLAN	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable	
Require developers to provide the basic infrastructure necessary for development.	NA
COURSES OF ACTION North Kona	
Discourage strip resort development along Ali'i Drive	NA
Re-evaluate some areas currently zoned for resort use.	NA
Improve and provide adequate roadways, sewer and water systems, and other basic amenities in all areas where higher density uses are allowed.	NA
COMMENTARY: The proposed project does not include a resort component.	
GENERAL PLAN - LAND USE - OPEN SPACE	
GOALS	
Provide and protect open space for the social, environmental, and economic well-being of the County of Hawai'i and its residents.	C
Protect designated natural areas.	C
POLICIES	
Open space shall reflect and be in keeping with the goals, policies, and standards set forth in the other elements of the General Plan.	C
Open space in urban areas shall be established and provided through zoning and subdivision regulations.	C
Encourage the identification, evaluation, and designation of natural areas.	C
Zoning, subdivision and other applicable ordinances shall provide for and protect open space areas.	C
Amend the Zoning Code to create a category for lands that should be kept in a largely natural state, but that may not be in the Conservation District, such as certain important viewplanes, buffer areas, and very steep slopes.	NA
COMMENTARY: The Keahuolu project provides neighborhood parks and open space and the preservation of archeological areas. These elements are consistent with the intent of the General Plan's open space policies.	
GENERAL PLAN - LAND USE - PUBLIC LANDS	
GOALS	
Utilize publicly owned lands in the best public interest and to the maximum benefit for the greatest number of people.	A
Acquire lands for public use to implement policies and programs contained in the General Plan.	A
POLICIES	
Encourage uses of public lands that will satisfy specific public needs, such as housing, recreation, open space and education.	A
Encourage the adoption of State programs for State lands consistent with the General Plan.	C
State and County Capital Improvement Programs should continue to be coordinated.	NA
A sub-classification, University use, shall continue to be utilized, permitting the primary institutional and numerous supportive and accessory uses required for establishing and/or expanding a public university. Its designation shall continue to be shown on the Land Use Pattern Allocation Guide map.	NA

ELEMENTS OF THE HAWAI'I COUNTY GENERAL PLAN	RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable	
Support the U.S. Department of Interior, National Park Service's expansion plans for the Hawai'i Volcanoes, Puukohola and Puuhonua O Honaunau National Historic Parks.	NA
Encourage the State to continue the Villages of La'i 'Opua project at Kealakehe.	C
COMMENTARY: Approximately 172 acres of the 272 acres of the Keahuolu project was a part of the Villages of La'i 'Opua project at Kealakehe and embodies the goals and policies for use of public lands to continue the Villages of La'i 'Opua project and satisfy specific public needs, such as housing, recreation, open space and education.	

5.13 KEAHOLE TO KAILUA DEVELOPMENT PLAN

The County initiated in July 1988 the Keahole to Kailua Development Plan study (Keahole Plan) with the intent of developing the area. The Keahole Plan serves as an implementing tool for the General Plan of the County and as a sub-regional plan and developmental framework for the West Hawai'i Plan.

The County contracted R.M. Towill Corporation to prepare the Keahole Plan, and in 1990 adopted it to serve as a guide for future infrastructure and land uses in the region. The Hawai'i County Council in 1991 amended the plan to incorporate electricity and telephone accommodations that would allow improvements as demand increased. HELCo estimated at the time that full development could entail an additional 100 megawatts MW of power.

5.13.1 Goals and Objectives of the Keahole to Kailua Plan

The goal of the Keāhole Plan was to develop a mixed residential, commercial, resort, industrial, and recreational community, with appropriate shoreline uses, public facilities, and infrastructure, which would be built in phases over the course of 20 years.

The objectives were to: (1) develop a plan for an integrated community that can be served by the required infrastructure in phases and provide a mix of land uses; (2) develop design guidelines for critical visual aspects; (3) develop an efficient, safe and pleasing road network over the next 10-20 years; (4) identify all areas subject to flood and tsunami inundation and develop a comprehensive flood control system; (5) develop a water system with 6 mgd capacity to serve land uses; (6) develop area-wide system of sewage facilities with 6 mgd capacity; (7) develop adequate solid-waste facilities; (8) develop recreational facilities that would meet the rise of

new residents; ~~and~~ (89) develop a financing approach that provides infrastructure financing, feasible land development, and feasible level of County capital expenditures.

Four alternative concept plans were slated for the area. A regional center; residential development; elementary, middle and high schools; a university site; community, district, and waterfront parks; a municipal golf course; a regional sports complex; an industrial component; judiciary and, hospital accommodations; and a fire station; and cemetery were included in these plans.

5.13.2 Land Use Plan for the Area

The major growth assumptions of the plan were that (1) the Keahole to Kailua area would be the location for a new “Civic and Business Center” with civic and commercial uses; (2) 4,500 new residential units would be built between 1990 and 2010; (3) a number of facilities were planned that would serve a much larger region, including a municipal golf course, a regional sports complex, and the University of Hawai‘i-UH - West Hawai‘i College; and (4) the project area would accommodate resort development in the range of 1,500 visitor units.

A flexible land use plan was developed for the area to provide a framework for future growth, infrastructure costs, public-private implementation of major infrastructure projects, and State and County action on designating lands for urban development. However, more importantly than specific boundaries, the plan emphasized that four major development themes should guide the planning and development of the area: (1) three major development zones; ~~and~~ (2) a new civic and business center; ~~and~~ (3) major new roadways; ~~and~~ (4) a regional greenbelt system.

5.13.3 Current and Projected Resident Population in West Hawai‘i

The population in the North Kona region increased 62 percent in 1980-1990 from 13,748 to 22,284, and 28 percent in 1990-2000 from 22,284 to 28,543. (U.S. Census 2000). The following table shows the numbers as of 2000 and the projected population to the year 2020.

**Table 5-6: Projection of Resident Population by District
 Year 2000 to 2020**

District	2000	2005	2010	2015	2020
North Kohala	6,038	6,622	7,917	9,446	11,273
South Kohala	13,131	15,659	18,184	21,072	24,426
North Kona	28,543	30,467	34,024	37,922	42,275
South Kona	8,589	10,253	11,414	12,681	14,092
Ka'u	5,827	6,443	7,050	7,698	8,408
	64,128	71,449	80,599	90,834	102,494

Economic Assessment, PKF Hawaii, January 2000
 U.S. Census, 2000
 Hawai'i County Department of Research and Development

According to the County General Plan, various resort and resort-residential complexes are currently under construction or are planned for construction in the near future. Most of these developments are concentrated in West Hawai'i in the Kohala and Kona Districts, which will continue to accommodate the majority of the visitor market within the County. Visitor accommodation units within the County totaled 9,655 units in 1998, up from 8,952 units in 1990. Bed and Breakfast units, although not a significant part of the total visitor unit count, have been the fastest growing segment of the industry, growing from 55 units in 1990, to 171 units in 1998.

5.13.4 Conformance and Support of the Keahole to Kailua Plan

The Keahuolu project conforms to the goal of the plan to provide a significant number of new residential units in the planning area. Since the Keahuolu project site is designated for Urban Expansion and Low Density Urban, the project is consistent with the plan. The project also includes development of new infrastructure systems that will benefit the region.

5.14 KEAHOLE TO HONAUNAU REGIONAL CIRCULATION PLAN - COUNTY ACTION PLAN (2006)

As presented in the Planning Department’s report,

“Traffic congestion in Kona is bad and growing worse. The congestion is fueled by the rapid growth and exacerbated [sic] by the road network (lack of connectivity that funnels traffic to main arterials) and land use patterns (affordable housing being pushed to the outskirts resulting in more and longer commutes). The congestion and commuting is deteriorating Kona’s quality of life. Road improvements have not kept pace with development. Past development has eliminated or compromised future roadway corridor options. Major road improvements take a long time and limited financial resources need to be prioritized and supplemented by innovative funding sources. The scope of this action plan is to address these problems.”

The report includes an action strategy. Following are Table 5-7 includes the strategies that are relevant to the Keahuolu Affordable Housing Project, with relevant commentary.

Table 5-7: Keahole to Honaunau Regional Circulation Plan Action Strategies

Keahole to Honaunau Regional Circulation Plan		RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant’s objectives NA = goal is not applicable		
Strategy #2: Improve connectivity with a road network that spreads the traffic rather than funneling all the traffic to the major arterials.		A
COMMENTARY: The Keahuolu project is consistent with this strategy. The project’s internal roadways are to make feasible connections to existing and future developments on adjacent lands, which will contribute towards the implementation of this strategy.		
Strategy #2-F: Keanalehu/Manawalea Street Extension. The connection of Manawalea to Keanalehu would provide another link between the Kealakehe elementary, middle, and high schools for the residents of La’i Opuia and Kealakehe (in the vicinity of the elementary and middle schools). These roads are nearly “construction-ready” since the EIS has been completed, and the design is almost complete. The County will advance the funds and DHHL will reimburse the County its proportionate share.		A
COMMENTARY: The Keanalehu/Manawalea Street Extension is under construction and will provide access from the project site to lands and roadways east of the subject property.		
Strategy #2-I: Ane Keohokalole Extension (aka Henry Street Extension or Mid-Level Road). This project will extend Henry Street from Palani Road to the existing terminus of Ane Keohokalole makai of Kealakehe High School. The 2006 State legislature appropriated \$6 million for this project. Once constructed, this road will enable someone to drive from Kailua village to the Kaloko Industrial Park via Henry Street and the Kamanu Street Extension, without having to drive on Queen Ka’ahumanu Highway.		A

Keahole to Honaunau Regional Circulation Plan		RATING
A = actively supportive C = conforms I = goal is inconsistent with applicant's objectives NA = goal is not applicable		
COMMENTARY: The attributes of the Keahuolu project are all consistent with the intent of this strategy. The planned Ane Keohokalole Highway extension will be along the project site's makai boundary and will therefore provide significant access to the project site.		
Strategy #4: Increase multimodal choices to reduce dependency on the automobile.		A
COMMENTARY: The attributes of the Keahuolu project are all consistent with the intent of this strategy.		
Strategy #5: Reduce commuting needs by directing growth to existing compact urban areas; encouraging affordable housing within these core urban areas; and mixing land uses so that jobs and/or daily requirements are within walking distances.		A
COMMENTARY: The attributes of the Keahuolu project are all consistent with the intent of this strategy.		
Strategy #5-B: Growth Management Policies. Infill higher density rezoning within the urban core that includes affordable housing and mixed uses, and discourage development in the fringe areas. The Community Development Plan will play a major role to encourage more innovative development concepts that provide mixed uses and higher density in a manner that fits the character of this area, and manages growth in fringe areas in a manner that balances private property rights and furthers public interests in infrastructure management, agricultural/cultural/ecological resource protection, and rural character preservation.		A
COMMENTARY: The attributes of the Keahuolu project are all consistent with the intent of this strategy. The project proposes mixed-use higher density development within an area designated for urban expansion.		
Strategy #6: Implement a concurrency system.		A
COMMENTARY: The project supports the concurrency system recognizing that there may be complicated multi-party negotiations in instances where several land owners and/or agencies are involved.		
Strategy #6-A: Projects that provide affordable housing or increase the infrastructure capacity should be allowed to proceed even if the transportation infrastructure may not be adequate on the basis that such developments reduce demand (i.e., housing closer to jobs thereby reducing commuting) or build important connector roads.		A
COMMENTARY: The Keahuolu's project's affordable housing component fulfills the intent of this strategy. The project site will have access onto the Keanalehu Drive expansion, which is to be completed in 20 2008.		

5.15 KONA COMMUNITY DEVELOPMENT PLAN

The Hawai'i County General Plan requires that community development plans be adopted by the County Council for each judicial district in the county. The Kona Community Development Plan is intended to be first of the new plans and will serve as a model for the remaining districts. It is intended to provide detail to the elements presented in the General Plan and emphasize those elements most relevant to the issues and conditions of the specific plan area.

As of the writing of this EIS, some draft sections of the Kona Community Development Plan have been posted to the internet. In January 2007, the planning consultant published the Kona Regional Profile for the plan. Given the anticipated schedule, it presently appears that this EIS will precede adoption of the Kona Community Development Plan. ~~Therefore, for the purposes~~

~~of this EIS, the Kona Community Development Plan is identified as an Unresolved Issue. Should publication of the plan occur during the review and comment period for this EIS, the authors will make every attempt to address the plan in the Final EIS for the Keahuolu project.~~

6 CHAPTER SIX: ALTERNATIVES

The alternatives that were considered to the proposed action are limited to those which would allow the objectives of the proposed project to be met, while minimizing potential adverse environmental impacts, according to Section 11-200-17(f), HAR. Feasible alternatives must provide for-sale dwelling units on State-owned land.

The Alternative Concept Plans presented in this EIS were developed during the master plan process and with preliminary input from governmental agencies, surrounding land owners and stakeholders. The intent of the conceptual planning process was to understand the physical, environmental and cultural character of the land and then propose land use plans that would fulfill HHFDC's mission and objectives, as well as general State and County land use policies for the region.

This section presents other alternatives and potential impacts that have been considered during the planning process. The remainder of the EIS concentrates on discussing and analyzing the impacts of the three Alternative Concept Plans.

6.1 THE "NO ACTION" ALTERNATIVE

The No Action Alternative would mean that the site would remain vacant and undeveloped and there would be no immediate change to the property. The no-action alternative would not fulfill HHFDC's mission to develop low- and moderate-income housing projects. The No Action Alternative would not respond to the need to provide affordable housing in West Hawai'i as discussed in Section 1.5, and would not be consistent with State and County policies and priorities to provide affordable housing, in particular near job centers.

Under the No Action Alternative, the site would remain vacant in an area that is being developed with housing. The project site is in a prime location to provide housing in close proximity to

Kailua-Kona. The site, if vacant, would be significantly underutilized in terms of meeting the demand for long-term affordable housing in West Hawai'i.

The No Action Alternative would not meet the project's objectives to:

- Develop affordable housing near job centers, in particular West Hawai'i, which would lessen regional road congestion;
- Build a variety of housing unit types in response to the increase in population in West Hawai'i and the demand for affordable housing;
- Create a walkable, bikable, active-lifestyle community;
- Develop infrastructure that will be required for the project, but also benefit the region;
- Create a community that will integrate the project site with the area's current and future transportation network, as well as adjacent lands;
- Provide a transit-oriented high density development within easy walking distance of future bus stops along Ane Keohokalole Highway;
- Create a community with a mixed-use town center that contains multi-family housing, ground-floor commercial space and civic open space;
- Contribute to the greater community by providing a site for a new DOE elementary school; and
- Retain archaeological preserve areas and provide open space and neighborhood parks.

6.2 ALTERNATIVE LOCATIONS

HHFDC's primary objective for the Keahuolu project is to provide affordable dwelling units, including for-sale units in West Hawai'i. The Keahuolu site is non-ceded land and is HHFDC's only non-ceded property on the island of Hawai'i. Development of non-ceded lands provides the option of offering affordable for-sale housing in fee simple ownership. Therefore, State-owned ceded lands at other locations were not considered because they are not viable alternatives that would meet HHFDC's goals and objectives for this project.

In terms of the larger picture of HHFDC's mission to develop and finance low- and moderate-income housing projects throughout the state of Hawaii, the objective of the current project is to provide affordable housing in response to demand in West Hawai'i. Therefore, locating this project on another island or in another location on the island of Hawai'i are not viable

alternatives. HHFDC's objectives for the Keahuolu project can be met at the proposed site. There are no other viable locations on the island of Hawai'i that would allow the project's objectives to be met.

6.3 THE ALTERNATIVE OF POSTPONING ACTION UNTIL FURTHER STUDY

The alternative to postpone action and conduct further study would not allow HHFDC to meet its objective to provide affordable for-sale housing units in a timely manner in response to the current strong market demand in West Hawai'i. This alternative is not warranted because the environmental impact statement and its related technical studies provide a thorough evaluation of the project's potential impacts; subsequent entitlement processes will provide for public individual and government agency input and comment, as well as the opportunity to request more information or further study; and significantly delaying the project will likely increase the price of moderate- to market-priced units that may be a part of the ultimate developer's project. Delays for more study will only further aggravate housing demand and increase prices.

7 CHAPTER SIX SEVEN: CONTEXTUAL

7.1 RELATIONSHIP BETWEEN SHORT-TERM USES AND MAINTENANCE OF LONG-TERM PRODUCTIVITY (SUSTAINABILITY ANALYSIS)

The Keahuolu Affordable Housing Pproject site is primarily classified as State Agricultural and zoned for 5-acre agriculture lots. (A small portion is State Urban and zoned residential RS-15.). The project site's current potential use is generally limited to agricultural uses. However, the soil quality is relatively poor. Consequently, it has remained unutilized and vacant, constituting an open space area.

The project site is proposed for reclassification from the State Agricultural District to the State Urban District, and subsequent rezoning to allow its development as a mixed-use residential master planned community. These actions would commit the property to residential and commercial use, which would require the provision of infrastructure in the form of new roadways; potable water wells, reservoirs, and a water transmission system; a wastewater collection system; and electrical and telecommunications utilities.

Development of the property as a residential community constitutes a permanent commitment that would remove the property from the inventory of available agricultural land. This action is consistent with the State and County plans for the area. The region of North Kona between Keahole and Kailua-Kona is intended to function as a residential and commercial center for West Hawai'i. Reclassification of the property to the Urban District is consistent with that intent.

Demand for homes in North Kona is already strong and expected to exceed planned production, especially of housing for middle-income families. The housing market continues to be active, even though prices have reached levels that many families cannot afford. About a third of Hawai'i County respondents expecting to move named North Kona as their preferred destination.

The project's impact on housing can be estimated in relation to demand indicators. The 2006 *Hawaii Housing Policy Study* suggests that there is demand from about 7,200 resident households for units in North Kona in the next few years. In addition, population growth will account for formation of at least 2,370 new households. Given a regional demand for approximately 9,570 units (7,200 units existing demand plus 2,370 new households), the net contribution of the project amounts to 5.3 to 18.7 percent of regional demand.

The HHFDC Keahuolu project is planned as a response to the regional needs for housing and the desire to reduce congestion on regional highways due to residents' traveling long distances between home and work.

Short-term uses and long-term productivity relate to the short-term construction phases and the long-term socioeconomic benefits that would accrue to the State and the County in the form of affordable housing near employment centers in North Kona and added revenue resulting from economic activity that would otherwise not occur on the property.

6.27.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Development of the subject property as a residential community will permanently alter the use and character of the land:

Soil: The terrain will be crushed and graded to allow the construction of roads that comply with county road design standards. The land abutting the roads may be terraced to accommodate home sites. Aggregate rock and topsoil will be imported.

Quarry material: High quality aggregate rock is an important natural resource in an island environment. As the subject property is not considered to be a source of potential quarry material (grade-A basalt), there will be no loss of this particular natural resource by reclassifying the property from Agricultural to Urban. However, development of the project will require large amounts of aggregate rock for the construction of roadbeds and house foundations, and the production of concrete and asphalt.

Flora: Much of the existing flora will be removed (grubbed) prior to site development. Residential properties will eventually be landscaped with new plant material, including, where practicable, drought-tolerant species.

Fauna and avifauna: Existing fauna and avifauna will be displaced during the development process. With the exception of rats and pigs, most displaced species of fauna and avifauna will likely return once the property has been re-landscaped.

Cultural Resources: Archaeological sites and cultural resources determined to be significant under State criteria will be preserved. Sites identified for data collection will be further analyzed and recorded in an effort to increase the understanding of the historical use of the area. Sites identified for preservation will be preserved. This process must be completed in accordance with the requirements of the SHPD.

Development of the project will require the expenditure of energy in the form of fuel for construction vehicles and equipment and the consumption of natural and man-made resources in the form of construction materials (metal, glass, wood, plastic, etc.). Construction of the project will also require the consumption of potable water. However, some of the water used for dust control will percolate back into the soil while the remainder will evaporate.

The project will require the investment of human labor that might otherwise be employed elsewhere.

The so-called operational phase of the project, that is to say once the project is completed and the homes have been built and occupied, will require an ongoing commitment of potable water, electrical energy, and fuel for privately owned vehicles and motorized equipment.

6-37.3 CUMULATIVE AND SECONDARY IMPACTS

Cumulative impacts are defined as impacts on the environment ~~which~~ that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such actions. Cumulative impacts

can result from individually minor but collectively significant actions taking place over a period of time.

The Keahuolu Affordable Housing ~~P~~project represents a potentially significant contribution of affordable housing units to the much larger “landscape” of the emergence of the city of Kailua-Kona and area developments. Over the past 40 years, Kailua-Kona has grown from a small community to a regional growth center, with much of the growth occurring in the past 10 years.

The construction of the Queen Ka‘ahumanu Highway in the early 1970s led to the development of several visitor destination areas along the North Kona/South Kohala coastline, including Mauna Kea Resort, Mauna Lani Resort, Waikoloa Resort, and ~~the~~Hualalai Resort. The resulting demand for resort employees led the State and the County to designate the area of North Kona between Kailua-Kona and Keahole as the primary growth area for residential and commercial development in West Hawai‘i.

The rapid expansion of commercial centers, including the Kona Coast Shopping Center, Makalapua Center, and the Kaloko Industrial Park clearly demonstrate the demand for new goods and services generated by an expanding residential population. Continuing residential expansion is evidenced by other proposed projects in the area.

Unfortunately, the pace of commercial and residential growth has exceeded the development of transportation infrastructure to accommodate it, leaving traffic conditions along the principal arterials (Queen Ka‘ahumanu Highway and Mamalahoa Highway) to deteriorate. The rapid emergence of this “crisis” has caught many residents and community leaders by surprise, leading for calls to carefully examine the future of the area.

However, Kailua-Kona is already on a path of growth fueled by an abundance of developable land, lack of existing housing stock, a highly desirable climate, and a constant supply of visitors to West Hawai‘i. Noticeably, the commercial and population expansion around Kailua-Kona parallels the health of the visitor industry. Since recovering from the downturn of visitor arrivals in the early 1990s, the visitor industry has enjoyed a decade of expansion. Economic cycles are inevitable and a resolution of the traffic “crisis” will likely occur when the current visitor

industry cycle ends and a downturn in visitor arrivals allows the gap between roadway capacity and travel demand to narrow. The challenge facing taxpayers at that time will be the courage to support public investment in infrastructure during an economic downturn. However, that is precisely when jobs will be needed the most.

As a mixed-use affordable housing community, the cumulative impact of the Keahuolu project will be its contribution to the long term stability of the resident population of the city of Kailua-Kona. The Keahuolu project and other emerging housing developments will help to fulfill the goal of a strong and healthy West Hawai'i economy and the provision of affordable housing in proximity to employment centers.

The term “secondary impact” means effects ~~which~~ that are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. These impacts may include ~~growth~~ growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems including ecosystems.

The Keahuolu Affordable Housing ~~P~~project's primary impacts include an increase in the supply of affordable housing, an increase in commercial floor area in the Kailua-Kona region, population growth, increased traffic, and the demand for potable water and energy. The project's secondary impacts are effects that are induced by these primary impacts, such as the additional jobs created in the economy, and the effects resulting from the project residents' demand for goods and services.

6.47.4 OFFSETTING CONSIDERATIONS OF GOVERNMENTAL POLICIES

The proposed project is consistent with State and County policies that identify the property and its surrounding area for urban expansion to support economic growth in West Hawai'i. The project is also consistent with the County General Plan's designation of Urban Expansion / Low Density Residential. Other policies of the State and County promote the preservation of agricultural land. However, because the subject property is not considered to be prime

agricultural land, due to its poor soil quality, its proposed development for residential use is not inconsistent with the goal of preserving important agricultural resources.

6.57.5 UNRESOLVED ISSUES

The following issues remain unresolved at the time this document is being prepared. See Chapter Six, Section 6.4, for a discussion of these unresolved issues.

Final Development Scheme and Schedule: The HHFDC is reviewing proposals from qualified developers to develop the Keahuolu Affordable Housing Pproject. The final development scheme will be within the range of the concept plans presented in this EIS. However, the following details are unknown at the time of this writing: the total number of housing units; the mix of affordable units and market units; the mix of single-family and multi-family; the mix of low density, medium density, and high density; the total square footage of commercial floor area; the alignment/route of off-site wastewater lines that will service the project. The Board of Directors of HHFDC approved Forest City Hawaii Residential, Inc., as the developer of the project, subject to successful negotiation and execution of a development agreement. However until the development agreement is signed, there is the possibility that an agreement may not be reached between HHFDC and Forest City, and thus the search for a developer would continue until one is selected and a development agreement is signed. Until that time, the details of the proposed project and the developer's schedule for the project are not available. That information will become available prior to subsequent permitting processes, which will provide the opportunity for public and agency input and comment, as well as the opportunity to request additional information.

~~**Kona Community Development Plan:** It is likely that this EIS will be published for public and agency review and comment prior to the publication of the first draft of the Kona Community Development Plan. Thus, the content of the plan is unknown. UPDATE PRIOR TO FINAL EIS~~

Concurrency Ordinance: Since publication of the February 2008 Draft EIS for the Keahuolu project, the County of Hawai'i Planning Department clarified that Ordinance No. 07 99 became effective on June 25, 2007. It created concurrency standards for roads and water supply in

change of zone actions. According to the County of Hawai'i Planning Department, rezoning would not take effect unless improvements to the traffic situation occur before the occupancy of the project, and that there would also be standard expectations for water supply for new rezonings.

It is the intention of the HHFDC that the project developer submit the project to the State LUC and the County of Hawai'i under the expedited approval process provided for under Section 201H-38, HRS. If the expedited approval process is used by the Keahuolu project developer, it is unresolved as to what extent the concurrency standards would or would not apply. At the time this EIS is being prepared the Hawai'i County Council is considering a bill for an ordinance that would require the concurrent development of project-related infrastructure. It is unknown if the ordinance will be adopted, what its final language might contain, when it might become effective, and if it might impact the Keahuolu project.

County Council Deferred Action on Change of Zone Applications: Since publication of the February 2008 Draft EIS for the Keahuolu project, the County of Hawai'i Planning Department clarified that Resolution No. 529 08 was adopted on March 12, 2008. According to the County, it extended the temporary delay of Council action on rezoning applications until the North and South Kona Community Development Plan is adopted by ordinance, or December 1, 2008, whichever occurs first.

It is the intention of the HHFDC that the project developer submit the project with the State LUC and the County of Hawai'i under the expedited approval process provided for under Section 201H-38, HRS. According to the estimated permit schedule in Table 1-4 of this EIS, it is anticipated that a zone change application for the Keahuolu project would at the earliest be submitted to the County on January 1, 2009, which is after the December 1, 2008 deadline for the temporary delay of Council action on rezoning applications. It is unknown whether the County's deadline will be extended and if the Council will continue to defer action on change of zone applications. If the expedited approval process is used by the Keahuolu project developer, it is unresolved as to what extent the Council's deferral on change of zone applications would or would not apply, if it is still in effect.

~~In early 2007, the Hawai'i County Council adopted a resolution calling to defer action on any Change of Zone applications prior to adoption of the Kona Community Development Plan. It is unknown when and how this resolution might impact the Keahuolu Affordable Housing project.~~

8 CHAPTER SEVENEIGHT: LIST OF PREPARERS

This Draft EIS has been prepared by Belt Collins Hawaii Ltd., 2153 North King Street, Suite 200, Honolulu, Hawaii, 96819. The staff involved in the preparation of this document includes:

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Technical consultants were employed to provide specific assessments of environmental factors for this project. The consultants, their company affiliations and their ~~specialty~~ specialties are listed below:

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10 CHAPTER ~~NINETEEN~~: PARTIES CONSULTED AND COMMENTS RECEIVED

The HHFDC Keahuolu Affordable Housing Project ~~Environmental Impact Statement Preparation Notice~~ (EISPN) was sent to the following agencies, organizations, and individuals. The 30-day public comment period on the EISPN began on July 23, 2007 and ended on August 22, 2007.

Respondents and Distribution		Received EISPN	EISPN Comments	Received Draft EIS	Draft EIS Comment	Will Received Final EIS
A. Federal Agencies						
	Department of Housing and Urban Development (HUD)			X		
	Federal Highway Administration	X		X		
	US Army Corps of Engineer	X				
	US Department of the Interior - Fish and Wildlife Service (USFWS)	X		X	X	X
	US Department of the Interior - National Park Service, Pacific West Region	X				
	US Department of the Interior - National Park Service, Koloko-Honokohua National Historic Park	X	X	X	X	X
	US Natural Resources Conservation Service					
B. State Agencies						
	Department of Accounting and General Services	X		X	X	X
	Department of Agriculture	X		X		
	Department of Business, Economic Development and Tourism (DBEDT)					
	- Director	X		X		
	- Land Use Commission (LUC)			X	X	X
	- Office of Planning	X		X	X	X
	- Resources and Technology Division					
	- Strategic Industries Division	X	X	X		
	Department of Defense			X	X	X
	Department of Education (DOE)	X	X	X	X	X
	Department of Hawaiian Home Lands (DHHL)					
	- Chairman	X		X		
	- Land Development Division	X		X		
	Department of Health (DOH)			X		
	- Environmental Planning Office	X	X	X	X	X
	- Office of Environmental Quality Control	X	X	X		X
	Department of Human Services (DHS)					

Respondents and Distribution		Received EISPN	EISPN Comments	Received Draft EIS	Draft EIS Comment	Will Received Final EIS
- Hawaii Public Housing Authority		X		X	X	X
Department of Labor and Industrial Relations						
Department of Land & Natural Resources (DLNR)						
- Chairperson		X		X		X
- Aquatic Resources Division				X		
- Commission on Water Resource Management			X			
- Engineering Division					X	X
- Historic Preservation Division		X		X	X	X
- Land Division, Honolulu			X		X	X
- Land Division, Hawaii District			X			
- Na Ala Hele						
Department of Public Safety						
Department of Transportation (DOT)						
- Director		X	X	X	X	X
- Hawaii District Office, Highways Division		X	X			
Hawaii Housing Finance and Development Corporation		X		X		X
Office of Hawaiian Affairs		X	X	X	X	X
Office of the Governor				X		
Office of the Governor – Kona/West Hawaii		X		X		X
University of Hawai'i – Environmental Center		X		X	X	X
University of Hawaii at Manoa – Water Resources Research Center		X		X		
C. County of Hawai'i						
Civil Defense Agency				X		
Department of Environmental Management						
- Director		X	X	X	X	X
- Solid Waste Division				X		
- Wastewater Division				X		
- Technical Services				X		
Department of Parks and Recreation						
- Director		X		X		
- Parks Maintenance Division						
- Recreation Division						
Department of Public Works						
- Director		X		X		
- Building Division				X		
- Engineering Division				X		
- Highway Maintenance Division				X		
- Traffic Division				X		X
Department of Research and Development		X	X	X		
Department of Water Supply		X	X	X	X	X
Finance Department				X		
- Public Access, Open Space, and Natural Resource Preservation Commission						
- Real Property Tax Division						

Respondents and Distribution		Received EISPN	EISPN Comments	Received Draft EIS	Draft EIS Comment	Will Received Final EIS
	Fire Department	X		<u>X</u>	<u>X</u>	<u>X</u>
	Mass Transit Agency	X		<u>X</u>		
	Office of Housing and Community Development	X		<u>X</u>		
	Office of the Mayor	X		<u>X</u>		<u>X</u>
	Planning Department	X	X	<u>X</u>	<u>X</u>	<u>X</u>
	Police Department	X		<u>X</u>	<u>X</u>	<u>X</u>
D. Elected Officials						
	Senator Daniel K. Akaka	X		<u>X</u>		
	Senator Daniel K. Inouye	X		<u>X</u>		
	Rep. Neil Abercrombie	X		<u>X</u>		
	Rep. Maize Hirono	X		<u>X</u>		
	State Senator Paul Whalen	X		<u>X</u>		
	State Rep. Josh Green M.D.	X		<u>X</u>		
	Councilmember: County District 1	X		<u>X</u>		
	Councilmember: County District 2	X		<u>X</u>		
	Councilmember: County District 3	X		<u>X</u>		
	Councilmember: County District 4	X		<u>X</u>		
	Councilmember: County District 5	X		<u>X</u>		
	Councilmember: County District 6	X		<u>X</u>		
	Councilmember: County District 7	X		<u>X</u>		
	Councilmember: County District 8	X		<u>X</u>		
	Councilmember: County District 9	X		<u>X</u>		
E. News Media						
	Hawai'i Tribune Herald	X		<u>X</u>		<u>X</u>
	Honolulu Advertiser	X		<u>X</u>		<u>X</u>
	Honolulu Star Bulletin	X		<u>X</u>		<u>X</u>
	West Hawai'i Today	X		<u>X</u>		<u>X</u>
F. Public Libraries and Depositories						
	Bond Memorial Public Library			<u>X</u>		
	DBEDT Library	X		<u>X</u>		<u>X</u>
	Hawai'i State Main Library	X		<u>X</u>		<u>X</u>
	Hilo Public Regional Library	X		<u>X</u>		<u>X</u>
	Holualoa Public Library			<u>X</u>		
	Kailua-Kona Public Library	X		<u>X</u>		<u>X</u>
	Kealahou Public Library	X		<u>X</u>		<u>X</u>
	Legislative Reference Bureau Library	X		<u>X</u>		<u>X</u>
	Thelma Parker Memorial Public/School Library	X		<u>X</u>		
	University of Hawaii – Hamilton Library	X		<u>X</u>		<u>X</u>
	University of Hawaii – Hilo Edwin H. Mookini Library <u>at Hilo</u>	X		<u>X</u>		<u>X</u>
G. Local Utilities						
	Hawaii Electric Light Co., Inc. - Hilo	X		<u>X</u>		
	Hawaiian Electric Light Co., Inc. – Kailua-Kona	X		<u>X</u>		
	Hawaiian Telcom – Hilo	X		<u>X</u>		
	Hawaiian Telcom – Honolulu	X		<u>X</u>		
	Hawaiian Telcom – Kailua-Kona	X		<u>X</u>		

Respondents and Distribution		Received EISPN	EISPN Comments	Received Draft EIS	Draft EIS Comment	Will Received Final EIS
	HECO - Honolulu			X		
	Oceanic Time Warner Cable – Kailua-Kona	X		X		
	The Gas Company – Kailua-Kona	X		X		
H. Community Organizations, Associations, and Other Groups						
	A & B Properties, Inc.	X		X		
	Akinaka and Associates, Ltd.	X		X		
	Stanford S. Carr Development Corporation	X		X		
	Castle & Cooke Homes Hawaii, Inc.	X		X		
	Community Planning and Engineering, Inc.	X		X		
	Concerned Citizens of Kona			X		
	D.R. Horton, Schuler Division	X		X		
	General Contractors Association of Hawaii			X		
	Hawai'i Island Economic Development Board			X		
	Hawai'i Island Board of Realtors			X		
	Hawai'i Island Chamber of Commerce			X		
	Hawai'i Island Community Development Corporation			X		
	Hawai'i Leeward Planning Conference	X		X		X
	Kamehameha Schools			X		
	Kona Board of Realtors			X		
	Kona Community Plan Steering Committee	X		X		
	Kona Hills Estates Community Association					
	Kona-Kohala Chamber of Commerce	X		X		
	Kona Traffic Safety Committee	X		X		
	Kuakini Hawaiian Civic Club			X		
	Maryl Development	X		X		
	Neighborhood Place of Kona	X		X		
	Pacific Kona Landscaping	X		X		
	Queen Liliuokalani Trust	X		X		X
	Steelhead Capital			X		
	UniDev Hawaii, LLC	X		X		
I. Individuals						
	Ms. Elaine Watai	X		X		X
	Mr. Robert Ward, Hawaii County Transportation Commission	X	X	X		X
	Mr. Aaron Stene		X	X		X

COMMENT AND RESPONSE LETTERS
FOR THE EISPN AND DRAFT EIS



Harry Kim
Mayor



RECEIVED

Lawrence K. Mahuna
Police Chief

2008 MAR 10 PM 2:22

BELT COLLINS HAWAII

Harry S. Kubojiri
Deputy Police Chief

County of Hawaii

POLICE DEPARTMENT

349 Kapiolani Street • Hilo, Hawaii 96720-3998
(808) 935-3311 • Fax (808) 961-2389

March 5, 2008

Ms. Mary O'Leary, AICP
Senior Planner
Belt Collins Hawaii Ltd.
2153 North King Street Suite 200
Honolulu, Hawaii 96819-4554

Dear Ms. O'Leary:

SUBJECT: Draft Environmental Impact Statement
Project: Keahuolu Affordable Housing Project
Location: Keahuolu, North Kona, Island of Hawaii
Tax Map: (3) 7-4-021: 020 – Housing Site
(3) 7-4-21: por. 21 – Reservoir Site

This responds to your February 20, 2008 letter regarding review and comments of your Draft Environmental Impact Statement (DEIS) for the Keahuolu Affordable Housing Project in North Kona, Hawaii.

Staff has reviewed the above-referenced DEIS and submits the following comments:

- Any additional development/project utilizing Palani Road, Queen Kaahumanu Highway or Hawaii Belt Road as an access will adversely impact traffic conditions throughout Palani Road, Queen Kaahumanu Highway and Hawaii Belt Road, particularly during peak traffic hours or during an emergency condition.
- Recommend against any further development in this area until such time as the second phase of improvements to Queen Kaahumanu Highway (Kealakehe Parkway to Keahole Airport) has been completed and is open to traffic.

Ms. Mary O'Leary
March 5, 2008
Page 2

- Recommend that the secondary road, Ane Keohokalole Highway (Palani Road to Kealakehe Parkway), be completed and open to traffic prior to occupancy of the project.
- Recommend that Ane Keohokalole Highway be extended north to Kaiminani Drive.
- Recommend that Makala Boulevard be completed between Queen Kaahumanu Highway and Keanalehu Drive prior to occupancy of the project.

If you have any further questions or comments please feel free to contact Acting Captain Chad Basque at 326-4646 extension 249.

Sincerely,

LAWRENCE K. MAHUNA
POLICE CHIEF



JOHN E. DAWRS
ACTING ASSISTANT CHIEF
AREA II OPERATIONS



September 25, 2008
2006.70.0900 / 08P-317

Chief Lawrence K. Mahuna
Police Department
County of Hawaii
349 Kapiolani Street
Hilo, Hawaii 96720-3998

Dear Chief Mahuna:

Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of March 5, 2008 for the above-referenced document. Our responses are provided in the order of your comments.

1. The Hawaii Housing Finance and Development Corporation commissioned a Traffic Impact Analysis Report (TIAR) for the proposed project which studied potential impacts on the roadways surrounding the project site, including Palani Road, Queen Kaahumanu Highway, Henry Street, Ane Keohokalole Highway, and Kealakehe Parkway during peak traffic hours. The project does not have direct access onto Hawaii Belt Road, and the site is approximately three miles from the Hawaii Belt Road. The complete TIAR is located in Appendix F of the Draft Environmental Impact Statement.

Based on the TIAR study, a number of strategies and roadway improvements were developed to mitigate impacts on street intersections and street segments that would operate at poor levels of service (LOS E or F). With the proposed improvements implemented pursuant to a Fair Share Cost program distributing costs in an equitable manner among affected developments, the impacts would be fully mitigated.

2. Based on communications with the DOT Hawaii District office, the second phase of improvements to Queen Kaahumanu Highway (Kealakehe Parkway to Keahole Airport) may be completed and open to traffic by the end of 2011. It is anticipated that the proposed Keahuolu project would be issued its first certificate of occupancy in 2012. Therefore, this roadway work should be completed prior to the occupancy of the proposed project.
3. We acknowledge your comment recommending that the secondary road, Ane Keohokalole Highway (Palani Road to Kealakehe Parkway), be completed and open to traffic prior to occupancy of the project. Both the State and the County of Hawaii are working together to achieve concurrency.

Honolulu
Bangkok
Boulder
Guam
Hong Kong
Manila
Seattle
Shenzhen
Singapore

Chief Lawrence K. Mahuna
September 25, 2008
2006.70.0900 / 08P-317
Page 2

4. We acknowledge your comment recommending that Ane Keohokalole Highway be extended north to Kaiminani Drive. The traffic study for the Keahuolu project used the existing and future street network in the County's *Keahole to Honaunau Regional Circulation Plan* report (County of Hawaii Planning Department, August 2006). The Kona Action Plan and the Draft Kona Community Development Plan both depict the future extension of Ane Keohokalole Highway to Kaiminani Drive and beyond.
5. We acknowledge your comment recommending that Makala Boulevard be completed between Queen Kaahumanu Highway and Keanalehu Drive prior to occupancy of the project. The State is coordinating with the Queen Liliuokalani Trust, the landowner responsible for Makala Boulevard, and the County of Hawaii in an attempt to achieve concurrency.

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Lee W. Sichter
Principal Planner

LWS:lf

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

LINDA LINGLE
GOVERNOR OF HAWAII



LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

March 10, 2008

LD-GM

Ms. Mary O'Leary, AICP, Senior Planner
Belt Collins Hawaii Ltd
2153 North King Street, Suite 200
Honolulu, HI 96819

Dear Ms. O'Leary:

Subject: Keahuolu Affordable Housing Project, North Kona, Hawaii TMK: (3) 7-4-21: 20
and Portion 21 Containing 272 Acres

In response to your February 20, 2008, request for comments on the above referenced subject we offer the following.

The Hawaii Housing Finance and Development Corporation (HHFDC) was the master developer for the Villages of Laiopua, an affordable housing project, when a lawsuit was initiated by the Office of Hawaiian Affairs. The lawsuit resulted in a moratorium prohibiting the sales of ceded lands Statewide.

All but the subject 272 acres of the Villages of Laiopua covered by the draft EIS are classified as ceded land.

The 272 acres were acquired by the State from the Queen Liliuokalani Trust by warranty deed dated May 5, 1992. The acquisition was specifically intended to be part of the Villages of Laiopua development. On July 9, 2007 the Department of Land and Natural Resources, by way of quitclaim deed (Land Office Deed No. S-28884) conveyed the fee simple interest of the 272 acres to HHFDC. Accordingly, we have no objection to the development of the 272 acres as affordable housing.

Thank you for this opportunity to comment. If there are any questions please call Gary Martin at 587-0421.

Sincerely,

A handwritten signature in black ink, appearing to read "Morris M. Atta".

MORRIS M. ATTA
Administrator

LINDA LINGLE
GOVERNOR OF HAWAII



LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
RECEIVED

2008 APR -7 PM 2: 35

BELT COLLINS HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION**

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

April 3, 2008

Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, Hawaii 96819

Attention: Ms. Mary O'Leary

Gentlemen:

Subject: Draft Environmental Impact Statement for Keahuolu Affordable Housing Project, North Kona, Hawaii, Tax Map Key: (3) 7-4-21:20, portion 21

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comment.

Other than the comments from Engineering Division, Land Division, the Department of Land and Natural Resources has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Morris M. Atta".

A small, stylized handwritten mark or signature element.

Morris M. Atta
Administrator



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

March 3, 2008

MEMORANDUM

TO: **DLNR Agencies:**
 Div. of Aquatic Resources
 Div. of Boating & Ocean Recreation
 Engineering Division
 Div. of Forestry & Wildlife
 Div. of State Parks
 Commission on Water Resource Management
 Office of Conservation & Coastal Lands
 Land Division - Hawaii District/Gary Martin

FROM: *jo* Morris M. Atta *Thiele*
SUBJECT: Draft Environmental Impact Statement for Keahuolu Affordable Housing Project
LOCATION: North Kona, Hawaii, TMK: (3) 7-4-21:20, por 21
APPLICANT: Belt Collins on behalf of Hawaii Housing Finance & Development Corporation

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by April 1, 2008.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed: *Gary Martin*
Date: MAR 10 2008

LINDA LINGLE
GOVERNOR OF HAWAII



RECEIVED

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

2008 APR 15 PM 3:55



BELT COLLINS HAWAII
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

April 11, 2008

Belt Collins Hawaii Ltd.
2153 North King Street Suite 200
Honolulu, Hawaii 96819

Attention: Ms. Mary O'Leary

Gentlemen:

Subject: Draft Environmental Impact Statement for Keahuolu Affordable Housing
Project, North Kona, Hawaii, Tax Map Key: (3) 7-4-21:20, portion 21

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR), Land Division distributed or made available a copy of your report pertaining to the subject matter to the Division of Aquatic Resources for their review and comment.

The Department of Land and Natural Resources has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Morris M. Atta".

Morris M. Atta
Administrator



September 25, 2008
2006.70.0900 / 08P-323

Mr. Morris M. Atta, Administrator
Land Division
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, HI 96809

Dear Mr. Atta:

**Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of March 10, 2008 for the above-referenced document.

1. We acknowledge that your office has no objections to the project.
2. We acknowledge that your letter states the approximately 272-acre project site is not ceded land.

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.

Lee W. Sichter
Principal Planner

LWS:lf

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

Honolulu
Bangkok
Boulder
Guam
Hong Kong
Manila
Seattle
Shenzhen
Singapore

LINDA LINGLE
GOVERNOR OF HAWAII



Laura H. Thielen
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

Handwritten initials



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

AQUATIC RESOURCES: *1446*

DIRECTOR	
COMM. FISH.	
AQ RES/ENV	
AQ REC	
PLANNER	
STAFF SVCS	
RCUH/UH	
STATISTICS	
AFRC/FED AID	
EDUCATION	
SECRETARY	
OFFICE SVCS	
TECH ASST	<input checked="" type="checkbox"/>
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No Copies	
Copies to:	
Due Date:	

March 3, 2008

MEMORANDUM

TO:

- DLNR Agencies:**
- Div. of Aquatic Resources
 - Div. of Boating & Ocean Recreation
 - Engineering Division
 - Div. of Forestry & Wildlife
 - Div. of State Parks
 - Commission on Water Resource Management
 - Office of Conservation & Coastal Lands
 - Land Division – Hawaii District/Gary Martin



FROM:

Morris M. Atta

SUBJECT: Draft Environmental Impact Statement for Keahuolu Affordable Housing Project
LOCATION: North Kona, Hawaii, TMK: (3) 7-4-21:20, por 21
APPLICANT: Belt Collins on behalf of Hawaii Housing Finance & Development Corporation

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by April 1, 2008.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed: *hgtwals*
Date: 3/31/08

RECEIVED
Mau
MAR 20 2008

Div. of Aquatic Resources



September 25, 2008
2006.70.0900 / 08P-332

Mr. Dan Polhemus, Administrator
Division of Aquatic Resources
Department of Land and Natural Resources
State of Hawaii
1151 Punchbowl, Room 330
Honolulu, HI 96813

Dear Mr. Polhemus:

**Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to your letter of March 3, 2008 for the above-referenced document.

We acknowledge that your office has no comments on the proposed project.

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.

Lee W. Sichter
Principal Planner

LWS:lf

cc: Morris Atta, Land Division Administrator
Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

Honolulu
Bangkok
Boulder
Guam
Hong Kong
Manila
Seattle
Shenzhen
Singapore

LINDA LINGLE
GOVERNOR



RECEIVED

2008 MAR 14 PM 1:49

RUSS K. SAITO
COMPTROLLER

BARBARA A. ANNIS
DEPUTY COMPTROLLER

(P)1074.8

STATE OF HAWAII BELT COLLINS HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

P.O. BOX 119, HONOLULU, HAWAII 96810

MAR 13 2008

Ms. Mary O'Leary, AICP
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, HI 96819

Dear Ms. O'Leary:

Subject: Draft Environmental Impact Statement
Keahuolu Affordable Housing Project
TMK: (3) 7-4-021:020, por. 21

The project does not impact any of the Department of Accounting and General Services' projects or existing facilities and we have no comments to offer.

If you have any questions regarding the above, please have your staff call Mr. David DePonte of the Planning Branch at 586-0492.

Sincerely,

A handwritten signature in black ink, appearing to read "Ernest Y. W. Lau".

ERNEST Y. W. LAU
Public Works Administrator

DD:mo

c: Ms. Janice Takahashi, HHF&DC
Ms. Katherine P. Kealoha, OEQC
Mr. Glenn Okada, DAGS-Hawaii District



September 25, 2008
2006.70.0900 / 08P-318

Mr. Ernest Y. W. Lau
Public Works Administrator
Department of Accounting and General Services
State of Hawaii
P.O. Box 119
Honolulu, HI 96810

Dear Mr. Lau:

**Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for your letter of March 13, 2008. We acknowledge that your office has no comments as the proposed project does not impact any of the Department of Accounting and General Services' projects or existing facilities.

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.

Lee W. Sichter
Principal Planner

Honolulu
Bangkok
Boulder
Guam
Hong Kong
Manila
Seattle
Shenzhen
Singapore

LWS:lf

cc: Glenn Okada, DAGS-Hawaii District
Office of Environmental Quality Control
Janice Takahashi, HHFDC
Stanley Fujimoto, HHFDC

Harry Kim
Mayor



RECEIVED Darryl J. Oliveira
Fire Chief

2008 MAR 20 PM 2: 28 Glen P.I. Honda
Deputy Fire Chief

County of Hawai'i COLLINS HAWAII
HAWAII FIRE DEPARTMENT
25 Aupuni Street • Suite 103 • Hilo, Hawai'i 96720
(808) 981-8394 • Fax (808) 981-2037

March 18, 2008

Belt Collins Hawaii Ltd.
2153 North King Street
Suite 200
Honolulu, Hawaii 96819

SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)
PROJECT TITLE: KEAHUOLU AFFORDABLE HOUSING PROJECT
LOCATION: KEAHUOLU, NORTH KONA
TAX MAP KEY: (3) 7-4-021:020 – HOUSING SITE
(3) 7-4-21:POR. 21 – RESERVOIR SITE

In regards to the above-mentioned Draft Environmental Impact Statement, the following shall be in accordance:

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.

"EXCEPTIONS: 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, nonnegotiable grades or other similar conditions, the chief may require additional fire protection as specified in Section 10.301 (b).



"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) **Surface.** 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.

"(j) **Grade.** The gradient for a fire apparatus access road shall not exceed the maximum approved by the chief." (15%)

Mary O'Leary
March 12, 2008
Page 3

"(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(c):

"(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 as set forth by the respective county water requirements. All hydrants shall be accessible to the fire department apparatus by roadways meeting the requirements of Section 10.207.

Comments to Volume 1, Section 4.10.1.1 "Fire Protection." (Page 4-162)

Keahole Airport fire station should not be included when considering fire protection for this project. Its fire protection services are dedicated to the airport only and except in extreme circumstances, will not respond outside of their jurisdiction.


DARRYL OLIVEIRA
Fire Chief

PBW:lpc



September 25, 2008
2006.70.0900 / 08P-319

Chief Darryl Oliveira
Fire Department
County of Hawaii
25 Aupuni Street, Suite 103
Hilo, Hawaii 96720

Dear Chief Oliveira:

**Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of March 18, 2008 for the above-referenced document. The responses are provided in the order of your comments.

1. Fire apparatus access roads: The developer of the Keahuolu Affordable Housing project will comply with the applicable regulations for fire apparatus access roads.
2. Water supply: The developer of the Keahuolu Affordable Housing project will comply with the applicable regulations for water supply.
3. The Keahuolu Draft EIS Section 4.10.1.1. "Fire Protection": Your comment that the Keahole Airport fire station should not be included when considering fire protection for this project is acknowledged. We have deleted reference to the station from page 4-162 of the Final EIS.

Honolulu
Bangkok
Boulder
Guam
Hong Kong
Manila
Seattle
Shenzhen
Singapore

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.

Lee W. Sichter
Principal Planner

LWS:lf

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200 ■ Honolulu, Hawaii 96819-4554 USA
T/808 521 5361 ■ F/808 538 7819 ■ honolulu@beltcollins.com ■ www.beltcollins.com

Belt Collins Hawaii is an Equal Opportunity Employer

LINDA LINGLE
Governor

JAMES R. AIONA, JR.
Lieutenant Governor

THEODORE E. LIU
Director

MARK K. ANDERSON
Deputy Director



LAND USE COMMISSION
Department of Business, Economic Development & Tourism
State of Hawai'i

RECEIVED

RODNEY A. MAILE
Interim Executive Officer

2008 MAR 25 PM 2:19 SANDRA M. MATSUSHIMA
Chief Clerk

BELT COLLINS HAWAII BERT K. SARUWATARI
Senior Planner

FRED A. TALON
Drafting Technician

March 24, 2008

Ms. Mary O'Leary, Senior Planner
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, Hawaii 96819

Dear Ms. O'Leary:

**Subject: Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
Keahuolu, North Kona, Hawaii
Tax Map Key: 7-4-21: 20 (Housing Site)
7-4-21: por. 21 (Reservoir Site)**

We have reviewed the DEIS for the subject project and have the following comments for your consideration:

- 1) In accordance with section 11-200-17(f), Hawaii Administrative Rules (HAR), alternatives to the proposed action should be described in a separate and distinct section. Please include alternative locations for the proposed action in the analysis.
- 2) In accordance with section 11-200-17(h), HAR, the status of each identified approval should be described. Therefore, we request that to the extent possible the projected submittal dates (i.e., by month/year) of the applications and plans for approval to the various agencies be provided.
- 3) In accordance with section 11-200-17(i), HAR, the probable impact of the proposed action on the environment shall be included. Review of the DEIS indicates that no inventory and assessment of arthropods on the subject property was conducted. In the interest of full environmental disclosure, we request that such a study be conducted.

According to the DEIS, the proposed project will have negligible long-term impacts upon the air quality and ambient noise levels of the area. However, there are no studies in the DEIS to support these conclusions. Given the technical and

scientific nature of these issues, it has been customary to assess existing conditions and potential impacts and mitigation measures based on studies conducted by experts in the respective fields. In fact, the location, size, and configuration of the development would appear to require that such studies be done. As such, we request that the conclusions be affirmed by acknowledged experts in the fields in question. In the alternative, we request that the conclusions be comprehensively supported by published studies that have addressed the impacts upon air quality and ambient noise levels from developments in the County of Hawaii that are similar to the proposed project.

Pursuant to section 11-200-17(i), HAR, the interrelationships and cumulative environmental impacts (both direct and indirect) of the proposed action and other related developments should also be discussed, including the potential secondary effects. We note that in the *Cumulative and Secondary Impacts* section of the DEIS, the discussion is generalized with certain developments mentioned in passing. Given the growth in the region, we request that the discussion be more definitive and quantitative in nature by specifically describing the extent to which the proposed project in conjunction with specific planned and existing developments in the region will contribute to the overall cumulative impact to public services and facilities (e.g., highways, schools, wastewater, solid waste, etc.) and resources (e.g., visual, aural and air quality, flora and fauna, etc.).

Finally, a discussion on the existing civil defense conditions and potential impacts and proposed mitigation measures should be included.

- 4) In accordance with section 11-200(17)(k), HAR, the possibility of environmental accidents resulting from any phase of the project should be included.
- 5) In accordance with section 11-200-17(m), HAR, mitigation measures proposed to avoid, minimize, rectify, or reduce impact should be considered. Included in this discussion are the timing of each step proposed to be taken in the mitigation process and other provisions to assure that the mitigation measures will, in fact, be taken. Although the proposed project is represented to involve a redistribution of existing and anticipated demand, we believe that it will still generate additional demand in the location of the proposed project and impact public facilities and services and natural resources to the extent that a comprehensive discussion is warranted on the identification and timing of the specific mitigative actions and the measures to assure their implementation.
- 6) In accordance with section 11-200-17(n), HAR, a separate and distinct section that summarizes unresolved issues should be provided. To the extent that the ultimate development scheme of the project has not been selected, the development schedule has not been determined and should therefore be included as an unresolved issue at this time. As required by this section, a discussion of either how the unresolved issues will be resolved prior to commencement of the project

or what overriding reasons are present to proceed without resolving the problems should also be provided.

- 7) In accordance with section 11-200-20(d), HAR, the original copy of the DEIS or FEIS should be signed and dated by the applicant indicating that the statement and all ancillary documents were prepared under the signatory's direction or supervision and that the information submitted, to the best of the signatory's knowledge, fully addresses document content requirements as set forth in sections 11-200-17 and 11-200-18, HAR, as appropriate. The DEIS that we reviewed did not comply with this requirement. This should be corrected when the FEIS is filed.
- 8) In the DEIS, there are numerous references to the term *potable water*. We request that it be replaced by the term *drinking water*. We have been advised that although potable water has generally been used to mean drinking water, the Department of Health (DOH) uses the latter term specifically to indicate water for human consumption that is derived from surface water and/or groundwater and is regulated by the DOH pursuant to chapter 11-20, HAR.
- 9) We acknowledge that the proposed project will generate revenues to the State and County of Hawaii via increased general excise/income taxes and real property taxes, respectively. We further acknowledge that because the project will serve West Hawaii residents and not a new population, demand for public facilities and services is anticipated to be relocated closer to the urban center, and consequently governmental expenditures are likely to be less than they would be without the project. To substantiate the lower government costs expected with the project, we request that the costs to the State and County be identified for each alternative concept plan by the following areas to include, but not be limited to, roadways (improvements and maintenance), higher/lower education, public safety, health and sanitation, human services, recreation, debt service, and government employee benefits.
- 10) We acknowledge that preliminary offsite infrastructure costs are provided in the DEIS. However, inasmuch as the number and type of residential units and other uses have been conceptually determined for each alternative, we believe that the onsite costs should also be provided to the extent that construction costs typically associated with residential, commercial, school, and roadway uses can be projected for the project.
- 11) We would like to point out that the reclassification of land from the State Land Use Agricultural District to the State Land Use Urban District is *not* a trigger for the chapter 343, HRS, environmental review process as stated on page 1-14 of the DEIS.

Ms. Mary O'Leary, Senior Planner
March 24, 2008
Page 4

- 12) We note that our office previously prepared a boundary interpretation involving the subject property dated August 16, 1990 (BI No. 90-26). Given that the surrounding areas have since been urbanized pursuant to Docket Nos. A90-660/HFDC and A89-646/Liliuokalani Trust, we suggest that a boundary interpretation request be filed with our office pursuant to section 15-15-22, HAR, to ensure that the subject property is consistent with the current land use district boundaries in the area.

- 13) We acknowledge that a petition for district boundary amendment will be filed with our office in the future by the ultimate developer of the project. Clarification should be provided as to whether said petition will be filed under the expedited approval process provided under section 201H-38, Hawaii Revised Statutes (HRS).

We have no further comments to offer at this time. Thank you for the opportunity to comment on the DEIS.

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

Sincerely,



RODNEY A. MAILE
Interim Executive Officer

c: Office of Environmental Quality Control
Janice Takahashi, Chief Planner, HHFDC



September 25, 2008
2006.70.0900 / 08P-320

Mr. Dan Davidson, Executive Officer
Land Use Commission
Department of Business, Economic Development & Tourism
State of Hawaii
235 South Beretania Street, Suite 406
Honolulu, Hawaii 96813

Dear Mr. Davidson:

Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments your predecessor, Mr. Rodney Maile, provided in a letter dated March 24, 2008 for the above-referenced document. Our responses are provided in the order of his comments.

1. Alternatives. The Final EIS will include a new section describing the alternatives to the proposed project as shown in **Attachment 1** of this letter.
2. Submittal Dates. The Final EIS will include the estimated projected submittal dates of the applications and plans for approval to the various agencies as shown in **Attachment 2** of this letter.
3. Assessment of Arthropods. The Final EIS, as shown in **Attachment 3** of this letter, will contain the results of a cave biological survey conducted by SWCA Environmental Consultants in August 2008.

Air Quality and Noise Levels. Other published studies for developments in Hawaii County similar to or larger than the proposed project conclude that there will be no significant future impacts to air quality or noise quality. For example, the Kona Kai Ola Final Environmental Impact Statement (July 2007) contains an air quality study prepared by B.D. Neal & Associates. The Kona Kai Ola project proposes a mixed-use development with approximately 2,503 units on 530 acres. The Kona Kai Ola project site is approximately two to three miles west-northwest of the Keahuolu project site.

Existing air quality in the area of the Keahuolu project is relatively good. Major sources of air pollution include the Hawaii Electric Light Company's Keahole Power Plant and emissions from vehicles, especially along Queen Kaahumanu Highway. The B.D. Neal study notes that the Department of Health's air quality monitoring site in the Kealakekua area showed that existing sulfur dioxide measurement concentrations were consistently low over a 5-year period (2000-2004), representing about 10 percent of the state and national standard. The study also noted that there were no exceedances

recorded for the state/national 3-hour and 24-hour Ambient Air Quality Standards (AAQS) for sulfur dioxide.

Future air quality is expected to remain good. According to the B.D. Neal study, in the year 2020 with the Kona Kai Ola project (with approximately 2,500 units), ambient concentrations of carbon monoxide are projected to remain within state and federal standards, even with increased vehicular traffic. Indirect air pollution will be created from oil-fired electrical power generating facilities which will meet the electrical power needs of the project. The analysis presented in the Kona Kai Ola Final EIS shows that the estimated indirect emissions from the Kona Kai Ola project's electrical demand will amount to only eight-percent (8%) of the existing air pollution emissions occurring on the island of Hawaii, assuming all project power is derived from oil. The Kona Kai Ola Final EIS states that no long-term air quality mitigation measures were needed, as projected emissions are expected to remain within both state and national air quality standards. The Keahuolu EIS discusses short-term construction-related air quality impacts and mitigation measures.

The Kona Kai Ola Final Environmental Impact Statement (July 2007) contains a noise assessment prepared by D.L. Adams Associates. The Final EIS states that long-term (24-hour) and short-term (30-minute) noise measurements were made at various locations around the Kona Kai Ola site, which borders Queen Kaahumanu Highway along one side. Long-term measurement shows that hourly noise levels generally ranged from 37 dBA to 56 dBA. This is within the Federal Highway Administration and State Department of Transportation noise limit of 72 dBA.

The vehicular traffic noise analysis for the Kona Kai Ola project anticipates that noise levels could be expected to increase by 1 dB to 2dB with the project; a 3dB change is not considered significant. Even with the expected increase in traffic, future long-term noise levels would be within the federal and state noise limit. The Keahuolu EIS discusses short-term construction-related noise impacts and mitigation measures.

Cumulative Environmental Impacts. The Draft EIS considers cumulative and secondary impacts in three ways. First, infrastructure planning has involved close collaboration between the County of Hawaii and nearby landowners, all of whom recognize the importance of collaboration to minimize impacts of population growth on roads, the wastewater system, and water supply. Next, several impact analysis sections deal with both immediate and cumulative impacts. For example, the traffic analysis deals not only with project-generated traffic, but with cumulative increases in traffic on Kona roadways. Other infrastructure analyses assess project impacts in relation to plans and studies that take into account regional growth projections (e.g., the County's *Updated Integrated Solid Waste Management Plan* and the *Draft Report Hawaii County Water Use and Development Plan Update*). Thirdly, "Section 6.3 Cumulative and Secondary Impacts" of the Draft EIS provides a synthesis of past, ongoing, and emerging growth in the region, and assesses the project's impacts in that context.

The Keahuolu project is planned to serve the region's need for workforce housing near job centers. It will not attract new residents to Hawaii, but will help residents find housing convenient to work, schools, and other urban amenities. Project residents will find better housing and/or shorter commute times in Keahuolu than in their current homes. Consequently, the regional impact is small, and may involve a reduction in the cost of public service delivery, since the project site is close to public safety facilities.

The discussion of "Purpose and Need for the Project" (Section 1.5) includes a brief account of major housing projects, including affordable housing, in West Hawaii and compares regional housing production to the thousands of families in the region and islandwide seeking to move to affordable housing in the next few years. The Hawaii Housing Finance and Development Corporation expects its chosen developer to propose its specific plan based on more detailed market analysis of demand for particular product types, ownership or rental arrangements, and price points, taking into account the actual and likely new production in other developments.

Existing Civil Defense. The Final EIS will contain information regarding the County of Hawaii's Civil Defense Agency as shown in **Attachment 4** of this letter.

4. Section 11-200(17)(k), Hawaii Administrative Rules states, "*The possibility of environmental accidents resulting from any phase of the action shall also be considered.*" The possibility of environmental accidents from any phase of the action was considered. Additional discussion has been added to Section 6.2 of the Final EIS to address the possibility of environmental accidents. The new text states: "The possibility of an environmental accident has also been considered. For the purposes of this discussion, the term "environmental accident" refers to unanticipated occurrences resulting from the failure of a specific component of the proposed action. For example, a bursting subterranean water main resulting in a sinkhole forming in a street would meet our definition of an environmental accident, as opposed to a natural disaster such as the flooding of a neighborhood during a severe thunderstorm resulting in damage to homes. The development of a residential subdivision on previously vacant land introduces the possibility that an environmental accident may occur. This possibility has been considered in the course of site planning for the proposed project. The design and construction of infrastructure, including roadways, utilities, drinking water storage and transmission, and wastewater collection and treatment are all conducted in accordance with applicable federal, State and County rules and regulations in an attempt to prevent an environmental accident from occurring.
5. Mitigation measures were provided in each Section of Chapter 3 and Chapter 4 of the Draft EIS. The timing of most mitigation measures are linked to the sequence of the permitting processes and/or the sequence of development. Some mitigation measures identified in the Draft EIS are required by law, such as a National Pollutant Discharge Elimination System permit, which assures its implementation or the developer would not be allowed to proceed with the project. Other mitigation measures stated in the EIS represent a commitment by HHFDC and its developer. State and county agencies can impose these and other mitigation measures as conditions of approval in permit processes subsequent to completion of the environmental review process.

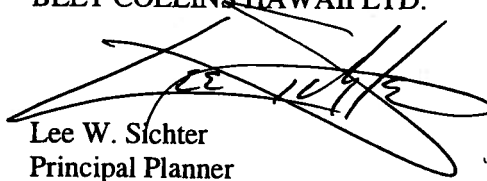
Mr. Dan Davidson, Executive Officer
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6. The Final EIS will contain a separate and distinct section that summarizes unresolved issues and discusses of those unresolved issues in relationship to commencement of the project as shown in **Attachment 5** of this letter.
7. The Final EIS will be signed and dated by the applicant.
8. We concur that references to "potable water" are to be replaced with the term "drinking water."
9. The Final EIS will be revised to include the text in Section 4.9.4.2 Economic Impacts – Government Costs as shown in **Attachment 6** of this letter.
10. The Final EIS will contain preliminary on-site costs information as shown in **Attachment 7** of this letter.
11. We acknowledge your comment that reclassification from the State Land Use Agricultural District to the State Land Use Urban District is not a trigger for the Chapter 343, HRS, environmental review process. Section 1.7 of the Final EIS will be revised as shown in **Attachment 8** of this letter.
12. A boundary interpretation request will be filed with the Land Use Commission office.
13. It is the intention of the Hawaii Housing Finance and Development Corporation that the selected developer file the State Land Use District Boundary Amendment with the Land Use Commission office under the expedited approval process provided under Chapter 201H, Hawaii Revised Statutes.

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Lee W. Sichter
Principal Planner

LWS:lf

Attachments

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

Attachment 1

In the Final EIS Section 6 regarding alternatives will be revised as follows:

CHAPTER SIX: ALTERNATIVES

The alternatives that were considered to the proposed action are limited to those which would allow the objectives of the proposed project to be met, while minimizing potential adverse environmental impacts, according to Section 11-200-17(f), HAR. Feasible alternatives must provide for-sale dwelling units on State-owned land. The Alternative Concept Plans presented in this EIS were developed during the master plan process and with preliminary input from governmental agencies, surrounding land owners and stakeholders. The intent of the conceptual planning process was to understand the physical, environmental and cultural character of the land and then propose land use plans that would fulfill HHFDC's mission and objectives, as well as general State and County land use policies for the region.

This section presents other alternatives and potential impacts that have been considered during the planning process. The remainder of the EIS concentrates on discussing and analyzing the impacts of the three Alternative Concept Plans.

6.1 THE "NO ACTION" ALTERNATIVE

The No Action Alternative would mean that the site would remain vacant and undeveloped and there would be no immediate change to the property. The no-action alternative would not fulfill HHFDC's mission to develop low- and moderate-income housing projects. The No Action Alternative would not respond to the need to provide affordable housing in West Hawai'i as discussed in Section 1.5, and would not be consistent with State and County polices and priorities to provide affordable housing, in particular near job centers.

Under the No Action Alternative, the site would remain vacant in an area that is being developed with housing. The project site is in a prime location to provide housing in close proximity to Kailua-Kona. The site, if vacant, would be significantly underutilized in terms of meeting the demand for long-term affordable housing in West Hawai'i.

The No Action Alternative would not meet the project's objectives to:

- Develop affordable housing near job centers, in particular West Hawai'i, which would lessen regional road congestion;
- Build a variety of housing unit types in response to the increase in population in West Hawai'i and the demand for affordable housing;
- Create a walkable, bikable, active-lifestyle community;
- Develop infrastructure that will be required for the project, but also benefit the region;
- Create a community that will integrate the project site with the area's current and future transportation network, as well as adjacent lands;
- Provide a transit-oriented high density development within easy walking distance of future bus stops along Ane Keohokalole Highway;
- Create a community with a mixed-use town center that contains multi-family housing, ground-floor commercial space and civic open space;
- Contribute to the greater community by providing a site for a new DOE elementary school; and
- Retain archaeological preserve areas and provide open space and neighborhood parks.

6.2 ALTERNATIVE LOCATIONS

HHFDC's primary objective for the Keahuolu project is to provide affordable dwelling units, including for-sale units in West Hawai'i. The Keahuolu site is non-ceded land and is HHFDC's only non-ceded property on the island of Hawai'i. Development of non-ceded lands provides the option of offering affordable for-sale housing in fee simple ownership. Therefore, State-owned ceded lands at other locations were not considered because they are not viable alternatives that would meet HHFDC's goals and objectives for this project.

In terms of the larger picture of HHFDC's mission to develop and finance low- and moderate-income housing projects throughout the state of Hawaii, the objective of the current project is to provide affordable housing in response to demand in West Hawai'i. Therefore, locating this project on another island or in another location on the island of

Hawai'i are not viable alternatives. HHFDC's objectives for the Keahuolu project can be met at the proposed site. There are no other viable locations on the island of Hawai'i that would allow the project's objectives to be met.

6.3 THE ALTERNATIVE OF POSTPONING ACTION UNTIL FURTHER STUDY

The alternative to postpone action and conduct further study would not allow HHFDC to meet its objective to provide affordable for-sale housing units in a timely manner in response to the current strong market demand in West Hawai'i. This alternative is not warranted because the environmental impact statement and its related technical studies provide a thorough evaluation of the project's potential impacts; subsequent entitlement processes will provide for public individual and government agency input and comment, as well as the opportunity to request more information or further study; and significantly delaying the project will likely increase the price of moderate- to market-priced units that may be a part of the ultimate developer's project. Delays for more study will only further aggravate housing demand and increase prices.

Attachment 2

In the Final EIS Section 1.9 regarding permit submittal dates will be revised as follows:

1.9 REQUIRED PERMITS AND APPROVALS

The following is a summary of major approvals and permits required for implementation of the proposed project. Additional approvals and permits may be necessary. The HHFDC will not be the developer of the project. The developer will be required to comply with the rules, regulations, ordinances, codes, and standards of the County and any federal and state requirements. It is the intention of the HHFDC that the developer submit the project with the State LUC and the County of Hawai'i under the expedited approval process provided for under Section 201H-38, HRS. Chapter 5 includes a more detailed discussion of the project's consistency with federal, state, and local land use plans, policies and controls.

Table 1-5: Required Permits and Approvals

Permit or Approval	What is Needed	Agency	Status
Chapter 343, HRS Compliance	Acceptance of Final EIS	Office of the Governor	Submitted Final EIS on September 2008. The Office of the Governor acceptance of the Final EIS is pending.
Land Use Boundary Amendment	State Agricultural District to State Urban District	State LUC	Filed under Section 201H-38 HRS. Expected submittal January 1, 2009.
Zone Change	A-5a (Agriculture) to new zoning designation(s) to be determined by selected developer	County of Hawai'i County Council	Submit under Section 201H-38 HRS or Sections 46-15 or 15.1 HRS, pending approval of Land Use Commission
Exemptions from statutes, ordinances charter provisions and/or rules	Approval of exemptions	County of Hawai'i County Council	Pending identification of exemptions
Archaeological Inventory Survey of Queen Lili'uokalani Trust Property by PHRI/Donham in 1990	Approval of archaeologist's work and recommendations	State Historic Preservation Division (SHPD)	SHPD approval letter 2/17/1993 Log. 6839, Doc 9302RC34
Archaeological Mitigation Program for Queen Lili'uokalani Trust Property by PRHI/Jensen in 1992	Approval of archaeologist's work and recommendations	SHPD	SHPD approval letter 10/21/1993 Log 10361 Doc. 9312RC02
Data Recovery Work	Approval of archaeologist's work and recommendations	SHPD	Archaeologist not yet contracted.
Site Preservation Plan	Approval of archaeologist's work and recommendations	SHPD	Archaeologist not yet contracted.
Archaeological Survey for proposed Water Reservoir	Approval of archaeologist's work and recommendations	SHPD	SHPD approval letter xx/xx/2008 Log 2008.1339 Doc. 0805TS02
Monitoring Plan for proposed Water Reservoir	Approval of archaeologist's work and recommendations	SHPD	Archaeologist not yet contracted.
National Pollutant Discharge Elimination System (NPDES) Permit	Approval of plans	State Department of Health (DOH)	Expected submittal July 1, 2009
Subdivision Approval	Preliminary and Final approvals	County of Hawai'i	Submit under Section 201H-38 HRS or Sections 46-15 or 15.1, HRS. pending zoning approval
Grading, building, plan approval and other necessary development permits	Approval of plans	County of Hawai'i	Submit under Section 201H-38 HRS or Sections 46-15 or 15.1, HRS pending subdivision approval.
Production Well(s) Construction Permit / Pump Installation Permit	Approval of plans and water allocation by the County of Hawai'i, Department of Water Supply (DWS)	State Department of Land and Natural Resources (DLNR) Commission on Water Resource Management	Expected submittal July 1, 2009

Attachment 3

In the Final EIS Section 3.8 will be revised to include the 2008 cave biological survey results as follows:

3.8 INVERTEBRATE SURVEY

SWCA Environmental Consultants conducted a biological survey of lava tube caves on the project site. The survey report is included in Appendix H. The study's objectives included: (1) conducting a biological survey of caves within the project area; (2) specifically identifying biologically significant caves; (3) compiling a list of faunal species found in the caves, particularly invertebrates; and (4) providing management recommendations for the more biologically significant caves.

3.8.1 Existing Conditions

SWCA entered onto the project site and conducted a series of cave surveys from June 18-20, 2008. Surface reconnaissance surveys were first conducted to locate and document known cave entrances and any previously unidentified features on the site. Once reconnaissance surveys were completed, a list of cave sites proposed for more detailed inventory survey was developed. The focus of these inventory surveys was to develop a general understanding of the troglobitic¹ cave fauna within the Keahuolu project site.

The SWCA study team found eight cave openings at Keahuolu, of which three caves appeared to have a suitable habitat for troglobitic arthropods. SWCA found a total of 14 distinct species of arthropods within four caves. Of these 14 species, SWCA collected and examined 13 species. Current State and Federal regulations provide no special (or specific) protection for any of these species.

Only two possible native cave species are represented in SWCA's findings: the Rhagidiid mite, which belongs to a group with two known blind cave species and an eyed species known from fumaroles near Kilauea, and the cave moth (*Schrankia* species). The remaining

¹ Troglobitic animals live entirely in the dark parts of caves and are adapted for life in total darkness.

eleven species are classified as alien invaders. The full list of species is located in Table 2 of Appendix H and summarized below.

Acari (Mites): Only one species of mite was identified. The Rhagidiidae is described as a pale predatory mite with conspicuous eyespots.

Araneae (Spiders): Six species of spiders were identified by SWCA during the survey.

Collembola (Springtails): One species of Springtails was discovered (Entomobryidae: Genus species [unidentified]).

Insecta (Insects): Five species of insects were identified.

3.8.2 Potential Impacts and Mitigation Measures

The lava tubes and caves in the Keahuolu project site contain a variety of invertebrates. SWCA concluded that these biological resources do not present a regulatory obstacle to development. None of the identified species is listed as threatened or endangered.

Potential impacts to these species were evaluated. Ultimately, the disposition of the surveyed caves will depend upon whether they contain significant archaeological or cultural material. Mitigation measures are recommended for those caves and/or lava tubes identified for preservation by the SHPD. A determination as to the preservation of caves and/or lava tubes containing no archaeological or cultural resources will be made by the developer pursuant to the final development plan. In all likelihood, caves and/or lava tubes containing no significant archaeological or cultural resources will be destroyed during site grading and preparation, as the invertebrates inventoried in them do not warrant preservation. Furthermore, the caves pose a liability to the landowner if someone should enter one and become injured. In some instances, a cave or lava tube containing no archaeological or cultural resources may be preserved by the developer because the area surrounding it may not require mass grading. In those cases, the entrance will likely be blocked or hidden to prevent intentional or unintentional trespassing.

SWCA made the following recommendations to minimize impacts on caves, particularly those known to contain cultural resources:

- Minimize adding topsoil or impermeable material to the surface directly above known caves and preserves.
- Control invasive plant species within the preserves. For landscaping, utilize native plants and avoid aggressive, fire-prone, non-native grasses.
- Exercise care to minimize surface disturbance during construction within the general vicinity of known caves.
- Prevent wildfires and develop a rapid response plan to fires within the proposed project area.
- If unsurveyed caves are encountered during construction and the caves are accessible, allow a biological survey if appropriate.

Attachment 4

In the Final EIS Section 4.10.1.1 regarding civil defense will be revised as follows:

4.10.1.1 *EXISTING CONDITIONS*

Civil Defense. The County's webpage states that the role of the Civil Defense Agency is to direct and coordinate the development and administration of the County's total emergency preparedness and response program to ensure prompt and effective action when natural or man-caused disaster threatens or occurs anywhere in the County of Hawai'i.

Attachment 5

In the Final EIS Section 7.5 regarding unresolved issues will be revised as follows:

7.5 UNRESOLVED ISSUES

The following issues remain unresolved at the time this document is being prepared.

Final Development Scheme and Schedule: The HHFDC is reviewing proposals from qualified developers to develop the Keahuolu Affordable Housing Project. The final development scheme will be within the range of the concept plans presented in this EIS. However, the following details are unknown at the time of this writing: the total number of housing units; the mix of affordable units and market units; the mix of single-family and multi-family; the mix of low density, medium density, and high density; the total square footage of commercial floor area; the alignment/route of off-site wastewater lines that will service the project. The Board of Directors of HHFDC approved Forest City Hawaii Residential, Inc., as the developer of the project, subject to successful negotiation and execution of a development agreement. However until the development agreement is signed, there is the possibility that an agreement may not be reached between HHFDC and Forest City, and thus the search for a developer would continue until one is selected and a development agreement is signed. Until that time, the details of the proposed project and the developer's schedule for the project are not available. That information will become available prior to subsequent permitting processes, which will provide the opportunity for public and agency input and comment, as well as the opportunity to request additional information.

Concurrency Ordinance: Since publication of the February 2008 Draft EIS for the Keahuolu project, the County of Hawai'i Planning Department clarified that Ordinance No. 07 99 became effective on June 25, 2007. It created concurrency standards for roads and water supply in change of zone actions. According to the County of Hawai'i Planning Department, rezoning would not take effect unless improvements to the traffic situation occur before the occupancy of the project, and that there would also be standard expectations for water supply for new rezonings.

It is the intention of the HHFDC that the project developer submit the project to the State LUC and the County of Hawai'i under the expedited approval process provided for under Section 201H-38, HRS. If the expedited approval process is used by the Keahuolu project developer, it is unresolved as to what extent the concurrency standards would or would not apply.

County Council Deferred Action on Change of Zone Applications: Since publication of the February 2008 Draft EIS for the Keahuolu project, the County of Hawai'i Planning Department clarified that Resolution No. 529 08 was adopted on March 12, 2008. According to the County, it extended the temporary delay of Council action on rezoning applications until the North and South Kona Community Development Plan is adopted by ordinance, or December 1, 2008, whichever occurs first.

It is the intention of the HHFDC that the project developer submit the project with the State LUC and the County of Hawai'i under the expedited approval process provided for under Section 201H-38, HRS. According to the estimated permit schedule in Table 1-4 of this EIS, it is anticipated that a zone change application for the Keahuolu project would at the earliest be submitted to the County on January 1, 2009, which is after the December 1, 2008 deadline for the temporary delay of Council action on rezoning applications. It is unknown whether the County's deadline will be extended and if the Council will continue to defer action on change of zone applications. If the expedited approval process is used by the Keahuolu project developer, it is unresolved as to what extent the Council's deferral on change of zone applications would or would not apply, if it is still in effect.

Attachment 6

The Final EIS Section 4.9.4.2 regarding government costs will be revised as follows:

4.9.4.2 FUTURE SOCIO-ECONOMIC CONDITIONS WITH THE PROJECT

As a workforce housing development, the project is planned to have beneficial socio-economic impacts. This section provides detailed accounts of specific impacts, covering both immediate and cumulative impacts.

Economic Impacts

Construction Employment and Wages

Development of the Keahuolu project is expected to involve residential construction over a period of four to eight years, as shown in Table 4-47. Commercial construction could follow residential development and occur in two phases. Project construction work will include off-site infrastructure development, on-site development of lots and infrastructure, and housing construction. The next table shows construction spending and direct construction labor, estimated in full-time equivalent jobs, for selected years and cumulatively over the construction period.²

² Many specialized construction jobs are short-term. For example, an electrician may spend a week or less on a project where others work throughout the year. The number of workers hired is likely to be larger than the estimated number of full-time equivalent jobs. Also, the direct construction workforce includes workers in the offices and baseyards of firms involved in a project, as well as ones actually on-site.

Table 4-47: Preliminary Timetable for Construction

Year	Concept A No. Units	Concept B No. Units	Concept C No. Units	Commercial (SF)
2010	300	300	300	
2011	300	300	300	
2012	300	300	300	
2013	120	300	300	
2014		300	300	
2015		300	300	
2016		40	300	
2017			230	
2018				100,000
2019				
2020				97,000
Total	1,020	1,840	2,330	197,000

Source: HHFDC.

Direct jobs are created within firms and by engaging subcontractors in building the project. When these jobholders in turn buy materials and equipment in the local economy, they contribute to the creation of indirect jobs (for example, in home supply stores or from concrete manufacturing firms.) When in turn direct and indirect workers spend their wages, they create induced jobs, supported by the movement of capital from those wages through the local economy. Induced jobs largely consist of retail, service, and government jobs.

Wages can be estimated from records of average wages in the construction industry in the County. The indirect and induced jobs are spread throughout the economy, so they are estimated from average wages of all workers.

Table 4-48: Construction-Related Spending, Jobs, and Wages

	2010	2015	2020	Cumulative, to 2020
Total construction consts (Millions)				
Concept A	\$126.1	\$0.0	\$7.3	\$455.0
Concept B	\$125.2	\$71.8	\$7.3	\$651.5
Concept C	\$113.0	\$61.0	\$7.3	\$676.5
Direct construction workforce (annual person-years)				
Concept A	639	-	37	2,044
Concept B	634	364	37	3,030
Concept C	573	309	37	3,159
Total construction-related workforce (annual person-years)				
Concept A	1,527	-	88	4,885
Concept B	1,516	869	88	7,241
Concept C	1,369	738	88	7,549
Direct construction wages (Millions, constant 2007 \$s)				
Concept A	\$34.2	\$0.0	\$2.0	\$109.5
Concept B	\$34.0	\$19.5	\$2.0	\$162.3
Concept C	\$30.7	\$16.5	\$2.0	\$169.2
Total construction-related wages (Millions, constant 2007 \$s)				
Concept A	\$66.2	\$0.0	\$3.8	\$211.9
Concept B	\$65.8	\$37.7	\$3.8	\$314.1
Concept C	\$59.4	\$32.0	\$3.8	\$327.5

Notes: Construction costs estimated by Belt Collins Hawaii. Cost estimates cover on-site and off-site infrastructure, residential and commercial construction. School construction costs are not included. Workforce full-time equivalent jobs are estimated based on the relation between statewide construction spending and the construction workforce. Indirect and induced construction-related workforce calculated from the State's Inter-County Input-Output Model (2002 version). Wages estimated from 2005 average annual industry wage for Hawai'i County and total covered employment (for indirect and induced jobs), using 2005 data adjusted to 2007 in line with increases in the Consumer Price Index.

Sources: DBEDT, State of Hawaii Data Book 2006 (Honolulu, HI: 2007); *The Hawaii Inter-County Input-Output Study: 2002 Benchmark Report*. Honolulu, HI. 2007. Posted at http://www.hawaii.gov/dbedt/info/economic/data_reports/2002_Intercounty_I-O/. Department of Labor and Industrial Relations, Employment and Payrolls in Hawaii, 2005. Honolulu, HI. 2006.

On the average, some 204 to 243 full-time direct jobs will be involved in construction of the Keahuolu Project annually, while total construction-related employment will reach 489 to 581 jobs annually, as shown in Table 4-49.

Table 4-49: Average Annual Construction-Related Workforce

Concept	Construction Period	Average Annual Construction Workforce	
		Direct	Total
A	10 years	204	489 person-years
B	13 years	233	557 person-years
B	13 years	243	581 person-years

Operations Employment and Wages

Residential projects do not result in the creation of many permanent jobs. Resident managers and a few landscape, maintenance, and security workers could be employed on a permanent basis at Keahuolu. Within the neighborhood commercial area, as many as 800 jobs could be located when it is fully built out and occupied. These jobs would exist in Hawai'i County wherever families find it possible to live: they would still exist even if the project is not built.

The location of direct jobs at the project site is a socio-economic impact, affecting residents and their neighbors. The indirect and induced jobs associated with operations on the project site are not, since those operations, funded by resident spending, would occur somewhere in the County with or without the project. Accordingly, indirect and induced jobs associated with operations are not calculated here.

Labor Force Impacts

The Keahuolu project will affect the regional labor force in part by creating jobs, but more importantly, by providing housing for service, retail, managerial, and professional workers. As more housing units are built, fewer workers will face unacceptable housing choices and/or difficult daily commutes. People living close to Kailua-Kona are likely to have more employment options, including full- and part-time employment. By shortening the commute time for workers and their families, the project is likely to increase labor force participation, with some joining the labor force and others changing from part-time to full-time

employment. For young people, the number of easily accessible jobs is far greater in Kailua-Kona than in outlying areas. Consequently, high-school student participation in the labor force will likely be higher. (In 2000, civilian workers amounted to 70 percent of persons 16 and over in North Kona, compared to 53 percent in Ka'u and 54 percent in North Kohala.)

With fewer obstacles to work, residents living near job centers are more likely to keep their jobs than ones with long commutes. A long-term result of increasing the housing stock for Kailua-Kona workers will likely be lower job turnover.

Population Impacts

Table 4-51 shows calculations for on-site population. When fully built, the Keahuolu project will house some 2,988 to 6,826 residents.

The project is unlikely to attract any new residents or visitors to Hawai'i. Affordable units will be sold or rented to full-time occupants. A resident preference will be established for the initial sale of market units. While some market units could theoretically be sold to non-residents, this seems unlikely given both strong resident demand and the design of the project as a community for residents, not a resort.

Table 4-50: Direct Operations Jobs and Wages: Annual Estimates for Selected Years

	2010	2015	2020
Operations Jobs			
<i>Concept A</i>			
Residential			
Building Services	4	12	12
Security	1	3	3
Grounds and maintenance	4	4	4
Commercial	-	-	788
	9	20	808
<i>Concept B</i>			
Residential			
Building Services	4	24	25
Security	1	6	6
Grounds and maintenance	4	4	4
Commercial	-	-	788
	9	34	823
<i>Concept C</i>			
Residential			
Building Services	6	36	47
Security	2	9	12
Grounds and maintenance	4	4	4
Commercial	-	-	788
	12	49	850
Operations Wages			
<i>(In Millions of Constant 2007 \$s)</i>			
Concept A	\$0.2	\$0.5	\$22.0
Concept B	\$0.2	\$0.9	\$22.4
Concept C	\$0.3	\$1.2	\$23.1

Notes: Building services and security jobs are associated with multifamily construction; grounds and maintenance jobs are associated with opening up and using the entire project site. Commercial jobs estimated at 4 jobs per 1,000 square feet gross leasable area.

Table 4-51: On-Site Occupancy and Population

	2010	2015	2020
Units Built			
Concept A	300	1,020	1,020
Concept B	300	1,800	1,840
Concept C	300	1,800	2,330
Units Occupied			
Concept A	291	989	989
Concept B	291	1,746	1,785
Concept C	291	1,746	2,260
Resident Population			
Concept A	879	2,988	2,988
Concept B	879	5,273	5,390
Concept C	879	5,273	6,826

Notes: Occupancy is estimated at 97%, to allow for normal vacancies due to sales or change in renters. Because of strong demand, occupancy is expected to be high from initial construction through the period studied. Population estimated from the 2000 Census data for Census Tract 215.01, which contains a broad mix of local residents. Its average household size (3.02 persons per household) was well above the district average (2.70 persons per household).

Impacts on the Housing Market

Demand for homes in North Kona is already strong and expected to exceed planned production, especially of housing for middle-income families. (See the discussion of housing demand in 2006, in Chapter 2.) Also, the district resident population is expected to increase by some 6,400 persons between 2010 and 2020. That increase accounts for approximately 2,370 households at the 2000 district average household size of 2.70 persons/household. Additional housing demand at the regional level will be due to movement of the island of Hawai'i residents to homes nearer the urban center and to purchases by non-residents, whether for vacation homes or retirement.

Initial plans for the Keahuolu project call for production of 300 housing units annually, with the first homes available in 2010.³ Taken together with additional DHHL increments in La'i 'Opua, affordable units and some of the market housing produced in Palamanui, new housing in Waikoloa Village, and smaller projects, the cumulative impact of planned housing developments should be a significant reduction in demand. With much more housing available for residents, the price of moderate homes can be expected to stabilize. A wide range of prices and housing types (including apartments, condominiums, townhomes, homes, self-help housing, and properties in leased-land as well as fee-simple communities) will be available to West Hawai'i residents.

The project's impact on housing can be estimated in relation to demand indicators. The 2006 *Hawaii Housing Policy Study* suggests that there is demand from about 7,200 resident households for units in North Kona in the next few years. In addition, population growth will account for formation of at least 2,370 new households.

Some 1,020 to 2,330 units are proposed in the different concepts for the Keahuolu project. The net increase in units is smaller, since the project also includes operational jobs, and the workers in those jobs will need housing. Table 4-52 shows the net housing impact of the project. The net addition to the housing stock is estimated as 511 units under Concept A to 1,794 units under Concept C. Given a regional demand for approximately 9,570 units (7,200 units existing demand plus 2,370 new households), the net contribution of the project amounts to 5.3 to 18.7 percent of regional demand.

³ As noted in earlier chapters, the three conceptual alternatives represent the range of potential development that could be done in response to HHFDC's Request for Proposals. The actual volume and timing of construction will be refined by the developer over time.

Table 4-52: Net Housing Impact of Keahuolu Project

	2010	2015	2020
On-site Jobs			
Concept A	9	20	808
Concept B	9	34	823
Concept C	12	49	850
On-site Workers' Households (1)			
Concept A	5	12	509
Concept B	6	22	519
Concept C	7	31	536
Population supported by On-site jobs (2)			
Concept A	16	37	1,539
Concept B	17	65	1,568
Concept C	22	93	1,620
Units Built			
Concept A	300	1,020	1,020
Concept B	300	1,800	1,840
Concept C	300	1,800	2,330
Net Units (Units Built - On-site Workers' Households)			
Concept A	295	1,008	511
Concept B	294	1,778	1,321
Concept C	293	1,769	1,794

Notes:

- 1 Workers' households are assumed to include 1.585 workers per household, on average, based on averages for CT 215.01 in 2000.
- 2 Workforce households assumed to average 3.02 persons/household (based on 2000 average household size, CT 215.01).

Fiscal Impacts

Government Revenues

Development of the Keahuolu project will result in revenues for the State associated with construction and sale of property. The County will gain revenues from taxes on homes and residential land.

The State is expected to gain from corporate income taxes on firms building the project, from excise taxes on spending by construction-related workers in the local economy, and from income taxes on construction-related workers' wages. Because the project is being built to increase the supply of affordable housing, direct construction revenues will be exempted from the excise tax. State revenues associated with construction are derived in Table 4-53. Conveyance taxes might be levied on some market units, but these are not included in Table 4-53. The cumulative increase in State revenues is estimated as approximately \$19 to \$28 million by the end of the construction period.

The County will see increased revenues from real property taxes. As government land, the project site is not now yielding property taxes. When housing and commercial facilities are occupied, they will be taxable. However, some or all of the housing in the project would likely be assessed at below-market rates, and taxed at special rates for homeowners and affordable rentals. The treatment of low-income rentals at the homeowner rate is a new County practice, and the applicable laws could well be revised before any homes are built at Keahuolu. To derive a minimal estimate of new tax revenues, this analysis assumes that all housing within the project is sold and resold at affordable rates, and that all is taxed at homeowner and affordable rental rates.

For the County of Hawai'i, the minimal real property taxes associated with development of the Keahuolu project are estimated to range from \$1.2 million to \$1.7 million (2007 dollars) annually by 2020 and to reach a cumulative total of \$9.4 million to \$13.0 million through 2020. Table 4-54, Table 4-55, and Table 4-56 show calculations for the three project concepts.

Table 4-53: State of Hawai'i Tax Revenues Associated with Construction, Keahuolu Project

	2010	2015	2020	Cumulative
Total construction costs (Millions of 2007 \$s)				
Concept A	\$126.1	\$0.0	\$7.3	\$455.0
Concept B	\$125.2	\$71.8	\$7.3	\$651.5
Concept C	\$113.0	\$61.0	\$7.3	\$676.5
Total construction-related wages (Millions of 2007 \$s)				
Concept A	\$66.2	\$0.0	\$3.8	\$239.0
Concept B	\$65.8	\$37.7	\$3.8	\$342.3
Concept C	\$59.4	\$32.0	\$3.8	\$355.4
Corporate income taxes (Thousands of \$s) (1)				
Concept A	\$112.6	\$0.0	\$6.5	\$406.4
Concept B	\$111.8	\$64.1	\$6.5	\$581.8
Concept C	\$100.9	\$54.4	\$6.5	\$604.1
Excise Tax on workforce spending (Thousands of \$s) (2)				
Concept A	\$1,659.6	\$0.0	\$95.7	\$5,988.0
Concept B	\$1,647.3	\$944.4	\$95.7	\$8,573.8
Concept C	\$1,487.3	\$802.1	\$95.7	\$8,902.5
Personal Income Tax (Thousands of \$) (3)				
Concept A	\$3,462.5	\$0.0	\$199.7	\$12,493.2
Concept B	\$3,436.9	\$1,970.4	\$199.7	\$17,888.1
Concept C	\$3,103.1	\$1,673.4	\$199.7	\$18,574.0
Total State Revenues (Thousands of \$s)				
Concept A	\$5,234.7	\$0.0	\$302.0	\$18,887.5
Concept B	\$5,196.1	\$2,978.9	\$302.0	\$27,043.8
Concept C	\$4,691.4	\$2,530.0	\$302.0	\$28,080.7

Sources: Hawaii State Department of Taxation, 2001, 2005.

Notes:

- (1) Corporate income tax historically averages 0.17% of corporate revenues (data from 2000).
- (2) Excise tax at 4% of workforce disposable income. Share of spending subject to excise tax estimated from 2002 expenditure data.
- (3) Personal income tax historically 5.22% of resident incomes (average, 1998-2002).

Table 4-54: Minimum Estimate of Real Property Tax Revenues, County of Hawai'i, from Development of Project Concept A

	2010	2015	2020	Cumulative
Basis for Valuation				
Units built				
For Sale (1)	239	813	813	813
For Rent (1)	61	207	207	207
Commercial area (GLA in thousands sq. ft.)	-	-	197	197
Value (Millions of 2007 \$s)				
Value of housing units				
For Sale (2)	\$59.5	\$202.4	\$202.4	
For Rent (3)	\$10.0	\$34.0	\$34.0	
Homeowner's Exemptions				
Basic Exemption (4)	\$9.6	\$32.5	\$32.5	
Additional Housing Exemption (5)	\$11.9	\$40.5	\$40.5	
Net Taxable Value, Housing	\$48.0	\$163.3	\$163.3	
Value of Commercial Property (6)	\$0.0	\$0.0	\$29.6	
Real Property Taxes (Thousands of 2007 \$s)				
Residential (7)	\$266.6	\$906.5	\$906.5	\$8,851.4
Commercial (8)	\$0.0	\$0.0	\$266.0	\$536.0
Total	\$266.6	\$906.5	\$1,172.4	\$9,387.4

Notes:

- (1) One-third of multifamily units assumed to be rentals.
- (2) Average housing unit assumed to be unit affordable for sale to family of four with income 110% of median, (priced at \$217,900 in 2007).
- (3) All rentals assumed to be "affordable," so units qualify for homeowner tax classification. Value of rentals extrapolated by assuming 5.7% cap rate, 95% occupancy, and that the average unit is a two-bedroom unit rented at the top of the affordable range for West Hawaii (\$822). Cap rate based on NCREIF moving average.
- (4) Basic exemption for homeowners = \$40,000 of value.
- (5) Since 2005, Hawaii County exempts 20% of the homeowners' property values, up to \$400,000 in value.
- (6) Commercial property value estimated from assumed construction costs.
- (7) Homeowner class residential property is taxed at \$5.55/\$1,000 value.
- (8) Commercial property is taxed at \$9.00/\$1,000 value.

Sources: Hawaii County property tax information, as posted at
<http://www.hawaiipropertytax.com/pdf/files/HOME%20EXEMPTIONS%20Brochure.pdf>
[http://www.hawaiipropertytax.com/pdf/files/RP%20Form%2019-53\(h\)%20Affordable%20Rental%20Program%20Application.pdf](http://www.hawaiipropertytax.com/pdf/files/RP%20Form%2019-53(h)%20Affordable%20Rental%20Program%20Application.pdf)
 National Council of Real Estate Investment Fiduciaries data posted at <http://www.ncreif.com/#>

**Table 4-55: Minimum Estimate of Real Property Tax Revenues,
County of Hawai'i, from Development of Project Concept B**

	2010	2015	2020	Cumulative
Basis for Valuation				
Units built				
For Sale (1)	233	1,396	1,427	1,427
For Rent (1)	67	404	413	413
Commercial area (GLA in thousands sq. ft.)	-	-	197	197
Value (Millions of 2007 \$s)				
Value of housing units				
For Sale (2)	\$57.9	\$347.2	\$355.0	
For Rent (3)	\$10.0	\$34.0	\$34.0	
Homeowner's Exemptions				
Basic Exemption (4)	\$9.3	\$55.8	\$57.1	
Additional Housing Exemption (5)	\$11.6	\$69.4	\$71.0	
Net Taxable Value, Housing	\$47.0	\$255.9	\$260.9	
Value of Commercial Property (6)	\$0.0	\$0.0	\$29.6	
Real Property Taxes (Thousands of 2007 \$s)				
Residential (7)	\$260.8	\$1,420.5	\$1,447.8	\$12,449.4
Commercial (8)	\$0.0	\$0.0	\$266.0	\$536.0
Total	\$260.8	\$1,420.5	\$1,713.8	\$12,985.3

Notes: See table for Concept A. By assumption, one third of all multifamily units is assumed to be low-income rentals, so tax return on Concept B is higher than for Concept C, which has no single family units.

Table 4-56: Minimum Estimate of Real Property Tax Revenues, County of Hawai'i, from Development of Project Concept C

	2010	2015	2020	Cumulative
Basis for Valuation				
Units built				
For Sale (1)	200	1,200	1,553	1,553
For Rent (1)	100	600	777	777
Commercial area (GLA in thousands sq. ft.)	-	-	197	197
Value (Millions of 2007 \$s)				
Value of housing units				
For Sale (2)	\$49.8	\$298.6	\$386.5	
For Rent (3)	\$10.0	\$34.0	\$34.0	
Homeowner's Exemptions				
Basic Exemption (4)	\$8.0	\$48.0	\$62.1	
Additional Housing Exemption (5)	\$10.0	\$59.7	\$77.3	
Net Taxable Value, Housing	\$41.8	\$224.8	\$281.0	
Value of Commercial Property (6)	\$0.0	\$0.0	\$29.6	
Real Property Taxes (Thousands of 2007 \$s)				
Residential (7)	\$232.0	\$1,247.8	\$1,559.7	\$12,268.6
Commercial (8)	\$0.0	\$0.0	\$266.0	\$536.0
Total	\$232.0	\$1,247.8	\$1,825.6	\$12,804.5

Notes: See table for Concept A. By assumption, one third of all multifamily units is assumed to be low-income rentals, so tax return on Concept B is higher than for Concept C, which has no single family units.

Government Costs

From a planning perspective, the Keahuolu project is a case of "smart growth." This concept is usually discussed in terms of alternative futures: sprawling urbanization vs. compact growth, especially infill growth in existing urban zones. Sprawl involves calculable costs to individuals (travel time and costs; less physical activity and higher incidence of obesity), to communities (lower involvement of adults as volunteers and community participants), and to municipal or regional authorities (higher costs of providing infrastructure over greater distances). For calculations, please see Costs of Sprawl – 2000 published in the "Transit Cooperative Research Program Report 74," 2002.

In the context of Hawai'i County, it is clear that delivery of some services – notably police and fire control – can be accomplished more efficiently and at lower cost if homes are concentrated near police and fire stations. The impact on roadways is also obvious. With concentrated development, traffic congestion may continue to be a serious problem in Kailua-Kona, but it is likely to be less severe over the many road-miles that commuters from Ka'u, South Kona and North Kohala now travel to and from work. The analysis becomes

more complex with regard to wastewater facilities, which exist in urban, but not rural areas. The developer will be responsible for onsite and offsite costs of infrastructure that can be dedicated to the County. The County will thereby acquire assets. The County will also be responsible for operations and maintenance of those assets, but will be able to bill users for these costs. Again, an urbanized population may well make greater demands for recreation services than a dispersed one, but the developer will be responsible for adding parks within the project area.

Increases in certain government revenues are quantified in the EIS because these can be calculated in a straightforward manner. Costs and other revenues are not calculated because the assumptions needed to calculate them are far more complex and may depend on future agency funding decisions (e.g., the timing and extent of park improvements). Since the total costs associated with public facilities for smart growth are likely to be smaller than with dispersed development, it is appropriate to disclose this likely positive impact but not necessary to calculate it in detail.

The project will serve West Hawai'i residents and not a new population. It does not create a new demand for government services but rather relocates that demand to a site near the urban center. Consequently, the costs of government service delivery to Keahuolu project residents are likely to be less than they would be without the project.

Social Impacts

Impacts on West Hawai'i

The Keahuolu project will house a large number of working residents in Kailua-Kona, increasing demand for commercial and public services in the urban area.

The project contributes to a cumulative impact, the differentiation of urban and "country" areas in West Hawai'i. As young working families concentrate in or near Kailua-Kona, outlying areas will tend to have older populations and lower labor force participation. The urban area will be more densely settled, while other areas will be more "country" in

appearance and ambiance. Retirees and some workers willing to commute long distances will still be found throughout West Hawai'i – the impact is the intensification of an ongoing trend, not a qualitative change.

As a rule, the shorter the commute, the easier it is for adults to participate in the life of their home communities, whether as volunteers, as parents involved with their children's schools and teams, or simply as participants in everyday life. Community involvement is likely to increase. On the other hand, residents moving from areas in which they grew up and have family ties can find a new development to be less vibrant and lacking the networks, occasions, and places in which they enjoy community life. The Keahuolu project's design as a walkable community with parks and schools nearby that will help to encourage resident community participation. On balance, then, the project is likely to increase West Hawai'i residents' ability to contribute to community life.

Traffic congestion on Palani Road has long been a source of resident dissatisfaction in Kona. By concentrating residents near Palani Road, close to Kailua-Kona job sites, the project is likely to worsen congestion on that route during its early years. In time, with highway improvements and the construction of new roads, the project will help to limit congestion throughout the region because a smaller share of workers will be commuting long distances on a few through roads.

Impacts on the Project Site and Surrounding Area

The immediate area will change due to the cumulative impact of development in the project, in QLT lands, and in DHHL lands. That change has been anticipated and most of the sites in question are already designated as Urban or Urban Expansion. A new residential center will be created for Kailua-Kona. With the eventual development of new roadways, the project and adjoining sites will have internal circulation, so that trips between homes and schools, community facilities, or commercial areas will not rely on major through roads. The commercial and public facilities within the project will likely help to encourage residents of the project and adjoining areas to limit trips outside the immediate area, and tend to engender a sense of Kealakehe/Kealuolu as a distinctive community or neighborhood in Kailua-Kona.

The new neighborhood will be characterized by design elements intended to encourage walking, bicycling, and public transit use. As a neighborhood with much of the new construction in Kailua, it will likely be more desirable than older areas with homes at similar prices. As a community with a mix of rental and for-sale units, the Keahuolu project will not fit the negative stereotypes associated with low-income housing.

Attachment 7

On-Site Costs:

Table 4-48: Construction-Related Spending, Jobs, and Wages

	2010	2015	2020	Cumulative, to 2020
Total construction consts (Millions)				
Concept A	\$126.1	\$0.0	\$7.3	\$455.0
Concept B	\$125.2	\$71.8	\$7.3	\$651.5
Concept C	\$113.0	\$61.0	\$7.3	\$676.5
Direct construction workforce (annual person-years)				
Concept A	639	-	37	2,044
Concept B	634	364	37	3,030
Concept C	573	309	37	3,159
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Concept A	\$34.2	\$0.0	\$2.0	\$109.5
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Notes: Construction costs estimated by Belt Collins Hawaii. Cost estimates cover on-site and off-site infrastructure, residential and commercial construction. School construction costs are not included. Workforce full-time equivalent jobs are estimated based on the relation between statewide construction spending and the construction workforce. Indirect and induced construction-related workforce calculated from the State's Inter-County Input-Output Model (2002 version). Wages estimated from 2005 average annual industry wage for Hawai'i County and total covered employment (for indirect and induced jobs), using 2005 data adjusted to 2007 in line with increases in the Consumer Price Index.

Sources: DBEDT, *State of Hawaii Data Book 2006* (Honolulu, HI: 2007); *The Hawaii Inter-County Input-Output Study: 2002 Benchmark Report*. Honolulu, HI: 2007. Posted at http://www.hawaii.gov/dbedt/info/economic/data_reports/2002_Intercounty_I-O/. Department of Labor and Industrial Relations, *Employment and Payrolls in Hawaii, 2005*. Honolulu, HI: 2006.

LINDA LINGLE
GOVERNOR

MAJOR GENERAL ROBERT G. F. LEE
DIRECTOR OF CIVIL DEFENSE

EDWARD T. TEIXEIRA
VICE DIRECTOR OF CIVIL DEFENSE



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PHONE (808) 733-4300
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STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE DIRECTOR OF CIVIL DEFENSE
3949 DIAMOND HEAD ROAD
HONOLULU, HAWAII 96816-4495

BELT COLLINS HAWAII

March 31, 2008

Ms. Mary O'Leary, AICP, Senior Planner
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, Hawaii 96819

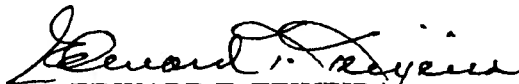
Dear Ms. O'Leary:

Draft Environmental Impact Statement
Keahuolu Affordable Housing Project, North Kona, Island of Hawaii

Thank you for the opportunity to comment on this development. After careful review of the documents for this development, we request that the developer install one outdoor warning siren close to Makala Boulevard near the eastern end of the commercial district complex. We also recommend that the minimum-size siren be 121 DBC, solar powered with omni-directional sound properties. Please refer to the mark on the attached Figure 2-11 CONCEPT PLAN A map for the approximate location of the siren. (Note: The circles are approximate coverage areas only.)

If you have any questions, please call Mr. Norman Ogasawara, Assistant Telecommunications Officer, at (808) 733-4300, ext. 531.

Sincerely,


EDWARD T. TEIXEIRA
Vice Director of Civil Defense

Enc.

c: HCDA
State Civil Defense Radio Shop



September 25, 2008
2006.70.0900 / 08P-321

Mr. Edward T. Teixeira
Vice Director of Civil Defense
Department of Defense
State of Hawaii
3949 Diamond Head Road
Honolulu, HI 96816-4495

Dear Mr. Teixeira:

**Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of March 31, 2008 for the above-referenced document.

The project developer will install one outdoor warning siren (minimum size 121 DBC solar powered with omni-directional sound properties) at a central location within the development.

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.

Lee W. Sichter
Principal Planner

Honolulu
Bangkok
Boulder
Guam
Hong Kong
Manila
Seattle
Shenzhen
Singapore

LWS:lf

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAII 96804

OFFICE OF SCHOOL FACILITIES AND SUPPORT SERVICES

April 1, 2008

Ms. Mary O'Leary, AICP, Senior Planner
Belt Collins Hawaii, Ltd.
2153 North King Street, Suite 200
Honolulu, Hawaii 96819

Dear Ms. O'Leary:

**SUBJECT: Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii, TMK: (3) 7-4-021:020**

The Department of Education (DOE) has reviewed the Draft Environmental Impact Statement (DEIS) for the Keahuolu Affordable Housing Project.

As previously noted in our response letter for the EISPN, dated August 10, 2007, the 2007 Legislature passed a bill establishing school impact fees. The bill became Act 245 and is in the process of being implemented. Under this new law, we believe that the project will be required to pay an impact fee. We will be able to calculate the amount of fee per residential unit after we know which of the concepts is selected so that we have more definitive numbers of single-family and multi-family units, general price range, size and number of bedrooms.

Our comments on the DEIS are as follows:

Section 2.5.3, School Facility Site, page 2-30: Your narrative in this section is incorrect. Act 245 does not have provisions allowing educational facility requirements to be satisfied by providing for charter schools, day care centers or early learning centers. Please also advise the HHFDC that the RFP that you refer to should be corrected to reflect that Act 245 does not provide for such flexibility.

It is required, therefore, that a site for the elementary school, as mentioned in the DEIS, be conveyed to the State of Hawaii for use by the DOE. The DOE will request that this site be at

Ms. Mary O'Leary
Page 2
April 1, 2008

least 12 usable acres in size. The planned location of school sites and options for meeting other fair-share requirements will be discussed at future meetings between the DOE and the developers.

Section 4.10.2.1, Education, Existing Conditions, page 4-163: Please update enrollment numbers. Current numbers are as follows:

Actual and Projected Enrollments at Department of Education Schools

	Actual Enrollment Done Fall 2007	Projected Enrollment - Done Spring 2006-2007				
	School Year 07-08	2008	2009	2010	2011	2012
Kealakehe El.	984	1106	1229	1285	1339	1371
Kealakehe Inter.	909	911	922	911	893	910
Kealakehe High	1638	1601	1596	1584	1586	1555

Should you have any questions, please call George Casen of the Facilities Development Branch at 377-8308.

Sincerely yours,



Duane Y. Kashiwai
Public Works Administrator
Facilities Development Branch

DYK:jmb

cc: Patricia Hamamoto, Superintendent
Randolph Moore, Assistant Superintendent, OSFSS
Arthur Souza, CAS, Honokaa/Kealakehe/Kohala/Konawaena Complex Areas
✓Janice Takahashi, Chief Planner, Office of the Governor
Katherine P. Kealoha, Director, OEQC



September 25, 2008
2006.70.0900 / 08P-336

Mr. Duane Kashiwai
Public Works Administrator
Facilities Development Branch
State Department of Education
P.O. Box 2360
Honolulu, HI 96804

Dear Mr. Kashiwai:

Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of April 1, 2008 for the above-referenced document. Our responses are provided in the order of your comments.

1. We acknowledge your comment that under Act 245, the Keahuolu project will likely be required to pay an impact fee.
2. Section 2.5.3, School Facility Site, page 2-30: The Final EIS will be corrected to reflect that Act 245 does not have provision allowing education facility requirements to be satisfied by providing for charter schools, day care center or early learning centers as shown in **Attachment 1** of this letter. A copy of your letter has been given to the Hawaii Housing Finance and Development Corporation.
3. We acknowledge your comment that the Department of Education will request that a school site be at least twelve (12) usable acres in size, and that the DOE will discuss in the future with the selected developer the location of school sites and options for meeting other fair-share requirements.
4. Section 4.10.2.1, Education, Existing Condition, page 4-163: The Final EIS will include the updated enrollment numbers as provided by your office. The Final EIS will be edited as shown in **Attachment 2** of this letter.

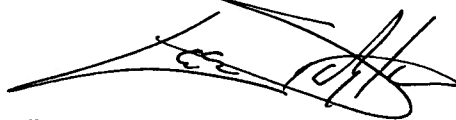
Honolulu
Bangkok
Boulder
Guam
Hong Kong
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Shenzhen
Singapore

Mr. Duane Kashiwai
September 25, 2008
2006.70.0900 / 08P-336
Page 2

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.

A handwritten signature in black ink, appearing to read "Lee W. Sichter", written over a horizontal line.

Lee W. Sichter
Principal Planner

LWS:lf

Attachments

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

Attachment 1

In the Final EIS “Section 2.5.3 School Facility Site” will be revised as follows:

2.5.3 School Facility Site

An approximately 12-acre school site is designated along Ane Keohokalole Highway. There is a deed reservation for a school facility site to be conveyed in fee for set-aside to the Department of Education (DOE).

Attachment 2

In the Final EIS "Section 4.10.2.1 regarding "Education – Existing Conditions" will be revised as follows:

4.10.2.1 Education - Existing Conditions

The Keahuolu project site is within the Kealakehe school catchment area. It is served by:

- Kealakehe Elementary School. Located on Kealaka'a Street, this school serves nearly 990 students from kindergarten through grade five. It has 60 full-time equivalent teaching positions, including regular education, special education, and supplemental instructors.
- Kealakehe Intermediate School. Also located on Kealaka'a Street, this school has approximately 900 students in grades six through eight, and a teaching staff of 58 positions.
- Kealakehe High School. Opened in 1997 in the Villages of La'i 'Opua, this school serves students from Hualalai to Waikoloa Village. In the 2007-2008 school year, 1,638 students were enrolled. A total of 76.5 teaching positions are allocated to the school.

The following enrollment information is provided by the DOE:

**Table 4-57: Actual and Projected Enrollments at
Department of Education Schools**

	Actual Enrollment Done Fall 2007	Projected Enrollment – Done Spring 2006-2007				
		School Year 07-8	2008	2009	2010	2011
Kealakehe Elementary	984	1106	1229	1285	1339	1371
Kealakehe Intermediate	909	911	922	911	893	910
Kealakehe High School	1638	1601	1596	1584	1586	1555

Private schools in North Kona include:

- Hualalai Academy, with 160 students in grades K through 12, located on Kealaka'a Street;
- The Kona campus of the Hawai'i Montessori School (serving grades K through six); and
- Makua Lani Christian School in Holualoa, and the Kona Christian Academy.

In addition, Hawai'i Preparatory School, located in Waimea, South Kohala, is a K-12 school with approximately 585 students. It regularly enrolls students from North Kona, as well as ones from South Kohala and boarders. The Kea'au campus of the Kamehameha Schools enrolls more than 1,100 Native Hawaiian students from the County. Some students commute from West Hawai'i, catching buses from Ka'u or Waimea.

LINDA LINGLE
GOVERNOR OF HAWAII



LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
RECEIVED

2008 APR -7 PM 2:35

BELT COLLINS HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION**

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

April 3, 2008

Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, Hawaii 96819

Attention: Ms. Mary O'Leary

Gentlemen:

Subject: Draft Environmental Impact Statement for Keahuolu Affordable Housing Project, North Kona, Hawaii, Tax Map Key: (3) 7-4-21:20, portion 21

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comment.

Other than the comments from Engineering Division, Land Division, the Department of Land and Natural Resources has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Morris M. Atta".

Handwritten initials in black ink, possibly "MA".

Morris M. Atta
Administrator

LINDA LINGLE
GOVERNOR OF HAWAII



LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

March 3, 2008

MEMORANDUM

TO: **DLNR Agencies:**
 Div. of Aquatic Resources
 ~~Div. of Boating & Ocean Recreation~~
 Engineering Division
 Div. of Forestry & Wildlife
 Div. of State Parks
 Commission on Water Resource Management
 Office of Conservation & Coastal Lands
 Land Division – Hawaii District/Gary Martin

FROM: *jo* Morris M. Atta *Thielen*
SUBJECT: Draft Environmental Impact Statement for Keahuolu Affordable Housing Project
LOCATION: North Kona, Hawaii, TMK: (3) 7-4-21:20, por 21
APPLICANT: Belt Collins on behalf of Hawaii Housing Finance & Development Corporation

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by April 1, 2008.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed: *[Signature]*
Date: 3/13/08

08 MAR 03 PM 1:29 ENGINEERING

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/MorrisAtta
REF.: DEISKeahuoluAffordHousing
Hawaii.373

COMMENTS

- () We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone ____.
- (X) Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone X. The National Flood Insurance Program does not have any regulations for developments within Zone X.
- () Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is ____.
- () Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.


Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

- () Mr. Robert Sumitomo at (808) 768-8097 or Mr. Mario Siu Li at (808) 768-8098 of the City and County of Honolulu, Department of Planning and Permitting.
- () Mr. Kelly Gomes at (808) 961-8327 (Hilo) or Mr. Kiran Emler at (808) 327-3530 (Kona) of the County of Hawaii, Department of Public Works.
- () Mr. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.
- () Mr. Mario Antonio at (808) 241-6620 of the County of Kauai, Department of Public Works.

- () The applicant should include water demands and infrastructure required to meet project needs. Please note that projects within State lands requiring water service from the Honolulu Board of Water Supply system will be required to pay a resource development charge, in addition to Water Facilities Charges for transmission and daily storage.
- (X) The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.
- () Additional Comments: _____

- () Other: _____

Should you have any questions, please call Ms. Suzie S. Agraan of the Planning Branch at 587-0258.

Signed: 
ERIC T. HIKANO, CHIEF ENGINEER
Date: 3/17/08



September 25, 2008
2006.70.0900 / 08P-322

Mr. Eric T. Hirano, Chief Engineer
Engineering Division
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, HI 96809

Dear Mr. Hirano:

Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of March 17, 2008 for the above-referenced document.

1. We acknowledge your comments that the project site is located in Zone X according to the Flood Insurance Rate Map and that the National Flood Insurance Program does not have any regulations for development within Zone X. The Final EIS will be revised as shown in **Attachment 1** of this letter.
2. The Hawaii Housing Finance and Development Corporation will require the project developer to provide the water demands and calculations to the Engineering Division for inclusion into the State Water Projects Plan Update.

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.

Lee W. Sichter
Principal Planner

LWS:lf

Attachment

cc: Morris Atta, Land Division Administrator
Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200 ■ Honolulu, Hawaii 96819-4554 USA
T/808 521 5361 ■ F/808 538 7819 ■ honolulu@beltcollins.com ■ www.beltcollins.com

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Attachment 1

In the Final EIS, Section 3.3.1.2 Surface Water and Drainage will be revised as follows:

3.3.1.2 Surface Water and Drainage

There are no perennial streams, existing drainage facilities, or defined natural drainage ways on the project property or the reservoir site. The high permeability of the existing soils is evident by the absence of any natural storm water channels or gullies in the project area. No floodways have been identified in the project area. The project site is located in Flood Zone X according to the Flood Insurance Rate Map (FIRM). The National Flood Insurance Program does not have any regulations for developments within Zone X. In general, because of the high permeability of the soil types on the project lands, drainage of surface waters is relatively rapid.

LINDA LINGLE
GOVERNOR



CHAD K. TANIGUCHI
EXECUTIVE DIRECTOR

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2008 APR -8 PM 2: 21

STATE OF HAWAII

DEPARTMENT OF HUMAN SERVICES
HAWAII PUBLIC HOUSING AUTHORITY

1002 NORTH SCHOOL STREET

P.O. BOX 17907
Honolulu, Hawaii 96817

BELT COLLINS HAWAII PLEASE REFER TO:

08:CMS/055

April 3, 2008

Ms. Mary O'Leary, AICP, Senior Planner
Belt Collins Hawaii, Ltd.
2153 North King Street, Suite 200
Honolulu, Hawaii 96819

Dear Ms. O'Leary:

Subject: Draft Environmental Impact Statement
Keahuolu Affordable Housing Project
North Kona, Island of Hawai'i

Thank you for your letter dated February 20, 2008 regarding the proposed Keahuolu Affordable Housing Project.

We have no comments on the Draft Environmental Impact Statement for the above project.

Should you have any questions, please call Mr. Derek H. Fujikami, State Housing Development Administrator, at 832-6020.

Sincerely,

A handwritten signature in black ink, appearing to read "Chad K. Taniguchi".

Chad K. Taniguchi
Executive Director

c: Office of the Governor
c/o Hawaii Housing Finance & Development Corporation
Attn: Ms. Janice Takahashi, Chief Planner
677 Queen Street, Suite 300
Honolulu, Hawaii 96813

Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813



September 25, 2008
2006.70.0900 / 08P-325

Mr. Chad K. Taniguchi, Executive Director
Hawaii Public Housing Authority
Department of Human Services
State of Hawaii
1002 North School Street
Honolulu, HI 96817

Dear Mr. Taniguchi:

**Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to your letter of April 3, 2008 for the above-referenced document.

We acknowledge that your office has no comments on the Draft Environmental Impact Statement.

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.

Lee W. Sichter
Principal Planner

LWS:lf

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

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Singapore

LINDA LINGLE
GOVERNOR OF HAWAII



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CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

2008 APR -8 PM 2: 19

STATE OF HAWAII
DEPARTMENT OF HEALTH BELT COLLINS HAWAII
P.O. Box 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
EPO-08-033

April 3, 2008

Ms. Mary O'Leary, Senior Planner
Belt Collins Hawaii Ltd
2153 North King Street, Suite 200
Honolulu, Hawaii 96819

Dear Ms. O'Leary:

**SUBJECT: Draft Environmental Impact Statement (DEIS) for Keahuolu Affordable Housing Project
Kailua-Kona, North Kona, Island of Hawaii, Hawaii
TMK: (3) 7-4-021: 020; 272.63 acres**

Thank you for allowing us to review and comment on the subject application. The document was routed to the various branches of the Department of Health (DOH) Environmental Health Administration. We have the following Clean Water Branch, Waste Water Branch and General comments.

Clean Water Branch

The Department of Health, Clean Water Branch (CWB), has reviewed the subject document and offers these comments on your project. Please note that our review is based solely on the information provided in the subject document and its compliance with Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at

<http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf>

1. Any project and its potential impacts to State waters must meet the following criteria:
 - a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.
 - b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.
 - c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

Ms. O'Leary:
April 3, 2008
Page 2

2. You are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). For the following types of discharges into Class A or Class 2 State waters, you may apply for NPDES general permit coverage by submitting a Notice of Intent (NOI) form:
 - a. Storm water associated with industrial activities, as defined in Title 40, Code of Federal Regulations, Sections 122.26(b)(14)(i) through 122.26(b)(14)(ix) and 122.26(b)(14)(xi).
 - b. Storm water associated with construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. An NPDES permit is required before the start of the construction activities.
 - c. Hydrotesting water.
 - d. Construction dewatering effluent.
 - e. Treated effluent from well drilling activities.

You must submit a separate NOI form for each type of discharge at least 30 calendar days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 calendar days before to the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at <http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html>.

3. For types of wastewater not listed in Item 3 above or wastewater discharging into Class 1 or Class AA waters, you may need an NPDES individual permit. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. The NPDES application forms may be picked up at our office or downloaded from our website at <http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html>.
4. You must also submit a copy of the NOI or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the CWB that SHPD has or is in the process of evaluating your project. Please submit a copy of your request for review by SHPD or SHPD's determination letter for the project along with your NOI or NPDES permit application, as applicable.

Ms. O'Leary:
April 3, 2008
Page 3

5. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 Water Quality Certification are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of \$25,000 per day per violation.

If you have any questions, please visit our website at <http://www.hawaii.gov/health/environmental/water/cleanwater/index.html>, or contact the Engineering Section, CWB, at 586-4309.

Waste Water Branch

The document proposes to develop and finance low and moderate income housing projects and administer homeownership programs. The Hawaii Housing Finance & Development Corporation (HHFDC) is proposing the development of the Keahuolu Affordable Housing project to serve the people employed in West Hawaii. The project is intended to be a mixed-use community with affordable and market-priced housing as well as commercial space and public facilities.

The EIS proposes connection of the subject development's wastewater generation to the Kealakehe Wastewater Treatment Plant (WWTP). The Department will not object to the tie-in to the Kealakehe sewer system but the following Department of Health's concerns should be addressed:

- 1) The County continues to utilize the temporarily approved infiltration basin as the facility's principal disposal method. Recycled water projects have been slow to materialize. The EIS should address the long term water reuse and disposal of effluent;
- 2) Although the Kealakehe WWTP appears to have enough capacity to handle concept A of the development plan, the plant had effluent violations based on the 2008 operation and maintenance inspection of the Department;
- 3) An assessment of the adequacy of the WWTP to handle the additional loadings should be performed based on the current conditions of the plant; and
- 4) The County had submitted planning documents to the Department that Kealakehe WWTP will be upgraded to R1- facility. The County should update the Department of the status of this proposal.

Ms. O'Leary:
April 3, 2008
Page 4

All wastewater plans must meet Department's Rules, HAR Chapter 11-62, "Wastewater Systems." We do reserve the right to review the detailed wastewater plans for conformance to applicable rules. If you have any questions, please contact the Planning & Design Section of the Wastewater Branch at 586-4294.

General

We strongly recommend that you review all of the Standard Comments on our website: www.state.hi.us/health/environmental/env-planning/landuse/landuse.html. Any comments specifically applicable to this project should be adhered to.

If there are any questions about these comments please contact Jiakai Liu with the Environmental Planning Office at 586-4346.

Sincerely,



KELVIN H. SUNADA, MANAGER
Environmental Planning Office

c: EPO
CWB
WWB



September 25, 2008
2006.70.0900 / 08P-326

Mr. Kelvin Sunada, Manager
Environmental Planning Office
Department of Health
State of Hawaii
P.O. Box 3378
Honolulu, HI 96801-3378

Dear Mr. Sunada:

Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of April 3, 2008 for the above-referenced document. Our responses are provided in the order of your comments.

Clean Water Branch

1. The project developer will comply with the antidegradation policy (HAR, Section 11-54-1.1), the designated uses (HAR, Section 11-54-3) and the water quality criteria (HAR, Sections 11-54-4 through 11-54-8), as applicable.
2. The project developer will obtain a National Pollutant Discharge Elimination System (NPDES) Permit and will comply with the applicable NPDES requirements. The project developer will submit separate Notice of Intent (NOI) forms if required.
3. The project developer will comply with NPDES individual permit requirements, as applicable.
4. The project developer will submit the NOI or NPDES permit application to the State Department of Land and Natural Resources - State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the Clean Water Branch that SHPD has or is in the process of evaluating the project.
5. The project developer will comply with the State's Water Quality Standards for all discharges related to the project construction or operation activities.

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Seattle
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Singapore

Mr. Kelvin Sunada, Manager
September 25, 2008
2006.70.0900 / 08P-326
Page 2

Waste Water Branch

1. In response to this EIS, the County Department of Environmental Management has indicated the County's intention to upgrade the Kealakehe Wastewater Treatment Plant (WWTP) in FY 10-11 to produce R-1 water. The County Department of Environmental Management has also indicated that the County intends to phase in reuse water infrastructure, implementing infrastructure improvements near the WWTP. The planned first phase of the reuse water will be along Queen Kaahumanu Highway.
2. It is our understanding that the County has started assessing the WWTP's capacity and what improvements are to be made to upgrade the facility. It is our understanding that the County will develop a Master Plan for the WWTP for incremental upgrades to the facility.
3. The project developer will develop all wastewater plans in conformance to the applicable Department of Health Rules, HAR Chapter 11-62, "Wastewater Systems."
4. We acknowledge your comment that your office wishes to have Hawaii County update the State Department of Health on the status of the County's proposal to upgrade the Kealakehe WWTP to an R1-facility.

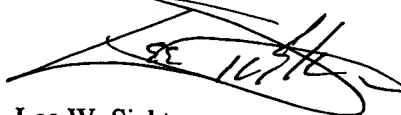
General

We acknowledge your recommendation that the developer review all of the Standard Comments on your website and that any comments specifically applicable to the proposed project should be adhered to.

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Lee W. Sichter
Principal Planner

LWS:lf

cc: Bobby Jean Leithead-Todd, Director, Hawaii County Dept. of Environmental Management
Bruce McClure, Director, Hawaii County Department of Public Works
Office of Environmental Quality Control
Stanley Fujimoto, Project Manager, HHFDC

LINDA LINGLE
GOVERNOR



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

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2008 APR -9 PM 1: 59

BELT COLLINS HAWAII

BRENNON T. MORIOKA
INTERIM DIRECTOR

Deputy Directors
MICHAEL D. FORMBY
FRANCIS PAUL KEENO
BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

STP 8.2825

April 4, 2008

Ms. Mary O'Leary, AICP, Senior Planner
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, Hawaii 96819

Dear Ms. O'Leary:

**Subject: Keahuolu Affordable Housing Project
Draft Environmental Impact Statement (Draft EIS)
Hawaii Housing Finance & Development Corporation
(HHFDC)**

The Department of Transportation (DOT) submits the following comments on the proposed subject project as presented in the Draft EIS:

1. The project will contribute to its share of the existing traffic on the surrounding State highways.
2. While the project directly accesses existing and planned local county streets, the merger of these local streets onto the State highways requires that the project provide traffic mitigation measures and highway/intersection transportation improvements, as determined by the DOT Highways Division. In particular, the actual (versus estimated) implementation schedule of the proposed streets will influence the impacts to the State highways. Coordination and timing of the necessary transportation improvements with the DOT is important.

The project's January 2008 traffic study assumed that 20% of the projected 2020 traffic on Queen Kaahumanu Highway would be diverted by the proposed County extension of Kuakini Highway from Makala Boulevard to Kealakehe Parkway and the proposed extension of Ana Keohokalole Highway from Palani Road to Hina Lani Street. A supplemental evaluation of the progress made on implementing these road extensions and a discussion of the resultant impacts if these road extensions are not completed by 2020 should be included in the project's Final EIS.

Ms. Mary O'Leary

Page 2

April 4, 2008

STP 8.2825

3. The project calls for prospective developers to select from the various development alternatives presented in the Draft EIS and formulate a development plan for HHFDC's acceptance. Following HHFDC's selection of a developer and final development plan, the DOT requests that a thorough analysis of the transportation impacts associated with the selected plan be presented to the DOT for review and approval.
4. The analysis should include, at a minimum: a) a traffic impact analysis report (TIAR) of the project's local and regional impacts and the requisite mitigation measures, and b) submission of a detailed development plan in accordance with the TIAR, showing the street network; types and location of uses; unit types, quantities and occupancy count; parking; number of increments or phases and construction schedules, including infrastructure; community and public facilities, and other related information to accurately reflect the growth of the project through full build out.

Any drainage from the project that could potentially impact State highway facilities should also be covered in the analysis and presented to the DOT.

The DOT reserves the right to require additional information and revisions to the development plan, as regards impacts to State transportation facilities.

5. The DOT requests that it be kept apprised the selection of the developer/development plan. The updates will permit the DOT to communicate questions or concerns, as needed.

We appreciate the opportunity to provide comments.

Very truly yours,



BRENNON T. MORIOKA, Ph.D, P.E.
Director of Transportation



September 25, 2008
2006.70.0900 / 08P-330

Mr. Brennon Morioka, Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Dear Mr. Morioka:

Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of April 4, 2008, letter number STP 8.2825, for the above-referenced document. Our responses are provided in the order of your comments.

1. We acknowledge your comment that the proposed project will contribute to the overall projected increase in traffic on State highways in the surrounding area. The actual implementation schedule of the proposed future streets in the area surrounding the project site will influence future travel patterns.
2. We acknowledge your comment that the project will be required to provide traffic mitigation measures and highway/intersection transportation improvements, as determined by the State Department of Transportation (DOT). It is agreed that coordination between the project developer and the State DOT on the timing of future street improvements will be important.

Input on the future street network to be assessed in the Draft Environmental Impact Statement (EIS) traffic analysis was sought from both State and County staff upon initiation of the traffic impact analysis report. During the agency coordination that was conducted early in the study process, County staff indicated that the presence of these planned future streets should be assumed. While State DOT staff did not respond directly to a detailed memorandum outlining the proposed scope and assumptions for the TIAR, they were informed through subsequent e-mail correspondence regarding the assumptions being made for the purposes of the Draft EIS traffic analysis.

The comment requests that supplemental analysis be conducted to assess future traffic impacts in the event that Kuakini Highway is not extended northward to Kealakehe Parkway and in the event that Ane Keohokalole Highway is not extended from Palani Road to Hina Lani Street. If the construction of these planned future streets were delayed beyond the 2020 horizon year, it would be expected that other streets in the area would carry more traffic than is projected in the Draft EIS, potentially resulting in level of service operation below LOS D at some locations. Given the time required to secure the necessary

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Mr. Brennon Morioka, Director
September 25, 2008
2006.70.0900 / 08P-330
Page 2

development approvals, it would appear to be most prudent for the project developer to update the TIAR at the time development is eminent. This will ensure DOT that the updated TIAR is based on upon the most current regional development scenario.

3. A thorough analysis of the transportation impacts associated with the proposed project site has been completed and is included in Section 4.4 of the Draft EIS, beginning on page 4-32 and in the Traffic Impact Analysis Report (TIAR) in Appendix F. The Draft EIS assesses a reasonable range of conceptual development alternatives for the proposed Keahuolu Affordable Housing project that differed primarily in the number of new housing units to be constructed. As stated on page 4-82 of the Draft EIS, "The number of traffic impacts would be the same under Concepts A, B and C; however, the magnitude of those impacts would be greatest with Concept C."
4. At this time, detailed construction plans for the project, including phases of development, are not available. As more detailed planning for development of the project site occurs, the project developer will submit those plans to State and County agencies, as required, for review and approval.

In compliance with the County's Storm Drainage Standard, the project will not be allowed to increase runoff flow rates and volumes from the project site.


We acknowledge your comment that the DOT reserves the right to require additional information and revisions to the development plan, as it regards impacts to State transportation facilities.

5. On April 11, 2008, the Board of Directors of the Hawaii Housing Finance and Development Corporation approved Forest City Hawaii Residential, Inc., as the developer of the project, subject to successful negotiation and execution of a development agreement.

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Lee W. Sichter
Principal Planner

LWS:lf

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

Harry Kim
Mayor



RECEIVED

Bobby Jean Leithead Todd
Director

2008 APR -9 PM 1: 57

Nelson Ho
Deputy Director

County of Hawai'i

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

25 Aupuni Street • Hilo, Hawai'i 96720
(808) 961-8083 • Fax (808) 961-8086
http://co.hawaii.hi.us/directory/djr_envmng.htm

April 7, 2008

Ms. Mary O'Leary, AICP
Senior Planner
Belt Collins Hawai'i, Ltd.
2153 North King Street, Suite 200
Honolulu, HI 96819

Re: Draft Environmental Impact Statement
Keahuolu Affordable Housing Project
Keahuolu, North Kona
TMK: (3) 7-4-021:020 – housing site
(3) 7-4-21:por.21 – reservoir site

Dear Ms. O'Leary,

We have reviewed the subject document and offer the following comments:

Technical Services Section

See attached memo.

Wastewater Division

All commercial developments shall comply with Sewer Ordinance 21-7 and 21-9. Grease Interceptor designed in accordance with City and County of Honolulu standards, shall be required for all restaurants.

Thank you for offering us the opportunity to review and comment on this project.

Sincerely,

A handwritten signature in cursive script that reads "Bobby Jean Leithead Todd".

Bobby Jean Leithead Todd
DIRECTOR

cc: TSS
WWD
OEQC
Office of the Governor, c/o Hawai'i Housing Finance & Development Corp.

County of Hawai'i is an Equal Opportunity Provider and Employer.

105004



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
TECHNICAL SERVICES SECTION

COUNTY OF HAWAII - 108 RAILROAD AVENUE - HILO, HI 96720
HILO (808) 961-8083 FAX (808) 961-8086

Memorandum

Date April 4, 2008

Memo Keahuolu 040208

To: Bobby-Jean Leithead Todd, Director

From: Dora Beck, P.E., Technical Services Chief

Subject: **Draft Environmental Impact Statement
Keahuolu Affordable Housing Project, Kailua-Kona, Hawai'i**

The Technical Services Section (TSS) has reviewed the Draft Environmental Impact Statement (DEIS) for the Keahuolu Affordable Housing Project in Kailua-Kona, Hawai'i and provides the following comments for department consideration and/or action:

Section 4.8.4.2

- The Design Average Flows for the project are stated as follows:
 - i. Concept A - 430,598 gpd
 - ii. Concept B - 665,436 gpd
 - iii. Concept C - 720 856 gpd
- The latter two exceeds the sewer treatment capacity of 431,360 gpd allotted to HHFDC. Under Section 2.5.7.2, the developer state that they will be responsible for securing adequate sewage treatment capacity at the Kealakehe Wastewater Treatments Plant and for the payment of any facilities charges for connections or capacities required for the project.
- In support of this, HHFDC states they will quitclaim any rights they may have to sewage treatment capacities related to their agreement with the County dated March 19, 1992 up to a maximum of 431,360 gallons per day.
- Correction to projected KWWTP upgrade costs: Aeration Upgrade is \$6,450,000 (versus \$1,500,000).
- Correction to the statement that the County has no plans to upgrade the WWTP to produce R-1 water. The County is very interested in establishing an effluent reuse program in North Kona. The Department of Environmental Management has projected upgrade of the facility to produce R-1 Water to occur in FY 10-11. Moreover, DEM is requesting the following:
 - i. A reservoir site for storage off R-1 water in the vicinity of the proposed potable water reservoir as shown in Figure 4-16.
 - ii. Installation of reuse water infrastructure for the project site. Increasing flows to the treatment plant will require other means for effluent disposal such as irrigation within private developments.
- Correction: R-3 water is discharged at the seepage pit in accordance with DOH requirements in lieu of R-2 water.

Should there be any comments or questions on the above, please contact me at 808-961-8028 (dbeck@co.hawaii.hi.us).

cc: Lyle Hirota, TSS



September 25, 2008
2006.70.0900 / 08P-329

Ms. Bobby Jean Leithead-Todd, Director
Department of Environmental Management
County of Hawaii
25 Aupuni Street
Hilo, HI 96720

Dear Ms. Leithead-Todd:

Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of April 7, 2008 for the above-referenced document. Our responses are provided in the order of your comments.

Technical Services Section Memo

1. We acknowledge your comments. The Hawaii Housing Finance and Development Corporation (HHFDC) will provide your letter to the project developer regarding the sewer treatment capacity at the Kealakehe Wastewater Treatment Plant (WWTP).

The Final EIS and civil report will contain the correct aeration upgrade cost which is \$6,450,000 (not \$1,500,000) as shown in **Attachment 1** of this letter.

The Final EIS and civil report will reflect the Department's statements regarding future plans to upgrade the WWTP to produce R-1 Water and correct statements regarding R-3 water discharged at the seepage pit as shown in **Attachment 1** of this letter.

2. Since the Department of Environmental Management is still in the conceptual planning stages for the reuse water system, this information will be provided by the HHFDC to the project developer to plan for future implementation of the reuse water system infrastructure.

Wastewater Division

1. The project developer will comply with Sewer Ordinance 21-7 and 21-9, and that any and all restaurants within the Keahuolu Affordable Housing Project site shall be required to have a grease interceptor(s) which shall be designed in accordance with the City and County of Honolulu's standards.

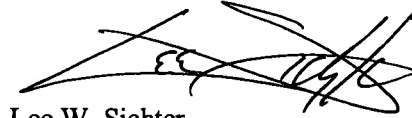
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Ms. Bobby Jean Leithead Todd, Director
September 25, 2008
2006.70.0900 / 08P-329
Page 2

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Lee W. Sichter
Principal Planner

LWS:lf

Attachment

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

Attachment 1

In the Final EIS Section 4.8.4.2 Proposed Wastewater System Design will be revised as follows:

4.8.4.2 Proposed Wastewater System Design

The proposed sewer system would be developed in accordance with the Hawai'i County Department of Environmental Management criteria. For details of the sewer system criteria, see Appendix G. Design and construction of the proposed off-site and on-site sewer systems would meet County Standards for dedication to the County Department of Environmental Management. The projected sewer flows, presented in Table 4-30, are summarized in Appendix G.

Table 4-30: Sewer Requirements

Development Plan	Design Average Flow (gpd)	Design Peak Flow (gpd)
Concept A	430,598	1,915,899
Concept B	665,436	2,568,875
Concept C	720,856	2,710,213

The project has reserved 431,360 gpd capacity at the Kealakehe WWTP. Additional capacity at the WWTP would be required to accommodate Concepts B and C, which are projected to exceed the reserved capacity. The Department of Environmental Management would have to expand the WWTP and is currently undertaking a master plan to review options to upgrade the WWTP. Two improvement projects to the WWTP are planned: (1) sludge removal \$4,600,000 (County of Hawai'i FY 07-08 budget), and (2) aeration upgrade \$6,450,000 (County of Hawai'i FY 07-08 budget). The two improvement projects will allow the WWTP to continue to operate at the present capacity and allow for future capacity upgrades.

R-3 Water (undisinfected secondary recycled water) from the Kealakehe WWTP is discharged to a pond in the lava fields makai of Queen Ka'ahumanu Highway in the DHHL/Villages of La'i 'Opua. R-3 Water is not suitable for irrigation use for the project. The County would have to further treat the effluent to R-1 Water (significant reduction in viral and bacterial pathogens) before the effluent would be suitable for irrigation use on the project site. The County has plans to upgrade the WWTP to produce R-1 Water in FY 10-11. In addition, a pump system, and storage and transmission lines for the recycled effluent system would be required, but there are no detailed plans by the County for a system to the project area.

Potential Off-Site Wastewater System Alignments

Sewer lines from the project site to the WWTP would be routed either through QLT lands or through DHHL/Villages of La'i 'Opua lands. Figure 4-18 and Figure 4-19 show the QLT route for the off-site sewer system for development Concept A and Concepts B and C, respectively. Figure 4-20 and Figure 4-21 show the La'i 'Opua route for the off-site sewer system for Concept A and Concepts B and C, respectively. Sewer lines would be sized to accommodate sewer flows from the project site, lands immediately mauka of the project, and the makai lands adjacent to the sewer line alignment. The sewer line alignment and sizes are subject to change based on the final development concept.

Based on the design flows, a new 30-inch sewer line would be required for either route to convey sewer flows from the project site, across Queen Ka'ahumanu Highway, to the WWTP. A sewer line through the QLT route can convey wastewater flows from the entire project site to the WWTP. A sewer line through the Villages of La'i 'Opua route can convey the majority of the flows from the site. A low-elevation portion, approximately 40 acres of the project parcel near Palani Road, could be developed with activities not requiring sewer service, such as parking lots, open spaces, preserve areas, and playfields and parks with restroom facilities located outside the low area. If sewer service is required for the low area, either a pump station would be required or a sewer line would have to be constructed through QLT land to convey flows from the low area. Figure 4-18 and Figure 4-19 show the proposed sewer line to service this low area through the QLT lands.

The order-of-magnitude costs in Table 4-31 for sewer system construction assume that the low area would be developed with sewage-generating facilities. For details on the sewer system costs, see Appendix G. These cost estimates are based on the best available information on DHHL and QLT plans for future development of their properties. QLT is in preliminary planning, and actual routing and sewer flows may change.

Table 4-31: Off-Site Wastewater System Costs

Off-Site Water System	Concept A	Concept B	Concept C
Through QLT Lands	\$6,381,000	\$6,663,000	\$6,663,000
Through DHHL / Villages of La'i 'Opua			
Through La'i 'Opua	\$5,983,000	\$5,983,000	\$5,983,000
Through QLT Lands	<u>\$4,297,000</u>	<u>\$4,543,000</u>	<u>\$4,543,000</u>
Subtotal	\$10,280,000	10,526,000	10,526,000

Proposed On-Site Wastewater System

The on-site sewer system would consist of sewer lines within the roadway network. The system would connect to sewer line routed through either the DHHL/Villages of La'i 'Opua lands or the QLT lands. The sewer system would have a minimum pipe size of 8 inches in diameter and a maximum pipe size of 21 inches in diameter for the DHHL/Villages of La'i 'Opua route or 15 inches in diameter for the QLT route. The sewer lines would be sized to convey the design peak flow from the upstream tributary areas.

Harry Kim
Mayor



Christopher J. Yuen
Director

Brad Kurokawa, ASLA
LEED® AP
Deputy Director

County of Hawaii
PLANNING DEPARTMENT

101 Puuhale Street, Suite 3 • Hilo, Hawaii 96720-4224
(808) 961-8288 • FAX (808) 961-8742

April 8, 2008

Ms. Mary O'Leary, AICP, Senior Planner
Belt Collins Hawaii Ltd
2153 North King Street, Suite 200
Honolulu HI 96819

Dear Ms. O'Leary:

Draft Environmental Impact Statement
Request for Comments
Keahuolu Affordable Housing Project
Tax Map Key: 7-4-21:20 (Housing Site)
Tax Map Key: 7-4-21: Portion of 21 (Reservoir Site)

This is to acknowledge receipt of your letter dated February 20, 2008, requesting our comments on the proposed Keahuolu Affordable Housing Project in North Kona.

We affirm the State and County land use designations and that the project site is outside of the Special Management Area.

We have the following comments:

A. Chapter 1.14 Summary of Unresolved Issues and Chapter 6.5 Unresolved Issues:

1. **Final Development Scheme:** Of the three alternatives, we strongly prefer the 1,840 residential dwelling units which includes 600 single-family areas. We hope that the State can continue to offer affordable single-family living for local families.
2. **Kona Community Development Plan:** This plan is in the final stages of preparing the draft.
3. **Concurrency Ordinance:** Ordinance No. 07 99 became effective on June 25, 2007. It created concurrency standards for roads and water supply in change of zone actions. Rezoning would not take effect unless improvements to the traffic situation occur

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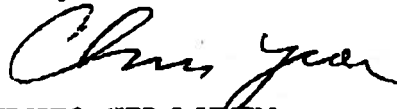
Ms. Mary O'Leary, AICP, Senior Planner
Belt Collins Hawaii Ltd
Page 2
April 8, 2008

before the occupancy of the project. There would also be standard expectations for water supply for new rezonings.

4. County Council Deferred Action on Change of Zone Applications: Resolution No. 529 08 was adopted on March 12, 2008. It extended the temporary delay of Council action on rezoning applications until the North and South Kona Community Development Plan is adopted by ordinance, or December 1, 2008, whichever ever occurs first.
- B. There is a very large General Commercial (CG-10) area along the Queen Kaahumanu Highway and another area along Palani Road as well as a General Commercial (CG-20) area along Henry Street. This proposed commercial area should be developed to meet the needs of the immediate residential community; therefore we question the size of the proposed commercial area.
- C. The trip generation estimates shown in Tables 4-10 through 4-12 do not correspond to the trips at intersections #5 and #7 (main project entrances) shown in Figures 4-7 through 4-9. For example, Table 4-12 assigns 973 trips into the project area during the P.M. peak hour; however, only 876 trips are assigned into the project area at intersections #5 and #7 in Figure 4-9. What intersection will the 97 remaining trips be assigned to? Please explain this discrepancy or correct the traffic volumes in these tables and figures.

Thank you for the opportunity to comment on the proposed project. Should you have questions, please contact Esther Imamura of my staff at 961-8288, ext. 257.

Sincerely,



CHRISTOPHER J. YUEN
Planning Director

ETI:pk

P:\wpwin6\NETNEIS RESPONSES\Koaahuola Affordable Housing.doc

xc: Office of the Governor
c/o Hawaii Housing Finance & Development Corporation
Attn: Ms. Janice Takahashi, Chief Planner
677 Queen Street, Suite 300
Honolulu HI 96813

Ms. Mary O'Leary, AICP, Senior Planner
Belt Collins Hawaii Ltd
Page 3
April 8, 2008

Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu HI 96813

Planning Department, Kona



September 25, 2008
2006.70.0900 / 08P-324

Mr. Chris Yuen, Director
Planning Department
County of Hawaii
101 Pauahi Street, Suite 3
Hilo, HI 93720-4224

Dear Mr. Yuen:

Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of April 8, 2008 for the above-referenced document. Our responses are in the order of your comments.

A. Chapter 1.14 Summary of Unresolved Issues and Chapter 6.5 Unresolved Issues

1. Final Development Scheme: We acknowledge that your office, of the three alternatives, strongly prefers the alternative that has 1,840 residential dwelling units which includes 600 single-family dwelling units. HHFDC will forward your comments to the project developer.
2. Kona Community Development Plan: We acknowledge your comment that a draft of the Kona Community Development Plan is in the final stages of being prepared. The Final EIS will contain a discussion of the project's relationship to the Kona Community Development Plan as shown in **Attachment 1** of this letter.
3. Concurrency Ordinance: We acknowledge your comment that rezoning would not take effect unless improvements to the traffic situation occur before the occupancy of the project. We acknowledge your comment that there would also be standard expectations for water supply for new rezonings. The Final EIS will contain the information provided by your office as shown in **Attachment 1** of this letter.
4. County Council Deferred Action on Change of Zone Applications: We acknowledge your comment that on March 12, 2008 Resolution No. 529 08 was adopted, which extended the temporary delay of Council action on rezoning applications until the North and South Kona Community Development Plan is adopted by ordinance, or December 1, 2008, which ever occurs first. The Final EIS will contain the information provided by your office as shown in **Attachment 1** of this letter.

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Mr. Chris Yuen, Director
September 25, 2008
2006.70.0900 / 08P-324
Page 2

B. Commercial Area along Queen Kaahumanu

The Hawaii Housing Finance and Development Corporation will recommend to the project developer that the Keahuolu Affordable Housing project's proposed commercial area be developed to meet the needs of the immediate residential community.

C. Traffic Impact Analysis Report

The project trip distribution pattern used in the environmental impact statement's (EIS) traffic analysis is presented in Figure 4-6 of the Draft EIS. The project trip distribution pattern assumes that approximately forty percent (40%) of project traffic will travel to and from the northwest and southwest, and that approximately twenty percent (20%) will travel to and from the northeast.


Your comment correctly notes that the PM peak hour project-generated trips assigned to study intersections #5 and #7 under the Concept C scenario total 876 inbound trips, while a total of 973 inbound trips are estimated under this scenario.

As shown in Figure 4-9 of the Draft EIS, an additional 49 inbound trips were assumed to reach the project site through study intersection #8. The remaining 48 inbound project-related trips were assumed to travel to the project site via the future Holoholo Street. A similar assignment was made for the other two scenarios that were analyzed. Thus, the traffic impact analysis in the Draft EIS assigned all of the project-generated trips to the surrounding street network.

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Lee W. Sichter
Principal Planner

LWS:lf

Attachment

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

Attachment 1

In the Final EIS, Section 1.14 Summary of Unresolved Issues and Section 7.5 Unresolved Issues will be revised as follows:

1.14 SUMMARY OF UNRESOLVED ISSUES

The following issues remain unresolved at the time this document is being prepared. See Chapter Six for a discussion of these unresolved issues.

Final Development Scheme and Schedule: The HHFDC is reviewing proposals from qualified developers to develop the Keahuolu Affordable Housing Project. The final development scheme will be within the range of the concept plans presented in this EIS. However, the following details are unknown at the time of this writing: the total number of housing units; the mix of affordable units and market units; the mix of single-family and multi-family; the mix of low density, medium density, and high density; the total square footage of commercial floor area; and the alignment/route of off-site wastewater lines that will service the project. The Board of Directors of HHFDC approved Forest City Hawaii Residential, Inc., as the developer of the project, subject to successful negotiation and execution of a development agreement. However, until the development agreement is signed, there is the possibility that an agreement may not be reached between HHFDC and Forest City, and thus the search for a developer would continue until one is selected and a development agreement is signed. Until that time, the details of the proposed project and the developer's schedule for the project are not available. That information will become available prior to subsequent permitting processes, which will provide the opportunity for public and agency input and comment, as well as the opportunity to request additional information.

Concurrency Ordinance: Since publication of the February 2008 Draft EIS for the Keahuolu project, the County of Hawai'i Planning Department clarified that Ordinance No. 07 99 became effective on June 25, 2007. It created concurrency standards for roads and

water supply in change of zone actions. According to the County of Hawai'i Planning Department, rezoning would not take effect unless improvements to the traffic situation occur before the occupancy of the project, and that there would also be standard expectations for water supply for new rezonings.

It is the intention of the HHFDC that the project developer submit the project with the State LUC and the County of Hawai'i under the expedited approval process provided for under Section 201H-38, HRS. If the expedited approval process is used by the Keahuolu project developer, it is unresolved as to what extent the concurrency standards would or would not apply.

County Council Deferred Action on Change of Zone Applications: Since publication of the February 2008 Draft EIS for the Keahuolu Project, the County of Hawai'i Planning Department clarified that Resolution No. 529 08 was adopted on March 12, 2008.

According to the County, it extended the temporary delay of Council action on rezoning applications until the North and South Kona Community Development Plan is adopted by ordinance, or December 1, 2008, whichever occurs first.

It is the intention of the HHFDC that the project developer submit the project with the State LUC and the County of Hawai'i under the expedited approval process provided for under Section 201H-38, HRS. According to the estimated permit schedule in Table 1-4 of this EIS, it is anticipated that a zone change application for the Keahuolu project would at the earliest be submitted to the County on January 1, 2009, which is after the December 1, 2008 deadline for the temporary delay of Council action on rezoning applications. It is unknown whether the County's deadline will be extended and if the Council will continue to defer action on change of zone applications. If the expedited approval process is used by the Keahuolu project developer, it is unresolved as to what extent the Council's deferral on change of zone applications would or would not apply, if it is still in effect.

7.5 UNRESOLVED ISSUES

The following issues remain unresolved at the time this document is being prepared.

Final Development Scheme and Schedule: The HHFDC is reviewing proposals from qualified developers to develop the Keahuolu Affordable Housing Project. The final development scheme will be within the range of the concept plans presented in this EIS. However, the following details are unknown at the time of this writing: the total number of housing units; the mix of affordable units and market units; the mix of single-family and multi-family; the mix of low density, medium density, and high density; the total square footage of commercial floor area; the alignment/route of off-site wastewater lines that will service the project. The Board of Directors of HHFDC approved Forest City Hawaii Residential, Inc., as the developer of the project, subject to successful negotiation and execution of a development agreement. However until the development agreement is signed, there is the possibility that an agreement may not be reached between HHFDC and Forest City, and thus the search for a developer would continue until one is selected and a development agreement is signed. Until that time, the details of the proposed project and the developer's schedule for the project are not available. That information will become available prior to subsequent permitting processes, which will provide the opportunity for public and agency input and comment, as well as the opportunity to request additional information.

Concurrency Ordinance: Since publication of the February 2008 Draft EIS for the Keahuolu project, the County of Hawai'i Planning Department clarified that Ordinance No. 07 99 became effective on June 25, 2007. It created concurrency standards for roads and water supply in change of zone actions. According to the County of Hawai'i Planning Department, rezoning would not take effect unless improvements to the traffic situation occur before the occupancy of the project, and that there would also be standard expectations for water supply for new rezonings.

It is the intention of the HHFDC that the project developer submit the project to the State LUC and the County of Hawai'i under the expedited approval process provided for under Section 201H-38, HRS. If the expedited approval process is used by the Keahuolu project

developer, it is unresolved as to what extent the concurrency standards would or would not apply.

County Council Deferred Action on Change of Zone Applications: Since publication of the February 2008 Draft EIS for the Keahuolu project, the County of Hawai'i Planning Department clarified that Resolution No. 529 08 was adopted on March 12, 2008.

According to the County, it extended the temporary delay of Council action on rezoning applications until the North and South Kona Community Development Plan is adopted by ordinance, or December 1, 2008, whichever occurs first.

It is the intention of the HHFDC that the project developer submit the project with the State LUC and the County of Hawai'i under the expedited approval process provided for under Section 201H-38, HRS. According to the estimated permit schedule in Table 1-4 of this EIS, it is anticipated that a zone change application for the Keahuolu project would at the earliest be submitted to the County on January 1, 2009, which is after the December 1, 2008 deadline for the temporary delay of Council action on rezoning applications. It is unknown whether the County's deadline will be extended and if the Council will continue to defer action on change of zone applications. If the expedited approval process is used by the Keahuolu project developer, it is unresolved as to what extent the Council's deferral on change of zone applications would or would not apply, if it is still in effect.



United States Department of the Interior

RECEIVED

2008 APR -9 PM 2:10



FISH AND WILDLIFE SERVICE

Pacific Islands Fish and Wildlife Office BELT COLLINS HAWAII
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

In Reply Refer To:
2008-TA-0126

APR 08 2008

Ms. Mary O'Leary, AICP, Senior Planner
Belt Collins Hawaii Ltd
2153 North King Street, Suite 200
Honolulu, Hawaii 96819

Subject: Draft Environmental Impact Statement for Keahuolu Affordable Housing Project,
North Kona, Island of Hawaii [TMK: (3) 7-4-008: por. 056]

Dear Ms. O'Leary:

The U. S. Fish and Wildlife Service (Service) has reviewed the Draft Environmental Impact Statement (DEIS) for the Keahuolu Affordable Housing Project located north of Kailua-Kona, on the island of Hawaii. This project will be located on 272 acres of land that is currently vacant and undeveloped. The project consists of a master planned community of 1,020 to 2,330 single-family and multi-family residences, commercial/retail space, a site reserved for a school, neighborhood parks, archeological preserve and open space. Based on the project information you provided and pertinent information in our files, including data compiled by the Hawaii Biodiversity and Mapping Program, and the Hawaii GAP Program, we recommend you address potential project impacts to the below listed species and native ecosystems and include measures to minimize adverse impacts in your Final Environmental Impact Statement (FEIS). The following recommendations are provided to assist you in the development of your FEIS:

- Hawaiian hoary bats roost and give birth in both exotic and native woody vegetation and leave their young behind in "nursery" trees when they forage. If vegetation is cleared during the bat breeding season (April to August) there is a risk that young bats could inadvertently be harmed or killed. We recommend surveys for this species to determine if they are present. If bats are on the property, then we will help you to develop avoidance and minimization measures so that your project will be in compliance with the Endangered Species Act of 1973, as amended. One simple avoidance measure is to conduct all grading and clearing of vegetation outside of the bat breeding season to avoid impacts to this endangered species.
- The threatened Newell's shearwater (*Puffinus auricularis newelli*) and endangered Hawaiian petrel (*Pterodroma phaeopygia sandwichensis*) (collectively referred to as seabirds) are known to traverse the project site. Potential impacts to seabirds could be

TAKE PRIDE
IN AMERICA 

minimized by shielding outdoor lights so the bulb can only be seen from below. Shielding should include lights associated with all buildings, streets and parking lots.

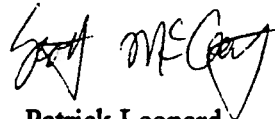
- We were unable to determine from the information you provided whether or not caves or lava tubes are present in the area. The DEIS makes no mention of cave invertebrates. We recommend conducting presence/absence surveys for cave invertebrates (Kaumana cave cricket (*Caconemobius varius*), volcanoes cave cricket (*Thaumatogryllus cavicola*), Doc Bellou cave oliarius planthopper (*Oliarus* spp.), Pahoia cave oliarius planthopper (*Oliarus* spp.), if suitable habitat is present. The Hawaii Speleological Survey may be a good source for this information. Additional detailed surveys may be warranted if rare or federally protected species are found. Survey results for these species should be included in the FEIS.
- This development will lead to an increase in impervious surfaces and thus an increase in stormwater runoff and potentially a decrease in water quality. The DEIS states in section 4.8.2.2 "Storm water runoff from the site would be collected through swales, ditches, gutters, inlets, and catch basins, and transported through pipes to dry wells, seepage wells, or infiltration areas for disposal....It is recommended that BMPs be included in the design of the drainage system, such as vegetated swales, and storm drain filtration devices to capture sediments and prevent pollutants from entering the groundwater". While vegetated swales will likely prevent most nutrients, pesticides and sediments from entering the groundwater, to the best of our knowledge there are no storm drain filtration devices that will capture nutrients and pesticides. In areas with well developed soils, seepage wells or infiltration areas have been shown to prevent nutrients and pesticides from entering the groundwater. However, with the unique geology of North Kona (lava rock and no soil), there is little guarantee seepage wells or infiltration areas will function as they do in areas with better developed soils. We recommend you include the potential impacts of urban run-off and subsequent changes in groundwater quality on aquatic ecosystems in the FEIS.
- The Service is concerned that the long-term demand for water from the Keauhou aquifer system would exceed the aquifer's sustainable yield and increase the salinity of wetlands, fishponds, anchialine pools, and coastal waters in the Kaloko-Honokahau National Park. The shrimp species *Metabetaeus lohena* (candidate) and *Palaemonella burnsi* (candidate) a damselfly *Megalagrion xanthomelas* (candidate) and the Hawaiian stilt (*Himantopus mexicanus knudseni*) and the Hawaiian coot (*Fulica alai*), both endangered species, depend on these aquatic ecosystems and may potentially be adversely impacted by increases in salinity. The Service has designated Kaloko-Honokahau National Park as core wetland for the recovery of Hawaiian waterbirds. Page 4-108 of the DEIS, in the potential long-term impacts to groundwater section, states "In the long-term, water demands in the Keauhou aquifer would exceed the sustainable yield of the aquifer, and alternate water resource enhancement measures would be required to meet the water demands." The DEIS also discusses alternate water resource enhancement measures. However, the mitigation measures are for the high level aquifer, not to protect water flowing to the coast. For example, rainwater catchment systems would decrease the

available water for recharge, and thus would not serve as an enhancement measure. Another alternate water resource enhancement measure identified in the DEIS is desalination from brackish wells between Queen Ka'ahumanu Highway and Mamalahoa Highway. Pumping from the basal lens may put the groundwater-dependent ecosystems at risk. The Service recommends that you analyze the impacts of pumping from brackish wells, as well as high level wells on groundwater-dependent aquatic ecosystems. The FEIS should consider the impacts of water withdrawal in the context of other withdrawals from the aquifer, both existing and planned. Potentially, the cumulative impact to the aquifer may be quite significant. We recommend this issue be studied with a three-dimensional, variable density numerical ground water model.

- Hawaii's native ecosystems are being decimated by exotic invasive plants. Whenever possible we recommend using native plants for landscaping purposes. If native plants do not meet your landscaping objectives, we recommend that you choose species that are thought to have a low risk of becoming invasive. The following websites would be good resources to use when choosing landscaping plants: Pacific Island Ecosystems at Risk (<http://www.hear.org/Pier/>), Hawaii-Pacific Weed Risk Assessment (http://www.botany.hawaii.edu/faculty/daehler/wra/full_table.asp) and Global Compendium of Weeds (www.hear.org/gcw).

We hope this information assists you in drafting the Environmental Assessment. If you have questions regarding this letter, please contact Dr. Jeff Zimpfer, Fish and Wildlife Biologist, Consultation and Technical Assistance Program (phone: 808-792-9431; fax: 808-792-9581).

Sincerely,



Patrick Leonard
Field Supervisor



September 25, 2008
2006.70.0900 / 08P-328

Mr. Patrick Leonard, Field Supervisor
Pacific Islands Fish and Wildlife Office
Fish and Wildlife Services
U.S. Department of the Interior
Box 50088
Honolulu, HI 96850

Dear Mr. Leonard:

Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of April 8, 2008 for the above-referenced document. Our responses are provided in the order of your comments.

1. Hawaiian Hoary Bats: The Final EIS, as shown in **Attachment 1** of this letter, will contain the results of an avifaunal and feral mammal survey conducted by Phil Bruner in May 2008.
2. Newell's Shearwater and Hawaiian Petrel: All developments within the island of Hawaii are subject to the County of Hawaii Ordinance No. 88 122 which requires that exterior building light fixtures and parking lot light fixtures be fully shielded if using any light source other than low-pressure sodium lamps.

To further mitigate any impact, the Hawaii Housing Finance and Development Corporation (HHFDC) will recommend to the project developer that the developer establish covenants requiring that all exterior light fixtures, regardless of light sources, be fully shielded.

For County dedicable roadways, the fixtures approved by the County of Hawaii Department of Public Works for street light use are also fully shielded as defined above.

For non- dedicable roadway, the HHFDC will recommend to the project developer that the developer establish covenants requiring that all roadway, area and street light fixtures be fully shielded. It should be noted that privately owned roadway, area and street light fixtures are further constrained by the County's Ordinance 88 122.

Honolulu
Bangkok
Boulder
Guam
Hong Kong
Manila
Seattle
Shenzhen
Singapore

3. Caves / Lava Tubes: The Final EIS, as shown in **Attachment 2** of this letter, will contain the results of a cave biological survey conducted by SWCA Environmental Consultants in August 2008.
4. Storm Water Runoff: The HHFDC will require that the project developer provide educational materials and programs to residents regarding how they can control and prevent non-point source pollution including but not limited to, vehicle maintenance and proper disposal of vehicle fluids, the impacts of washing cars on the street, the potential impacts of fertilizers and pesticides on the environment, and alternatives to fertilizers and pesticides.

The HHFDC will require that the project developer establish community association covenants to include landscape management controls, including the use of fertilizers and pesticides, and vehicle maintenance controls, including vehicle washing and maintenance. A discussion on the urban runoff and mitigation measures will be included in the Final EIS.

Keauhou Aquifer: The existing and planned developments and alternate water resource enhancement measures to the aquifer will have an impact on the aquifer. The HHFDC is participating with two groundwater working groups - the National Park Service group and the Department of Water Supply group – which meet to address the potential impacts of development on the area's water resources. We acknowledge your recommendation concerning the use of a three-dimensional, variable density numerical ground water model to study cumulative impacts on the aquifer. As the issue of impacts on the aquifer is a regional issue, the aforementioned Working Groups represent an appropriate forum for initiating this level of analysis. However, it is our understanding that the recommended model has two significant drawbacks: 1) it is extremely costly; on the order of a million dollars; and 2) because there is so little known about the physical characteristics and function of the high-level aquifer, the viability of the recommended model will be limited by the quality of input data. We understand that an alternate methodology is being pursued by two North Kona area landowners involving the installation of monitoring wells to improve the collective understanding of the aquifer. This seems to be a more practical and potentially productive approach. .

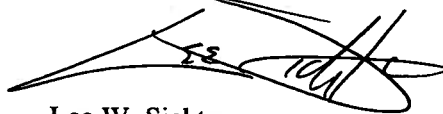
5. Landscaping: The HHFDC will recommend to the project developer that native plants be used for landscaping purposes or choose species that are thought to have a low risk of becoming invasive.

Mr. Patrick Leonard, Field Supervisor
September 25, 2008
2006.70.0900 / 08P-328
Page 3

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.

A handwritten signature in black ink, appearing to read "Lee W. Sichter", written over a horizontal line.

Lee W. Sichter
Principal Planner

LWS:lf

Attachments

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

Attachment 1

In the Final EIS Section 3.7 will be revised to include the 2008 avifaunal and feral mammal survey results show as follows:

3.7.1 Existing Conditions

Phillip Bruner conducted a field survey in May 2008 of the proposed Keahuolu Affordable Housing Project and Reservoir site [TMK (3) 7-4-021: 020 and TMK (3) 7-4-021: Por. 021].

The goals of this field survey were:

1. Documentation of the species of birds and mammals currently on the property.
2. Examination of the site for the purpose of identifying the natural resources available to wildlife in this region.
3. Devoting special attention to documenting the presence and possible use of this property by native and migratory species particularly those that are listed as threatened or endangered.

The property examined is presently covered in dense, second growth forest composed of primarily alien species of trees, brush, and grass. The surrounding land contains residential, commercial, schools, and other similar undeveloped property.

The field survey was conducted over two consecutive days (May 27-28, 2008). The observations were made in the early morning and late in the day when the birds are most active. The property was covered on foot and all birds seen or heard were documented.

Native Land Birds:

No native land birds were observed during this field survey. The only species that might be seen, on occasion, in this area is the endangered Hawaiian Hawk (*Buteo solitarius*) and the Hawaiian Short-eared Owl (*Asio flammeus sanwicensis*). The Hawaiian Short-eared Owl

is not listed as endangered or threatened on the island of Hawaii. Aside from the Hawaiian Hawk, no other native land birds would be expected to occur on this property.

Native Waterbirds:

No native waterbirds were recorded and would not be expected on this site. No wetland habitat was found on this survey.

Seabirds:

No nesting seabirds were seen during the field survey and would not be expected to nest in this area due to the human disturbance and predators.

Migratory Birds:

No migratory shorebirds were observed. No habitat suitable for shorebirds currently occurs on this site.

Alien (Introduced) Birds:

Nineteen alien species were observed during the course of this survey. None of the birds are listed as threatened or endangered.

Mammals:

The skeletal remains of a feral pig (*Sus scrofa*) and two live adult pigs were observed on May 27, 2008. No rats (*Rattus spp.*), mice (*Mus musculus*), or cats (*Felis catus*) were seen but likely occur on and around the property. No endangered Hawaiian Hoary Bats (*Lasiurus cinereus semotus*) were detected by the ultrasound device during a night search on the property on May 27, 2008.

3.7.2 Potential Impacts and Mitigation Measures

Potential impacts to the various species were evaluated. All habitats on the property were thoroughly surveyed. The birds and mammals found were those to be expected in this region. The endangered Hawaiian Hawk and the non-endangered Hawaiian Short-eared Owl occur in man-altered as well as native habitats throughout the island of Hawaii. A change in the land use at this site will produce small, local increases and decreases in the populations of alien birds. Ultimately, there are no avifaunal or feral mammal impediments to carrying out the proposed project.

Attachment 2

In the Final EIS Section 3.8 will be revised to include the 2008 cave biological survey results as follows:

3.8 INVERTEBRATE SURVEY

SWCA Environmental Consultants conducted a biological survey of lava tube caves on the project site. The survey report is included in Appendix H. The study's objectives included: (1) conducting a biological survey of caves within the project area; (2) specifically identifying biologically significant caves; (3) compiling a list of faunal species found in the caves, particularly invertebrates; and (4) providing management recommendations for the more biologically significant caves.

3.8.1 Existing Conditions

SWCA entered onto the project site and conducted a series of cave surveys from June 18-20, 2008. Surface reconnaissance surveys were first conducted to locate and document known cave entrances and any previously unidentified features on the site. Once reconnaissance surveys were completed, a list of cave sites proposed for more detailed inventory survey was developed. The focus of these inventory surveys was to develop a general understanding of the troglobitic¹ cave fauna within the Keahuolu project site.

The SWCA study team found eight cave openings at Keahuolu, of which three caves appeared to have a suitable habitat for troglobitic arthropods. SWCA found a total of 14 distinct species of arthropods within four caves. Of these 14 species, SWCA collected and examined 13 species. Current State and Federal regulations provide no special (or specific) protection for any of these species.

Only two possible native cave species are represented in SWCA's findings: the Rhagidiid mite, which belongs to a group with two known blind cave species and an eyed species known from fumaroles near Kilauea, and the cave moth (*Schrankia* species). The remaining

¹ Troglobitic animals live entirely in the dark parts of caves and are adapted for life in total darkness.

eleven species are classified as alien invaders. The full list of species is located in Table 2 of Appendix H and summarized below.

Acari (Mites): Only one species of mite was identified. The Rhagidiidae is described as a pale predatory mite with conspicuous eyespots.

Araneae (Spiders): Six species of spiders were identified by SWCA during the survey.

Collembola (Springtails): One species of Springtails was discovered (Entomobryidae: Genus species [unidentified]).

Insecta (Insects): Five species of insects were identified.

3.8.2 Potential Impacts and Mitigation Measures

The lava tubes and caves in the Keahuolu project site contain a variety of invertebrates. SWCA concluded that these biological resources do not present a regulatory obstacle to development. None of the identified species is listed as threatened or endangered.

Potential impacts to these species were evaluated. Ultimately, the disposition of the surveyed caves will depend upon whether they contain significant archaeological or cultural material. Mitigation measures are recommended for those caves and/or lava tubes identified for preservation by the SHPD. A determination as to the preservation of caves and/or lava tubes containing no archaeological or cultural resources will be made by the developer pursuant to the final development plan. In all likelihood, caves and/or lava tubes containing no significant archaeological or cultural resources will be destroyed during site grading and preparation, as the invertebrates inventoried in them do not warrant preservation. Furthermore, the caves pose a liability to the landowner if someone should enter one and become injured. In some instances, a cave or lava tube containing no archaeological or cultural resources may be preserved by the developer because the area surrounding it may not require mass grading. In those cases, the entrance will likely be blocked or hidden to prevent intentional or unintentional trespassing.

SWCA made the following recommendations to minimize impacts on caves, particularly those known to contain cultural resources:

- Minimize adding topsoil or impermeable material to the surface directly above known caves and preserves.
- Control invasive plant species within the preserves. For landscaping, utilize native plants and avoid aggressive, fire-prone, non-native grasses.
- Exercise care to minimize surface disturbance during construction within the general vicinity of known caves.
- Prevent wildfires and develop a rapid response plan to fires within the proposed project area.
- If unsurveyed caves are encountered during construction and the caves are accessible, allow a biological survey if appropriate.

FAX TRANSMITTAL SHEET

ENVIRONMENTAL CENTER

University of Hawaii

2500 Dole Street, Krauss Annex 19, Honolulu, HI 96822

Telephone: (808) 956-7361 Fax: (808) 956-3980

DATE: 4/8/2008

FROM: Peter Rappa
Environmental Review Coordinator

TO: Stan Fujimoto, HHFDC (587- 0600)
Mary O’Leary, Belt Collins (538-7819)
Janice Takahashi, HHFDC (587-0600)
OEQC (586-4186)

SUBJECT: REVIEW OF DRAFT EIS
KEAHUOLU AFFORDABLE HOUSING PROJECT
NORTH KONA, HAWAII

No. of Pages: including cover sheet: _____

**UNIVERSITY
of HAWAII**
MĀNOA

April 8, 2008
RE:778

Mr. Stan Fujimoto
Hawai'i Housing Finance & Development Corporation
677 Queen Street, Suite 300
Honolulu, HI 96813

Dear Mr. Fujimoto:

Draft Environmental Impact Statement
Keahuolu Affordable Housing Project
Keahuolu, North Kona, Hawaii

The HHFDC proposes construction of the Keahuolu Affordable Housing Project, a project that aims to provide affordable housing for individuals working in West Hawaii, thereby reducing commute time for many of the area's workers. The Keahuolu Housing Project is envisioned as a mixed-use community with both affordable and market-priced housing in addition to public facilities and commercial space. The 272-acre project site is located in Hawaii's North Kona district in the ahupua'a of Keahuolu. It is bounded to the north by DHHL's Villages of La'i Opuia, to the south by Palani Road, to the west by QLT lands, and to the east by DHHL-proposed housing land. The HHFDC has developed a master plan with three alternative land use concepts for the site. Concept A, B, and C offer single and multi-family housing units in varying densities, with total housing units varying from 1,020 to 2,330. All three concept plans share common elements: the inclusion of 197,000 square feet of commercial space, a civic open space at the town center, and lands reserved for a school, parks, open space, and an archaeological preserve.

This review was conducted with the assistance of Ryan Riddle, Environmental Center.

General Comments

There can be little doubt of the need for affordable housing in Hawaii. An article in the June 10, 2007 *Honolulu Advertiser* by Andrew Gomes said it best "Finding an affordable home to buy or rent tops the challenges facing many people. The simple solution is to build more low-cost homes, but making that happen is far from simple." This draft environmental impact statement (DEIS) enumerates many of the reasons why it is so difficult. In its coverage of the Keahuolu Affordable Housing Project the DEIS is encyclopedic and very informative. In its coverage of the cumulative effects of this and the many other projects that are proposed for this

2500 Dole Street, Krauss Annex 19 Honolulu, Hawaii 96822
Telephone: (808) 956-7361 Fax: (808) 956-3980
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April 8, 2008

Page 2

area and cited in this document, the DEIS is not as comprehensive. The DEIS should explore what the effects of all the current and proposed development projects will be on the region. We believe that there will be significant impacts on the area's transportation and water resources when all of the projects cited in the DEIS are built. Better analysis of cumulative impacts would give decisionmakers important information they need in approving this project.

In addition to our general comment we have a number of specific issues discussed below.

Overview of Site Conditions, Opportunities, and Constraints (p. 2-5)

On page 2-5, the DEIS states, "The upper or eastern half of the site is steeper; some of the slopes are greater than 15 percent, but the larger portion has slopes less than 15 percent. This organizes the site to be used more intensively in the lower sections with larger footprint uses or higher density residential uses being placed on the flatter areas. The upper sections should be used for smaller footprint residential structures that can accommodate grade changes more easily." This statement appears to indicate a preference for smaller footprint residential structures on the upper sections of the site. We note in Concept C, however, that the upper section of the project site is planned for multi-family medium density residential housing. Since there are no single-family houses called for in Concept C can we assume that there is no way to develop low density housing on the sloped lands?

Concept Plans (pp. 2-21 – 2-22)

In the list of *Common Elements of the Three Alternative Concept Plans* you could have added that all housing will strive for energy efficiency and a low environmental footprint.

Figures 2-11, 2-12, 2-13 (pp. 2-23, 2-25, 2-26)

In Figures 2-11, 2-12, and 2-13, an oval-shaped structure is depicted in the northeast portion of the petition area. We are unsure whether this is an existing structure, or a proposed structure. It would be helpful to have this structure labeled in future conceptual diagrams.

Terrestrial Fauna (p. 3-32)

The avifauna and feral mammal survey referred to in section 3.7 was conducted in 1989, almost two decades ago. We suggest that since the flora survey was updated, the faunal survey should have been updated as well.

Table 4-1 (p. 4-11)

The acronym for further data collection FCD is different in the key at the bottom of the table than it is in the column under recommendations FDC.

April 8, 2008

Page 3

Present Study Scope and Methodology (p. 4-27)

The last sentence on page 4-27 reads, "The study presented in this report is believed to comprise a reasonable approach for the assessment of potential cultural impacts within this specific project area." We believe that you meant "The study area presented in this report is believed to comprise a reasonable approach for the assessment of potential cultural impacts within this specific project area."

Roadway Systems (pp. 4-93 – 4-95)

We notice from Figure 4-13 that the Keahuolu Affordable Housing Project adjoins land that the DHHL plans to develop in the future. Looking at the internal road network illustrated in Figures 2-7 to 2-9 on pages 2-15 to 2-17, it seems that there are several streets ending in cul-de-sacs that might connect to the future DHHL development. Has there been any attempt to coordinate the planning of this project with the DHHL so that streets can hook-up, creating an even more fine-grained internal network of streets?

Table 4-26: Water Requirements (p. 4-99)

Table 4-26 estimates the projected average daily water demand under Concepts A, B, and C. The average daily demand under Concept B is 1,158,680, while under Concept C the average daily demand is 1,114,680. Why is there a higher projected demand under Concept B which has fewer dwelling units planned in comparison to Concept C?

Proposed Wastewater System Design (p. 4-110)

There is no plan at present by the County to upgrade its sewage treatment to the R1 level. This upgrade is necessary to allow for the effluent to be reused for irrigation. Since the area may have a need for potable water in excess of the sustainable yield of the aquifer at some time in the future, doesn't it make sense to develop a secondary water distribution system in the new development in the event that the County does upgrade to R1 levels in the future?

The last sentence in this section needs revising.

Solid Waste (pp. 4-117 – 4-120)

The charts on pages 4-119 and 4-120 show the amount of solid waste that will be diverted from the landfill through minimization and recycling. What type of waste minimization and recycling programs can be implemented, will they be voluntary or mandatory, and what happens if the programs fail to divert waste from the waste stream?


April 8, 2008
Page 4

Government Costs (p. 4-158)

We find discussion of cost to government of this project lacking in substance. There is no data presented or any attempt to quantify the cost to government of this development. When compared to the amount of data and analysis presented on the benefits of the project, this section is woefully lacking.

Thank you for the opportunity to review this Draft EIS.

Sincerely,



Peter Rappa
Environmental Review Coordinator

cc: **OEQC**
Janice Takahashi, Hawaii Housing Finance and Development Corporation
Mary O'Leary, Belt Collins
James Moncur, Water Resources Research Center
Ryan Riddle



September 25, 2008
2006.70.0900 / 08P-327

Mr. Peter Rappa
Environmental Review Coordinator
Environmental Center
University of Hawaii
2500 Dole Street, Krauss Annex 19
Honolulu, HI 96822

Dear Mr. Rappa:

**Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of April 8, 2008 for the above-referenced document.

General Comments – Potential Impacts on Transportation and Water Resources

The traffic impact analysis report (TIAR) prepared as part of the DEIS was prepared in coordination with staff at both the County and State levels. Projections of future traffic in the study area were based on past traffic growth trends as well as information on other planned development projects in the area. To these cumulative base traffic projections were also added the estimated project traffic under each of the analyzed development scenarios, forming the total estimated future traffic volumes. Thus, the analysis of future traffic conditions was able to assess both project-specific traffic impacts as well as cumulative traffic impacts.

The belief stated in the comment that there would be significant traffic impacts in the future is, in fact, confirmed by the analysis in the Draft EIS, which projected that five analyzed intersections and three analyzed street segments would decline to unacceptable levels of service under future year 2020 traffic conditions. These findings are documented on pages 4-67 to 4-68 and 4-75 to 4-81 of the Draft EIS. Mitigation measures were developed to assess both types of impacts and to achieve the desired level of service at all analyzed locations.

HHFDC is participating in two groundwater working groups, the National Park Service and the County Department of Water Supply, which are meeting to discuss and assess the potential impacts of various developments on the area's water resources and possible mitigation measures. The two working groups were formed earlier this year. Neither group has issued official findings or conclusions at the time of this writing.

Honolulu
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Seattle
Shenzhen
Singapore

Overview of Site Conditions, Opportunities and Constraints (p. 2-5)

There are no single-family housing units in Concept C because it illustrates a 'maximum number of dwelling units' alternative that utilizes only multi-family housing. Low-density housing can be developed on the sloped lands. The amount of grading required and the potential need for retaining walls to take up grade changes would depend on the footprint size of the structure, whether it is low-density or high-density.

Concept Plans (pp. 2-21 – 2-22)

We acknowledge your comment regarding the Common Elements of the Three Alternative Plans. The Draft EIS states in "Section 2.5.7.1 Energy and Design Considerations" that, to the extent possible, the project must incorporate a number of design features to conserve energy and water usage, in addition to design and construct buildings to meet and receive certification for U.S. Green Building Councils' Leadership in Energy and Environmental Design (LEED) standards.

Figures 2-11, 2-12, 2-13 (pp. 2-23, 2-25, 2-260)

The oval-shaped structure on Figures 2-11, 2-12, and 2-13 is an archeological site. The Final EIS will contain revised Conceptual Plan A, B and C figures as shown in **Attachment 1** of this letter.

Terrestrial Fauna (p. 3-32)

The Final EIS, as shown in **Attachment 2** of this letter, will contain the results of an avifaunal and feral mammal survey conducted by Phil Bruner in May 2008.

Table 4-1 (p. 4-11)

The Final EIS will contain a revised "Table 4-1 Summary of General Significance Assessments and Recommended General Treatments – project Site as shown in **Attachment 3** of this letter.

Present Study Scope and Methodology (p. 4-27)

The Final EIS will correct the last sentence that appeared on page 4-27 of the Draft EIS to read, "The study presented in this report is believed to comprise a reasonable approach for the assessment of potential cultural impacts within this specific project area." as shown in **Attachment 4** of this letter.

Roadway Systems (pp. 4-93 – 4-95)

Planning for the Keahuolu project has been coordinated with the Department of Hawaiian Home Lands (DHHL) and Queen Liliuokalani Trust (QLT). Roadway connections shown in the EIS were based on plans from DHHL and QLT for the adjacent parcels.

Table 4-26: Water Requirements (p. 4-99)

The higher projected water demand under Concept B is due to the larger water use for single-family units. Water use for a single family unit is 800 gallons per day, while a multi-family unit consumes 400 gallons per day, per Department of Water Supply criteria. Concept B includes 800 single-family units, while Concept C does not include any single-family units. For detailed calculations, please see the Appendix G – Civil Infrastructure and Appendix B – Water in the Draft EIS.

Proposed Wastewater System Design (p. 4-110)

We received a comment letter from the County of Hawaii Department of Environmental Management on the Draft EIS. The Department clarified that they are “very interested in establishing an effluent reuse program in North Kona.” However, upgrade of the Kealakehe Wastewater Treatment Plant is not projected until FY10-11. In discussions with the Department of Environmental Management, the reuse water system is currently a concept and there is no infrastructure design criteria established at present. The Final EIS will be revised as shown in **Attachment 5** based on this new information and will contain the Department’s comment letter.

Your comments and letter will be given to the project developer regarding the development of a secondary water distribution system. The developer could design the roadway infrastructure to allow for the future installation of a reuse water system.

In the Final EIS, the last sentence of “Section 4.8.4.2 Proposed Wastewater System Design” will be revised as shown in **Attachment 5**.

Solid Waste (pp. 4-117 – 4-120)

Recycling programs and sites are already established in the County of Hawaii to divert waste from the waste stream. Groups such as Recycle Hawaii provide information on recycling tips and sites to recycle various materials. The project developer (and/or the private contractor(s) that are used to haul waste from the site) can also implement educational waste minimization and recycling programs. If the programs fail to divert waste from the waste stream, the lifespan of the West Hawaii Landfill will be reduced to less than the projected 40 years. However, the County is looking into waste reduction facilities for the island, such as a waste-to-energy incinerator, thermal gasification plant or anaerobic digestion plant.

Government Costs (p. 4-158)

The Final EIS will be revised to include the following text in Section 4.9.4.2 Economic Impacts – Government Costs as shown in **Attachment 6** of this letter.

Mr. Peter Rappa
September 25, 2008
2006.70.0900 / 08P-327
Page 4

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.

A handwritten signature in black ink, appearing to read "LWS", written over a horizontal line.

Lee W. Sichter
Principal Planner

LWS:lf

Attachments

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

Attachment 1

The Final EIS will contain revised Conceptual Plan A, B and C figures as follows.

Table 2-2: Alternative Concept Plans – Housing Unit Totals and Densities

	Alternative Concept Plans		
	A	B	C
Number of residential units:			
High density – multi-family	400	800	800
Medium density – multi-family	220	440	1,530
Low density - single-family	400	600	None
Total Residential Dwelling Units (du)	1,020 du	1,840 du	2,330 du
Density (dwelling units per acre):			
High density – multi-family	12	24	24
Medium density – multi-family	8	16	12
Low density - single-family	4	6	None
Source: The Keahuolu Affordable Housing Master Plan – June 2007			

Attachment 2

In the Final EIS Section 3.7 will be revised to include the 2008 avifaunal and feral mammal survey results show as follows:

3.7 TERRESTRIAL FAUNA

3.7.1 Existing Conditions

Phillip Bruner conducted a field survey in May 2008 of the proposed Keahuolu Affordable Housing Project and Reservoir site [TMK (3) 7-4-021: 020 and TMK (3) 7-4-021: Por. 021].

The goals of this field survey were:

1. Documentation of the species of birds and mammals currently on the property.
2. Examination of the site for the purpose of identifying the natural resources available to wildlife in this region.
3. Devoting special attention to documenting the presence and possible use of this property by native and migratory species particularly those that are listed as threatened or endangered.

The property examined is presently covered in dense, second growth forest composed of primarily alien species of trees, brush, and grass. The surrounding land contains residential, commercial, schools, and other similar undeveloped property.

The field survey was conducted over two consecutive days (May 27-28, 2008). The observations were made in the early morning and late in the day when the birds are most active. The property was covered on foot and all birds seen or heard were documented.

Native Land Birds:

No native land birds were observed during this field survey. The only species that might be seen, on occasion, in this area is the endangered Hawaiian Hawk (*Buteo solitarius*) and the

Hawaiian Short-eared Owl (*Asio flammeus sanwicensis*). The Hawaiian Short-eared Owl is not listed as endangered or threatened on the island of Hawaii. Aside from the Hawaiian Hawk, no other native land birds would be expected to occur on this property.

Native Waterbirds:

No native waterbirds were recorded and would not be expected on this site. No wetland habitat was found on this survey.

Seabirds:

No nesting seabirds were seen during the field survey and would not be expected to nest in this area due to the human disturbance and predators.

Migratory Birds:

No migratory shorebirds were observed. No habitat suitable for shorebirds currently occurs on this site.

Alien (Introduced) Birds:

Nineteen alien species were observed during the course of this survey. None of the birds are listed as threatened or endangered.

Mammals:

The skeletal remains of a feral pig (*Sus scrofa*) and two live adult pigs were observed on May 27, 2008. No rats (*Rattus spp.*), mice (*Mus musculus*), or cats (*Felis catus*) were seen but likely occur on and around the property. No endangered Hawaiian Hoary Bats (*Lasiurus cinereus semotus*) were detected by the ultrasound device during a night search on the property on May 27, 2008.

3.7.2 Potential Impacts and Mitigation Measures

Potential impacts to the various species were evaluated. All habitats on the property were thoroughly surveyed. The birds and mammals found were those to be expected in this region. The endangered Hawaiian Hawk and the non-endangered Hawaiian Short-eared Owl occur in man-altered as well as native habitats throughout the island of Hawaii. A change in the land use at this site will produce small, local increases and decreases in the populations of alien birds. Ultimately, there are no avifaunal or feral mammal impediments to carrying out the proposed project.

Attachment 3

Table 4.1 of the Final EIS will be revised as follows:

4.1 ARCHAEOLOGICAL AND HISTORIC RESOURCES – HOUSING PROJECT SITE

Paul H. Rosendahl, Ph.D., Inc. (PHRI) conducted an archaeological survey and prepared a preliminary CIA for the proposed Keahuolu Affordable Housing Project site, comprised of approximately 272 acres. The CIA study is discussed in Section 4.3. The overall objective of the archaeological survey and the CIA is to comply with the current historic preservation requirements of the Hawai'i SHPD.

The specific objectives of the survey were fourfold: (a) to re-identify and re-locate specific archaeological remains present within the study area; (b) to collect information sufficient to evaluate and document the potential significance of all identified remains; (c) to evaluate the potential impacts of any proposed development upon any identified significant remains; and (d) to recommend appropriate measures that would mitigate any adverse impacts upon identified significant remains. The PHRI archaeological survey report is excerpted below. Appendix D contains the complete report.

Attachment 4

The Final EIS will correct the last sentence that appeared on page 4-27 of the Draft EIS as follows.

The overall rationale guiding the present limited assessment study has been that the level of study effort should be commensurate with the potential of the proposed project for making any adverse impacts upon any Native Hawaiian or other ethnic group cultural practices currently conducted by cultural practitioners within the project area. **The study presented in this report is believed to comprise a reasonable approach for the assessment of potential cultural impacts within this specific project area.**

Attachment 5

In the Final EIS Section 4.8.4.2 Proposed Wastewater System Design is revised as follows.

4.8.4.2 Proposed Wastewater System Design

The proposed sewer system would be developed in accordance with the Hawai'i County Department of Environmental Management criteria. For details of the sewer system criteria, see Appendix G. Design and construction of the proposed off-site and on-site sewer systems would meet County Standards for dedication to the County Department of Environmental Management. The projected sewer flows, presented in Table 4-30, are summarized in Appendix G.

Table 4-30: Sewer Requirements

Development Plan	Design Average Flow (gpd)	Design Peak Flow (gpd)
Concept A	430,598	1,915,899
Concept B	665,436	2,568,875
Concept C	720,856	2,710,213

The project has reserved 431,360 gpd capacity at the Kealakehe WWTP. Additional capacity at the WWTP would be required to accommodate Concepts B and C, which are projected to exceed the reserved capacity. The Department of Environmental Management would have to expand the WWTP and is currently undertaking a master plan to review options to upgrade the WWTP. Two improvement projects to the WWTP are planned: (1) sludge removal \$4,600,000 (County of Hawai'i FY 07-08 budget), and (2) aeration upgrade \$6,450,000 (County of Hawai'i FY 07-08 budget). The two improvement projects will allow the WWTP to continue to operate at the present capacity and allow for future capacity upgrades.

R-3 Water (undisinfected secondary recycled water) from the Kealakehe WWTP is discharged to a pond in the lava fields makai of Queen Ka'ahumanu Highway in the DHHL/Villages of La'i 'Opua. R-3 Water is not suitable for irrigation use for the project. The County would have to further treat the effluent to R-1 Water (significant reduction in

viral and bacterial pathogens) before the effluent would be suitable for irrigation use on the project site. The County has plans to upgrade the WWTP to produce R-1 Water in FY 10-11. In addition, a pump system, and storage and transmission lines for the recycled effluent system would be required, but there are no detailed plans by the County for a system to the project area.

Potential Off-Site Wastewater System Alignments

Sewer lines from the project site to the WWTP would be routed either through QLT lands or through DHHL/Villages of La'i 'Opua lands. Figure 4-18 and Figure 4-19 show the QLT route for the off-site sewer system for development Concept A and Concepts B and C, respectively. Figure 4-20 and Figure 4-21 show the La'i 'Opua route for the off-site sewer system for Concept A and Concepts B and C, respectively. Sewer lines would be sized to accommodate sewer flows from the project site, lands immediately mauka of the project, and the makai lands adjacent to the sewer line alignment. The sewer line alignment and sizes are subject to change based on the final development concept.

Based on the design flows, a new 30-inch sewer line would be required for either route to convey sewer flows from the project site, across Queen Ka'ahumanu Highway, to the WWTP. A sewer line through the QLT route can convey wastewater flows from the entire project site to the WWTP. A sewer line through the Villages of La'i 'Opua route can convey the majority of the flows from the site. A low-elevation portion, approximately 40 acres of the project parcel near Palani Road, could be developed with activities not requiring sewer service, such as parking lots, open spaces, preserve areas, and playfields and parks with restroom facilities located outside the low area. If sewer service is required for the low area, either a pump station would be required or a sewer line would have to be constructed through QLT land to convey flows from the low area. Figure 4-18 and Figure 4-19 show the proposed sewer line to service this low area through the QLT lands.

The order-of-magnitude costs in Table 4-31 for sewer system construction assume that the low area would be developed with sewage-generating facilities. For details on the sewer system costs, see Appendix G. These cost estimates are based on the best available information on DHHL and QLT plans for future development of their properties. QLT is in preliminary planning, and actual routing and sewer flows may change.

Table 4-31: Off-Site Wastewater System Costs

Off-Site Water System	Concept A	Concept B	Concept C
Through QLT Lands	\$6,381,000	\$6,663,000	\$6,663,000
Through DHHL / Villages of La'i 'Opua			
Through La'i 'Opua	\$5,983,000	\$5,983,000	\$5,983,000
Through QLT Lands	<u>\$4,297,000</u>	<u>\$4,543,000</u>	<u>\$4,543,000</u>
Subtotal	\$10,280,000	10,526,000	10,526,000

Proposed On-Site Wastewater System

The on-site sewer system would consist of sewer lines within the roadway network. The system would connect to sewer line routed through either the DHHL/Villages of La'i 'Opua lands or the QLT lands. The sewer system would have a minimum pipe size of 8 inches in diameter and a maximum pipe size of 21 inches in diameter for the DHHL/Villages of La'i 'Opua route or 15 inches in diameter for the QLT route. The sewer lines would be sized to convey the design peak flow from the upstream tributary areas.

Attachment 6

The Final EIS Section 4.9.4.2 Economic Impacts – Government Costs will be revised as follows:

Future Socio-Economic Conditions with the Project

As a workforce housing development, the project is planned to have beneficial socio-economic impacts. This section provides detailed accounts of specific impacts, covering both immediate and cumulative impacts.

Economic Impacts

Construction Employment and Wages

Development of the Keahuolu project is expected to involve residential construction over a period of four to eight years, as shown in Table 4-47. Commercial construction could follow residential development and occur in two phases. Project construction work will include off-site infrastructure development, on-site development of lots and infrastructure, and housing construction. The next table shows construction spending and direct construction labor, estimated in full-time equivalent jobs, for selected years and cumulatively over the construction period.¹

¹ Many specialized construction jobs are short-term. For example, an electrician may spend a week or less on a project where others work throughout the year. The number of workers hired is likely to be larger than the estimated number of full-time equivalent jobs. Also, the direct construction workforce includes workers in the offices and baseyards of firms involved in a project, as well as ones actually on-site.

Table 4-47: Preliminary Timetable for Construction

Year	Concept A No. Units	Concept B No. Units	Concept C No. Units	Commercial (SF)
2010	300	300	300	
2011	300	300	300	
2012	300	300	300	
2013	120	300	300	
2014		300	300	
2015		300	300	
2016		40	300	
2017			230	
2018				100,000
2019				
2020				97,000
Total	1,020	1,840	2,330	197,000

Source: HHFDC.

Direct jobs are created within firms and by engaging subcontractors in building the project. When these jobholders in turn buy materials and equipment in the local economy, they contribute to the creation of indirect jobs (for example, in home supply stores or from concrete manufacturing firms.) When in turn direct and indirect workers spend their wages, they create induced jobs, supported by the movement of capital from those wages through the local economy. Induced jobs largely consist of retail, service, and government jobs.

Wages can be estimated from records of average wages in the construction industry in the County. The indirect and induced jobs are spread throughout the economy, so they are estimated from average wages of all workers.

Table 4-48: Construction-Related Spending, Jobs, and Wages

	2010	2015	2020	Cumulative, to 2020
Total construction costs (Millions)				
Concept A	\$126.1	\$0.0	\$7.3	\$455.0
Concept B	\$125.2	\$71.8	\$7.3	\$651.5
Concept C	\$113.0	\$61.0	\$7.3	\$676.5
Direct construction workforce (annual person-years)				
Concept A	639	-	37	2,044
Concept B	634	364	37	3,030
Concept C	573	309	37	3,159
Total construction-related workforce (annual person-years)				
Concept A	1,527	-	88	4,885
Concept B	1,516	869	88	7,241
Concept C	1,369	738	88	7,549
Direct construction wages (Millions, constant 2007 \$s)				
Concept A	\$34.2	\$0.0	\$2.0	\$109.5
Concept B	\$34.0	\$19.5	\$2.0	\$162.3
Concept C	\$30.7	\$16.5	\$2.0	\$169.2
Total construction-related wages (Millions, constant 2007 \$s)				
Concept A	\$66.2	\$0.0	\$3.8	\$211.9
Concept B	\$65.8	\$37.7	\$3.8	\$314.1
Concept C	\$59.4	\$32.0	\$3.8	\$327.5

Notes: Construction costs estimated by Belt Collins Hawaii. Cost estimates cover on-site and off-site infrastructure, residential and commercial construction. School construction costs are not included. Workforce full-time equivalent jobs are estimated based on the relation between statewide construction spending and the construction workforce. Indirect and induced construction-related workforce calculated from the State's Inter-County Input-Output Model (2002 version). Wages estimated from 2005 average annual industry wage for Hawai'i County and total covered employment (for indirect and induced jobs), using 2005 data adjusted to 2007 in line with increases in the Consumer Price Index.

Sources: DBEDT, State of Hawaii Data Book 2006 (Honolulu, HI: 2007); *The Hawaii Inter-County Input-Output Study: 2002 Benchmark Report*. Honolulu, HI. 2007. Posted at http://www.hawaii.gov/dbedt/info/economic/data_reports/2002_Intercounty_I-O/. Department of Labor and Industrial Relations, Employment and Payrolls in Hawaii, 2005. Honolulu, HI. 2006.

On the average, some 204 to 243 full-time direct jobs will be involved in construction of the Keahuolu Project annually, while total construction-related employment will reach 489 to 581 jobs annually, as shown in Table 4-49.

Table 4-49: Average Annual Construction-Related Workforce

Concept	Construction Period	Average Annual Construction Workforce	
		Direct	Total
A	10 years	204	489 person-years
B	13 years	233	557 person-years
B	13 years	243	581 person-years

Operations Employment and Wages

Residential projects do not result in the creation of many permanent jobs. Resident managers and a few landscape, maintenance, and security workers could be employed on a permanent basis at Keahuolu. Within the neighborhood commercial area, as many as 800 jobs could be located when it is fully built out and occupied. These jobs would exist in Hawai'i County wherever families find it possible to live: they would still exist even if the project is not built.

The location of direct jobs at the project site is a socio-economic impact, affecting residents and their neighbors. The indirect and induced jobs associated with operations on the project site are not, since those operations, funded by resident spending, would occur somewhere in the County with or without the project. Accordingly, indirect and induced jobs associated with operations are not calculated here.

Labor Force Impacts

The Keahuolu project will affect the regional labor force in part by creating jobs, but more importantly, by providing housing for service, retail, managerial, and professional workers. As more housing units are built, fewer workers will face unacceptable housing choices and/or difficult daily commutes. People living close to Kailua-Kona are likely to have more employment options, including full- and part-time employment. By shortening the commute time for workers and their families, the project is likely to increase labor force participation, with some joining the labor force and others changing from part-time to full-time

employment. For young people, the number of easily accessible jobs is far greater in Kailua-Kona than in outlying areas. Consequently, high-school student participation in the labor force will likely be higher. (In 2000, civilian workers amounted to 70 percent of persons 16 and over in North Kona, compared to 53 percent in Ka'u and 54 percent in North Kohala.)

With fewer obstacles to work, residents living near job centers are more likely to keep their jobs than ones with long commutes. A long-term result of increasing the housing stock for Kailua-Kona workers will likely be lower job turnover.

Population Impacts

Table 4-51 shows calculations for on-site population. When fully built, the Keahuolu project will house some 2,988 to 6,826 residents.

The project is unlikely to attract any new residents or visitors to Hawai'i. Affordable units will be sold or rented to full-time occupants. A resident preference will be established for the initial sale of market units. While some market units could theoretically be sold to non-residents, this seems unlikely given both strong resident demand and the design of the project as a community for residents, not a resort.

Table 4-50: Direct Operations Jobs and Wages: Annual Estimates for Selected Years

	2010	2015	2020
Operations Jobs			
<i>Concept A</i>			
Residential			
Building Services	4	12	12
Security	1	3	3
Grounds and maintenance	4	4	4
Commercial	-	-	788
	9	20	808
<i>Concept B</i>			
Residential			
Building Services	4	24	25
Security	1	6	6
Grounds and maintenance	4	4	4
Commercial	-	-	788
	9	34	823
<i>Concept C</i>			
Residential			
Building Services	6	36	47
Security	2	9	12
Grounds and maintenance	4	4	4
Commercial	-	-	788
	12	49	850
Operations Wages (In Millions of Constant 2007 \$s)			
Concept A	\$0.2	\$0.5	\$22.0
Concept B	\$0.2	\$0.9	\$22.4
Concept C	\$0.3	\$1.2	\$23.1

Notes: Building services and security jobs are associated with multifamily construction; grounds and maintenance jobs are associated with opening up and using the entire project site. Commercial jobs estimated at 4 jobs per 1,000 square feet gross leasable area.

Table 4-51: On-Site Occupancy and Population

	2010	2015	2020
Units Built			
Concept A	300	1,020	1,020
Concept B	300	1,800	1,840
Concept C	300	1,800	2,330
Units Occupied			
Concept A	291	989	989
Concept B	291	1,746	1,785
Concept C	291	1,746	2,260
Resident Population			
Concept A	879	2,988	2,988
Concept B	879	5,273	5,390
Concept C	879	5,273	6,826

Notes: Occupancy is estimated at 97%, to allow for normal vacancies due to sales or change in renters. Because of strong demand, occupancy is expected to be high from initial construction through the period studied. Population estimated from the 2000 Census data for Census Tract 215.01, which contains a broad mix of local residents. Its average household size (3.02 persons per household) was well above the district average (2.70 persons per household).

Impacts on the Housing Market

Demand for homes in North Kona is already strong and expected to exceed planned production, especially of housing for middle-income families. (See the discussion of housing demand in 2006, in Chapter 2.) Also, the district resident population is expected to increase by some 6,400 persons between 2010 and 2020. That increase accounts for approximately 2,370 households at the 2000 district average household size of 2.70 persons/household. Additional housing demand at the regional level will be due to movement of the island of Hawai'i residents to homes nearer the urban center and to purchases by non-residents, whether for vacation homes or retirement.

Initial plans for the Keahuolu project call for production of 300 housing units annually, with the first homes available in 2010.² Taken together with additional DHHL increments in La'i

² As noted in earlier chapters, the three conceptual alternatives represent the range of potential development that could be done in response to HHFDC's Request for Proposals. The actual volume and timing of construction will be refined by the developer over time.

'Opua, affordable units and some of the market housing produced in Palamanui, new housing in Waikoloa Village, and smaller projects, the cumulative impact of planned housing developments should be a significant reduction in demand. With much more housing available for residents, the price of moderate homes can be expected to stabilize. A wide range of prices and housing types (including apartments, condominiums, townhomes, homes, self-help housing, and properties in leased-land as well as fee-simple communities) will be available to West Hawai'i residents.

The project's impact on housing can be estimated in relation to demand indicators. The 2006 *Hawaii Housing Policy Study* suggests that there is demand from about 7,200 resident households for units in North Kona in the next few years. In addition, population growth will account for formation of at least 2,370 new households.

Some 1,020 to 2,330 units are proposed in the different concepts for the Keahuolu project. The net increase in units is smaller, since the project also includes operational jobs, and the workers in those jobs will need housing. Table 4-52 shows the net housing impact of the project. The net addition to the housing stock is estimated as 511 units under Concept A to 1,794 units under Concept C. Given a regional demand for approximately 9,570 units (7,200 units existing demand plus 2,370 new households), the net contribution of the project amounts to 5.3 to 18.7 percent of regional demand.

Table 4-52: Net Housing Impact of Keahuolu Project

	2010	2015	2020
On-site Jobs			
Concept A	9	20	808
Concept B	9	34	823
Concept C	12	49	850
On-site Workers' Households (1)			
Concept A	5	12	509
Concept B	6	22	519
Concept C	7	31	536
Population supported by On-site jobs (2)			
Concept A	16	37	1,539
Concept B	17	65	1,568
Concept C	22	93	1,620
Units Built			
Concept A	300	1,020	1,020
Concept B	300	1,800	1,840
Concept C	300	1,800	2,330
Net Units (Units Built - On-site Workers' Households)			
Concept A	295	1,008	511
Concept B	294	1,778	1,321
Concept C	293	1,769	1,794

Notes:

- 1 Workers' households are assumed to include 1.585 workers per household, on average, based on averages for CT 215.01 in 2000.
- 2 Workforce households assumed to average 3.02 persons/household (based on 2000 average household size, CT 215.01).

Fiscal Impacts

Government Revenues

Development of the Keahuolu project will result in revenues for the State associated with construction and sale of property. The County will gain revenues from taxes on homes and residential land.

The State is expected to gain from corporate income taxes on firms building the project, from excise taxes on spending by construction-related workers in the local economy, and from income taxes on construction-related workers' wages. Because the project is being built to increase the supply of affordable housing, direct construction revenues will be exempted from the excise tax. State revenues associated with construction are derived in Table 4-53. Conveyance taxes might be levied on some market units, but these are not included in Table 4-53. The cumulative increase in State revenues is estimated as approximately \$19 to \$28 million by the end of the construction period.

The County will see increased revenues from real property taxes. As government land, the project site is not now yielding property taxes. When housing and commercial facilities are occupied, they will be taxable. However, some or all of the housing in the project would likely be assessed at below-market rates, and taxed at special rates for homeowners and affordable rentals. The treatment of low-income rentals at the homeowner rate is a new County practice, and the applicable laws could well be revised before any homes are built at Keahuolu. To derive a minimal estimate of new tax revenues, this analysis assumes that all housing within the project is sold and resold at affordable rates, and that all is taxed at homeowner and affordable rental rates.

For the County of Hawai'i, the minimal real property taxes associated with development of the Keahuolu project are estimated to range from \$1.2 million to \$1.7 million (2007 dollars) annually by 2020 and to reach a cumulative total of \$9.4 million to \$13.0 million through 2020. Table 4-54, Table 4-55, and Table 4-56 show calculations for the three project concepts.

**Table 4-53: State of Hawai'i Tax Revenues Associated
with Construction, Keahuolu Project**

	2010	2015	2020	Cumulative
Total construction costs (Millions of 2007 \$s)				
Concept A	\$126.1	\$0.0	\$7.3	\$455.0
Concept B	\$125.2	\$71.8	\$7.3	\$651.5
Concept C	\$113.0	\$61.0	\$7.3	\$676.5
Total construction-related wages (Millions of 2007 \$s)				
Concept A	\$66.2	\$0.0	\$3.8	\$239.0
Concept B	\$65.8	\$37.7	\$3.8	\$342.3
Concept C	\$59.4	\$32.0	\$3.8	\$355.4
Corporate income taxes (Thousands of \$s) (1)				
Concept A	\$112.6	\$0.0	\$6.5	\$406.4
Concept B	\$111.8	\$64.1	\$6.5	\$581.8
Concept C	\$100.9	\$54.4	\$6.5	\$604.1
Excise Tax on workforce spending (Thousands of \$s) (2)				
Concept A	\$1,659.6	\$0.0	\$95.7	\$5,988.0
Concept B	\$1,647.3	\$944.4	\$95.7	\$8,573.8
Concept C	\$1,487.3	\$802.1	\$95.7	\$8,902.5
Personal Income Tax (Thousands of \$) (3)				
Concept A	\$3,462.5	\$0.0	\$199.7	\$12,493.2
Concept B	\$3,436.9	\$1,970.4	\$199.7	\$17,888.1
Concept C	\$3,103.1	\$1,673.4	\$199.7	\$18,574.0
Total State Revenues (Thousands of \$s)				
Concept A	\$5,234.7	\$0.0	\$302.0	\$18,887.5
Concept B	\$5,196.1	\$2,978.9	\$302.0	\$27,043.8
Concept C	\$4,691.4	\$2,530.0	\$302.0	\$28,080.7

Sources: Hawaii State Department of Taxation, 2001, 2005.

Notes:

- (1) Corporate income tax historically averages 0.17% of corporate revenues (data from 2000).
- (2) Excise tax at 4% of workforce disposable income. Share of spending subject to excise tax estimated from 2002 expenditure data.
- (3) Personal income tax historically 5.22% of resident incomes (average, 1998-2002).

Table 4-54: Minimum Estimate of Real Property Tax Revenues, County of Hawai'i, from Development of Project Concept A

	2010	2015	2020	Cumulative
Basis for Valuation				
Units built				
For Sale (1)	239	813	813	813
For Rent (1)	61	207	207	207
Commercial area (GLA in thousands sq. ft.)	-	-	197	197
Value (Millions of 2007 \$s)				
Value of housing units				
For Sale (2)	\$59.5	\$202.4	\$202.4	
For Rent (3)	\$10.0	\$34.0	\$34.0	
Homeowner's Exemptions				
Basic Exemption (4)	\$9.6	\$32.5	\$32.5	
Additional Housing Exemption (5)	\$11.9	\$40.5	\$40.5	
Net Taxable Value, Housing	\$48.0	\$163.3	\$163.3	
Value of Commercial Property (6)	\$0.0	\$0.0	\$29.6	
Real Property Taxes (Thousands of 2007 \$s)				
Residential (7)	\$266.6	\$906.5	\$906.5	\$8,851.4
Commercial (8)	\$0.0	\$0.0	\$266.0	\$536.0
Total	\$266.6	\$906.5	\$1,172.4	\$9,387.4

Notes:

- (1) One-third of multifamily units assumed to be rentals.
- (2) Average housing unit assumed to be unit affordable for sale to family of four with income 110% of median, (priced at \$217,900 in 2007).
- (3) All rentals assumed to be "affordable," so units qualify for homeowner tax classification. Value of rentals extrapolated by assuming 5.7% cap rate, 95% occupancy, and that the average unit is a two-bedroom unit rented at the top of the affordable range for West Hawaii (\$822). Cap rate based on NCREIF moving average.
- (4) Basic exemption for homeowners = \$40,000 of value.
- (5) Since 2005, Hawaii County exempts 20% of the homeowners' property values, up to \$400,000 in value.
- (6) Commercial property value estimated from assumed construction costs.
- (7) Homeowner class residential property is taxed at \$5.55/\$1,000 value.
- (8) Commercial property is taxed at \$9.00/\$1,000 value.

Sources: Hawaii County property tax information, as posted at
<http://www.hawaiipropertytax.com/pdf/FILES/HOME%20EXEMPTIONS%20Brochure.pdf>
[http://www.hawaiipropertytax.com/pdf/FILES/RP%20Form%202019-53\(h\)%20Affordable%20Rental%20Program%20Application.pdf](http://www.hawaiipropertytax.com/pdf/FILES/RP%20Form%202019-53(h)%20Affordable%20Rental%20Program%20Application.pdf)
 National Council of Real Estate Investment Fiduciaries data posted at <http://www.ncreif.com/#>

**Table 4-55: Minimum Estimate of Real Property Tax Revenues,
County of Hawai'i, from Development of Project Concept B**

	2010	2015	2020	Cumulative
Basis for Valuation				
Units built				
For Sale (1)	233	1,396	1,427	1,427
For Rent (1)	67	404	413	413
Commercial area (GLA in thousands sq. ft.)	-	-	197	197
Value (Millions of 2007 \$s)				
Value of housing units				
For Sale (2)	\$57.9	\$347.2	\$355.0	
For Rent (3)	\$10.0	\$34.0	\$34.0	
Homeowner's Exemptions				
Basic Exemption (4)	\$9.3	\$55.8	\$57.1	
Additional Housing Exemption (5)	\$11.6	\$69.4	\$71.0	
Net Taxable Value, Housing	\$47.0	\$255.9	\$260.9	
Value of Commercial Property (6)	\$0.0	\$0.0	\$29.6	
Real Property Taxes (Thousands of 2007 \$s)				
Residential (7)	\$260.8	\$1,420.5	\$1,447.8	\$12,449.4
Commercial (8)	\$0.0	\$0.0	\$266.0	\$536.0
Total	\$260.8	\$1,420.5	\$1,713.8	\$12,985.3

Notes: See table for Concept A. By assumption, one third of all multifamily units is assumed to be low-income rentals, so tax return on Concept B is higher than for Concept C, which has no single family units.

Table 4-56: Minimum Estimate of Real Property Tax Revenues, County of Hawai'i, from Development of Project Concept C

	2010	2015	2020	Cumulative
Basis for Valuation				
Units built				
For Sale (1)	200	1,200	1,553	1,553
For Rent (1)	100	600	777	777
Commercial area (GLA in thousands sq. ft.)	-	-	197	197
Value (Millions of 2007 \$s)				
Value of housing units				
For Sale (2)	\$49.8	\$298.6	\$386.5	
For Rent (3)	\$10.0	\$34.0	\$34.0	
Homeowner's Exemptions				
Basic Exemption (4)	\$8.0	\$48.0	\$62.1	
Additional Housing Exemption (5)	\$10.0	\$59.7	\$77.3	
Net Taxable Value, Housing	\$41.8	\$224.8	\$281.0	
Value of Commercial Property (6)	\$0.0	\$0.0	\$29.6	
Real Property Taxes (Thousands of 2007 \$s)				
Residential (7)	\$232.0	\$1,247.8	\$1,559.7	\$12,268.6
Commercial (8)	\$0.0	\$0.0	\$266.0	\$536.0
Total	\$232.0	\$1,247.8	\$1,825.6	\$12,804.5

Notes: See table for Concept A. By assumption, one third of all multifamily units is assumed to be low-income rentals, so tax return on Concept B is higher than for Concept C, which has no single family units.

Government Costs

From a planning perspective, the Keahuolu project is a case of "smart growth." This concept is usually discussed in terms of alternative futures: sprawling urbanization vs. compact growth, especially infill growth in existing urban zones. Sprawl involves calculable costs to individuals (travel time and costs; less physical activity and higher incidence of obesity), to communities (lower involvement of adults as volunteers and community participants), and to municipal or regional authorities (higher costs of providing infrastructure over greater distances). For calculations, please see Costs of Sprawl – 2000 published in the "Transit Cooperative Research Program Report 74," 2002.

In the context of Hawai'i County, it is clear that delivery of some services – notably police and fire control – can be accomplished more efficiently and at lower cost if homes are concentrated near police and fire stations. The impact on roadways is also obvious. With concentrated development, traffic congestion may continue to be a serious problem in Kailua-Kona, but it is likely to be less severe over the many road-miles that commuters from Ka'u, South Kona and North Kohala now travel to and from work. The analysis becomes

more complex with regard to wastewater facilities, which exist in urban, but not rural areas. The developer will be responsible for onsite and offsite costs of infrastructure that can be dedicated to the County. The County will thereby acquire assets. The County will also be responsible for operations and maintenance of those assets, but will be able to bill users for these costs. Again, an urbanized population may well make greater demands for recreation services than a dispersed one, but the developer will be responsible for adding parks within the project area.

Increases in certain government revenues are quantified in the EIS because these can be calculated in a straightforward manner. Costs and other revenues are not calculated because the assumptions needed to calculate them are far more complex and may depend on future agency funding decisions (e.g., the timing and extent of park improvements). Since the total costs associated with public facilities for smart growth are likely to be smaller than with dispersed development, it is appropriate to disclose this likely positive impact but not necessary to calculate it in detail.

The project will serve West Hawai'i residents and not a new population. It does not create a new demand for government services but rather relocates that demand to a site near the urban center. Consequently, the costs of government service delivery to Keahuolu project residents are likely to be less than they would be without the project.

Social Impacts

Impacts on West Hawai'i

The Keahuolu project will house a large number of working residents in Kailua-Kona, increasing demand for commercial and public services in the urban area.

The project contributes to a cumulative impact, the differentiation of urban and "country" areas in West Hawai'i. As young working families concentrate in or near Kailua-Kona, outlying areas will tend to have older populations and lower labor force participation. The urban area will be more densely settled, while other areas will be more "country" in

appearance and ambiance. Retirees and some workers willing to commute long distances will still be found throughout West Hawai'i – the impact is the intensification of an ongoing trend, not a qualitative change.

As a rule, the shorter the commute, the easier it is for adults to participate in the life of their home communities, whether as volunteers, as parents involved with their children's schools and teams, or simply as participants in everyday life. Community involvement is likely to increase. On the other hand, residents moving from areas in which they grew up and have family ties can find a new development to be less vibrant and lacking the networks, occasions, and places in which they enjoy community life. The Keahuolu project's design as a walkable community with parks and schools nearby that will help to encourage resident community participation. On balance, then, the project is likely to increase West Hawai'i residents' ability to contribute to community life.

Traffic congestion on Palani Road has long been a source of resident dissatisfaction in Kona. By concentrating residents near Palani Road, close to Kailua-Kona job sites, the project is likely to worsen congestion on that route during its early years. In time, with highway improvements and the construction of new roads, the project will help to limit congestion throughout the region because a smaller share of workers will be commuting long distances on a few through roads.

Impacts on the Project Site and Surrounding Area

The immediate area will change due to the cumulative impact of development in the project, in QLT lands, and in DHHL lands. That change has been anticipated and most of the sites in question are already designated as Urban or Urban Expansion. A new residential center will be created for Kailua-Kona. With the eventual development of new roadways, the project and adjoining sites will have internal circulation, so that trips between homes and schools, community facilities, or commercial areas will not rely on major through roads. The commercial and public facilities within the project will likely help to encourage residents of the project and adjoining areas to limit trips outside the immediate area, and tend to engender a sense of Kealakehe/Kealuolu as a distinctive community or neighborhood in Kailua-Kona.

The new neighborhood will be characterized by design elements intended to encourage walking, bicycling, and public transit use. As a neighborhood with much of the new construction in Kailua, it will likely be more desirable than older areas with homes at similar prices. As a community with a mix of rental and for-sale units, the Keahuolu project will not fit the negative stereotypes associated with low-income housing.



IN REPLY REFER TO:
L7621

United States Department of the Interior RECEIVED

NATIONAL PARK SERVICE
Kaloko-Honokohau National Historical Park
73-4786 Kanalani St., Suite 14
Kailua-Kona, HI 96740

2008 APR -9 PM 1: 57

BELT COLLINS HAWAII

April 8, 2008

Ms. Mary O'Leary, Senior Planner
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, HI 96819

RE: National Park Service Response to the Draft EIS,
Keahuolu Affordable Housing Project, Keahuolu, Island of Hawaii.

Dear Ms. O'Leary:

Thank you for providing the National Park Service with the opportunity to review and comment on the draft EIS for the Keahuolu Affordable Housing Project at Keahuolu, Hawaii, proposed for development by the Hawaii Housing Finance & Development Corporation (HHFDC). The Keahuolu Affordable Housing Project is situated approximately 1.5 miles from the Kaloko-Honokohau National Historical Park boundary, and has the potential to affect the natural and cultural resources within the National Park. We have reviewed the draft EIS document and provide the following comments.

Kaloko-Honokohau National Historical Park was authorized in 1978 by Congress to preserve, interpret, and perpetuate traditional Native Hawaiian activities and culture (Public Law 95-625). Water quality and quantity in the National Park are vital to the integrity of this mission. The National Park contains two large (11 and 15- acre) ancient Hawaiian fishponds with large associated wetlands, more than 140 known anchialine pools, and 596 acres of marine waters. Each of these water bodies is a significant cultural resource, and they also provide habitat for nine federally protected and candidate endangered species. The National Park water resources are fed by, and in the case of the anchialine pools and 'Aimakapa Fishpond, are solely dependent upon, ground water inputs. The anchialine pools support three known candidate endangered species. 'Aimakapa Fishpond and wetland is a significant foraging and breeding habitat for the endangered Hawaiian stilt and the Hawaiian coot, and is an important habitat for migratory waterfowl. The Park boundaries also encompass 596 acres of class AA marine waters, which include extensive coral reef habitat, and support four federally protected marine species.

Surface Water Drainage, Non-point Source Pollution

Surface water runoff is a significant nationwide problem for ground-water pollution. The consequences of non-point source pollution include increased risk of disease from water recreation, algae blooms, fish kills, destroyed aquatic habitats, and turbid waters. Upslope development therefore poses a significant threat to West Hawaii coastal resources, including the National Park's resources. Currently the County Department of Public Works standards for

drainage wells do not address protection of significant environmental resources, but rather solely consider flood control and volume of runoff. The National Park Service appreciates the inclusion in the draft EIS (Sections 3.3.2, 4.8.2.2) of proposed storm drainage devices and Best Management Practices beyond those currently required by the County of Hawaii in order to reduce non-point source pollution inputs to ground water, and would like to see in the final EIS a commitment by the developer to implement such measures as well as a commitment to providing specific educational materials and programs to residents regarding how they can control and prevent non-point source pollution including, but not limited to, the topics of vehicle maintenance and proper disposal of vehicle fluids, the impacts of washing cars on the street, the potential impacts of fertilizers and pesticides on the environment and the National Park, and alternatives to fertilizers and pesticides. In our response letter to the EIS preparation notice for this project, dated 8-21-2007, we also requested that enforceable controls on approved chemicals and uses by property owners and maintenance crews on yards and park common areas be proposed as mitigation to protect ground water. The draft EIS for did not discuss or propose any landscape management controls through a community association covenants, conditions, and restrictions document or other mechanism.

Parks and Open Space

The NPS is pleased to see that the design concepts for the community contain considerable open space and parks (Section 2.5.5). In our response letter to the EIS preparation notice, the NPS asked that the HHFDC or community maintenance crews for the neighborhood parks and open spaces avoid or minimize the use of fertilizers and pesticides and set an example by using alternative methods of controlling pests and weeds. The draft EIS mentions this recommendation in Section 3.3.2, but as above, no mechanism was proposed for enforceable control on fertilizer and pesticide application for common areas and parks.

Water System

A primary concern of the National Park Service is the impacts to the National Park's cultural and natural resources from ground-water withdrawal. The Keahuolu Affordable Housing Project, in the context of other proposed developments in the North Kona area, has the potential to impact cultural and natural resources in the Park that are dependent upon ground-water flow. Ground water within the National Park is considered a cultural resource; essential to the ancient Hawaiian fishponds and the anchialine pools that define the Park, and that are central to the National Park's planned Cultural Live-in Center (NPS 1994 General Management Plan/EIS). The long-term withdrawal of ground water described in the draft EIS will likely adversely affect these ecosystems that are dependent upon the quantity and quality of ground water that is discharging along the coast, and may affect cultural practices associated with these ecosystems. In our response letter to the EIS preparation notice, we raised the concern that the cumulative impact to the aquifer will be quite significant and requested that the HHFDC analyze the potential impacts, direct and cumulative, of water withdrawal to ground-water dependent ecosystems at the coast. In particular, the draft EIS does not analyze these impacts in the context of other withdrawals, existing and planned, from the aquifer.

The National Park Service has reason to be concerned about the amount of ground water available to the National Park. In 1999, the U.S. Geological Survey studied ground water in the National Park and modeled the effects of ground-water withdrawals on the amount of ground-

water flow through the Park (Oki et al., 1999)¹. Oki et al. (1999) concluded that the major source of fresh ground water is from subsurface flow originating from inland areas to the east of the National Park and that “withdrawals from wells directly up-gradient of the Park had the greatest effect on the model-calculated freshwater coastal discharge within the Park.” Simulated withdrawals from all existing and proposed wells permitted prior to March 1998 showed that an increase in withdrawal rates from a 1978 baseline rate to 56.8 MGD, caused a 47% reduction in ground water discharging at the Park coastline and a water-level decline of about 0.6 ft within the Park (Oki et al., 1999). Salinity change to National Park ground water was not included as part of the model, however if the freshwater input into the National Park were reduced by almost half, salinity would certainly increase, potentially affecting rare endemic species and ecosystems.

The projected average water demand for the proposed development is approximately 0.7 to 1.2 million gallons per day (Mgd), depending on which Concept Alternative is selected. It is proposed that the potable water source and storage for the project will be provided by one or two proposed wells referred to in the EIS as “Well #3” and “Well #4.” Well 4 is the Keopu Well (state well 3957-03), which would require pump installation and additional infrastructure. Well 3 has not been drilled. Both wells 3 and 4 are located in the Keauhou high-level aquifer, approximately 4 miles from the National Park. A typographical error in the first paragraph under Potential Long-Term Impacts to Groundwater makes the discussion on sustainable yield and project demand difficult to follow. It also appears that the DEIS has an error on page 4-106, Table 4-29, which shows the off-site reservoir as having a capacity of 15 million gallons.

The EIS states that “[i]n the long-term, water demands in the Keauhou aquifer would exceed the sustainable yield of the aquifer and alternate water resource enhancement measures would be required to meet the water demands.” Yet it was anticipated that short-term impacts upon the local ground-water quality will not be significant, while the long-term and cumulative impacts of increased ground-water development in the high-level aquifer were not considered. The long-term and cumulative impacts of existing ground-water withdrawals, in addition to the future demand for water in the Kona area, pose a serious threat to the purposes and values for which Kaloko-Honokohau National Historical Park was established. According to recent reports, pumping in the Keauhou aquifer system averages 12.08 Mgd². The National Park Service estimates that satisfying the water needs of all of the currently proposed development in the vicinity of Kaloko-Honokohau National Historical Park, including the Keahuolu Affordable Housing Project, will more than double production in the Keauhou aquifer system.

The U.S. Geological Survey notes that “Arguably, there is no volume of ground-water use that can be truly free of any adverse consequence, especially when time is considered. The direct hydrologic effects will be equal to the volume of water removed, but those effects may require decades to centuries to be manifest.”³ Likewise, if the new well will increase ground-water withdrawals by at least 0.7 Mgd and up to 1.2 Mgd, then the EIS should clearly acknowledge that the short-term impacts of this development will be a lowering of water levels in the vicinity

¹ Oki, DS, GW Tribble, WR Souza, and EL Bolke. 1999. Ground-water resources in Kaloko-Honokohau National Historical Park, Island of Hawaii, and numerical simulation of the effects of ground-water withdrawals. US Geological Survey Water Resources Investigations Report 99-4070. USGS, Honolulu, HI. 49 p.

² http://hi.water.usgs.gov/west_hawaii/west_hawaii_tab.htm

³ Anderson, Mark T., and Woosley, Lloyd H., Jr., 2005, Water availability for the Western United States--Key scientific challenges: U.S. Geological Survey Circular 1261, 85 p.

of the well, and that the long-term and cumulative impacts will be a decrease in ground-water discharge to the basal aquifer and the nearshore area that is equal to the volume of water pumped. Furthermore, resource enhancement measures mentioned in the draft EIS include measures that would be counterproductive to protecting discharge of ground water to the coastal ecosystems and marine waters. For example, the recommended rainwater catchment system upslope of Mamalahoa Hwy would reduce rainfall recharge to the high level aquifer and further reduce available water in the aquifer. The recommendation to pump from brackish wells (for desalination) in the basal lens is of particular concern to the National Park Service. Basal-lens pumping poses a potential for significant adverse impacts to the ecosystems dependent upon basal-lens ground water by reducing water levels, altering groundwater flow directions, and increasing salinities.

To address these concerns and to confirm the EIS's determination of no significant secondary or cumulative impacts, a network of observation wells to monitor ground-water levels and saltwater intrusion must be established in the Keauhou aquifer system. The National Park Service recognizes that water managers do not yet fully understand how the aquifer responds to pumping stresses, nor does the National Park Service fully understand the quantity of ground water necessary to sustain resources at the National Park. Adequate monitoring of well withdrawals and any changes in water levels and salinity are critical to understanding how the Keauhou aquifer system responds to development and managing for sustainability into the future. The National Park Service is developing a program to monitor water levels and water quality in three shallow wells within the Park's boundaries and is committed to improving our understanding of the National Park's ground-water needs.

Similarly, the HHFDC should work with the Department of Water Supply to identify an observation well in the high-level aquifer near the proposed well, in which water levels and fluid conductivity will be monitored on at least a monthly basis to measure changes in aquifer storage and salinity over time and to ultimately evaluate whether current and proposed water use in the Keauhou aquifer system is sustainable.

In our response letter to the EIS preparation notice, we requested that the developer discuss ways to incorporate to reduce water usage in the proposed development. For example, some proven methods for reducing water usage in new housing developments include planting drought resistant native landscaping, installing low flow toilets and showerheads, installing waterless urinals in public restrooms, and providing information to new residents concerning the importance of water conservation. Water conservation will save the developer and residents operational costs in the long term. The draft EIS does not address water-saving methods or discuss implementing these and similar measures to reduce the water usage to the minimum amount needed for the community.

Plant Species on the Proposed Water Reservoir Site

Section 3.6.2.2 states that no federally listed species were found on the proposed reservoir site. However, the survey did reveal the endemic plant *Bidens micrantha ctenophylla*. The draft EIS incorrectly uses the past-tense in stating that "[the] species *was* [emphasis added] a candidate for federal listing as endangered or threatened, ..." In fact, *Bidens micrantha ctenophylla* remains on

the US Fish and Wildlife Service Candidate Species list with a listing priority number of three.⁴ The threat status for this species is Magnitude = "High" and Immediacy = "Imminent." Detailed information can be found at: <http://ecos.fws.gov/speciesProfile/SpeciesReport.do?spcode=Q2XY>. Candidate Species are plants and animals for which the US Fish and Wildlife Service has sufficient information on their biological status and threats to propose them as endangered or threatened under the Endangered Species Act (ESA), but for which listing has been precluded by other higher priority listing activities. While it is true that Candidate Species receive no statutory protection under the ESA, the US Fish and Wildlife Service encourages formation of partnerships to conserve these species. The Hawaii Housing Finance and Development Corporation should make every effort to protect the *Bidens micrantha ctenophylla* on the proposed project site.

Wastewater and Solid Waste

The draft EIS states that the project has reserved space at the Kealakehe Wastewater Treatment Plant (KWTP) that will accommodate Concept A, but not enough capacity is reserved to accommodate Concepts B or C. The EIS does not discuss the cumulative impacts of increasing development pressure on the KWTP. Currently, the effluent from the plant is discharged into a drainage pit on the mauka side of the highway, which likely drains to Honokohau Harbor and National Park waters. If this situation for discharge continues, the increased nutrients from the proposed project combined with effluent from other new developments would increase the total nutrient load that is discharged into the nearshore waters of the National Park. The HHFDC should explore working with the County and neighboring developments to bring treatment of effluent up to R1.

Archaeology and Cultural Impact Assessment

The Archaeological survey for this project appears to have been based on relocating sites recorded by a previous survey.⁵ In an area with dense vegetation, our experience is that many archaeological sites and features are not visible to archaeologists until vegetation is at least thinned. It is likely that the 1990 survey missed significant cultural resources and it appears that the current survey did not attempt to locate additional sites or features.

The draft EIS section, Archaeological Survey, Findings and Conclusions, relied on State Historic Preservation Division approvals dating to 1993. While recommendations made fifteen years ago were very likely wise and prudent at the time, it is not necessarily the case that those same recommendations would be made today. In the past fifteen years, new developments have been proposed and developed, and other archaeological sites and cultural features have been lost to development and other actions. Each individual project has generated recommendations and determinations of affect. However, if all of the archaeological surveys for each development in the Keahuolu ahupua'a were considered as one large undertaking, or the ahupua'a were considered as a "Cultural Landscape," it is likely that mitigation and preservation plans would be significantly different. This issue of cumulative loss of archaeological sites and incremental, cumulative cultural-impacts are not addressed in the draft EIS. We suggest that the HHFDC consider reassessing all archaeological data for the ahupua'a and reassess affects to

⁴ Federal Register 12/2007 http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2007_register&docid=fr06de07-20

⁵ Donham, T.K. 1990. Archaeological Inventory Survey, Queen Liliuokalani Trust Property. Land of Keahuolu, North Kona District, Island of Hawaii (TMK:3-7-4-8:Por. 2,12).PHRI Report 596-021290. Prepared for Belt, Collins and Associates.

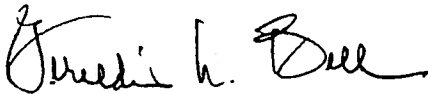
archaeological sites and cultural impacts while considering the Cultural Landscape of the ahupua'a.

Contextual Issues, Cumulative Impacts

Contextual issues and cumulative impacts were not fully addressed in the draft EIS for the Keahuolu Affordable Housing Project. Although the rapid development in the Kona area is well described, cumulative impacts were listed as broad topics but were not analyzed. The cumulative impacts of the project in the context of proposed or approved developments (e.g., Kona International Airport expansion, Air Force military training routes and the short austere air field, highway expansion, Queen Liliuokalani Trust projects, Kona Kai Ola, The Shores at Kohanaiki, O'oma Beachside Village, Kaloko Makai, West Hawaii Business Park, Kaloko Phases III & IV, Kaloko Heights, Kealakehe Planned Community) should be analyzed with regard to the community, cultural and natural resources, visitors, and cultural practitioners in the area.

Thank you for the opportunity to participate in the environmental review process for this proposed project and to provide you with our comments and concerns. If you have any questions on our comments, please contact me at 808-329-6881 x201, or my staff, Richard Boston, Resource Manager, at extension 203.

Sincerely



Geraldine K. Bell
Superintendent

cc: Office of Environmental Quality Control

J. Takahashi, Hawaii Housing Finance & Development Corp.

M. Kobayashi, State Office of Planning

Coastal Zone Management Program, Nonpoint Source Pollution Control Program

C. Hew, Department of Health, Ground Water Protection Program

~~D. Law~~ ~~S. Yamada~~, Department of Health, Clean Water Branch

P. Leonard, US Fish and Wildlife Service

R. Maile, State Land Use Commission

R. Hardy, Commission on Water Resources Management

C. Yuen, County of Hawaii Planning Department

M. Pavao, County of Hawaii Department of Water Supply

B. McClure, County of Hawaii Department of Public Works

C. Pettee, NPS Water Rights Branch

G. Lind, Office of the Solicitor

NPS Pacific West Regional Office



September 25, 2008
2006.70.0900 / 08P-331

Ms. Geraldine Bell, Superintendent
Kaloko-Honokohau National Historical Park
National Park Service
U.S. Department of the Interior
73-4786 Kanalani Street, Suite 14
Kailua-Kona, HI 96740

Dear Ms. Bell:

Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of April 8, 2008 for the above-referenced document. Our responses are provided in the order of your comments.

Surface Water Drainage, Non-point Source Pollution

HHFDC will require that the project developer utilize storm drainage devices and best management practices beyond those currently required by the County of Hawaii, including the provision of educational materials and programs to residents regarding how they can control and prevent non-point source pollution including, but not limited to, vehicle maintenance and proper disposal of vehicle fluids, the impacts of washing cars on the street, the potential impacts of fertilizers and pesticides on the environment and the National Park, and alternatives to fertilizers and pesticides. A discussion on the educational materials and programs will be included in the Final EIS.

HHFDC will require that the project developer create landscape management controls on approved chemicals and uses by property owners and maintenance crews on yards and park common areas through community association covenants, conditions or other mechanisms. This statement will be included in the Final EIS.

Parks and Open Space

The community association covenants will include landscape management controls, including the use of fertilizers and pesticides. The project developer will provide the County Department of Parks and the State Department of Education information on the landscape management controls to be used within the Keahuolu site.

Honolulu
Bangkok
Boulder
Guam
Hong Kong
Manila
Seattle
Shenzhen
Singapore

Water System

HHFDC is participating with two groundwater working groups, including the National Park Service's group and the County of Hawaii Department of Water Supply's group. It is our understanding that the working groups are meeting to study, analyze and address the long-term cumulative impacts of increased ground-water development in the high-level aquifer, and the potential impacts of existing and planned developments on the area's water resources.

In the Final EIS, the last sentence of the first paragraph under Potential Long-Term Impacts to Groundwater will be corrected to read, "The project would add approximately 0.7 to 1.2 MGD demand on the aquifer, which is within the sustainable yield of the aquifer."

In the Final EIS, Table 4-29 will be corrected to read that the capacity of the proposed off-site reservoir would be one and one-half million gallons (1.5 million gallons).

The Final EIS and the civil report will acknowledge that one of the potential short-term impacts of this development will be a lowering of water levels in the vicinity of the project's well.

In regards to an observation well in the high-level aquifer, well sites #3 and #4 would be outfitted with sensors to monitor the aquifer.

The project developer will implement water conservation measures including installing low-flow toilets and showerheads, waterless urinals in public restrooms, planting drought-tolerant native landscaping and providing new residents with information on the importance of water conservation. This information will be included in the Final EIS.

Plant Species on the Proposed Water Reservoir Site

The Final EIS will state that the endemic plant *Bidens micrantha ctenophylla* is a candidate for federal listing as endangered or threatened. The project developer will make every reasonable effort to protect the *Bidens micrantha ctenophylla* on the proposed project site.

Wastewater and Solid Waste

We received a comment letter on the Draft EIS from the County of Hawaii Department of Environmental Management. The Department states that upgrades to the Kealakehe Wastewater Treatment Plant to produce R-1 water are planned for FY 10-11. In addition, an R-1 reuse water infrastructure from the drainage pit mauka of the highway will be phased in along Queen Kaahumanu Highway toward the airport after the upgrades to the treatment plant are completed. This information will be included in the Final EIS.

Archaeology and Cultural Impact Assessment

It is true, as stated on page 3 of the current inventory report, that the Donham (1990) survey was the formal archaeological inventory survey for the project area and that the Donham (1990) survey was approved by the Hawaii State Historic Preservation Division (SHPD) letter dated February 17, 1993, Log No. 6839, Doc No. 9302RC34). The recent PHRI survey work conducted in 2007 therefore relocated and re-examined the Donham sites that potentially might be impacted in order to confirm the current condition, significance, and general mitigation treatment.

With regards to dense vegetation, the "Field Procedures" section of the Donham (1990, p. 13) report acknowledges dense vegetation in portions of the project area and notes the provisions made for this: *"During pedestrian survey, survey transects were flagged in order to insure complete coverage...In general, surface visibility was such that all or nearly all surface features could be located with persons spaced at approximately 10.0 meters apart...is likely that there are additional rock mounds, pahoehoe excavations, and other minor agricultural features that were not observed during the sweeping or recording phases of field work."*

In other words, the Donham methodology assures that all significant features in the project area have been identified, and that there may remain minor agricultural components of the Kona Field System. Donham makes it clear in her report that minor Kona Field System features are ubiquitous in the project area, and many minor features may be buried in vegetation, and that is why she recommends a sampling block methodology as part of future data recovery work in the project area (Donham 1990: p. 34, para.3-5). The sampling block methodology would involve clearing all vegetation in a large area (400x400 feet), recording every feature in the block, and examining and studying them in terms of the archaeology they represent. This (in conjunction with similar sampling block strategies in Kealakehe and Keahuolu) would then be adequate in representing the Kona Field System within the project area and the general vicinity.

The sampling block methodology is set forth in detail in the subsequent Archaeological Mitigation Plan for the project area (Jensen et al. 1992). This mitigation plan was approved by the SHPD in a letter dated July 28, 1993, Log No. 8976, Doc No. 9307RC40. Based on the Donham methodology and approach, Donham was fully aware of the problems regarding vegetation, and took adequate measures to assure all significant cultural resources were identified, and that the smaller Kona Field System features would be studied in an appropriate manner.

While it is also true that the archaeological findings rely on SHPD approvals dating to 1993, it is also true that SHPD standards and guidelines have not significantly changed, but have been formalized as Hawaii Administrative Rules (HAR). It is also true that current SHPD rules and regulations do not require a re-survey of land that has already undergone an inventory-level survey that the SHPD has approved. Nor does the SHPD require a reconsideration of recommendations because time has passed. PHRI conducts archaeological work in Hawaii to meet current SHPD rules and regulations.

In terms of comments regarding cultural landscape, it is already an SHPD requirement that an archaeological inventory survey report consider the overall pattern of settlement within an ahupua'a, as expressed in Chapter 13-275, Hawaii Administrative Rules, Section 13-276-5: [An inventory report should contain] "a re-evaluation of ideas on the history of land use in the ahupua'a and the parcel." Donham (1990) addresses this matter, as reflected in her review of previous archaeological work, historical documentary research, and in her section "Research Problems and Approach." Again, however, the SHPD does not state that after a given period of time has passed an inventory survey the SHPD has approved is no longer valid, and that re-approval of the survey would be contingent on examining the project area in terms of newly established criteria. The study of the cumulative loss of archaeological site and incremental, cumulative cultural impacts within a cultural landscape seems to fall under the purview of the SHPD and through its approval or disapproval of an archaeologist's significance determinations, mitigation measures and recommendations.

Contextual Issues, Cumulative Impacts

The Draft EIS considers cumulative and secondary impacts in three ways. First, infrastructure planning has involved close collaboration between the County of Hawaii and nearby landowners, all of whom recognize the importance of collaboration to minimize impacts of population growth on roads, the wastewater system, and water supply. Next, several impact analysis sections deal with both immediate and cumulative impacts. For example, the traffic analysis deals not only with project-generated traffic, but with cumulative increases in traffic on Kona roadways. Other infrastructure analyses assess project impacts in relation to plans and studies that take into account regional growth projections (e.g., the County's *Updated Integrated Solid Waste Management Plan* and the *Draft Report Hawaii County Water Use and Development Plan Update*). Thirdly, section 6.3 provides a synthesis of past, ongoing, and emerging growth in the region, and assesses the project's impacts in that context.

The Keahuolu project is planned to serve the region's need for workforce housing near job centers. It will not primarily attract new residents to Hawaii, but will help existing residents find housing convenient to work, schools, and other urban amenities. Residents that will live in the proposed project will likely find better housing and/or shorter commute times in Keahuolu than where they currently live. Consequently, the regional impact is small, and may involve a reduction in the cost of public service delivery, since the project site is close to public safety facilities.

The discussion of Purpose and Need for the Project (Section 1.5) includes a brief account of major housing projects including affordable housing in West Hawaii and compares regional housing production to the thousands of families in the region and islandwide seeking to move to affordable housing in the next few years. HHFDC expects its chosen developer to propose its specific plan based on more detailed market analysis of demand for particular product types, ownership or rental arrangements, and price points, taking into account the actual and likely new production of housing in other developments.

Ms. Geraldine Bell, Superintendent
September 25, 2008
2006.70.0900 / 08P-331
Page 5

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

~~BELT COLLINS HAWAII LTD.~~

A handwritten signature in black ink, appearing to read "Lee W. Sichter", written over the crossed-out company name.

Lee W. Sichter
Principal Planner

LWS:lf

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC



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DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII 54
345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAII 96720
TELEPHONE (808) 961-8050 • FAX (808) 961-8667
BELT COLLINS HAWAII

April 14, 2008

Ms. Mary O'Leary
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, HI 96819

**DRAFT ENVIRONMENTAL IMPACT STATEMENT
KEAHUOLU AFFORDABLE HOUSING PROJECT
APPLICANT – HAWAII HOUSING, FINANCE, AND DEVELOPMENT CORPORATION
TAX MAP KEY 7-4-021:020 AND 021 (PORTION)**

We have reviewed the subject Draft Environmental Impact Statement (DEIS) and have the following comments.


As indicated in the subject DEIS, extensive offsite improvements and additions will be required to support the proposed development, which shall include, but not be limited to, the development of additional source, concrete storage tanks, booster pumps, and transmission lines. The necessary onsite water system improvements will include, but not be limited to, distribution facilities and fire hydrants. All elements of the offsite and onsite water system improvements must be designed and constructed in accordance with the Department's Water System Standards and Rules and Regulations.

The developer will also be required to enter into a Water Development Agreement with the Water Board, which will establish the necessary offsite water system improvements required to support the development and the allocation of water commitments from any new source(s) developed. Water service within the proposed development will not be granted until the necessary offsite and onsite water system improvements are completed and accepted by/dedicated to the Water Board.

For your information, the Department does not have an existing policy restricting developers to use only 50% of the first well developed for a project. The Department will also note that water is made available for certain developments in Kona, if there are existing water commitments or in areas where the existing water system can support the development. The DEIS indicated that no water is available for new developments in Kona, which is incorrect.

Should there be any questions, you may contact Mr. Finn McCall of our Water Resources and Planning Branch at 961-8070, extension 255.

Sincerely yours,



Milton D. Pavao, P.E.
Manager

FM:dms

copy – Office of the Governor c/o Hawaii Housing Finance & Development Corporation
Office of Environmental Quality Control

... Water brings progress...



September 25, 2008
2006.70.0900 / 08P-334

Mr. Milton Pavao, P.E., Manager
Department of Water Supply
County of Hawaii
345 Kekuaaoa Street, Suite 20
Hilo, HI 96720

Dear Mr. Pavao:

Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of April 14, 2008 for the above-referenced document. Our responses are provided in the order of your comments.

1. The project developer will design and construct all elements of the offsite and onsite water system improvements in accordance with the Department of Water Supply's Water System Standards and Rules and Regulations.
2. The project developer will enter into a Water Development Agreement with the Water Board, which establishes the necessary offsite water system improvements required to support the development and the allocation of water commitments from any new source(s) developed.

We acknowledge your comment that water service within the proposed development will not be granted until the necessary offsite and onsite water system improvements are completed and accepted by/dedicated to the Water Board.

3. We understand that the Department does not have an existing policy restricting developers to use only fifty percent (50%) of the first well developed for a project. The Final EIS will be corrected with regards to statements about water availability for new developments in Kona as shown in **Attachment 1** of this letter.

The text of the Final EIS will be revised to indicate that the project has no existing water commitments and that the existing water system cannot support the development as shown in **Attachment 1** of this letter.

Honolulu
Bangkok
Boulder
Guam
Hong Kong
Manila
Seattle
Shenzhen
Singapore

Mr. Milton Pavao, P.E., Manager
September 25, 2008
2006.70.0900 / 08P-334
Page 2

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.

A handwritten signature in black ink, appearing to read "Lee W. Sichter", written over a horizontal line.

Lee W. Sichter
Principal Planner

LWS:lf

Attachment

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

Attachment 1

In the Final EIS Section 4.8.3.1 Water Supply and Storage Facilities - Existing Conditions and Section 4.8.3.2 Proposed Water System Design will be revised as follows:

4.8.3.1 Water Supply and Storage Facilities - Existing Conditions

There are no existing water commitments for the Keahuolu project site and the existing water system infrastructure cannot support the development. New source well(s) would be required to support the project. There is no existing water system within the project site.

The majority of the project site is within the 595-foot-elevation Kealakehe High School reservoir's service zone, which extends from the 495-foot elevation to the 225-foot elevation. A portion of the site, along the extension of Keanalehu Drive, above the 495-foot elevation, would have to be serviced from the 935-foot reservoir system to provide adequate water pressure (see Figure 4 15).

Existing water system infrastructure around the project area connects to existing well sites above Mamalahoa Highway. An existing 16-inch water line in Manawale'a Street from the 595-foot-elevation Kealakehe High School reservoir stubs out to the project site and services the 495- to 225-foot-elevation water service pressure zone. A 12-inch water line is under construction in Manawale'a Street as part of the road construction project to provide water service above the 495-foot elevation. There is an existing 16-inch water line in Palani Road along the project site.

A 1.0-million-gallon (MG) reservoir exists at the Kealakehe High School reservoir site. The site is designed for a second 1.0-MG reservoir. *The Villages of La'i 'Opua Water Master Plan* (approved October 26, 2006 by the DWS), prepared by Akinaka & Associates, Ltd. for the DHHL, allocated 472,800 gallons from the two 1.0-MG reservoirs to the Keahuolu Affordable Housing Project.

4.8.3.2 Proposed Water System Design

The proposed water system would be developed in accordance with the 2002 State of Hawai'i Water System Standards, Rules and Regulations, and revisions to the standards per discussions with DWS staff. For details of the water system criteria, see the civil infrastructure report in Appendix G. The design and construction of the proposed off-site water system and on-site water system within the road ROW would meet County Standards for dedication to the DWS.

The projected average water daily demand generated by the proposed development plan concepts and reservoir storage requirements are summarized in Table 4 26. Water system calculations are provided in the civil infrastructure report (see Appendix G).

Table 4-26: Water Requirements

Alternative Development Plan	Average Daily Demand (gallons per day [gpd])	Reservoir* (MG)
Concept A	745,820	1.0
Concept B	1,158,680	1.5
Concept C	1,114,680	1.5

* Reservoir calculations utilized 472,800 gallons of capacity in the Kealakehe High School reservoir site allocates for the project parcels in the existing and proposed 1.0 MG reservoirs.

Proposed Off-Site Water System

Proposed Off-Site Wells

Two source wells, numbered 3 and 4 in the *Villages of La'i 'Opuia Water Master Plan* (October 26, 2006), have been identified for the project (Figure 4 16). HHFDC and DHHL have discussed HHFDC's development of well 3 and well 4 to provide source water for the project. The proposed wells are within the Keauhou aquifer system.

The DWS has no existing policy allocating the percentage yield of a well to a project that develops the well. For planning purposes, the DWS indicated that a project is allowed 50 percent of the yield for one developed well and 67 percent of the yield for two developed

wells. Well number 4, with a projected 2.0 million gallon per day (mgd) anticipated yield, could provide the Keahuolu project with 1.0 mgd of water to meet the requirements for Concept A, which is 0.7 mgd (see Table 4 27). Well number 4 alone would not be able to support development Concepts B and C water demands, which exceed 1.0 mgd.

Development of well number 3, in addition to well number 4, would be required to support Concepts B and C.

The projected yield for well number 3 would be 1.0 mgd. With the development of the two wells 3 and 4, the total anticipated yield would be 3.0 mgd. The project would be allowed 67-percent of the 3.0 mgd, or 2.0 mgd to meet the requirements for Concepts B and C, which are 1.2 and 1.1 mgd, respectively.

Well number 4 would be required for Concepts A, B, and C. Well number 3 would be required in addition to well number 4 for Concepts B and C.

Table 4-27: Off-Site Wells

Concept Plan	Well No. 4 (mgd) 50% or 67% of yield	Well No. 3 (mgd) 67% of yield	Potential Total Supply(MGD)	Average Daily Demand (gpd)
Concept A	1.0		1.0	745,820
Concept B	1.34	0.67	2.0	1,158,680
Concept C	1.34	0.67	2.0	1,114,680

Development of well site number 4 would require outfitting the well with a pump, installation of a well control building with a chlorination system and backup generator, a reservoir, and appurtenant structures. The reservoir would be sized to the average daily production rate of the well, or 2 MG based on the anticipated yield for the well. A new access road would be required from Mamalahoa Highway to the well, well control building and reservoir. A new 16-inch water line would extend from the new reservoir to Mamalahoa Highway and extend approximately 7,000 linear feet north along Mamalahoa Highway to the existing Keahuolu (QLT #1) State Well No. 4057-01 well site.

Development of well site number 3 would require drilling of a new production well, installation of a pump, testing of the well for quality and capacity, installation of a well control building with chlorination system and backup generator, a reservoir, and appurtenant structures. However, well site number 3 does not currently have sufficient land area to accommodate all the structures required for a well site. Additional adjacent private lands would have to be obtained to operate the well. A new 1.0 MG reservoir would be required for the well. A 1.0 MG reservoir is approximately 95 feet in diameter. A new access road would be required from Mamalahoa Highway to the well, well control building and reservoir. A new 16-inch water line would extend from the reservoir to Mamalahoa Highway and connect to the new 16-inch water line between well site number 4 and the existing QLT well site. The well site(s), reservoir(s), water lines, and appurtenant structures would be dedicated to the DWS. Construction of the well site(s) would require well permits, pump installation permits, grading permits, NPDES general permit coverage authorizing discharges of storm water associated with construction activities, and building permits for the structures. An engineering report, including chemical analysis, would be required by the State DOH Safe Drinking Water Branch in the permitting process for the production wells. If dry wells are constructed at the sites, a UIC permit would also be required for the project.

Proposed Off-Site Reservoir on DHHL Property

Either a new 1.0MG reservoir for Concept A or 1.5MG reservoir for Concepts B or C would be required for project water storage, in addition to the 472,800-gallon reserve capacity within the existing Kealakehe reservoir site (Table 4-28). HHFDC and DHHL have discussed construction of a new 595-foot-elevation reservoir site located on the DHHL Keahuolu property at TMK: 7-4-21: portion of 21 (Figure 4 17). The site would be situated off the future extension of Keanalehu Drive, and a temporary access road with two 16-inch water lines would be required within the Keanalehu Drive ROW until Keanalehu Drive is built out. The access road would be located in TMK: 7-4-21: portions of 20 and 21, and grading for the access road would occur on TMK: 7-4-21: portion of 21.

Table 4-28: Projected Off-Site Reservoir Requirements

Development Plan	Reservoir * (MG)
Concept A	1.0
Concept B	1.5
Concept C	1.5

Construction of the reservoir site would require a grading permit, NPDES general permit coverage authorizing discharges of storm water associated with construction activities, and building permits for the reservoir structure. If dry wells are constructed at the reservoir site, a UIC permit would also be required for the reservoir construction.

Proposed Off-Site Water Lines

The *Villages of La'i 'Opua Water Master Plan* identified transmission deficiencies in the off-site water system. Approximately 3,200 linear feet of 8-inch water line in Kealaka'a Street, from Palani Road to Manawale'a Street, would require upsizing to a 12-inch water line. Approximately 800 linear feet of new 12-inch water line would be required in the existing Manawale'a Street. Approximately 2,820 linear feet of 12-inch water line would also be required in Ane Keohokalole Highway, between Palani Road and Makala Boulevard. The water line improvements are shown in Figure 4 16. Upon finalization of the development concept, the DWS has requested that the developer update the *Villages of La'i 'Opua Water Master Plan* to determine whether there are any other system deficiencies and required improvements.

Proposed Off-Site Water System Costs

Order-of-magnitude costs for the off-site water system improvements would be as described in Table 4 29. For details on the water system costs, see the civil infrastructure report in Appendix G. Additional off-site water system improvements or water line size upgrades may be required with the update of the *Villages of La'i 'Opua Water Master Plan*.

Table 4-29: Off-Site Water System Costs

Off-Site Water System	Concept A	Concept B	Concept C
<u>Off-Site Wells and Appurtenances *</u>			
Well Site Number 4	\$11,296,000	\$11,296,000	\$11,296,000
Well Site Number 3		\$7,175,000	\$7,175,000
<u>Off-Site Reservoir on DHHL Property **</u>			
1.0 million gallon	\$7,403,000		
1.5 million gallon		\$8,385,000	\$8,385,000
<u>Off-Site Water Lines ***</u>			
3,200 linear foot of 12-inch in Kealaka'a Street	\$873,000	\$873,000	\$873,000
800 linear foot of 12-inch in Manawale'a Street	\$287,000	\$287,000	\$287,000
2,820 linear foot of 12-inch in Ane Keohokalole Hwy	\$798,000	\$798,000	\$798,000
TOTAL Estimated Water System Costs****	\$20,657,000	\$28,814,000	\$28,814,000
* Well Site Number 4 required for all concepts. Well Site Number 3 required in addition to Well Site Number 4 for Concepts B or C.			
** One reservoir would be required.			
*** Upgrades required for all concepts.			
**** Additional water system improvements may be required.			

Proposed On-Site Water System

The on-site water system would consist of water lines within the roadway network. The system would be connected to the existing water system at Keanalehu Drive and Manawale'a Street and at Palani Road and Ane Keohokalole Highway, forming a looped water system. The Keahuolu water system network would have a minimum pipe size of 8 inches in diameter and a maximum pipe size of 16 inches in diameter, based on the proposed roadway layout and development layout and densities. The water lines would be

sized to meet the maximum daily demand plus fire flow, with a residual pressure of 20 pounds per square inch (psi) at the critical fire hydrant or a residual pressure of 40 psi to meet peak hour demand.

Potential Short-Term Impacts to Surface Waters

There are no surface water bodies on or near the project site. The developer would be required to comply with the NPDES permit requirements, including the BMP plan, and Chapter 10 – Erosion and Sedimentation Control - of the County Code during construction, and prevent the discharge of sediment from the site. As areas of the site are developed, drainage systems would collect runoff and discharge it to the subsurface. The project would be designed to comply with the County's Storm Drainage Standard such that runoff volumes and rates would not increase as a result of site development. The project would have no significant short-term effects on surface waters because there would be no increase of runoff from the site.

Potential Short-Term Impacts to Groundwater

Precipitation on the site currently percolates to the underlying groundwater. This would continue to be the case during and after site development. The NPDES permit requirements, including the BMP plan, would require the contractor to manage materials to prevent the discharge of pollutants to the ground. It is recommended that during and after development, landscape management practices be applied in public and private areas to minimize the use of fertilizers and pesticides that could potentially enter the groundwater. The developer and its contractor would be required to conform with the NPDES permit requirements during construction. BMPs, such as storm drainage filtration devices, are recommended to mitigate pollutants from entering the groundwater. With these measures, short-term impacts upon local groundwater quality would not be significant.

Potential Short-Term Impacts to Water Supply

Water supply infrastructure, including source wells, storage reservoirs, and distribution lines, would be constructed as required and approved by the County DWS. Short-term localized water system shut-downs and road closures may be required as the new water

infrastructure is connected to the existing water system. No short-term detrimental impacts on the existing water supply system are anticipated as a result of the proposed project.

Potential Long-Term Impacts to Surface Waters

Rainfall runoff from the developed site would be collected in the drainage systems and percolated into the ground in the on-site seepage areas, seepage wells, and dry wells. Runoff volumes and rates would not increase as a result of site development, in compliance with the County's Storm Drainage Standard, and the project would have no significant long-term effects on surface waters.

Potential Long-Term Impacts to Groundwater

The source wells would draw the high-level groundwater from the Keauhou aquifer system. The projected sustainable yield from the Keauhou aquifer is 38 mgd, while the projected 2018 demand is 4.98749 mgd. The project would add approximately 0.7 to 1.2 mgd demand on the aquifer, which is its sustainable yield.

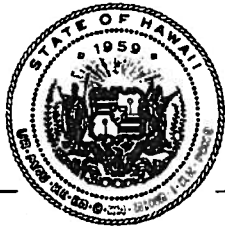
The full build-out water demands of the Keauhou aquifer based on the Hawai'i County General Plan is 170.8 mgd without agricultural demands and 245.4 mgd with agricultural demands. Based on the County Zoning, the full build-out water demands of the Keauhou aquifer is 39.1 mgd without agricultural demands and 111.6 MGD with agricultural demands. In the long-term, water demands in the Keauhou aquifer would exceed the sustainable yield of the aquifer, and alternate water resource enhancement measures would be required to meet the water demands. Alternative water resource enhancement measures that have been identified in the *Draft Report Hawaii County Water Use and Development Plan Update* (December 2006) by Fukunaga and Associates would include rainwater catchment systems in the areas mauka of Mamalahoa Highway, wastewater reclamation for use within close proximity of the wastewater treatment facilities, and desalination from brackish wells between Queen Ka'ahumanu Highway and Mamalahoa Highway. Future reduction in development density, development of water conservation programs by the DWS, and continued monitoring of the aquifer have also been identified in the *Draft Report*

Hawaii County Water Use and Development Plan Update to mitigate long-term impacts on the Keauhou aquifer.

It is recommended that the developer implement measures to reduce the amount of pollutants from entering the groundwater by including BMPs such as vegetative swales, bioretention areas, storm drain filtration devices, ground stabilization with landscape and hardscape, educational warning signs on the drainage systems with wording such as “DUMP NO WASTES. GOES TO GROUNDWATER AND OCEAN. HELP PROTECT HAWAI‘I’S ENVIRONMENT,” and coordinating environmental educational programs for project area residents with the DOH Clean Water Branch.

Potential Long-Term Impacts to Water Supply

The long-term impacts of the project on the DWS water source, storage, and transmission system would be an improvement of the existing system. The additional source well(s) for the project would increase water available to the region, as DWS only allocates a portion of the well yield to the project. As previously noted, DWS allows a project 50 percent of the yield for one developed well and 67 percent of the yield for two developed wells for a project. The project would add storage reservoirs and improve the area water transmission system, as required to provide water service from the source well(s) down to the site. No long-term detrimental impacts on the existing water supply system are anticipated as a result of the project.



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DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM

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Ref. No. P-12086

April 14, 2008

Ms. Mary O'Leary, AICP, Senior Planner
Belt Collins Hawaii Ltd.
2153 N. King Street, Suite 200
Honolulu, Hawaii 96819

Dear Ms. O'Leary:

Subject: Draft Environmental Impact Statement (EIS) for Keahuolu Affordable Housing Project, North Kona, Island of Hawaii
Tax Map Key: 7-4-021: 020-Housing site, and 7-4-021: Portion 21-Reservoir site

We have reviewed the above referenced Draft EIS, and have the following comments:

1. We note that this affordable housing project is proposed by the Hawaii Housing Finance & Development Corporation (HHFDC). According to HHFDC, a Request for Proposals has been initiated for the project, but a developer has not been chosen.
2. There are three project concepts at this time; concept A with a total unit count of 1,020 units; concept B with 1,840 units; and concept C with 2,330 units. The developer(s) will be presenting proposals to HHFDC and the exact mixture of affordable and market units will be finalized during this process.
3. The proposal will require State Land Use Commission reclassification from the State Agricultural to the Urban District. Subsequent to a reclassification, other permits will be needed prior to land development.
4. We note that no threatened or endangered species of flora were found. However, some endemic and indigenous species were discovered on-site. We note that no mitigation measures were recommended, but we recommend that native plants be used to vegetate the common areas of the development as much as possible.
5. The Cultural survey indicates that there are parties that have been gathering native vegetation on this site, and that this access should be preserved. The issue of gathering rights and public access should be further discussed.

Ms. Mary O'Leary

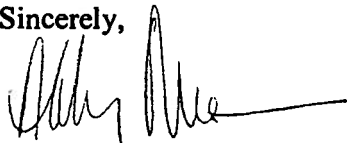
Page 2

April 14, 2008

6. According to the archaeological information, some caves have been found on the site. Mammal studies were completed and documented, but no cave invertebrate study has been done. We are concerned that endangered or threatened cave invertebrates might be found in the lava tubes and caves in the Kona area. We are also concerned that more lava tubes and caves may be found on the property.
7. We note that there was no study done for avifauna at the reservoir site. Please provide information as to whether a bat detector was used to determine the presence of the endangered Hawaiian Hoary Bat.
8. Coastal Water Quality/Nonpoint Source Pollution. While the subject property does not abut the ocean, it is upslope from coastal waters. We note that the DEIS (Sections 3.3.2, 4.8.2.2) mentions proposed storm drain devices and best management practices beyond those required by the County. With respect to discussions of proposed impacts, Appendix A provides tables for water and sewer requirements under the three concepts A, B & C. There is no corresponding table for surface water runoff. Discuss surface water runoff relative to the three concepts.

Thank you for the opportunity to comment. If you have any questions, please contact Lorene Maki of my staff at 587-2888.

Sincerely,



Abbey Seth Mayer
Director



September 25, 2008
2006.70.0900 / 08P-333

Mr. Abbey Seth Mayer, Director
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawaii
235 South Beretania Street, 6th Floor
Honolulu, HI 96813

Dear Mr. Mayer:

Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of April 14, 2008 for the above-referenced document. Our responses are numbered according to your comments.

4. **Landscaping:** The Hawaii Housing Finance and Development Corporation (HHFDC) will recommend to the project developer that native plants be used for landscaping purposes. For non-native species, HHFDC will recommend that the project developer choose species that are thought to have a low risk of becoming invasive.
5. **Cultural Survey:** Helen Wong-Smith's study, despite considerable effort, yielded only limited information regarding the gathering of native vegetation on the site. An informant indicated that several plants in the project area were important in pre-contact times. The botanical surveys conducted as part of this EIS identified three of these plants in the project area: pili, pilo, and alaha'e. One informant reported that he gathers pilo for medicinal uses. The study did not identify any other present-day gathering activities. In a cultural impact assessment prepared for the Kona Commons project located at Keahuolu, makai/seaward of Queen Ka'ahumanu Highway, Ms. Wong-Smith (2007) reported that contemporary cultural practices include gathering of pilo (or maiapilo) from the 300-foot elevation seaward. The HHFDC parcel is at a higher elevation, above 300 feet. Based on these findings, it is determined that the proposed action would have limited impact on gathering practices. HHFDC will recommend to the developer that care is taken to preserve habitat of endemic plants such as pilo and to assure access for gathering activities in common areas. Furthermore, as stated above, HHFDC will recommend that native plants be used for landscaping.
6. **Cave Invertebrates:** The Final EIS, as shown in **Attachment 1** of this letter, will contain the results of a cave biological survey conducted by SWCA Environmental Consultants in June 2008.

Honolulu
Bangkok
Boulder
Guam
Hong Kong
Manila
Seattle
Shenzhen
Singapore

7. Avifauna at the Reservoir Site: The Final EIS, as shown in **Attachment 2** of this letter, will contain the results of an avifaunal and feral mammal survey conducted by Phil Bruner in May 2008.
8. Coastal Water Quality/Nonpoint Source Pollution: As noted in the text of the Draft EIS, the project will be required to comply with the County's Storm Drainage Standard such that runoff volumes and rates would not increase as a result of site development.

The project developer will construct on-site seepage areas, seepage wells and dry wells to contain the additional runoff generated on-site due to the development.

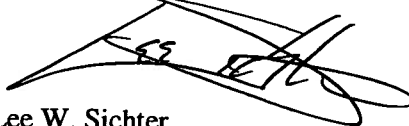
The project developer will undertake percolation testing in the area of the proposed drainage improvements and select a drainage structure or a combination of structures to dispose of runoff. The selected drainage structure will also depend on the location within the development, such as in a road or within a park, and which type of structure is used. Seepage areas, seepage wells and dry wells are all drainage structures that have been used extensively and effectively in Kona.

In addition, the developer will utilize storm drainage devices and best management practices beyond those currently required by the County of Hawaii such as providing educational materials and programs to residents on mitigating non-point source pollution including, but not limited to, vehicle maintenance and proper disposal of vehicle fluids, the impacts of washing cars on the street, the potential impacts of fertilizers and pesticides on the environment, and alternatives to fertilizers and pesticides.

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Lee W. Sichter
Principal Planner

LWS:lf

Attachments

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

Attachment 1

In the Final EIS Section 3.8 will be revised to include the 2008 cave biological survey results as follows:

3.8 Invertebrate Survey

SWCA Environmental Consultants conducted a biological survey of lava tube caves on the project site. The survey report is included in Appendix H. The study's objectives included: (1) conducting a biological survey of caves within the project area; (2) specifically identifying biologically significant caves; (3) compiling a list of faunal species found in the caves, particularly invertebrates; and (4) providing management recommendations for the more biologically significant caves.

3.8.1 Existing Conditions

SWCA entered onto the project site and conducted a series of cave surveys from June 18-20, 2008. Surface reconnaissance surveys were first conducted to locate and document known cave entrances and any previously unidentified features on the site. Once reconnaissance surveys were completed, a list of cave sites proposed for more detailed inventory survey was developed. The focus of these inventory surveys was to develop a general understanding of the troglobitic¹ cave fauna within the Keahuolu project site.

The SWCA study team found eight cave openings at Keahuolu, of which three caves appeared to have a suitable habitat for troglobitic arthropods. SWCA found a total of 14 distinct species of arthropods within four caves. Of these 14 species, SWCA collected and examined 13 species. Current State and Federal regulations provide no special (or specific) protection for any of these species.

¹ Troglobitic animals live entirely in the dark parts of caves and are adapted for life in total darkness.

Only two possible native cave species are represented in SWCA's findings: the Rhagidiid mite, which belongs to a group with two known blind cave species and an eyed species known from fumaroles near Kilauea, and the cave moth (*Schrankia* species). The remaining eleven species are classified as alien invaders. The full list of species is located in Table 2 of Appendix H and summarized below.

Acari (Mites): Only one species of mite was identified. The Rhagidiidae is described as a pale predatory mite with conspicuous eyespots.

Araneae (Spiders): Six species of spiders were identified by SWCA during the survey.

Collembola (Springtails): One species of Springtails was discovered (Entomobryidae: Genus species [unidentified]).

Insecta (Insects): Five species of insects were identified.

3.8.2 Potential Impacts and Mitigation Measures

The lava tubes and caves in the Keahuolu project site contain a variety of invertebrates. SWCA concluded that these biological resources do not present a regulatory obstacle to development. None of the identified species is listed as threatened or endangered.

Potential impacts to these species were evaluated. Ultimately, the disposition of the surveyed caves will depend upon whether they contain significant archaeological or cultural material. Mitigation measures are recommended for those caves and/or lava tubes identified for preservation by the SHPD. A determination as to the preservation of caves and/or lava tubes containing no archaeological or cultural resources will be made by the developer pursuant to the final development plan. In all likelihood, caves and/or lava tubes containing no significant archaeological or cultural resources will be destroyed during site grading and preparation, as the invertebrates inventoried in them do not warrant preservation. Furthermore, the caves pose a liability to the landowner if someone should enter one and become injured. In some instances, a cave or lava tube containing no archaeological or

cultural resources may be preserved by the developer because the area surrounding it may not require mass grading. In those cases, the entrance will likely be blocked or hidden to prevent intentional or unintentional trespassing.

SWCA made the following recommendations to minimize impacts on caves, particularly those known to contain cultural resources:

- Minimize adding topsoil or impermeable material to the surface directly above known caves and preserves.
- Control invasive plant species within the preserves. For landscaping, utilize native plants and avoid aggressive, fire-prone, non-native grasses.
- Exercise care to minimize surface disturbance during construction within the general vicinity of known caves.
- Prevent wildfires and develop a rapid response plan to fires within the proposed project area.

If unsurveyed caves are encountered during construction and the caves are accessible, allow a biological survey if appropriate.

Attachment 2

In the Final EIS Section 3.7 will be revised to include the 2008 avifaunal and feral mammal survey results as follows:

3.7 TERRESTRIAL FAUNA

3.7.1 Existing Conditions

Phillip Bruner conducted a field survey in May 2008 of the proposed Keahuolu Affordable Housing Project and Reservoir site [TMK (3) 7-4-021: 020 and TMK (3) 7-4-021: Por. 021]. The goals of this field survey were:

1. Documentation of the species of birds and mammals currently on the property.
2. Examination of the site for the purpose of identifying the natural resources available to wildlife in this region.
3. Devoting special attention to documenting the presence and possible use of this property by native and migratory species particularly those that are listed as threatened or endangered.

The property examined is presently covered in dense, second growth forest composed of primarily alien species of trees, brush, and grass. The surrounding land contains residential, commercial, schools, and other similar undeveloped property.

The field survey was conducted over two consecutive days (May 27-28, 2008). The observations were made in the early morning and late in the day when the birds are most active. The property was covered on foot and all birds seen or heard were documented.

Native Land Birds:

No native land birds were observed during this field survey. The only species that might be seen, on occasion, in this area is the endangered Hawaiian Hawk (*Buteo solitarius*) and the

Hawaiian Short-eared Owl (*Asio flammeus sanwicensis*). The Hawaiian Short-eared Owl is not listed as endangered or threatened on the island of Hawaii. Aside from the Hawaiian Hawk, no other native land birds would be expected to occur on this property.

Native Waterbirds:

No native waterbirds were recorded and would not be expected on this site. No wetland habitat was found on this survey.

Seabirds:

No nesting seabirds were seen during the field survey and would not be expected to nest in this area due to the human disturbance and predators.

Migratory Birds:

No migratory shorebirds were observed. No habitat suitable for shorebirds currently occurs on this site.

Alien (Introduced) Birds:

Nineteen alien species were observed during the course of this survey. None of the birds are listed as threatened or endangered.

Mammals:

The skeletal remains of a feral pig (*Sus scrofa*) and two live adult pigs were observed on May 27, 2008. No rats (*Rattus spp.*), mice (*Mus musculus*), or cats (*Felis catus*) were seen but likely occur on and around the property. No endangered Hawaiian Hoary Bats (*Lasiurus cinereus semotus*) were detected by the ultrasound device during a night search on the property on May 27, 2008.

3.7.2 Potential Impacts and Mitigation Measures

Potential impacts to the various species were evaluated. All habitats on the property were thoroughly surveyed. The birds and mammals found were those to be expected in this region. The endangered Hawaiian Hawk and the non-endangered Hawaiian Short-eared Owl occur in man-altered as well as native habitats throughout the island of Hawaii. A change in the land use at this site will produce small, local increases and decreases in the populations of alien birds. Ultimately, there are no avifaunal or feral mammal impediments to carrying out the proposed project.

RECEIVED

PHONE (808) 594-1888



2008 APR 21 PM 1: 54 FAX (808) 594-1885

BELT COLLINS HAWAII

STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

HRD08/3011C

April 16, 2008

Mary O'Leary, Senior Planner
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, HI 96819

RE: Request for comments on the Draft Environmental Impact Statement for the Keahuolū Affordable Housing Project, North Kona, Hawai'i Island, TMKs: (3) 7-4-21: 20 and por. 21.

Dear Mary O'Leary,

The Office of Hawaiian Affairs (OHA) is in receipt of the above-referenced Draft Environmental Impact Statement. The Hawaii Housing Finance & Development Corporation (HHFDC) is proposing to develop 271.865 acres of agricultural land in North Kona into an affordable housing subdivision. The applicant's three alternative plans call for the construction of between 1,020 to 2,330 homes. Each plan also contains a 197,000-square-foot commercial element. OHA has reviewed the project and offers the following comments.

OHA has substantive obligations to protect the cultural and natural resources of Hawai'i for its beneficiaries, the people of this land. The Hawaii Revised Statutes mandate that OHA "[s]erve as the principal public agency in the State of Hawaii responsible for the performance, development, and coordination of programs and activities relating to native Hawaiians and Hawaiians; . . . and [t]o assess the policies and practices of other agencies impacting on native Hawaiians and Hawaiians, and conducting advocacy efforts for native Hawaiians and Hawaiians." (HRS § 10-3)

As a general rule, we disapprove of any land reclassification that would result in the reduction of urban development protections afforded to a property. OHA would only approve of such land reclassifications in special cases in which the increased development is merited. We believe that agricultural lands and their status as such should be preserved, as their purpose fulfills a crucial need of the Native Hawaiian community and the state as a whole. However, the reclassification

Mary O'Leary, Senior Planner
Belt Collins Hawaii Ltd.
April 16, 2008
Page 2

of these lands from the agricultural district to the urban district is important for providing much-needed affordable housing to the West Hawai'i region.

OHA appreciates that the applicant will work with the State Historic Preservation Division and the Hawai'i Island Burial Council to develop a burial treatment plan for the project area in the event that any human remains are discovered at Sites 13395, 13408 and 13409. We recommend that the applicant conduct this data collection prior to the completion of the final EIS because the discovery of iwi could have a significant impact on the overall project and which alternative concept is ultimately chosen.

OHA asks to review all preservation plans for preservation sites, and the monitoring plan for the reservoir site, when they become available. As a general rule, OHA prefers that all archaeological sites be preserved "as is," and therefore requests more information on the method the applicant used to determine which archaeological sites would receive greater protections than others. Perhaps that information is located in the 1990 Archaeological Inventory Survey or the 1992 Archaeological Mitigation Program for the Queen Lili'uokalani Trust's Keahuolū lands. While you state in your February 12, 2008, letter to OHA that we were on the mailing list for the Queen Lili'uokalani Trust's draft EIS for its Keahuolū lands in 1990, we do not currently have that document on file. Therefore, we request to receive those documents for review.

We further request the applicant's assurances that should iwi kūpuna or Native Hawaiian cultural or traditional deposits be found during the construction of the project, work will cease, and the appropriate agencies will be contacted pursuant to applicable law.

In addition, OHA recommends that the applicant use native vegetation in its landscaping plan for the subject parcel. Landscaping with native plants furthers the traditional Hawaiian concept of mālama 'āina and creates a more Hawaiian sense of place. We ask the applicant to use the many endemic, indigenous and Polynesian-introduced plants found in the area in landscaping plans.

Thank you for the opportunity to comment. If you have further questions, please contact Sterling Wong (808) 594-0248 or e-mail him at sterlingw@oha.org.

Sincerely,



Clyde W. Nāmu'o
Administrator

C: Office of the Governor
c/o Hawaii Housing Finance & Development Corporation
Attn: Ms. Janice Takahashi, Chief Planner

Mary O'Leary, Senior Planner
Belt Collins Hawaii Ltd.
April 16, 2008
Page 3

677 Queen Street, Suite 300
Honolulu, HI 96813

Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, HI 96813

OHA West Hawai'i Office



September 25, 2008
2006.70.0900 / 08P-335

Mr. Clyde W. Namuo
Administrator
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, HI 96813

Dear Mr. Namuo:

Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of April 16, 2008 for the above-referenced document. Our responses are provided in the order of your comments.

1. We acknowledge your comment that reclassification of the project lands from the agricultural district to the urban district is important for providing much needed affordable housing to the West Hawaii region.
2. Sites 13395, 13408 and 13409 are in an area where no development is proposed. All three concept plans designate the lower southwest corner of the project site as an "Archaeological Preserve" where no development is proposed. The archaeological preserve is in the location of Block E. As explained in PHRI's December 2007 "Archaeological Survey and Cultural Impact Assessment" for the subject project, Block E was established as an archaeological sample block of the Queen Liliuokalani Trust mitigation plan. Block E (400 feet by 400 feet) was chosen so that data collected from it could be compared with similar-sized blocks on the Queen Liliuokalani Trust Property. The PHRI report states, "During future data recovery work, each feature within Block E is to be recorded in detail, and sites within the block are to undergo further data collection. Further data collection at Sites 13395, 13408, and 13409 will include testing features to determine whether human skeletal remains are present." If any burials are identified, a burial treatment plan must be prepared, approved, and implemented.
3. The developer will provide the Office of Hawaiian Affairs (OHA) with copies of all preservation plans for preservation sites, and the monitoring plan for the reservoir site, when they become available.

Honolulu
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Boulder
Guam
Hong Kong
Manila
Seattle
Shenzhen
Singapore

We acknowledge your comment that OHA prefers that all archaeological sites be preserved "as is."

According to PHRI, protection for archaeological sites is determined primarily based on significance assessments initially established following the archaeological inventory survey of the project area (Donham 1990). Significance criteria used to make the assessments are based on the National Register Criteria for evaluation as outlined in the

Code of Federal Regulations (36 CFR Part 60), which the Hawaii State Historic Preservation Division uses for evaluating cultural resources. The Donham report discusses in detail the criteria used to establish significance assessments. The assessments were reiterated in the Jensen et al. (1992) mitigation plan for the project area, and were later amended in PHRI Letter Report 1152-052493, which outlined a sampling block mitigation strategy for the project area. The State Historic Preservation Division approved all three reports.

Sites that are to be preserved generally have value beyond their information content (Criterion D) (see Table 4-1 of the Draft EIS). For example, they may also have cultural value, or be an excellent example of a particular site type. In some cases, however, a site may only have information value but still be recommended for preservation simply because it is convenient to do so; for example, the site happens to be near other sites slated for preservation in a designated Archaeological Preserve Area.

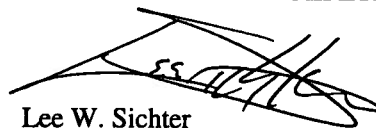
Copies of the 1990 Archaeological Inventory Survey and the 1992 Archaeological Mitigation Program for the Queen Liliuokalani Trust's Keahuolu Lands will be mailed to your office.

4. In the event that any sites or remains such as shell, bone or charcoal deposits, human burials, rock or coral alignments, pavings or walls are encountered during construction, the developer and its contractors shall stop work and contact the State Historic Preservation Division and comply with its requirements. This statement is in the Hawaii Housing Finance and Development Corporation's "Request for Proposals" dated July 23, 2007 document, which was provided to prospective developers.
5. The Hawaii Housing Finance and Development Corporation (HHFDC) will recommend that the project developer use native plants for landscaping purposes or choose species that are thought to have a low risk of becoming invasive.

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Lee W. Sichter
Principal Planner

LWS:lf

cc: Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

LINDA LINGLE
GOVERNOR OF HAWAII



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2008 MAY -8 PM 2: 22

BELT COLLINS HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

LAURA H. THIRLEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
RUSSELL Y. TSUIJI
FIRST DEPUTY
KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

May 6, 2008

Ms. Mary O'Leary, AICP, Senior Planner
Belt Collins Hawaii, Ltd.
2153 North King Street, Suite 200
Honolulu, HI 96819

LOG NO: 2008.0496
DOC NO: 0805TS01
Archaeology

Dear Ms. O'Leary:

**SUBJECT: Chapter 6E-8 Historic Preservation Review –
Keahuolū Draft EIS in Support of Land Use District Boundary Amendment Petition
Keahuolū and Kealakehe Ahupua`a, North Kona District, Island of Hawai`i
TMK: (3) 7-4-021: por. 14, 20 and 21**

Thank you for the opportunity to review the aforementioned project, which we received on March 06, 2008. We apologize for the delay in our response.

The applicant seeks to amend a State Land Use Boundary in order to reclassify 272 acres from Agricultural to Urban classification. We are unable to determine that no historic properties will be affected by this project for the following reasons.

The supporting "Archaeological Survey and Cultural Impact Assessment in Support of an EIS for the Kona Non-Ceded Lands" (prepared by Paul H. Rosendahl, Ph.D., Inc., Corbin and Wong-Smith 2007, included as Appendix D) is inadequate. The survey purports to have relocated all the sites in the project area that were recorded in the original Archaeological Inventory Survey (Donham 1990). Twelve sites are then listed (-13394, -13395, -13398, 13400, 13408, 13409, 13410, 13441, 13450, 13452, 13471, 13474) and the original significance assessments and recommended general mitigation treatments are reiterated. Comparison of this report with the 1990 Survey report indicates that many if not a majority of the previously recorded sites are not reported.

The Mitigation Plan, prepared in 1993, is represented in Appendix D as having been completed. This Plan was not approved as final. The letter referenced (log# 8976 doc# 9307RC40) states that several revisions are still required before approval. The proposed mitigation which includes data recovery fieldwork has not been completed, to date. Furthermore, the commitment to prepare a Preservation Plan for the project area, likewise has not been received by the SHPD.

Though the proposed action is not a ground altering activity, these discrepancies and the incomplete status of the historic preservation review process is cause for our concern. We request that the Final EIS include an up-to-date mitigation plan (including Data Recovery and Preservation Plans). Preferably this would be submitted for our office for review prior to inclusion in the EIS. We request that you also provide a schedule for the completion of these mitigation commitments. In addition, where applicable, Burial Treatment Plans for those that exist on the property must also be approved by the Hawaii Island Burial Council.

The second report submitted in support of the current DEIS, "An Archaeological Survey for the Proposed Development of a Water Reservoir and Service Road" (Ketner and Rechtman 2008) has been reviewed and is approved as final (Log# 2008.1339, Doc# 0805TS02). The SHPD looks forward to receiving a Monitoring Plan for review and approval.

If you have any questions or concerns regarding this letter please contact Assistant Hawaii Island Archaeologist, Timothy E. Scheffler, Ph.D. at (808) 981-2979 (timothy.e.scheffler@hawaii.gov).

Aloha,



Nancy McMahon, Archaeology and Historic Preservation Manager
State Historic Preservation Division

TS

Chris Yuen, Planning Director, HI County Department of Planning, Aupuni Center, 101 Pauahi Street, Suite 3, Hilo, HI 96720



September 25, 2008
2006.70.0900 / 08P-337

Ms. Nancy McMahon
Archaeology and Historic Preservation Manager
State Historic Preservation Division
Department of Land and Natural Resources
601 Kamokila Boulevard, Room 555
Kapolei, HI 96707

Dear Ms. McMahon:

**Response to Comments
Draft Environmental Impact Statement (DEIS)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided in your letter of May 6, 2008 for the above-referenced document. Our responses are provided in the order of your comments.

1. Adequacy of Archaeological Survey and Cultural Impact Assessment in Support of an EIS for the Kona Non-Ceded Lands prepared by PHRI, 2007, included as Appendix D.

The scope of PHRI's 1990 "Archaeological Inventory Survey - Queen Liliuokalani Trust (QLT) Property" report encompassed approximately 1,100 acres of land in Keahuolu.

The scope of PHRI's 2007 "Archaeological Survey and Cultural Impact Assessment in Support of an EIS for the Kona Non-Ceded Lands" report involves approximately 272 acres of the original 1,100 acres. Therefore, only those previously recorded sites within the current Hawaii Housing Finance and Development Corporation's (HHFDC) 272-acre project site are reported on in PHRI's 2007 document.

The 2007 report is not in itself an inventory survey, which would require relocation and reporting on all sites. As indicated on page 12, paragraph 2, and elsewhere in PHRI's report, the project site already has an SHPD-approved inventory survey related to the 1990 work done for QLT. The specific scope for the current HHFDC project is outlined in detail on page 3 of the PHRI's report. PHRI will make the following revisions to their report:

Page ii – delete the word "inventory" in paragraph 1, line 2.

Page 1 – delete the word “inventory” in paragraph 1, lines 2 and 7; replace the phrase “identify all potentially significant” in paragraph 2, line 13, with “re-identify and relocate specific....”

Section 4.1 of the Final EIS will be revised as shown in **Attachment 1** of this letter.

2. **1993 Mitigation Plan:** We believe that the confusion is due to a few inaccuracies in the PHRI 2007 report text which may lead the reader to believe that the mitigation plan has not been approved. However, it is clearly stated on page 12, paragraph 2, and elsewhere in PHRI's report, that: “The assessments and recommendations were reiterated in an archaeological mitigation plan for the project area (Jensen et al. 1992) (SHPD approval letter of 12/21/93; Log 10361; Doc 9312RC02) see Appendix).” The SHPD approval letter is in Appendix A of PHRI's 2007 report, which is Appendix E of the Keahuolu Draft EIS.

Not only has the mitigation plan been approved, but implementation of the plan has already begun (Block C data recovery; PHRI Report 1483-060101, Corbin 2001). PHRI will make the following revisions to their report:

Page 3 – last paragraph, line 9, replace “10/21/93” with “12/21/93.”

Page 12 – replace the last five lines in paragraph 2 with; Log 10361, Doc 9312RC02; see Appendix); the plan had been amended by PHRI Letter Report 1152-052493, which outlined the sampling block methodology to be used during mitigation (dated June 10, 1993; PHRI Letter 1152-052493, to D. Hibbard, SHPD, from A. Walker, PHRI). The final significance assessments and recommendations are summarized in Table 1.

The revisions above to page 12 of the 2007 PHRI report refer to Appendix A of the 2007 report, and to Table 1 of the 2007 PHRI report. Table 1 of the PHRI report is Table 4.1 in the HHFDC Keahuolu Draft EIS.

3. **Up-to-date Mitigation Plan:** The EIS process does not require the inclusion in an EIS of a completed archaeological mitigation plan (although an SHPD-approved mitigation plan for the project area does exist), or a completed preservation plan. This is because the EIS needs approval first; if it is not approved and the project is halted, then the preservation plan, for example, may have been created to no purpose. What usually happens in a case such as this is that the developer commits to a Special Condition of a State Land Use Commission approval. The Special Condition would require the developer's commitment to fulfill all of the historic preservation requirements of the SHPD, which includes fulfilling mitigation commitments, and preparing appropriate documents such as preservation and burial treatment plans.

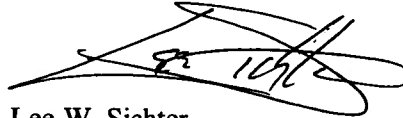
Ms. Nancy McMahon
September 25, 2008
2006.70.0900 / O8P-337
Page 3

Whatever the case, the developer is fully committed to follow through with appropriate and responsible measures to mitigate effects to archaeological properties.

Again, thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process.

Very truly yours,

BELT COLLINS HAWAII LTD.

A handwritten signature in black ink, appearing to read "Lee W. Sichter", written over a horizontal line.

Lee W. Sichter
Principal Planner

LWS:lf

Attachment

cc: Paul H. Rosendahl, PHRI Inc.
Office of Environmental Quality Control
Stanley Fujimoto, HHFDC

Attachment 1

Section 4.1 of the Final EIS will be revised as follows:

4.1 ARCHAEOLOGICAL AND HISTORIC RESOURCES – HOUSING PROJECT SITE

Paul H. Rosendahl, Ph.D., Inc. (PHRI) conducted an archaeological survey and prepared a preliminary CIA for the proposed Keahuolu Affordable Housing Project site, comprised of approximately 272 acres. The CIA study is discussed in Section 4.3. The overall objective of the archaeological survey and the CIA is to comply with the current historic preservation requirements of the Hawai'i SHPD.

The specific objectives of the survey were fourfold: (a) to re-identify and re-locate specific archaeological remains present within the study area; (b) to collect information sufficient to evaluate and document the potential significance of all identified remains; (c) to evaluate the potential impacts of any proposed development upon any identified significant remains; and (d) to recommend appropriate measures that would mitigate any adverse impacts upon identified significant remains. The PHRI archaeological survey report is excerpted below. Appendix D contains the complete report.

EISPN LETTERS

From: request_info@beltcollins.com [mailto:request_info@beltcollins.com]
Sent: Saturday, July 28, 2007 1:51 PM
To: Honolulu Belt Collins
Subject: Request for more information

Name: Aaron Stene
Company: N/A
Address1: 73-4181 Malino Place
Address2:
City: Kailua-Kona
State: HI
Country: USA
Zipcode: 96740
Phone: 325-7916
Fax:
Email: aaron@hawaiiantel.net

Comments: For Mary O'Leary:

Dear Ms.O'Leary,

In regards to Keahuolu Affordable Housing Project here in Kona, I hope the State and the developer will address the infrastructure impacts from this project. The existing infrastructure here in Kona is already at the breaking point. We don't need more houses built here, affordable or not, WITHOUT adequate infrastructure in place to support these new homes. I've lived here in Kona 31 years. It has changed very negatively over that period of time because all these homes were built without adequate supporting infrastructure. I hope those mistakes won't be repeated again with this project.

Best Regards, Aaron Stene



February 12, 2008
2006.70.0900 / 08P-049

Mr. Aaron Stene
73-4181 Malino Place
Kailua-Kona, HI 96740

Dear Mr. Stene:

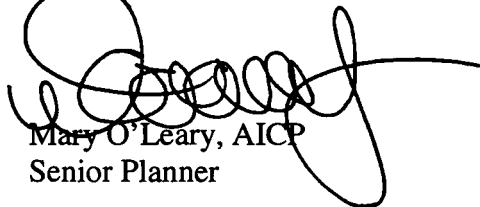
**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided on July 28, 2007 via electronic mail from aaron@hawaiiantel.net to request_info@beltcollins.com. The Draft Environmental Impact Statement will discuss existing and proposed infrastructure improvements required to support the proposed project and related potential impacts and mitigation measures.

Again, thank you for your participation in the Chapter 343 comment and review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Mary O'Leary, AICP
Senior Planner

Honolulu
Guam
Hong Kong
Philippines
Seattle
Singapore
Thailand

MO:lf

From: request_info@beltcollins.com [mailto:request_info@beltcollins.com]
Sent: Saturday, July 28, 2007 1:51 PM
To: Honolulu Belt Collins
Subject: Request for more information

Name: Aaron Stene
Company: N/A
Address1: 73-4181 Malino Place
Address2:
City: Kailua-Kona
State: HI
Country: USA
Zipcode: 96740
Phone: 325-7916
Fax:
Email: aaron@hawaiiantel.net

Comments: For Mary O'Leary:

Dear Ms.O'Leary,

In regards to Keahuolu Affordable Housing Project here in Kona, I hope the State and the developer will address the infrastructure impacts from this project. The existing infrastructure here in Kona is already at the breaking point. We don't need more houses built here, affordable or not, WITHOUT adequate infrastructure in place to support these new homes. I've lived here in Kona 31 years. It has changed very negatively over that period of time because all these homes were built without adequate supporting infrastructure. I hope those mistakes won't be repeated again with this project.

Best Regards, Aaron Stene

Aaron Stene <aaron@hawaiiantel.net>

07/28/2007 01:54 PM

Please respond to aaron@hawaiiantel.net

To library@dbedt.hawaii.gov

Cc Subject For Stanley Fujimoto

Stanley Fujimoto, State Department of Business, Economic Development and Tourism, Hawaii Housing and Finance and Development Corporation, 677 Queen St. Suite 300, Honolulu, HI 96813.

Aloha Mr. Fujimoto,

In regards to Keahuolu Affordable Housing Project here in Kona, I hope the State and the developer will address the infrastructure impacts from this project. The existing infrastructure here in Kona is already at the breaking point. We don't need more houses built here, affordable or not, WITHOUT adequate infrastructure in place to support these new homes.

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Best Regards,

Aaron Stene

--

Aaron Stene

Kailua-Kona, Hawaii

<http://aaronstene.blogspot.com/>



February 12, 2008
2006.70.0900 / 08P-050

Mr. Aaron Stene
73-4181 Malino Place
Kailua-Kona, HI 96740

Dear Mr. Stene:

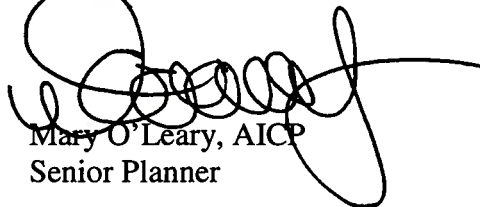
**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided on July 28, 2007 via electronic mail from aaron@hawaiiintel.net to library@dbedt.hawaii.gov. The Draft Environmental Impact Statement will discuss existing and proposed infrastructure improvements required to support the proposed project and related potential impacts and mitigation measures.

Again, thank you for your participation in the Chapter 343 comment and review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Mary O'Leary, AICP
Senior Planner

MO:lf

Honolulu
Guam
Hong Kong
Philippines
Seattle
Singapore
Thailand

From: request_info@beltcollins.com [mailto:request_info@beltcollins.com]
Sent: Saturday, July 28, 2007 1:51 PM
To: Honolulu Belt Collins
Subject: Request for more information

Name: Aaron Stene
Company: N/A
Address1: 73-4181 Malino Place
Address2:
City: Kailua-Kona
State: HI
Country: USA
Zipcode: 96740
Phone: 325-7916
Fax:
Email: aaron@hawaiiantel.net

..Comments: For Mary O'Leary:

Dear Ms.O'Leary,

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Best Regards, Aaron Stene

Aaron Stene <aaron@hawaiiantel.net>

07/28/2007 01:54 PM

Please respond to aaron@hawaiiantel.net

To library@dbedt.hawaii.gov

Cc Subject For Stanley Fujimoto

Stanley Fujimoto, State Department of Business, Economic Development and Tourism, Hawaii Housing and Finance and Development Corporation, 677 Queen St. Suite 300, Honolulu, HI 96813.

Aloha Mr. Fujimoto,

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Best Regards,

Aaron Stene

--

Aaron Stene

Kailua-Kona, Hawaii

<http://aaronstene.blogspot.com/>

LINDA LINGLE
GOVERNOR



RECEIVED

2007 JUL 30 PM 2:04

BARRY FUKUNAGA
INTERIM DIRECTOR

Deputy Directors
FRANCIS PAUL KEENO
BRENNON T. MORIOKA
BRIAN H. SEKIGUCHI

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

BELT COLLINS HAWAII

IN REPLY REFER TO:

HAWAII DISTRICT
50 MAKAALA STREET
HILO, HAWAII 96720
TELEPHONE: (808) 933-8866 • FAX: (808) 933-8869

HWY-H 07-2.0711

July 27, 2007

Ms. Mary O'Leary
Senior Planner
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, Hawai'i 96819

Dear Ms. O'Leary:

SUBJECT: Environmental Impact Statement Preparation Notice
Palani Road, Route 190
Hawaii Housing Finance & Development Corporation (HHFDC)
Affordable Housing Project
T.M.K. 3rd Div. 7-4-008:056 por.
Project No. 19BC-01-71
Keahuolu, North Kona, Hawai'i

Thank you for your transmittal requesting our review of the subject project.

The project does not have direct access to our highway facilities. However we retain an interest in any development that will indirectly impact our highway system.

We appreciate your providing this advance notice and for the opportunity to provide comments.

If you have any questions please call Mr. Clinton Yamada at 933-1951.

Very truly yours,

A handwritten signature in black ink, appearing to read "Stanley M. Tamura".

STANLEY M. TAMURA
Hawai'i District Engineer



February 12, 2008
2006.70.0900 / 08P-051

Mr. Stanley M. Tamura, Hawaii District Engineer
Highways Division - Hawaii District
Department of Transportation
State of Hawaii
50 Makaala Street
Hilo, HI 96720

Dear Mr. Tamura:

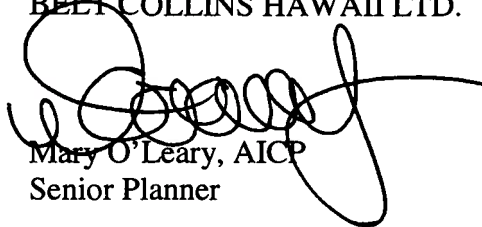
**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided on July 27, 2007 for the above-referenced document. We understand that the proposed project does not have direct access to a state highway facility. A copy of the Draft Environmental Impact Statement will be mailed to your office.

Again, thank you for your participation in the Chapter 343 comment and review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Mary O'Leary, AICP
Senior Planner

MO:lf

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Singapore
Thailand

LINDA LINGLE
GOVERNOR OF HAWAII



RECEIVED

DORRENE K. LAU
ACTING DIRECTOR

2007 AUG -6 PM 3:08

BELT COLLINS HAWAII

STATE OF HAWAII
DEPARTMENT OF HEALTH
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
235 SOUTH BERETANIA STREET
LEIOPAPA A KAMEHAMEHA, SUITE 702
HONOLULU, HAWAII 96813
Telephone (808) 586-4185
Facsimile (808) 586-4186
Electronic Mail: OEQC@doh.hawaii.gov

August 2, 2007

Orlando "Dan" Davidson
Executive Director
Hawaii Housing Finance and Development Corporation
677 Queen Street, Suite 300
Honolulu, Hawaii 96813

Dear Mr. Davidson:

Subject: Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
Keahuolu, Kailua-Kona, Hawaii
TMK (3) 7-4-008: por. 056

Thank you for the opportunity to review the subject document. The Office of Environmental Quality Control has no comments at this time.

Please call Herman Tuiolosega at (808) 586-4185 if you have any questions.

Sincerely,

George Casen

George Casen
Planner

c: Sue Sakai, Belt Collins Hawaii Ltd.
Mary O'Leary, Belt Collins Hawaii Ltd.



February 12, 2008
2006.70.0900 / 08P-052

Mr. George Casen, Planner
Office of Environmental Quality Control
Department of Health
State of Hawaii
235 South Beretania Street, Suite 702
Honolulu, HI 96813

Dear Mr. Casen:

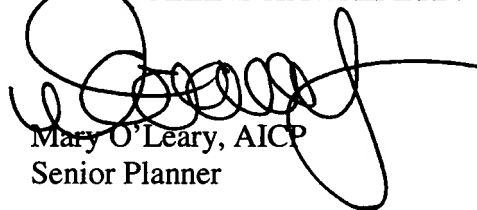
**Environmental Impact Statement Preparation Notice (EISPN)
Kehaolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. As stated in your August 2, 2007 letter regarding the above-referenced document, we understand that your office does not have any comments at this time. A copy of the Draft Environmental Impact Statement will be mailed to your office.

Again, thank you for your participation in the Chapter 343 comment and review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Mary O'Leary, AICP
Senior Planner

MO:lf

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2007 AUG -6 PM 3: 09

FAX (808) 594-1865

PHONE (808) 594-1888



BELT COLLINS HAWAII

STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

August 2, 2007

HRD07_3011B

Mary O'Leary, Senior Planner
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, Hawai'i 96819

Dear Ms. O'Leary:

**Re: Environmental Impact Statement Preparation Notice
Keahuolu Affordable Housing Project
Keahuolu Ahupua'a, North Kona District, Hawai'i Island
Tax Map Key: (3) 7-4-008: por. 56**

The Office of Hawaiian Affairs (OHA) is in receipt of your July 20, 2007 Environmental Impact Statement Preparation Notice (EISPN) for the subject Hawai'i Housing Finance & Development Corporation (HHFDC) affordable housing project on 272 acres of State land in Keahuolu Ahupua'a, North Kona District, Hawai'i Island.

OHA is obligated to work towards the betterment of Native Hawaiians, and to serve the needs and interests of this wide and diverse beneficiary group. OHA must also ensure that other agencies, on the State and County levels, uphold their constitutionally, statutorily and judicially mandated obligations to the Native Hawaiian people.

The EISPN indicates that an archaeological inventory survey (AIS) of 1,135 acres (including the 272 acre project area) was conducted in 1990 and that the draft EIS will include the results of current work to validate and update the findings of this earlier archaeological inventory survey. OHA requests verification that this 1990 AIS was conducted pursuant to applicable laws, rules and regulations and submitted to the appropriate agencies for review and approval. OHA seeks clarification on the necessity of the above mentioned current work to validate and update the findings of the 1990 AIS.

OHA notes that section 13-284-6 (c), HAR, states:

(c) Prior to submission of significance evaluations for properties other than architectural properties, the agency shall consult with ethnic organizations or members of the ethnic group for whom some of the historic properties may have significance under criterion "e", to seek their views on the significance evaluations. For native Hawaiian properties which may have significance under criterion "e", the Office of Hawaiian Affairs also shall be consulted.

Neither the developer's archaeological consultant nor the State Historic Preservation Division possess the capacity to determine whether any historical site found and evaluated, meets the criteria for having an "important value to the native Hawaiian people." Thus the obligation to meaningfully consult with the Office of Hawaiian Affairs so that the Hawaiian people can determine what is valuable to them. It is unclear whether this consultation with OHA has ever occurred.

Based on our experience with past development projects of this size in this part of the North Kona District, it is possible that additional Native Hawaiian traditional, cultural and burial sites will be identified during construction activities. Thus, archaeological monitoring for all construction machinery operating within the subject project area is warranted. Furthermore, project planners and engineers should be prepared to explore and implement all means necessary to accommodate the preservation in place of any identified native Hawaiian burial, traditional, and cultural sites.

In the event trails and lava tubes containing traditional or cultural resources have been identified within your project area, OHA is concerned how the integrity of these resources will be protected due to the need for excavations related to infrastructure requirements throughout the project area.

As previously stated in our May 3, 2007 letter to your company, we are sure individuals and organizations with specific knowledge of cultural resources, practices and beliefs within the project area will be identified and consulted as required by State law. Our staff is familiar with the following individuals as having familial connections to Keahuolu Ahupua'a: Clarence A. Medeiros, Jr., J. Curtis Tyler III, Mahealani Pai, Ruby P. Keana'aina McDonald and Reginald Lee. Please keep in mind that this list of individuals is by no means all encompassing and we are sure that additional individuals and organizations with connections to your project area will be identified as you begin your consultation process.

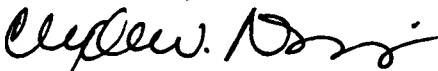
Mary O'Leary, Senior Planner
Belt Collins Hawai'i Ltd.
August 1, 2007
Page 3

OHA seeks assurances that the Cultural Impact Assessment (CIA) will follow the guidelines established by the Office of Environmental Quality Control. Office of Environmental Quality Control guidelines recommend preparers of assessments "*identify and consult with individuals and organizations with expertise concerning the types of cultural resources, practices and beliefs found within the broad geographical area, e.g., district or ahupua'a*". Thus, the larger traditional and cultural landscapes of Keahuolu and nearby ahupua'a bear consideration.

The overall goal of this HHFDC project certainly responds to the need for affordable housing for working families in and around North Kona and it is possible that many of these working families are OHA beneficiaries. With this in mind, OHA hopes that through meaningful consultation and appropriate collaboration between government agencies, a new paradigm for responsible development as it relates to the protection of Native Hawaiian traditional, cultural and burial sites can be established.

Thank you for the opportunity to provide comments on the EISPN and we look forward to the opportunity for a comprehensive review of the draft EIS when it is completed. Should you have any questions, please contact Keola Lindsey, Lead Advocate- Culture at 594-1904 or keolal@oha.org.

'O wau iho nō,



Clyde W. Nāmu'o
Administrator

C: Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, HI 96813

Ruby McDonald
OHA Community Resource Coordinator- West Hawai'i
75-5706 Hanama Place, Suite 107
Kailua-Kona, HI 96740

Christopher Yuen, Director
Hawai'i County Planning Department
Aupuni Center, 101 Pauahi Street, Suite 3
Hilo, HI 96720

State Historic Preservation Division
601 Kamokila Boulevard, Room 555
Kapolei, Hawai'i 96707



February 12, 2008
2006.70.0900 / 08P-053

Mr. Clyde W. Namuo, Administrator
Office of Hawaiian Affairs
State of Hawaii
711 Kapiolani Boulevard, Suite 500
Honolulu, HI 96813

Dear Mr. Namuo:

**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Chapter 343 (HRS) public and agency review process. We are writing in response to the comments you provided on August 2, 2007 for the above document. The following responses have been prepared with the assistance of the consulting project archaeologist, Paul H. Rosendahl, Ph.D., Inc. (PHRI). The responses are provided in the order of your comments. Your comments are quoted from your letter and appear in italics.

Comment:

- 1. The EISPN indicates that an archaeological inventory survey (AIS) of 1,135 acres (including the 272 acre project area) was conducted in 1990 and that the draft EIS will include the results of current work to validate and update the findings of this earlier archaeological inventory survey. OHA requests verification that this 1990 AIS was conducted pursuant to applicable laws, rules and regulations and submitted to the appropriate agencies for review and approval. OHA seeks clarification on the necessity of the above-mentioned current work to validate and update the findings of the 1990 AIS.*

Response: The 1990 archeological inventory survey (AIS) conducted by Donham was conducted pursuant to applicable s laws, rules and regulations. The AIS report is titled and referenced as:

Archaeological Inventory Survey, Queen Liliuokalani Trust Property, Land of Keahuolu, North Kona District, Island of Hawaii (TMK 3-7-4-8:Por.2, 12). PHRI Report 596-021290. August 1990. Prepared for Belt Collins and Associates.

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Philippines
Seattle
Singapore
Thailand

The AIS report was submitted to the State Historic Preservation Division for review and acceptance. The State Historic Preservation Division approved the AIS in its letter dated February 17, 1993 (Log No: 6839, Doc No: 9302RC34). Approval letters will be included in the Draft EIS.

The AIS report was prepared for inclusion in the 1990 Draft and Final Environmental Impact Statements, prepared by Belt Collins, for the Queen Liliuokalani Trust Property project.

The current work conducted by PHRI in 2007 for the Keahuolu Affordable Housing project was necessary to (1) validate the original findings, and (2) to update and confirm the status of sites, because seventeen years has passed since the 1990 archaeological inventory survey was conducted. Also, new technology, global positioning systems equipment (GPS), was employed to more precisely and accurately re-locate the previously identified archeological sites. No new archaeological sites were encountered in PHRI's efforts to relocate the previously identified archeological sites.

Comment:

2. *OHA notes that section 13-284-6 (c), HAR, states: (c) Prior to submission of significance evaluations for properties other than architectural properties, the agency shall consult with ethnic organizations or members of the ethnic group for whom some of the historic properties may have significance under criterion "e", to seek their views on the significance evaluations. For native Hawaiian properties which may have significance under criterion "e", the Office of Hawaiian Affairs also shall be consulted.*

Neither the developer's archaeological consultant nor the State Historic Preservation Division possess the capacity to determine whether any historical site found and evaluated, meets the criteria for having an "important value to the native Hawaiian people." Thus the obligation to meaningfully consult with the Office of Hawaiian Affairs so that the Hawaiian people can determine what is valuable to them. It is unclear whether this consultation with OHA has ever occurred.

Response: Please find enclosed a copy of the 1990 mailing list submitted by Belt Collins to the Office of Environmental Quality Control for the 1990 "Draft Environmental Impact Statement – Liliuokalani Trust Keahuolu Lands, Kailua-Kona, Hawaii". The Office of Hawaiian Affairs, Mr. Thomas K. Kaulukukui,

Chairman, was mailed a copy of the Draft EIS. The 1990 Final EIS does not contain a comment letter on the Draft EIS from the Office of Hawaiian Affairs. Historical Researcher and Cultural Resources Specialist Helen Wong Smith is working on the Cultural Impact Assessment for the Keahuolu Affordable Housing area. Her study will include documentary and informant research. If properties other than architectural ones are identified, they will be discussed with informants and the Office of Hawaiian Affairs.

Comment:

3. *Based on our experience with past development projects of this size in this part of the North Kona District, it is possible that additional Native Hawaiian traditional, cultural and burial sites will be identified during construction activities. Thus, archaeological monitoring for all construction machinery operating within the subject project area is warranted.*

Response: The approved mitigation program for the project area includes an Archaeological Monitoring Plan (Jensen et al. 1992; SHPD approval letter dated December 21, 1993, Log No: 10361, Doc No: 9312/RC02), which ensures protection if additional traditional, cultural, and burial sites are encountered during the course of construction. The SHPD rules and regulations provide the procedures for mitigation of such post inventory survey "inadvertent finds."

Comment:

4. *Furthermore, project planners and engineers should be prepared to explore and implement all means necessary to accommodate the preservation in place of any identified native Hawaiian burial, traditional, and cultural sites.*

Response: PHRI assumes that project planners and engineers will reasonably accommodate the preservation in place of any identified native Hawaiian, traditional and cultural sites assessed by the SHPD as requiring preservation.

Comment:

5. *In the event trails and lava tubes containing traditional or cultural resources have been identified within your project area, OHA is concerned how the integrity of these resources will be protected due to the need for excavations related to infrastructure requirements throughout the project area.*

Response: As noted above, the SHPD rules and regulations require that all sites (including trails and lava tubes) assessed as requiring preservation be protected if there is a need “for excavations related to infrastructure requirements.” Protection measures are addressed in an Interim Site Protection Plan, an Archaeological Monitoring Plan, and a Site Preservation Plan. The final Site Preservation Plan will address the specific preservation requirements for each site.

Comment:

6. *As previously stated in our May 3, 2007 letter to your company, we are sure individuals and organizations with specific knowledge of cultural resources, practices and beliefs within the project area will be identified and consulted as required by State law. Our staff is familiar with the following individuals as having familial connections to Keahuolu Ahupua'a: Clarence A. Medeiros, Jr., I. Curtis Tyler III, Mahealani Pai, Ruby P. Keana'aina McDonald and Reginald Lee. Please keep in mind that this list of individuals is by no means all encompassing and we are sure that additional individuals and organizations with connections to your project area will be identified as you begin your consultation process.*

Response: As noted above, Historical Researcher and Cultural Resources Specialist Helen Wong Smith is currently working on the Cultural Impact Assessment for the project area. Her study will include informant research. All of the above-listed people have already been contacted concerning the project, and additional individuals and organizations have been identified.

Comment:

7. *OHA seeks assurances that the Cultural Impact Assessment (CIA) will follow the guidelines established by the Office of Environmental Quality Control. Office of Environmental Quality Control guidelines recommend preparers of assessments “identify and consult with individuals and organizations with expertise concerning the types of cultural resources, practices and beliefs found within the broad geographical area, e.g., district or ahupua'a”. Thus, the larger traditional and cultural landscapes of Keahuolu and nearby ahupua'a bear consideration.*

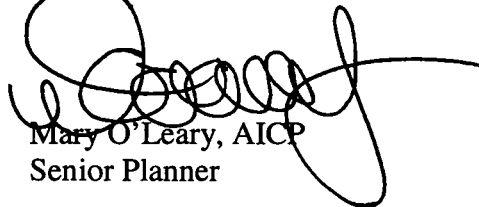
Response: The Cultural Impact Assessment study for the project area will follow the guidelines established by the Office of Environmental Quality Control, as well as all other applicable rules and guidelines, as specified by the DLNR-SHPD. The CIA report addresses the guidelines established by the OEQC.

Mr. Clyde W. Namuo
February 12, 2008
2006.70.0900 / 08P-053
Page 5

Again, thank you for your participation in the Chapter 343 comment and review process. A copy of the Draft Environmental Impact Statement will be mailed to your office

Very truly yours,

BELT COLLINS HAWAII LTD.



Mary O'Leary, AICP
Senior Planner

MO:lf

Enclosures

cc: Ms. Ruby McDonald
OHA Community Resource Coordinator – West Hawaii
75-5706 Hanama Place, Suite 107
Kailua-Kona, HI 96740



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAII 96804

RECEIVED

2007 AUG 14 PM 1:56

BELT COLLINS HAWAII

OFFICE OF THE SUPERINTENDENT

August 10, 2007

Ms. Mary O'Leary, Senior Planner
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, Hawai'i 96819

Dear Ms. O'Leary:


Subject: Keahuolu Affordable Housing Project Environmental Impact Statement
Preparation Notice, Kailua-Kona, TMK: 7-4-008: por. 056

The Department of Education (DOE) has reviewed the Environmental Impact Statement Preparation Notice (EISPN) for the Hawaii Housing Finance and Development Corporation (HHFDC) residential project in Keahuolu, North Kona. The DOE submitted comments on a brief description of the project in a May 2, 2007, letter to Susan A. Sakai. A copy of that letter is attached. In the letter we asked for additional information on the type of housing being proposed so that we can generate an estimated count of the number of public school students who would be living in the HHFDC project. We are awaiting that additional information.

The 2007 Legislature passed a bill establishing school impact fees. The bill became Act 245 and is in the process of being implemented. Under this new law, we believe the Keahuolu project will be required to pay an impact fee. We currently do not know the amount of the fee per residential unit but we should have a better idea once our questions are answered.

Thank you for the opportunity to comment. If you have any questions, please call Heidi Meeker of the Facilities Development Branch at 733-4862.

Very truly yours,


Patricia Hamamoto
Superintendent

PH:jmb

Attachment

c: Randolph Moore, Assistant Superintendent, OBS
Duane Kashiwai, Public Works Administrator, FDB
Art Souza, CAS, Honokaa/Kealakehe/Kohala/Konawaena Complex Areas
OEQC



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAII 96804

OFFICE OF BUSINESS SERVICES

May 2, 2007

Ms. Susan A. Sakai, Vice President
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, Hawai'i 96819-4554

Attention: Ms. Lynn Fukuhara

Subject: Request for Early Comments on Plans for Keahuolu, Kailua-Kona

To make a meaningful contribution to your planning effort at Keahuolu, the Department of Education (DOE) requests the following information:

- More descriptive information on the type of housing being considered for the project.
- Type of single-family housing being considered, including lot size, general size of the units, and targeted price range.
- For the multi-family housing, additional information about the differences between 24 units per acre and 12 units per acre (i.e., Would the multi-family housing be in large structures, several stories high, or, would it be more like two-story structures with 8 to 12 units?).
- An estimate of the size and price of the multi-story units.
- Numbers of affordable units and affordable to what income levels.
- Whether a significant number of multi-family units are expected to be rentals.

The additional information would enable us to generate a more accurate estimate of the number of public school students expected to live in the project.

The DOE is concerned with any increase in enrollment at the schools presently serving the Kealakehe area. Kealakehe Elementary has reached its facility capacity this school year and is expected to exceed its capacity each succeeding year. Kealakehe Intermediate School and Kealakehe High School are not expected to grow as fast; but with more development planned in the areas north of Kealakehe, enrollment increases are possible.

Ms. Susan A. Sakai
Page 2
May 2, 2007

Both of the land use concepts in your illustrations place the school in a generally good location as far as access along three or four of the site's boundaries. It would be helpful if you could explain why there is a designation for "non-sewer generating activity" on the school site. To properly evaluate the site, we would want to know the amount of slope on the site.

It is also important to the DOE to have as much information as possible about other development plans in the immediate vicinity. While it appears that the first need in Kealahou is for an additional elementary school, the need for an additional middle school and a high school are not too far behind.

The DOE appreciates the opportunity to offer comments in this preliminary stage of planning. We hope that the DOE will be consulted during each new phase of planning for the project. If you can provide DOE with more information on the housing types, we can provide you with a student enrollment estimate.

If you have any questions, please call Heidi Meeker at 733-4862.

Sincerely yours,



Duane Y. Kashiwai
Public Works Administrator

DYK:jmb



February 12, 2008
2006.70.0900 / 08P-054

Ms. Patricia Hamamoto, Superintendent
Department of Education
State of Hawaii
P.O. Box 2360
Honolulu, HI 96804

Dear Ms. Hamamoto:

**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided on August 10, 2007 for the above-referenced document.

The Draft Environmental Impact Statement will include provisional estimates of school impacts derived from standard formulae. Belt Collins has consulted with the DOE as we have prepared the provisional estimates. A copy of Draft Environmental Impact Statement will be sent to your office.

Again, thank you for your participation in the Chapter 343 comment and review process.

Very truly yours,

BELT COLLINS HAWAII LTD.

A handwritten signature in black ink, appearing to read "Mary O'Leary".

Mary O'Leary, AICP
Senior Planner

MO:lf

Honolulu
Guam
Hong Kong
Philippines
Seattle
Singapore
Thailand

Harry Kim
Mayor



RECEIVED

Jane H. Testa
Director

2007 AUG 16 PM 1:57

Diane L. Ley
Deputy Director

BELT COLLINS HAWAII

County of Hawaii

DEPARTMENT OF RESEARCH AND DEVELOPMENT

25 Aupuni Street, Room 109 • Hilo, Hawaii 96720-4252
(808) 961-8366 • Fax (808) 935-1205
E-mail: chresdev@co.hawaii.hi.us

August 10, 2007

TO: ✓ Ms. Mary O'Leary, Senior Partner
Belt Collins Hawai'i Ltd.
2153 North King Street, Suite 200
Honolulu, HI 96819

Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, HI 96813

FR: Diane Ley, 
Deputy Director

RE: Environmental Impact Statement Preparation Notice
Keahuolu Affordable Housing Project - Keahuolu, Island of Hawai'i

On behalf of the County of Hawai'i's Department of Research and Development, thank you for the opportunity to provide comments on the Environmental Impact Statement Preparation Notice for the Keahuolu Affordable Housing Project.

Over the past year, the Department has been engaged with the Hawai'i County Planning Department in providing the community process piece for the development of the North and South Kona Community Development Plan (CDP). Through this process there has been a wealth of information gathered relative to the community's concerns and desires for the future of the region. It is recommended that the CDP website be visited for information that may be relevant to the planning process for the Keahuolu Affordable Housing Project. The website is www.hawaiiislandplan.com, or contact the Planning Department for further details.

Additionally, it is recommended that research be conducted to mitigate the demand for electricity and minimize monthly electrical bills for individual residential, commercial and public or community units and project-wide auxiliary service components. Considerations may include setting minimum standards for energy efficiency with the U.S. Environmental Protection Agency's Energy Star rating program, installation of radiative barriers in roofs and walls, and the installation of net-metered photovoltaic systems.

Finally, it is recommended that landscaping and green space initiatives include the utilization of drought-tolerant plants and use of on-site generated mulch.

Again, we appreciate this opportunity to share our comments.

CC: Harry Kim, Mayor County of Hawaii
Hawai'i County is an Equal Opportunity Provider and Employer



February 12, 2008
2006.70.0900 / 08P-055

Ms. Diane Ley, Deputy Director
Department of Research and Development
County of Hawaii
25 Aupuni Street, Room 109
Hilo, HI 96720-4252

Dear Ms. Ley:

**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided on August 10, 2007 for the above-referenced document. Our responses are provided in the order of your comments.

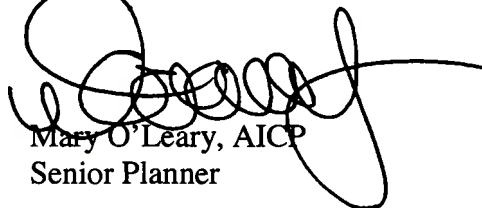
1. The website www.hawaiiislandplan.com is visited at different times to review the North and South Kona Community Development Plan.
2. The Hawaii Housing Finance and Development Corporation has undertaken a Request for Proposal process for the purpose of soliciting proposals from developers interested in developing the Keahuolu Affordable Housing project. Your letter will be conveyed to the selected developer.

Honolulu
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Again, thank you for your participation in the Chapter 343 comment and review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Mary O'Leary, AICP
Senior Planner

MO:lf

Ms. Mary O'Leary, Senior Planner
Belt Collins Hawaii Ltd.
2153 North King St, Suite 200
Honolulu, HI 96819

RE: Keahuolu Affordable Housing Project

Dear Ms. O'Leary:

I would like to offer the following comments for the proposed affordable housing Environmental Impact Statement Preparation Notice. The proposed location and conceptual layout are excellent. They promote a sense of community while enriching lifestyles. A walkable community with mixed-use development and transportation options fulfils the objectives of the Community Development Plan.

There are, however, a few opportunities for improvement that should be considered in the early development stages of this project.

- The access circles in Figure 2-4 should be converted to ovals to reflect the impediments to walking attributable to negotiating steeper slopes.
- If the street grid remains predominantly oriented with transverse streets running mauka-makai, the grades must be mitigated to encourage walking and bicycling. This could include utilizing meandering shared-use pathways.
- The street grid could be angled to reduce the maximum grades. Orientation parallel and perpendicular the easterly and northerly boundaries would also preserve land use efficiency.
- The pedestrian scale streets proposed in Figure 2-9 may need to be refined. On street parallel parking presents hazards to bicycling. Parking does not need to be continuous. So alternating back-in diagonal parking from side to side could provide a safer solution for bicyclist and motorists while integrating an element of traffic calming.
- Pedestrian scale lighting should be provided to encourage pedestrians and bicyclists. Innovative approaches such as broad umbrella canopies that also provide shade and shelter while satisfying the "dark skies" initiative should be considered

- Circulation plans are often focused exclusively on motor vehicles. A broader perspective that clearly delineates bicycle routes, pedestrian pathways and "Safe Routes to School" should be addressed in the TIAR and incorporated into the Official Network Map.
- Attention to integrating walkability into the surrounding community should be considered. If special considerations for pedestrians crossing the Ane Keohokalole Highway are needed, provisions should be addressed in the early planning stages.
- Traffic calming devices should not be added. Traffic calming should be integrated into the design of the local streets.

Thank you for your consideration,



Robert Ward
77-6526 Ho'olaupa'i St
Kailua Kona, HI 96740

Cc: Office of Environmental Quality Control
235 South Beretania St, Suite 702
Honolulu, HI 96813



February 12, 2008
2006.70.0900 / 08P-056

Mr. Robert Ward
77-6526 Hoolaupai Street
Kailua Kona, HI 96740

Dear Mr. Ward:

**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided via facsimile to Belt Collins on August 17, 2007 for the above-referenced document.

Our proposed master plan accommodates a program on the site and illustrates its development potential. However, the final plan may vary from the proposed plan. On July 23, 2007, following a master plan process, the Hawaii Housing Finance and Development Corporation (HHFDC) issued a Request for Proposal (“RFP”) for the purpose of soliciting proposals from interested developers who met the qualifications set forth by the HHFDC to plan, design, and develop “mixed income rental and/or for sale units” on the vacant and undeveloped project site comprised of approximately 272 acres.

Therefore, each developer who submits a proposal to HHFDC will formulate proposals based on their own plans and costs to meet the affordability requirements of the project and the requirements of the RFP. Some developers may seek to maximize the allocation into the house structure itself, versus others who may propose a higher quality site finish. Belt Collins and HHFDC worked together to develop master plan concepts that define the program accommodation and provide the developer with freedom to design their own layout based on the minimum suggested program defined by the master plan concepts.

Our responses are provided in the order of your comments.

- 1 Access circles are guidelines and show approximate accessibility to neighborhood nodes. Uphill and downhill travel distances could be said to average out to a circle as either the longer time for the uphill leg will be offset by the shorter time for the downhill leg. Regardless, if the nodes were within a 5- to 10-minute walking distance, it would still be relatively walkable and accessible to the neighborhood it served.

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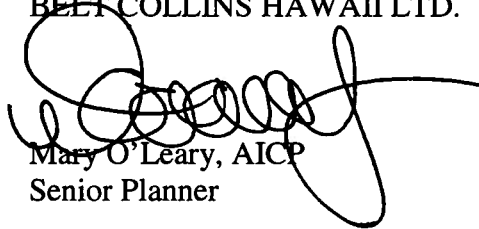
- 2 The maximum grade of the mauka-makai roads is less than 5 percent between the two neighborhood parks and Ane Keohokalole. This is an acceptable grade for the majority of the site area. The two sections of residential lands on the eastern third of the site are on steeper lands and most of the mauka-makai roads have an average grade of 7.5 percent. While this is not optimum for walking and biking, bringing the grades down to 5 percent will make the roads 40 percent longer. Secondly, it was felt to be important to connect these roads directly to the neighborhood parks, which were sited in centralized locations of the project. The tradeoff was in a shorter, more direct connection versus a steeper one.
- 3 Only the southeast corner of the site does not align to the property lines as suggested in your comment letter, but if one studies the existing grades of the proposed alignment, they are very similar to the grades along the property line.
- 4 Parallel parking may be broken into segments to allow for driveways if the developer's proposal so chooses. Similarly, back-in parking will be up to the developer should they choose to propose it.
- 5 Pedestrian-scaled lighting is proposed. Umbrella canopy trees are a function to the tree root pit being large enough to support such a canopy. Native trees have been recommended that are not large enough to provide large canopies. Only the Kamani tree would be large enough but their seed pods would provide a nuisance for those parking under them.
- 6 In Section 2.3.1 of the EISPN regarding design principals, the subsection on multimodal connectivity (pages 2-7, 2-8) offers a full array of transportation options through the site including walking, biking, and bus transit connections.
- 7 Connections to the adjacent properties have been considered and coordinated by the County of Hawaii. During the master plan process, meetings took place in Kona to discuss future connections and those shown on the proposed master plan reflect these discussions..
- 8 Traffic calming devices other than speed bumps or ramps would need adoption by the County Public Works Department if such devices are proposed by developers.

Mr. Robert Ward
February 12, 2008
2006.70.0900 / 08P-056
Page 3

Again, thank you for your participation in the Chapter 343 comment and review process.

Very truly yours,

BELT COLLINS HAWAII LTD.

A handwritten signature in black ink, appearing to read 'Mary O'Leary', written over the printed name and title.

Mary O'Leary, AICP
Senior Planner

MO:lf

LINDA LINGLE
GOVERNOR OF HAWAII



RECEIVED

CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

2007 AUG 17 PM 2: 25

STATE OF HAWAII BELT COLLINS HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
EPO-07-153

August 13, 2007

Ms. Mary O'Leary, Senior Planner
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, Hawaii 96819

Dear Ms. O'Leary:

SUBJECT: Environmental Impact Statement Preparation Notice for Keahuolu Affordable Housing Project
Keahuolu, Island of Hawaii, Hawaii
TMK: (3) 7-4-008: 056 (portion)

Thank you for allowing us to review and comment on the project. The document was routed to the various branches of the Department of Health (DOH) Environmental Health Administration. We have the following Wastewater Branch, Safe Drinking Water Branch and General comments.

Wastewater Branch

Use of onsite wastewater systems is not allowed as the number of lots to be developed is greater than a 50. However, we do concur with the project connecting to the County's service system and wastewater being treated and disposed of at the Kealakehe Sewage Treatment Plant. We strongly encourage the developer to work with the County and utilize recycled water for irrigation and other non-potable water purposes such as parks, golf courses and other open spaces or landscaping areas.

All wastewater plans must meet Department's Rules, HAR Chapter 11-62, "Wastewater Systems." We do reserve the right to review the detailed wastewater plans for conformance to Applicable rules. If you have any questions, please contact the Planning & Design Section of the Wastewater Branch at 586-4294.

Safe Drinking Water Branch (SDWB)

1. The Department of Water Supply, County of Hawaii will not provide the potable water required for this project. Consequently, the HHFDC will need to drill new wells for water and obtain Department of Health (DOH) approval to use the raw water for potable water use. An Engineering Report which includes chemical analyses for contaminants in the water, is required as part of the process to obtain DOH approval to use the water for potable water service.

Ms. O'Leary
August 13, 2007
Page 2

2. The Safe Drinking Water Act as amended in 1996 requires all new public water systems which serves at least fifteen service connections used by year-round residents or regularly serves at least twenty-five year-round residents to demonstrate adequate technical, managerial, and financial capacity with respect to each primary drinking water regulation in effect, or likely to be in effect, on commencement of operations after October 1, 1999.
3. The DOH's SDWB is the primacy agency in Hawaii implementing the Safe Drinking Water Act regulations. Additional information on the Engineering Report submittal to use raw water for potable water service and information on technical, managerial and financial capacity for new public water systems are available at the SDWB office at 919 Ala Moana Blvd., Honolulu, HI 96814, or by calling (808) 586-4258.

If you have any questions, please contact Don Yasutake of the Safe Drinking Water Branch at 586-4258.

General

We strongly recommend that you review all of the Standard Comments on our website: www.state.hi.us/health/environmental/env-planning/landuse/landuse.html. Any comments specifically applicable to this project should be adhered to.

If there are any questions about these comments please contact Jiakai Liu with the Environmental Planning Office at 586-4346.

Sincerely,



KELVIN H. SUNADA, MANAGER
Environmental Planning Office

c: EPO
WWB
SDWB
EH-Hawaii



February 12, 2008
2006.70.0900 / 08P-057

Mr. Kelvin H. Sunada, Manager
Environmental Planning Office
Department of Health
State of Hawaii
P.O. Box 3378
Honolulu, HI 96801-3378

Dear Mr. Sunada:

**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided on August 13, 2007 for the above-referenced document. Our responses are provided in the order of your comments.

Wastewater Branch

1. The Draft Environmental Impact Statement (EIS) will contain a civil infrastructure study.

We note that your August 13, 2007 letter concurs with the project connecting to the County's service system and wastewater being treated and disposed of at the Kealakehe Sewage Treatment Plant.

2. We acknowledge your office's comment that all wastewater plans must conform to applicable provisions of Chapter 11-62 of the Hawaii Administrative Rules for the Department of Health, "Wastewater Systems." The design and construction of the proposed offsite sewer system and onsite sewer system within the roadway system will be required to meet County Standards for dedication to the County Department of Environmental Management.

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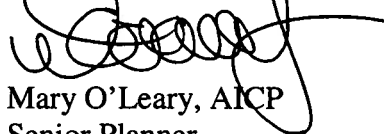
Safe Drinking Water Branch

4. The Hawaii Housing Finance and Development Corporation (HHFDC), County Department of Water Supply (DWS), and Department of Hawaiian Home Lands (DHHL) have been discussing water source, storage, and transmission requirements for the project. DHHL completed the *Villages of La`i`opua Water Master Plan*, which was approved by DWS and includes approximately half of the Keahuolu project site. Two wells have been identified for the Keahuolu project, which are included in the *Villages of La`i`opua Water Master Plan*. One of the wells, Keopu Well, State Well No. 3957-03 was drilled as Keopu-HFDC Exploratory Well No. 1 in August 2000. The design and construction of the proposed water system, including the source, storage, and transmission network will be required to meet County standards for dedication to the County DWS.
5. We acknowledge your office's comment that the Safe Drinking Water Act, as amended in 1996, requires all new public water systems that serves at least 15 service connections used by year-round residents, or regularly serves at least 25 year-round residents, to demonstrate adequate technical, managerial, and financial capacity with respect to each primary drinking water regulation in effect, or likely to be in effect on commencement of operation after October 1, 1999. The design and construction of the proposed water system, including the source, storage, and transmission network will be required to meet County standards for dedication to the County DWS.
6. We acknowledge your office's comment that additional information on the Engineering Report submittal regarding use of raw water for potable water service and other information on technical, managerial, and financial capacity for new public water systems are available at the Safe Drinking Water Branch offices.

Again, thank you for your participation in the Chapter 343 comment and review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Mary O'Leary, AICP
Senior Planner

MO:lf

LINDA LINGLE
GOVERNOR



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2007 AUG 17 PM 2:18

BARRY FUKUNAGA
DIRECTOR

Deputy Directors
MICHAEL D. FORMBY
FRANCIS PAUL KEENO
BRENNON T. MORIOKA
BRIAN H. SEKIGUCHI

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

BELT COLLINS HAWAII

IN REPLY REFER TO:

STP 8.2576

August 14, 2007

Ms. Mary O'Leary
Senior Planner
Belt Collins Hawaii, Ltd.
2153 North King Street, Suite 200
Honolulu, Hawaii 96819

Dear Ms. O'Leary:

Subject: Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
Hawaii Housing Finance & Development Corporation (HHFDC)
TMK: 7-4-008: por. 56

We have the following comments on the proposed subject project as described in the EIS Prep Notice:

1. The project will have a significant project impact as well as being a contributing factor to the cumulative impact on our highway facilities. We described this concern earlier in our letter STP 8.2475 dated May 7, 2007 (copy attached) to your firm. Our comments are still valid and would continue to be applicable for the EIS Prep Notice.
2. We understand a traffic impact analysis report (TIAR) is being done for the subject project. We look forward to reviewing the TIAR and the forthcoming draft environmental impact statement report, and will defer further comment until the documents are completed and submitted to us for review.
3. We wish to receive at least four (4) copies of the TIAR/Draft EIS report.

We appreciate the opportunity to provide comments.

Very truly yours,


BARRY FUKUNAGA
Director of Transportation

Attach.

c: Office of Environmental Quality Control
Office of Planning (DBEDT)

LINDA LINGLE
GOVERNOR



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

BARRY FUKUNAGA
INTERIM DIRECTOR

Deputy Directors
FRANCIS PAUL KEENO
BRENNON T. MORIOKA
BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

STP 8.2475

May 7, 2007

Ms. Susan A. Sakai
Vice President
Belt Collins Hawaii, Ltd.
2153 North King Street, Suite 200
Honolulu, Hawaii 96819-4554

Attention: Ms. Lynn Fukuhara

Dear Ms. Sakai:

Subject: Early Consultation, Environmental Impact Statement
Hawaii Housing Finance & Development Corporation (HHFDC)
Master Plan Affordable Housing Project, Keahuolu, Kailua-Kona

Thank you for your early consultation on the proposed subject development project. We have the following initial comments:

1. Both of the two alternatives presented will create a significant transportation impact particularly on our highway facilities by adding and generating additional vehicle trips. We will need to be an interested party because of the impact.
2. Your environmental assessment work should provide a development plan for the proposed project that is detailed and comprehensive with, but not limited to, a description of units and buildings to be built, construction phasing, drainage plans and infrastructure plans. Also a traffic impact analysis report (TIAR) should accompany and be matched to the development plan and the project's phasing to full build out. The TIAR needs to cover both project and regional impacts and the project and regional mitigation measures HHFDC will provide.
3. We will be especially interested in how the roadway and intersection impacts are addressed with the need to provide timely connectivity of the local roads surrounding and running through or adjacent to the development project to other parts of the greater Kailua-Kona community. Such connectivity is needed to avoid development projects only funneling onto and a reliance and dependence on the State highways as the sole principal route of travel in the area.

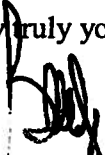
Ms. Susan A. Sakai
Page 2
May 7, 2007

STP 8.2475

4. When completed, at least four (4) copies of your draft environmental report should be provided to us for further review and comment by our departmental and divisional staff.

We appreciate the courtesy of your advance notification and for the opportunity to provide our initial comments.

Very truly yours,



BARRY FUKUNAGA
Interim Director of Transportation

DS:km



February 12, 2008
2006.70.0900 / 08P-058

Mr. Brennon Morioka, Interim Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, HI 96813-5097

Dear Mr. Morioka:

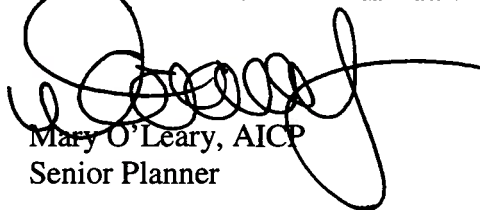
**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments your office provided on August 14, 2007 for the above-referenced document. A traffic impact analysis report for the proposed project will be included in the Draft Environmental Impact Statement (EIS). We will send the State Department of Transportation four (4) copies of the Draft EIS as requested.

Again, thank you for your participation in the Chapter 343 comment and review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Mary O'Leary, AICP
Senior Planner

MO:lf

Honolulu
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Thailand

Harry Kim
Mayor



RECEIVED Christopher J. Yuen
Director

2007 AUG 23 PM 1:37 **Brad Kurokawa, ASLA**
LEED® AP
Deputy Director

County of Hawaii BELT COLLINS HAWAII
PLANNING DEPARTMENT

101 Pauahi Street, Suite 3 • Hilo, Hawaii 96720-4224
(808) 961-8288 • FAX (808) 961-8742

August 21, 2007

Ms. Mary O'Leary
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu HI 96819

Dear Ms. O'Leary:

Subject: EIS Preparation Notice for Keahuolu Affordable Housing Project
Land Owner: State of Hawaii
Applicant: Hawaii Housing Finance & Development Corporation (HHFDC)
Tax Map Key: 7-4-21:20, Keahuolu, North Kona, Hawaii

In response to the above referenced document submitted for our review, we have the following to offer:

1. Final subdivision approval for SUB 06-000289 was granted on September 7, 2006. The subject parcel is now identified as TMK: 7-4-21:20.
2. In reference to the parcel's Land Use Designation of Agricultural by the State and Agricultural (A-5a) by the County, an area in the northeast corner of the parcel is designated Urban by the State Land Use Commission and zoned Single-Family Residential (RS-15) by the County.
3. General Plan:
 - a. The goals, policies, standards and courses of action of the General Plan and the applicability to the proposed project should be discussed in the Draft Environmental Impact Statement.
 - b. According to the General Plan's Land Use Pattern Allocation Guide Map, an area in the northeast corner of the parcel and an area along the southeast portion of the parcel are designated Low Density Urban. Low Density Urban is categorized as "Residential, with ancillary community and public uses, and neighborhood and convenience-type commercial uses; overall residential density may be up to six units per acre".

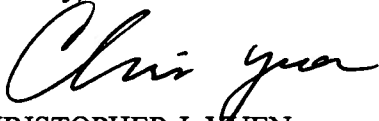
Ms. Mary O'Leary
Belt Collins Hawaii Ltd.
Page 2
August 21, 2007

- c. The Urban Expansion area *"Allows for a mix of high density, medium density, low density, industrial, industrial-commercial and/or open designations in areas where new settlements may be desirable, but where the specific settlement pattern and mix of uses have not yet been determined"*.
4. Permits/Approvals Required:
 - a. Subdivision: Creation of lots with split-zoning should be avoided.
 - b. A Change of Zone to allow for specific commercial and residential type uses would require a Planning Commission hearing and County Council approval.
5. The Kona Community Development Plan (KCDP) is still in progress and draft sections are currently being reviewed. The KCDP must be adopted by the County Council as an ordinance to give it the force of law.
6. Roadway Improvements – Road inter-connectivity with the future DHHL-Keahuolu Housing and QLT Phase 2A and 2B projects should be discussed.

Thank you for allowing us the opportunity to comment on the EIS Preparation Notice Submittal for OEQC filing.

If you have questions, please contact Esther Imamura of this office at 961-8288, extension 257.

Sincerely,



CHRISTOPHER J. YUEN
Planning Director

ETI:cd

P:\wpwin60\ETI\EA\draftPre-consul\O'Leary Keahuolu AH 7-4-8-56 07.rtf

xc: Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu HI 96813

Planning Department, Kona



February 12, 2008
2006.70.0900 / 08P-059

Mr. Christopher J. Yuen, Director
Planning Department
County of Hawaii
101 Pauahi Street, Suite 3
Hilo, HI 96720-4224

Dear Mr. Yuen:

**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided on August 21, 2007 for the above-referenced document. Our responses are provided in the order of your comments.

1. The Draft Environmental Impact Statement (EIS) will refer to the project property as TMK (3) 7-4-21:20 per the final subdivision approval for SUB 06-000289 granted on September 7, 2006.
2. State Land Use Classification. Please find enclosed a figure that illustrates the existing State Land Use designations for the subject property. Based on the enclosed Land Use Commission Boundary Interpretation Map 90-26, a small portion – 0.198 acres – of the property is classified as State Urban while the remainder – 271.865 acres – is classified as State Agriculture.

Zoning. Please find enclosed a figure that illustrates the existing Hawaii County zoning designations for the subject property, which is A-5a. The information in the figure is based on geographic information system data from the Hawaii County Data Systems Department.
3. General Plan.
 - a. The General Plan for the County of Hawaii and applicability to the proposed project will be addressed in the Draft EIS.

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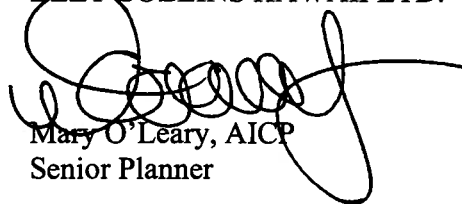
Mr. Christopher J. Yuen
February 12, 2008
2006.70.0900 / 08P-059
Page 2

- b. Please find enclosed a figure that illustrates the General Plan's Land Use Pattern Allocation Guide designations for the subject property, which is primarily Urban Expansion and a portion is Low Density Urban.
4. Permits/Approvals Required. We have noted your comments regarding the permits and approvals required from the County of Hawaii for the proposed project. The Draft EIS will identify the permits and approvals required for the proposed project, including a Change of Zone or exemptions from zoning.
5. Kona Community Development Plan. We have noted your comments regarding the Kona Community Development Plan (KCDP) and that it is still in progress and not yet adopted by the County Council.
6. Roadway Improvements. The Draft EIS will contain a traffic impact analysis report (TIAR). Interconnectivity with the Department of Hawaiian Home Lands, Keahuolu Housing and Queen Liliuokalani Trust projects will be addressed in the Draft EIS and the TIAR.

Again, thank you for your participation in the Chapter 343 comment and review process. A copy of the Draft EIS will be sent to your office.

Very truly yours,

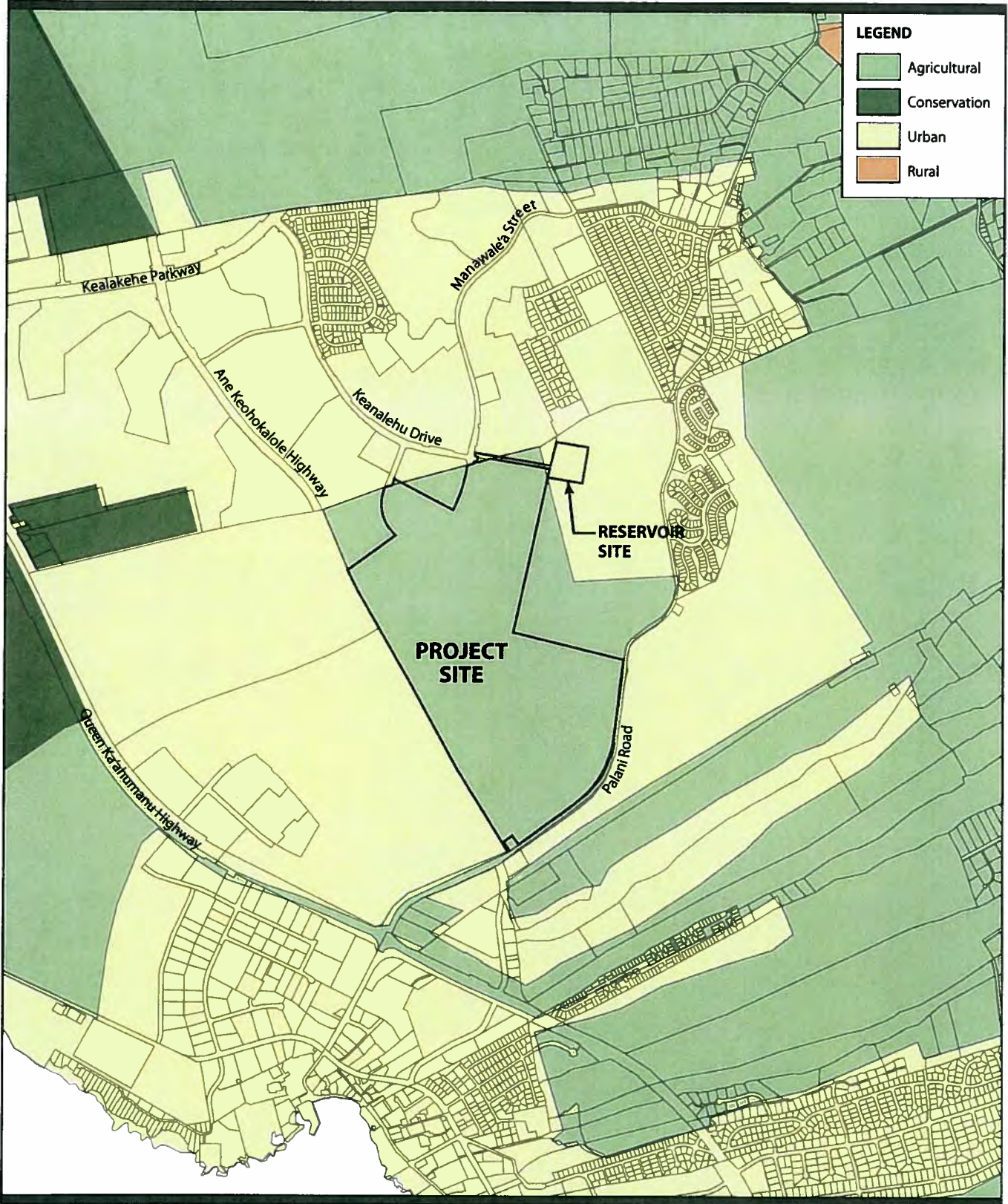
BELT COLLINS HAWAII LTD.



Mary O'Leary, AICP
Senior Planner

MO:lf

Enclosures



STATE LAND USE DISTRICTS

HHFDC Keahuolu Affordable Housing Project
February 2008

FILE PLAN

**PRELIMINARY MAP
KEAHUOLU SUBDIVISION**

LAND SITUATED ON THE NORTH-EASTERN
SIDE OF QUEEN KAAMUANU HIGHWAY AND ON
THE NORTH-WESTERN SIDE OF PALANI ROAD

AT KEAHUOLU, NORTH KONA
ISLAND OF HAWAII, HAWAII

Being a portion of Royal Patent 88651
dated 1850, and the same as shown on
Plans 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

**SUBDIVIDED INTO LOTS 1 AND 2
AREA = 995.498 Acres**

Subject, however, to Easement 'B' for pipeline purposes as recorded in the Bureau of Conveyances in Volume 2001, Page 314

**OWNER: Queen Liliuokalani Trust Estate
ADDRESS: c/o First Hawaiian Bank Trust Division
P O Box 36200
Honolulu, Hawaii 96801**

This map was prepared by and used the direct supervision of one
unaffiliated with the State of Hawaii, and was prepared by the
State of Hawaii, Department of Land and Natural Resources,
Division of Land Use Management, Honolulu, Hawaii.

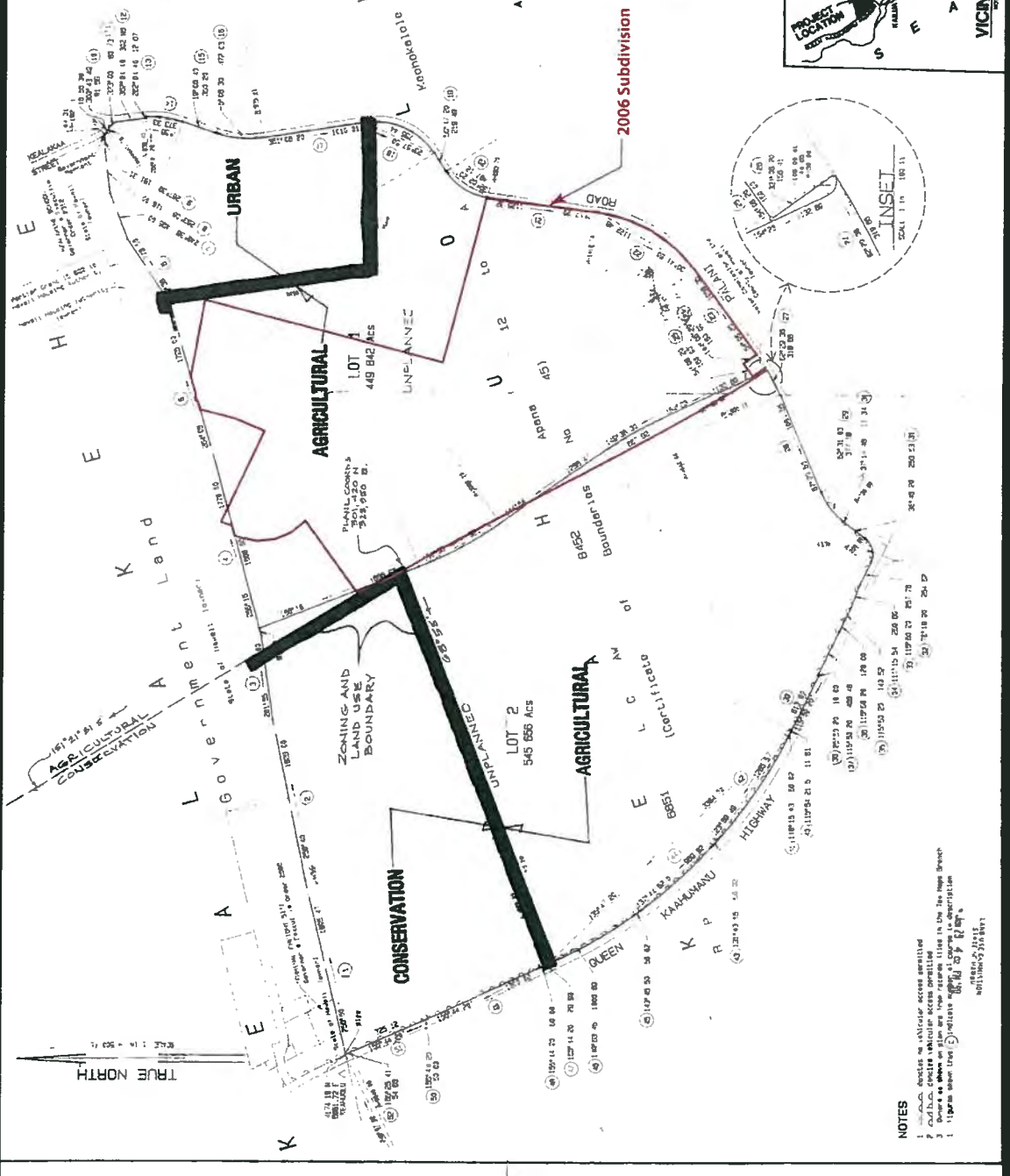
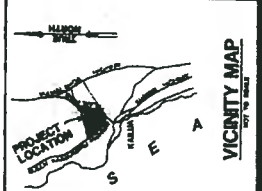


BELT COLLINS & ASSOCIATES
Professional Engineers
1111 Kalia Road, Suite 1100
Honolulu, Hawaii 96813
Tel: 808-955-1111
Fax: 808-955-1112

FILE COPY

The boundary shown on this map was established by survey conducted by the State of Hawaii, Department of Land and Natural Resources, Division of Land Use Management, Honolulu, Hawaii, on July 1, 1990 and is shown on the attached map.

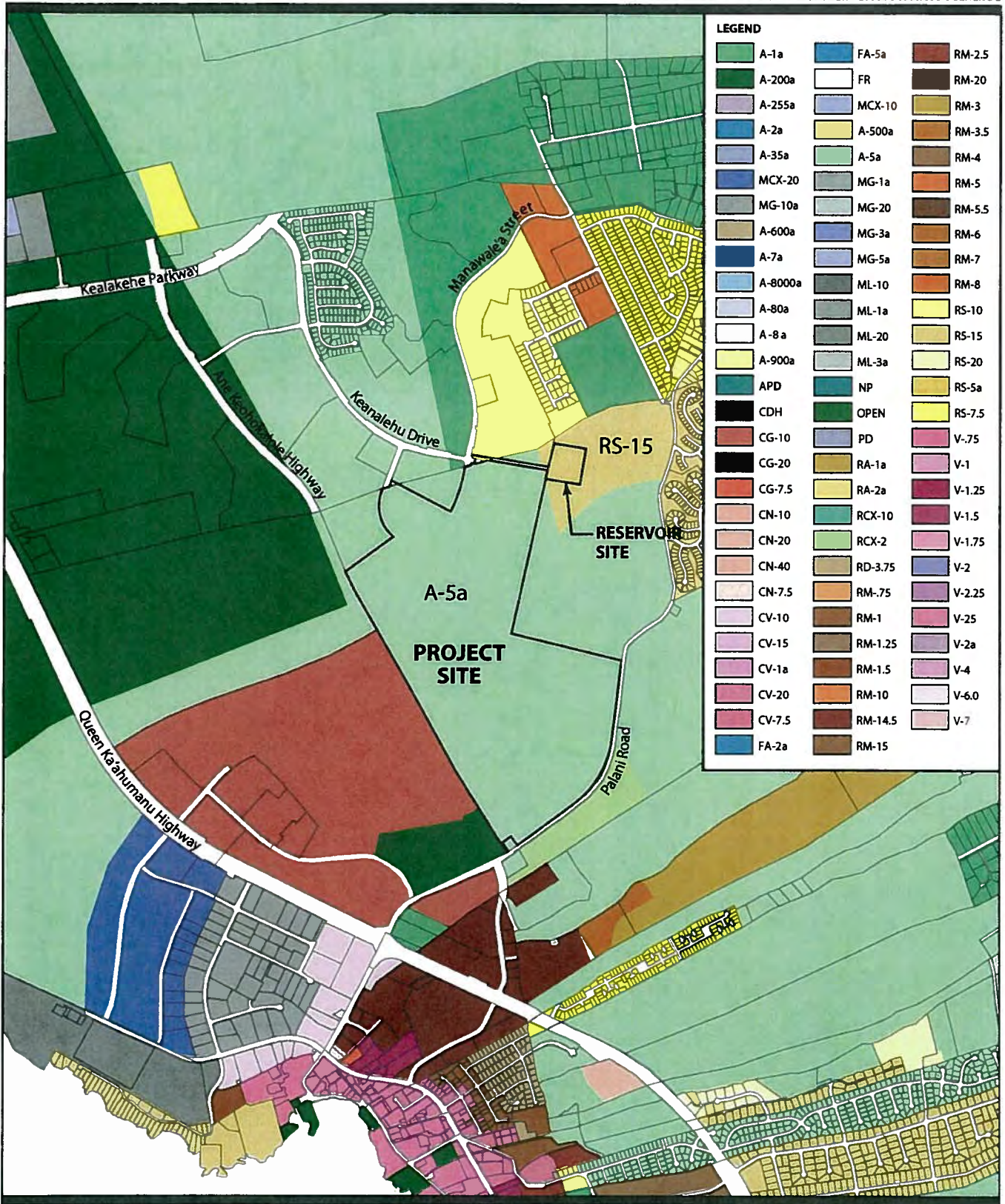
**FILE COPY
Boundary
Interpretation No. 90-26**



- NOTES**
1. All areas shown on this map are unimproved.
 2. All areas shown on this map are unimproved.
 3. All areas shown on this map are unimproved.
 4. All areas shown on this map are unimproved.
 5. All areas shown on this map are unimproved.
 6. All areas shown on this map are unimproved.
 7. All areas shown on this map are unimproved.
 8. All areas shown on this map are unimproved.
 9. All areas shown on this map are unimproved.
 10. All areas shown on this map are unimproved.



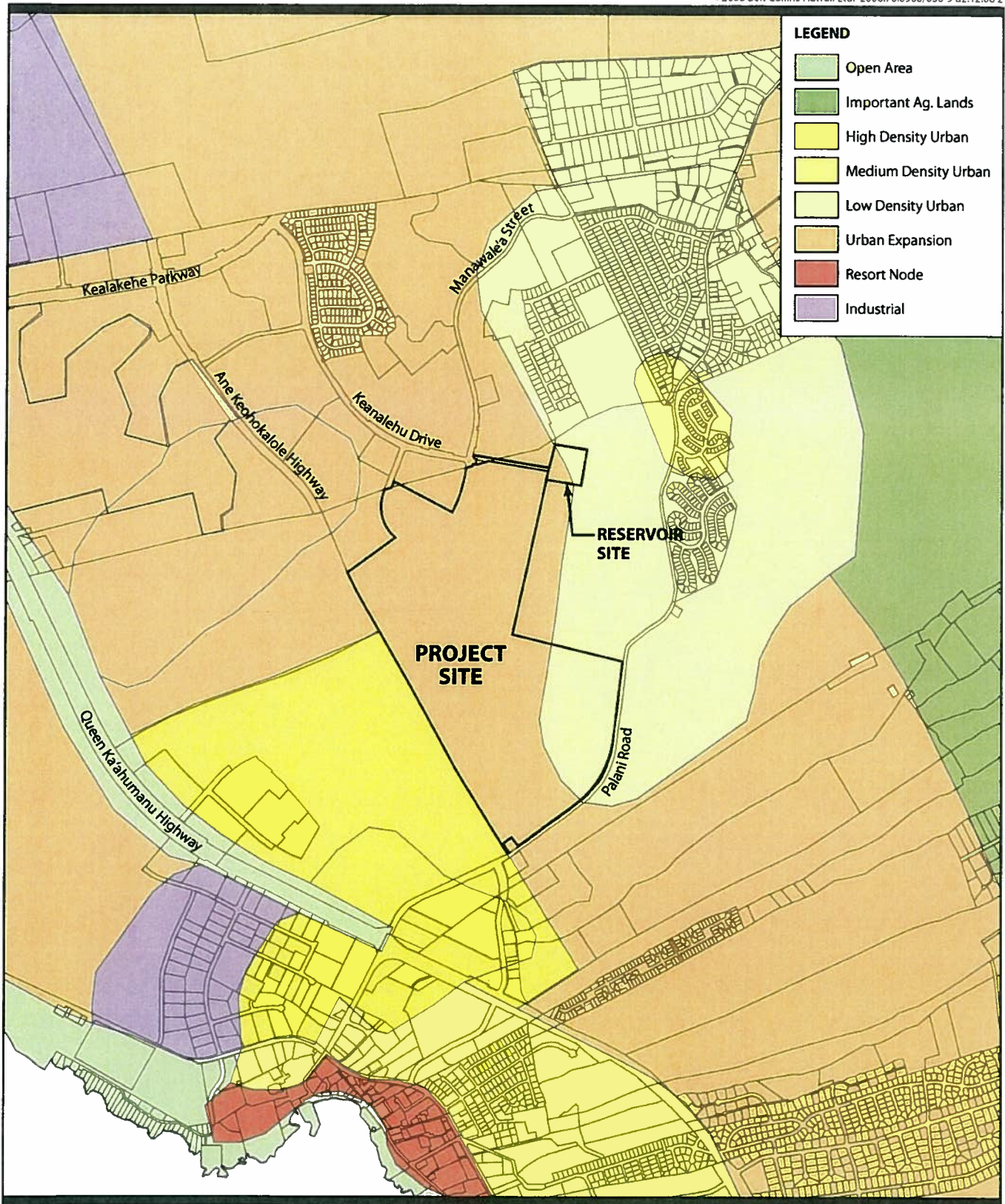
**LAND USE COMMISSION
BOUNDARY INTERPRETATION MAP 90-26**
HFDC Keahuolu Affordable Housing Project
February 2008



0 1000 2000
SCALE IN FEET

COUNTY ZONING

HHFDC Keahuolu Affordable Housing Project
February 2008



LEGEND	
	Open Area
	Important Ag. Lands
	High Density Urban
	Medium Density Urban
	Low Density Urban
	Urban Expansion
	Resort Node
	Industrial



GENERAL PLAN'S LAND USE PATTERN ALLOCATION GUIDE

HHFDC Kahuolu Affordable Housing Project
February 2008



United States Department of the Interior **RECEIVED**

NATIONAL PARK SERVICE
Kaloko-Honokohau National Historical Park
73-4786 Kanalani St., Suite 14
Kailua-Kona, HI 96740

2007 AUG 24 PM 3:32

BELT COLLINS HAWAII

IN REPLY REFER TO:
L7621

August 21, 2007

VIA FACSIMILE and MAIL

Ms. Mary O'Leary, Senior Planner
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, HI 96819

RE: National Park Service Review of the EIS Preparation Notice,
Keahuolu Affordable Housing Project, Keahuolu, Island of Hawaii.

Dear Ms. O'Leary:

Thank you for providing the National Park Service with the opportunity to review and comment on the EIS Preparation Notice for the Keahuolu Affordable Housing Project at Keahuolu, Hawaii proposed for development by the Hawaii Housing Finance & Development Corporation (HHFDC). We have reviewed the document and would like to provide the following comments, which are focused on water resources and the potential cumulative impacts of the Keahuolu Affordable Housing Project in the context of the rapidly urbanizing landscape identified in the project area. We recently commented on the Environmental Assessment for the Villiages at Lai'i'opua, which neighbors the Keahuolu project area. Many of our concerns regarding these two projects are the same.

Kaloko-Honokohau National Historical Park was authorized in 1978 by Congress to preserve, interpret, and perpetuate traditional native Hawaiian activities and culture (Public Law 95-625). The authorization was based on a study and report by a congressional advisory commission comprised of native Hawaiians. The study recommended that the site that is the Honokohau Settlement National Historical Landmark (designated in 1962) and its adjacent waters be preserved for the benefit of the Hawaiian people and the nation as part of the national park system. Water quality and quantity are vital to the integrity of this mission. The National Park contains two large (11 and 15-acre) Hawaiian fishponds with large associated wetlands, more than 140 known anchialine pools, and 596 acres of marine waters. Each of these water bodies are significant cultural resources and also provide habitat for nine federally protected and candidate endangered species. The National Park water resources are fed by, and in the case of the anchialine pools and 'Aimakapa Fishpond, are solely dependent upon, ground water inputs. The anchialine pools support three known candidate endangered species. 'Aimakapa Fishpond and wetland is a significant foraging and nesting habitat for the endangered Hawaiian stilt and the Hawaiian coot, and is an important habitat for migratory waterfowl.

The National Park is located within two miles *makai* of the proposed project as identified in the preparation notice. The project site is upslope and slightly to the east of the Honokohau Harbor.

Water System

The Environmental Impact Statement Preparation Notice (EIS-PN) Section 2.6.3 states that “[n]o water is available from the County for new developments in the Kona area” and that “[n]ew source wells will be required to support the proposed project.” However, an existing well is listed (SW #4067-04) as a source. It is unclear in the EIS-PN exactly what new and existing well sources are required. The NPS requests that the Draft EIS explain in detail which wells will provide project water, how much water from each well will be required for Concept Plans A, B and C, and analyze the impacts, direct and cumulative, of water withdrawal to ground-water dependent ecosystems at the coast. Water system criteria to determine water consumption rates for various land uses and densities, demand factors, fire flow requirements, pipeline and reservoir sizing and well yields that are identified in the EIS-PN should be further explained in the EIS as stated.

The EIS-PN estimates between approximately 0.7 and 1.2 million gallons per day of water is required for the Concept Plans. Although this withdrawal amount may be small relative to the recharge rate of the aquifer, it must be noted that this project is only one of a multitude of proposed housing and urban developments in the aquifer that will require many millions of gallons a day of potable water. The source wells for existing and future local development withdraw from the same aquifer as the ground water that discharges through the National Park, and many are located, or are sited to be drilled, inland of the Park. The NPS is highly concerned about the impacts of water withdrawal to the cultural and natural resources in the Park that are dependent upon ground-water flow. The Draft EIS should consider impacts of water withdrawal in the context of other withdrawals, existing and planned, from the aquifer. Ultimately, the cumulative impact to the aquifer will be quite significant.

Ground water within the National Park is considered a cultural resource; essential to the ancient Hawaiian fishponds and the pools that define the Park and are central to the National Park’s planned Cultural Live-in Center (NPS 1994, General Management Plan/EIS). The NPS requests that the EIS under preparation evaluate the potential environmental and cultural impacts of water withdrawal on cultural activities and practices, threatened and endangered species, wetlands, fishponds, anchialine pools, and coastal waters in the National Park.

The National Park Service has reason to be concerned. In 1999, the U.S. Geological Survey studied ground water in the National Park and modeled the effects of ground-water withdrawals on the amount of ground-water flow through the Park (Oki et al., 1999). Oki et al. (1999) concluded that the major source of fresh ground water is from subsurface flow originating from inland areas to the east of the National Park and that “withdrawals from wells directly up-gradient of the Park had the greatest effect on the model-calculated freshwater coastal discharge within the Park.” Simulated withdrawals from all existing and proposed wells permitted prior to March 1998 (including the three source wells for this project) showed that an increase in withdrawal rates from a 1978 baseline rate to 56.8 Mgd, caused a 47% reduction in ground water discharging at the Park coastline and a water-level decline of about 0.6 ft within the Park (Oki et al., 1999). Salinity changes to National Park ground water was not included as part of the model, however salinity would certainly increase, and potentially affect rare endemic species and ecosystems, if the freshwater input into the National Park were reduced by almost half.

The NPS requests that the HHFDC join a workgroup being established to look at the ground-water situation on the Kona coast. The agencies and developers need to work together to reach solutions for the ongoing groundwater supply issues.

The NPS also requests that the HHFDC look for ways to reduce water usage in the new development. Some proven methods for reducing water usage in new housing developments include planting drought resistant native landscaping, installing low flow toilets and showerheads, installing waterless urinals in public restrooms, and providing information to new residents concerning the importance of water conservation. Water conservation will save the HHFDC, and the residents, operational costs in the long term. The NPS requests that the HHFDC implement these and similar measures to reduce the water usage to minimum amount needed for the community.

Surface Water Drainage, Non-point Source Pollution

As the 2007 EIS-PN accurately points out (Sections 3.2, 3.3), the prevailing geologic condition of the proposed project site is highly permeable prehistoric lava with few accumulated soils. Rain and runoff water can potentially carry pollutants quickly to ground water, on to coastal anchialine pools, and into the nearshore waters. Kona has no streams or typical surface waters other than anchialine pools, which are essentially exposed ground water. Therefore, ground-water flow may be considered similar to an underground stream, that is, a conduit for pollutants to surface waters at the coast. The EIS-PN does not describe that the Draft EIS will assess impacts from polluted surface-runoff in the project's developed areas, roadways, houses, commercial and industrial areas etc. to ground water and to anchialine pools, wetlands, fishponds and the marine waters down slope in the coastal areas adjacent to the National Park.

Surface water runoff is a significant nationwide problem for ground-water pollution. The consequences of non-point source pollution include increased risk of disease from water recreation, algae blooms, fish kills, destroyed aquatic habitats, and turbid waters. Upslope development therefore poses a significant threat to West Hawaii coastal resources, including the National Park's resources. The Draft EIS should acknowledge that roadways and other impermeable surfaces are exposed to and can introduce petroleum products, metals, pesticides, nutrients, and other pollutants to ground water. Mitigation measures should be proposed and discussed in the Draft EIS to protect coastal resources and water quality.

In 2001 the National Park Service intervened in a petition by TSA Corporation for a land-use district boundary amendment before the state Land Use Commission (LUC). The NPS intervened not to halt development, but rather to request protective conditions be placed on the development to protect water resources in the National Park from non-point source pollution. The LUC recognized the potential adverse impacts of upslope development and the legal and constitutional obligation to protect and preserve the resources of the Park.

The LUC expressly determined that:

[N]ative Hawaiian rights and natural and cultural resources would be damaged or destroyed by the pollution of groundwater that reaches the National Park from surrounding areas, including [TSA]'s proposed development at the Kaloko Industrial

Park. Appropriate mitigation measures are, therefore, required under the Hawaii Constitution . . . in order to approve reclassification of the project area. (LUC 2002, Docket A00-732 Findings of Fact Conclusions of Law Decision and Order; Conclusion of Law ¶ 7)

Following the 2002 Decision and Order of the LUC on Docket A00-732, the neighboring commercial/industrial developers with petitions before the LUC, (Lanihau Partners and McClean Honokohau Properties), came to agreement with the National Park Service on protective conditions to be put in place on redistricting by the LUC.

To properly mitigate potential impacts to ground water, coastal waters and National Park resources from *mauka* project developments, the HHFDC should adopt those LUC conditions concerning protection of water resources (storm and surface water runoff, pollution prevention, ground water quality monitoring) for the entire Planned Community.

Project roadway and parking-lot drainage wells should be made to filter petrochemical pollutants by including oil/water separators or similar technology in the drainage basin. Such filters should be installed as mitigation because the design specifications of drainage wells in compliance with the Hawaii County Public Works and State Department of Health standards do not inherently incorporate any structure or other design feature to remove petroleum, oil, or any contaminants contained in runoff.

Currently the County Codes for drainage wells currently do not address protection of significant environmental resources, but rather solely consider flood control and volume of runoff. (2002 LUC FF ¶¶418-421). There is no State law or County code currently in place to ensure that pollutants carried with surface runoff below the UIC line do not get into the environment through groundwater. In 2002, the Hawaii County Council also recognized the need to address non-point source pollution and applied the following condition to Ordinance No. 02 114 amending the County Zoning Code for the TSA project:

In order to address and mitigate potential impacts from non-point source pollutants, the applicant shall participate with the County of Hawaii in a pilot storm drain program for roadways within the Kaloko-Honokohau region. This pilot program may potentially include other developments within the County and apply to all other government and private developments. . . . The drainage system within road rights-of-way shall include storm drain filtration devices...

(2002 County of Hawaii Ordinance No. 02 114, Section 2, Condition F)

In consideration of the above, the National Park Service requests that the HHFDC plan to install pollution filtration devices as mitigation to protect water resources. In addition, the NPS asks that the HHFDC provide the new residents with information about controlling non-point source pollution including vehicle maintenance and proper disposal of vehicle fluids, the impacts of washing cars on the street, and storm-drain stenciling.

The NPS is pleased to see that the design concepts for the community contain considerable open space and parks. Enforceable controls on approved chemicals and uses by property owners and maintenance crews on yards and park common areas should be proposed as mitigation to protect ground water. Again, please assist the new homeowners in understanding the potential impacts of

fertilizers and pesticides on the environment and the Park. The NPS asks that the HHFDC or community maintenance crews for the neighborhood parks and open spaces avoid or minimize the use of fertilizers and pesticides and set an example by using alternative methods of controlling pests and weeds.

Wastewater and Solid Waste

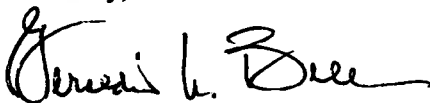
Section 4.5.1 acknowledges that there is a solid waste component that must be handled by the infrastructure and utility systems. To address the issues of wastewater, the Draft EIS should indicate that the project has space reserved (431,360 gallons per day) at the Kealakehe Wastewater Treatment Plant, and details should be provided on how the HHFDC will resolve the issue of additional capacity needed. A recent article in West Hawaii Today suggests the plant maybe near maximum capacity due to unforeseen circumstances (WHT May 7, 2007). Full explanation of the current situation and capacity of the WWT for the expected effluent of all Concept Plans should be included.

Contextual Issues, Cumulative Impacts

Contextual issues and cumulative impacts are very important and should be addressed in the Draft EIS. The majority of properties and developments around the project have environmental review documents, including the EIS for the National Park. These documents should be consulted and the cumulative impacts of the HHFDC project in the context of these proposed or approved developments (e.g., airport expansion, Air Force military training routes and the short austere air field, highway expansion, Queen Liliokalani Trust, Kona Kai Ola, The Shores at Kohanaiki, O`oma Beachside Village, West Hawaii Business Park, Kaloko Phases III & IV, Kaloko Heights, and others) should be analyzed with regard to the cultural and natural resources, visitors, and cultural practitioners in the area. Cumulative and direct impacts that will affect Park visitors and those engaged in traditional and cultural practices, particularly traffic, as well as noise, air pollution, light pollution, mauka views, and water resources must be considered.

I appreciate the opportunity to provide comments and request that your office add our park to the mailing list in order to receive future review notification in a timely manner. I can be reached at the above address; by phone at 808-329-6881 ext. 201; or by email at Geraldine_Bell@nps.gov

Sincerely,



Geraldine K. Bell
Superintendent

cc: Office of Environmental Quality Control
County of Hawaii Planning Department
County of Hawaii Department of Water Supply
Commission on Water Resources Management
NPS Pacific West Regional Office
Hawaii Housing Finance & Development Corporation



February 12, 2008
2006.70.0900 / 08P-060

Ms. Geraldine K. Bell, Superintendent
United States Department of the Interior
National Park Service, Kaloko-Honokahau National Historical Park
73-4786 Kanalani Street, #14
Kailua-Kona, Hawaii 96740

Dear Ms. Bell:

**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Chapter 343 Hawaii Revised Statutes public and agency review process. We are writing in response to the comments you provided on August 21, 2007 for the above document.

The Hawaii Housing Finance & Development Corporation has undertaken a Request for Proposals process for the Keahuolu Affordable Housing project. A copy of the National Park Service's August 21, 2007 letter was included in the HHFDC's RFP materials in order to inform the prospective developers of the issues raised in your August 21, 2007.

At the time of this writing, the Keahuolu Affordable Housing project is in the conceptual planning stage. The project's Draft EIS addresses issues raised in your letter to the extent such details are available. A civil infrastructure study for the Keahuolu Affordable Housing project will be in the Draft EIS. Along with other topics, the civil infrastructure study will address the wells that are proposed to support the Keahuolu Affordable Housing project, the related water supply and storage system, and discuss storm water runoff and pollution prevention measures

The developer of the potable water wells required for the project will be obligated to complete a rigorous environmental review process for the development of the wells into production wells according to the Office of Environmental Quality Control's *Environmental Guidebook* and its "Guidelines for Assessing Water Well Development Projects".

We acknowledge your comments regarding informing new residents about controlling non-point source pollution, proposing enforceable controls on chemical used by property owners and maintenance crews, and to avoid or minimize the use of fertilizers and pesticides. The developer of the Keahuolu Affordable Housing project will be informed of these issues raised in your letter. As the project is still in the conceptual planning stages, these details will be addressed at a future stage.

A representative from the Hawaii Housing Development Corporation will attend the February 27, 2008 meeting to discuss the formation of a Kona Ground Water Working Group.

Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200 ■ Honolulu, Hawaii 96819-4554 USA
T/808 521 5361 ■ F/808 538 7819 ■ honolulu@beltcollins.com ■ www.beltcollins.com

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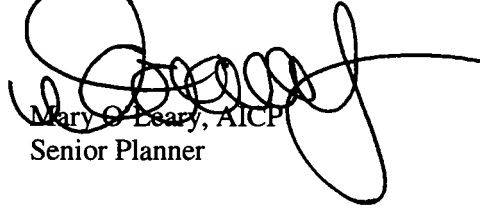
Honolulu
Guam
Hong Kong
Philippines
Seattle
Singapore
Thailand

Ms. Geraldine K. Bell
February 12, 2008
2006.70.0900 / 08P-060
Page 2

Again, thank you for your participation in the Chapter 343 comment and review process.

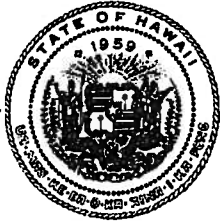
Very truly yours,

BELT COLLINS HAWAII LTD.



Mary O. Leary, AICP
Senior Planner

MO:lf



**DEPARTMENT OF BUSINESS, RECEIVED
ECONOMIC DEVELOPMENT & TOURISM**

LINDA LINGLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
MARK K. ANDERSON
DEPUTY DIRECTOR

STRATEGIC INDUSTRIES DIVISION
235 South Beretania Street, Leiopapa A Kamehameha Bldg., 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

2007 AUG 22 PM 2:07
Telephone: (808) 587-3807
Fax: (808) 586-2536
Web site: www.hawaii.gov/dbedt

BELT COLLINS HAWAII

August 10, 2007

Ms. Mary O'Leary, Senior Planner
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, Hawaii 96819

Dear Ms. O'Leary:

Re: Environmental Impact Statement Preparation Notice (EISPN)
Keahuolo Affordable Housing Project, Island of Hawaii
Tax Map Key: (3) 7-4-008: por.56

Thank you for the opportunity to review the EISPN for Keahuolo Affordable Housing Project, Island of Hawaii, which is a master-planned community of 1,020 to 2,330 affordable dwelling units (single-family and multi-family residences); mixed-used development, and civic open space at a town center; commercial/retail space; and other uses.

We would like to call your attention to: (1) State energy conservation goals; and, (2) energy and resource efficiency and renewable energy and resource development.

- 1. State energy conservation goals.** Project buildings, activities, and site grounds should be designed and/or retrofit with energy saving considerations. The mandate for such consideration is found in Chapter 344, HRS ("State Environmental Policy") and Chapter 226 ("Hawaii State Planning Act"). In particular, we would like to call to your attention HRS 226 18(c) (4) which includes a State objective of promoting all cost-effective energy conservation through adoption of energy-efficient practices and technologies.
- 2. Energy and resource efficiency and renewable energy and resource development.** We do not note any proposed covenants to enhance the sustainability of the development, including green architecture, photovoltaic energy for appliances, shading of exterior lighting, and water conservation measures. We do note that the development will be based on smart growth principles.

Belt Collins
August 10, 2007
Page 2

We encourage the parties to this development to make a further commitment to energy and resource efficiency and include a requirement in the Conditions, Covenants, and Restrictions for this affordable housing development that, at a minimum, requires R19 insulation in roofs and R11 insulation in exterior walls of dwellings, solar water heating, efficient lighting, and EnergyStar appliances.

Our website (<http://www.hawaii.gov/dbedt/info/energy/efficiency/>) provides detailed information on guidelines, directives and statutes, as well as studies and reports on aspects of energy efficiency. Please also do not hesitate to contact Carilyn Shon, Energy Efficiency Branch Manager, at telephone number 587-3810, for additional information on green buildings, energy efficiency, and renewable energy resources.

Sincerely,



Maurice H. Kaya
Chief Technology Officer

c: OEQC



February 12, 2008
2006.70.0900 / 08P-061

Mr. Maurice H. Kaya
Chief Technology Officer
Strategic Industries Division
Dept. of Business, Economic Development & Tourism
State of Hawaii
P.O. Box 2359
Honolulu, HI 96804

Dear Mr. Kaya:

**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

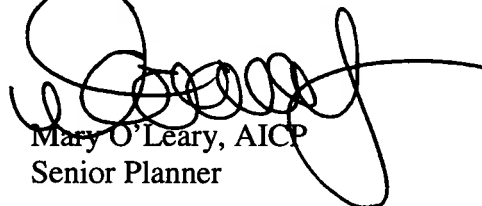
Thank you for participating in the Hawaii Revised Statutes (HRS), Chapter 343, public and agency review process. We are writing in response to the comments you provided on August 10, 2007 for the above-referenced document.

The Draft EIS will contain a discussion of the project's compliance with Chapter 344 and Chapter 226. The Hawaii Housing Finance and Development Corporation has undertaken a Request for Proposal process for the purpose of soliciting proposals from developers interested in developing the Keahuolu Affordable Housing project. Your letter and comments regarding State energy conservation goals and energy, and resource efficiency and renewable energy and resource development will be conveyed to the selected developer.

Again, thank you for your participation in the Chapter 343 comment and review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Mary O'Leary, AICP
Senior Planner

MO:lf

Honolulu
Guam
Hong Kong
Philippines
Seattle
Singapore
Thailand



RECEIVED

DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII 1: 32
345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAII 96720
TELEPHONE (808) 961-8050 • FAX (808) 961-8657
BELT COLLINS HAWAII

August 22, 2007

Ms. Mary O'Leary
Belt Collins Hawaii, Ltd.
2153 North King Street, Suite 200
Honolulu, HI 96819

**ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE
KEAHUOLU AFFORDABLE HOUSING PROJECT
TAX MAP KEY 7-4-008:056 (PORTION)**

We have reviewed the subject Environmental Impact Statement Preparation Notice (EISPN) and have the following comments.

The Department's existing water system facilities are unable to support the proposed development at this time. As stated in the subject EISPN, the Department's existing water system lacks adequate source and transmission capacity to provide the anticipated amount of water needed. In addition, the developer will also be required to construct the necessary storage facilities to provide for the estimated maximum daily water usage for the development.

Further, it should be noted that the developer will also be required to show the Department that they have obtained all necessary rights and permits to develop the proposed wells or otherwise develop their own new wells.

Should there be any questions, you may contact Mr. Finn McCall of our Water Resources and Planning Branch at 961-8070, extension 255.

Sincerely yours,

Milton D. Pavao, P.E.
Manager

FM:dfg

copy – Office of Environmental Quality Control
Hawaii Housing Finance and Development Corporation

... Water brings progress...



February 12, 2008
2006.70.0900 / 08P-062

Mr. Milton D. Pavao, P.E., Manager
Department of Water Supply
County of Hawaii
345 Kekuanaoa Street, Suite 20
Hilo, HI 96720

Dear Mr. Pavao:

**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided on August 22, 2007 for the above-referenced document. The Draft Environmental Impact Statement will contain a civil infrastructure study which will identify the proposed potable water source, storage, and transmission and distribution system required to support the proposed project.

Again, thank you for your participation in the Chapter 343 comment and review process.

Very truly yours,

BELT COLLINS HAWAII LTD.

A handwritten signature in black ink, appearing to read "Mary O'Leary".

Mary O'Leary, AICP
Senior Planner

MO:lf

Honolulu
Guam
Hong Kong
Philippines
Seattle
Singapore
Thailand

LINDA LINGLE
GOVERNOR OF HAWAII



LAURA H. THIELEN
INTERNAL CHAIRPERSON
COMMISSION ON WATER RESOURCE MANAGEMENT
RECEIVED

7/07 SEP -5 PM 2: 31

BELT COLLINS HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

August 31, 2007

Belt Collins Hawaii Ltd.
2153 North King Street Suite 200
Honolulu, Hawaii 96819

Attention: ~~Ms.~~ Mary O'Leary

Gentlemen:

Subject: Environmental Impact Statement Preparation Notice, Keahuolu Affordable Housing Project, Keahuolu, Hawaii, Tax Map Key: (3) 7-4-8:portion 56

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comment.

Other than the comments from Commission on Water Resource Management, Land Division – Hawaii District, the Department of Land and Natural Resources has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Russell Y. Tsuji".

Russell Y. Tsuji
Administrator



February 12, 2008
2006.70.0900 / 08P-063

Mr. Russell Y. Tsuji, Administrator
Land Division
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, HI 96809

Dear Mr. Tsuji:

**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

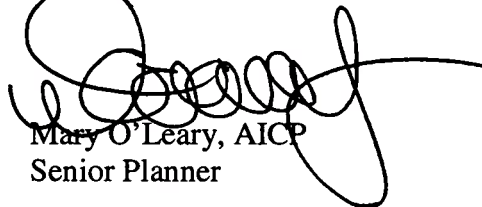
Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to your August 31, 2007 letter regarding the above-referenced document.

We note that the Department of Land and Natural Resources (DLNR) Land Division in Honolulu distributed the EISPN to DLNR divisions for their review and comment. Two comment letters were received, one from the Commission on Water Resource Management and one from the Land Division – Hawaii District.

We have copied your office on our responses to those divisions. Again, thank you for your participation in the Chapter 343 comment and review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Mary O'Leary, AICP
Senior Planner

MO:lf

Honolulu
Guam
Hong Kong
Philippines
Seattle
Singapore
Thailand

LINDA LINGLE
GOVERNOR OF HAWAII



ALLAN A. SMITH
INTERIM CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

July 25, 2007

MEMORANDUM

TO: **DLNR Agencies:**
 ___ Div. of Aquatic Resources
 ___ Div. of Boating & Ocean Recreation
x Engineering Division
 ___ Div. of Forestry & Wildlife
 ___ Div. of State Parks
x **Commission on Water Resource Management**
 ___ Office of Conservation & Coastal Lands
x Land Division – Hawaii District/Gary Martin

07 JUL 26 08:33
RECEIVED

FROM: Russell Y. Tsuji
 SUBJECT: Environmental Impact Statement Preparation Notice for Keahuolu Affordable Housing Project
 LOCATION: Keahuolu, Hawaii, Tax Map Key: (3) ~~748~~ ^{1-4-8:} portion 56
 APPLICANT: Belt Collins on behalf of Hawaii Housing Finance & Development Corporation

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by August 15, 2007.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

- () We have no objections.
- () We have no comments.
- () Comments are attached.

Signed: _____
Date: _____

LINDA LINGLE
GOVERNOR OF HAWAII



LAURA H THIELEN
INTERIM CHAIRPERSON
MEREDITH J CHING
JAMES A. FRAZIER
NEAL S FUJIWARA
CHIYOME L FUKINO M.D
DONNA FAY K. KIYOSAKI, P.E.
LAWRENCE H MIIKE, M.D., J.D.
KEN C KAWAHARA, P.E.
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

August 28, 2007

REF: EISPN Keahuolu Affordable Housing Project.dr

TO: Russell Tsuji, Administrator
Land Division

FROM: Ken C. Kawahara, P.E., Deputy Director
Commission on Water Resource Management **R**

SUBJECT: EISPN Keahuolu Affordable Housing Project, Keahuolu, HI TMK 7-4-8:portion 56

FILE NO.:

RECEIVED
LAND DIVISION
2007 AUG 31 A 10:38
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore, all water use is subject to legally protected water rights. CWRM strongly promotes the efficient use of Hawaii's water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. These documents are available via the Internet at <http://www.hawaii.gov/dlnr/cwrm>.

Our comments related to water resources are checked off below.

- 1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.
- 2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.
- 3. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.

Permits required by CWRM: Additional information and forms are available at www.hawaii.gov/dlnr/cwrm/forms.htm.

- 4. The proposed water supply source for the project is located in a designated ground-water management area, and a Water Use Permit is required prior to use of ground water.
- 5. A Well Construction Permit(s) is (are) required before the commencement of any well construction work.
- 6. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.

- 7. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.
- 8. Ground-water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.
- 9. A Stream Channel Alteration Permit(s) is (are) required before any alteration can be made to the bed and/or banks of a stream channel.
- 10. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is constructed or altered.
- 11. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.
- 12. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.
- 13. We recommend that the report identify feasible alternative non-potable water resources, including reclaimed wastewater.
- OTHER:

The EIS should discuss groundwater resources in the area and the potential impact of the proposed development upon such resources. The Commission's Water Resource Protection Plan provides information on hydrologic unit boundaries and groundwater sustainable yields (<http://www.hawaii.gov/dlnr/cwrm/planning/hwp.htm>). In addition, the County of Hawaii, Department of Water Supply (DWS) is in the process of updating its Water Use and Development Plan for the island of Hawaii; we recommend you contact the DWS to obtain current information on existing and projected water demands for this area.

If there are any questions, please contact Lenore Nakama at 587-0218.

LN:ss



February 12, 2008
2006.70.0900 / 08P-064

Mr. Ken C. Kawahara, P.E., Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, HI 96809

Dear Mr. Kawahara:

**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to the comments you provided on August 28, 2007 for the above-referenced document. Our responses are provided in the order of your comments.

1. The Hawaii Housing Finance & Development Corporation and Belt Collins Hawaii Ltd. have met with the Hawaii County Department of Water Supply and the Department of Hawaiian Home Lands to determine water source, transmission, and storage requirements for the project. The majority of the project lands are part of the Villages of La'i'opua Water Master Plan area, which was prepared for the Department of Hawaiian Home Lands and approved by the Department of Water Supply on October 26, 2006. The developer will be required to update the Water Master Plan based on the proposed development.
2. Copies of the EISPN for the Keahuolu Affordable Housing project were sent to the Department of Land and Natural Resources for distribution to the Engineering Division. At the time of this writing, no comments have been received from the Engineering Division.
3. The project will be required to comply with all State Department of Health reviews and approvals including, but not limited to, underground injection control and National Pollutant Discharge Elimination System general permits to mitigate ground or surface water degradation/ contamination.
4. We note your comment regarding the well construction permit required before the commencement of any well construction work. The developer of the project will be required to obtain the well construction permit before commencement of any well construction work.

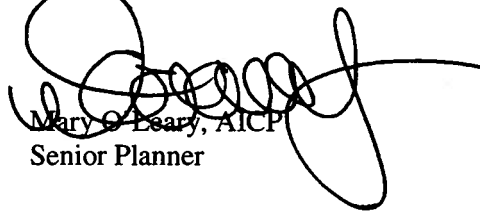
Honolulu
Guam
Hong Kong
Philippines
Seattle
Singapore
Thailand

5. We note your comment regarding the pump installation permit required before ground water is developed as a source of supply for the project. The developer of the project will be required to obtain the pump installation permit before ground water is developed as a source of supply for the project.
6. Reclaimed wastewater for the project was discussed with the Department of Environmental Management (DEM). Per discussions with Ms. Dora Beck, effluent from the Kealakehe Wastewater Treatment Plant is R-3 water, which can be processed to R-2 water. The effluent would have to be treated to R-1 water for irrigation use for the project; however, DEM has no current plans to upgrade the treatment plant to produce R-1 water. DEM is working on a project to install infrastructure for reclaimed water within Queen Kaahumanu Highway out to Hina Lani Street. However, DEM has no plans to extend the infrastructure (piping and reservoirs) mauka of the highway.
7. The Draft EIS will contain a civil infrastructure study that identifies groundwater resources in the area and the water source for the project. In preparation of the civil infrastructure report, Belt Collins has consulted with the Hawaii County Department of Water Supply and has reviewed the Department's "Draft Report - Hawaii County Water Use and Development Plan Update, December 2006".

Again, thank you for your participation in the Chapter 343 comment and review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Mary O'Leary, AICP
Senior Planner

MO:lf

cc: Mr. Russell Y. Tsuji, Administrator
Land Division
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, HI 96809

LINDA LINGLE
GOVERNOR OF HAWAII



ALLAN A. SMITH
INTERIM CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

RECEIVED
LAND DIVISION

2007 AUG 13 A 10:22

OFFICE OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

2007 AUG 26 A 10:13

July 25, 2007

MEMORANDUM

TO: **DLNR Agencies:**
_ Div. of Aquatic Resources
_ Div. of Boating & Ocean Recreation
x Engineering Division
_ Div. of Forestry & Wildlife
_ Div. of State Parks
x Commission on Water Resource Management
~~Office of Conservation & Coastal Lands~~
x Land Division – Hawaii District Gary Martin

FROM: Russell Y. Tsuji
SUBJECT: Environmental Impact Statement Preparation Notice for Keahuolu Affordable Housing Project
LOCATION: Keahuolu, Hawaii, Tax Map Key: (3) ^{7-4-8:} ~~7-4-8:~~ portion 56
APPLICANT: Belt Collins on behalf of Hawaii Housing Finance & Development Corporation

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by August 15, 2007.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

- () We have no objections.
- () We have no comments.
- () Comments are attached.

Signed: Wally Martin
Date: 8/9/07



February 12, 2008
2006.70.0900 / 08P-065

Mr. Wesley T. Matsunaga, Land Agent
Hawaii District Land Office
Land Division
Dept. of Land and Natural Resources
State of Hawaii
75 Aupuni Street, Room 204
Hilo, HI 96720

Dear Mr. Matsunaga:

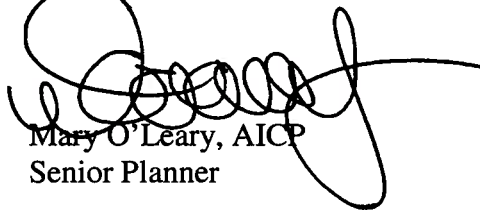
**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to your August 9, 2007 letter for the above-referenced document. We acknowledge that your office has no comments at this time.

Again, thank you for your participation in the Chapter 343 comment and review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



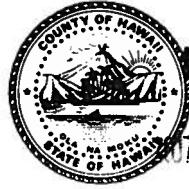
Mary O'Leary, AICP
Senior Planner

Honolulu
Guam
Hong Kong
Philippines
Seattle
Singapore
Thailand

MO:lf

cc: Mr. Russell Y. Tsuji, Administrator
Land Division
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, HI 96809

Harry Kim
Mayor



RECEIVED Bobby Jean Leithead-Todd
Director

07 SEP 21 PM 2:09

Nelson Ho
Deputy Director

BELT COLLINS HAWAII
County of Hawaii

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

25 Aupuni Street, Hilo, Hawai'i 96720-4252
(808) 961-8083 • Fax (808) 961-8086
[email: cohdem@co.hawaii.hi.us](mailto:cohdem@co.hawaii.hi.us)

September 19, 2007

Ms. Mary O'Leary, Senior Planner
Belt Collins Hawai'i, Ltd.
2153 North King Street, Suite 200
Honolulu, HI 96819

Re: Environmental Impact Statement Preparation Notice
Keahuolu Affordable Housing Project
Keahuola, Island of Hawai'i

Dear Ms. O'Leary,

Please accept my apologies for the lateness of this response. Our department has no comments to offer.

Thank you for allowing us the opportunity to review the subject Draft Environmental Impact Statement.

A handwritten signature in black ink, appearing to read "Bobby Jean Leithead-Todd".

Bobby Jean Leithead-Todd
DIRECTOR

cc: Office of Environmental Quality Control



February 12, 2008
2006.70.0900 / 08P-066

Ms. Bobby Jean Leithead-Todd, Director
Department of Environmental Management
County of Hawaii
25 Aupuni Street
Hilo, HI 96720-4252

Dear Ms. Leithead-Todd:

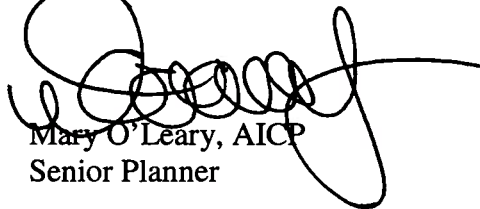
**Environmental Impact Statement Preparation Notice (EISPN)
Keahuolu Affordable Housing Project
North Kona, Island of Hawaii**

Thank you for participating in the Hawaii Revised Statutes, Chapter 343, public and agency review process. We are writing in response to your September 19, 2007 letter for the above-referenced document. We acknowledge that your office has no comments at this time.

Again, thank you for your participation in the Chapter 343 comment and review process.

Very truly yours,

BELT COLLINS HAWAII LTD.



Mary O'Leary, AICP
Senior Planner

Honolulu
Guam
Hong Kong
Philippines
Seattle
Singapore
Thailand

MO:lf