DEPARTMENT OF PLANNING AND PERMITTING CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813 PHONE: (808) 768-8000 • FAX: (808) 768-6041 DEPT. WEB SITE: <u>www.honoluludpp.org</u> • CITY WEB SITE: <u>www.honolulu.gov</u>

KIRK CALDWELL MAYOR



December 5, 2014

GEORGE I. ATTA, FAICP DIRECTOR

ARTHUR D. CHALLACOMBE DEPUTY DIRECTOR

2014/ED-4 (NA)

m

E

Ms. Jessica Wooley, Director Office of Environmental Quality Control Department of Health, State of Hawaii 235 South Beretania Street, Room 702 Honolulu, Hawaii 96813

Dear Ms. Wooley:

DEC 2 3 2014

SUBJECT: Chapter 343. Hawaii Revised Statutes Draft Environmental Assessment

Applicant	
Applicant/	3 9
Landowner:	Kunia Village Title Holding Corporation
Agent:	David M. Robichaux
Location:	92-1700 Kunia Road – Kunia
Tax Map Key:	*-4-919: 83
	(Formerly Tax Map Key 9-2-5: 23)
Zoning:	AG-1 Restricted Agricultural District
Request:	HRS Chapter 201H Exemptions
Proposal:	To permit public service buildings to be located on land in
	the AG-1 Restricted Agricultural District, and to expand the
	number of permitted dwelling units at the Kunia Village
	from 121 to 200 units to meet the need for housing for
	agricultural workers in Central Oahu.

We respectfully request publication of the project summary of the Draft Environmental Assessment (DEA) in the next edition of <u>The Environmental Notice</u> on <u>December 23, 2014</u>. Enclosed are one hard copy and one electronic copy of the DEA and the Publication Form. The Publication Form, including project summary, was also sent via electronic mail to your office.

If you have any questions, please contact Nelson Armitage of our staff at 768-8016.

Very truly yours, George T. Atta.

Enclosure: DEA, one hard copy and one disk One copy of OEQC Publication Form

APPLICANT ACTIONS SECTION 343-5(C), HRS PUBLICATION FORM (JANUARY 2013 REVISION)

Project Name:Kunia Village and Agribusiness Complex Affordable Housing RedevelopmentIsland:OahuDistrict:EwaTMK:9-2-005:023Permits:HRS 201-H, Building, Soil Conservation Plan

Approving Agency: City and County of Honollulu, Department of Planning and Permitting 65 S. King Street, 7th floor Honolulu, HI 96813 Attn: Jamie Peirson (808) 768-6743

- Applicant:Kunia Village Title Holding Corporation
PO Box 100
Kunia, Hawaii 96759
Attn: David Robichaux (808) 368-5352
- Consultant: North Shore Consultants 2333 Kapiolani Blvd Suite 3017 Honolulu, HI 96826 Attn: David Robichaux (808) 368-5352

Status (check one only):

<u>X</u>_DEA-AFNSI Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of DEA, a completed OEQC publication form, along with an electronic word processing summary and a PDF copy (you may send both summary and PDF to <u>oeqchawaii@doh.hawaii.gov</u>; a 30-day comment period ensues upon publication in the periodic bulletin.

Summary (Provide proposed action and purpose/need in less than 200 words. Please keep the summary brief and on this one page):

The Kunia Village is a former Del Monte Plantation Camp in Central Oahu, Hawaii. The Kunia Village Title Holding Corporation (KVTHC) has assumed ownership and operation of the housing and agribusiness infrastructure with the objective of providing affordable rental units to farm workers and farmers in Central Oahu. The housing and commercial infrastructure in the Village are allowed on land zoned for restricted agriculture (AG-1) only under a Variance to the Land-Use Ordinance. KVTHC intends to apply for a permit under Hawaii Revised Statute 201-H, which replaces the existing variance and allows certain exemptions to the County LUO requirements including height limits, setbacks and would permit public service buildings to be located on Ag-1 land. The 201-H application will also seek to expand the allowable number of housing units from 121 to 200 in order to meet the increasing demand for affordable housing for farm workers and farmers in Central Oahu's farm belt. HRS 343 compliance is triggered because Kunia Village is on both the State and National Historic Registers. Pending receipt of comments the applicant anticipates a finding of no significant impact.

Draft Environmental Assessment

Kunia Village and Agribusiness Complex Affordable Housing Redevelopment Kunia, Oahu, Hawaii TMK # 9-2-005:023



Prepared for

The City and County of Honolulu Department of Planning and Permitting

December 2014

Draft Environmental Assessment

Kunia Village and Agribusiness Complex Affordable Housing Redevelopment Kunia, Oahu, Hawaii TMK # 9-2-005:023

Approving Agency

Land Use Permits Division City and County of Honolulu Department of Planning & Permitting

Applicant



December 2014

PROJECT SUMMARY

This Environmental Assessment (EA) has been prepared in accordance with Chapter 343, Hawai`i Revised Statutes (HRS), to support an application under HRS Chapter 201-H for The Kunia Village and Agribusiness Complex, Affordable Housing Project on the Island of Oahu, Hawaii. The requirements for HRS 343 compliance are triggered because Kunia Village is on both the State and National Historic Registers.

Name:	a Village Low-Income Housing Re-Development			
Location:	Kunia, Oahu, Hawaii			
Judicial District:	Ewa			
Applicant and: Recorded Fee Owner	Kunia Village Title Holding Corporation PO Box 100 Kunia, Hawaii 96759 (808) 621-1350			
Approving Agency:	Dept. Of Planning and Permitting City and County of Honolulu Land Use Permitting Division 650 S. King Street 7 th Floor Honolulu HI 96823			
Agent:	North Shore Consultants, LLC 2091 Round Top Dr. Honolulu, HI 96822 Attn: David Robichaux (808) 368-5352			
Tax Map Key:	TMK (1) 9-2-005:023			
Land Area:	110.96 acres			
Existing Use:	Residential and commercial accessory to agriculture uses			
Proposed Use:	Renovation and increased density of the existing housing.			
Land Use Designation	ns: State Land Use: Agriculture District General Plan: Agriculture County Zoning: Ag-1 Restricted agriculture Special Management Area (SMA): Not within the SMA			
Major Approvals Rec	quired: Approval of exemptions under HRS 201-H Building permits Soil Conservation Plan State Historic Preservation Division Review			

Contents

1.0 PROJECT LOCATION, PURPOSE AND NEED	1
1.1 Project Location	1
1.2 Need for HRS 343 Environmental Assessment	2
1.3 Site History	4
1.4 Purpose and Need	4
1.4.1 Demand for Farm Worker Housing in Central Oahu	8
2.0 PROPOSED ACTION AND ALTERNATIVES	11
2.1 Proposed Action (Project Description)	11
2.4 Alternative Actions Considered and Rejected	
3.0 ENVIRONMENTAL SETTING AND IMPACTS	26
3.1 Physical Environment	26
3.1.1 Geology and Soils	26
3.1.2 Surface Water Quality	27
3.1.3 Groundwater Resources	
3.1.4 Climate and Air Quality	
3.1.5 Noise and Odor	
3.1.6 Scenic Value and View Plane	
3.1.7 Hazardous Substances	
3.2 Biological Environment	
3.2.1 Vegetation	
3.2.2 Wildlife	
3.2.3 Special-Status Species	
3.3 Socioeconomic	
3.3.1 Social Factors and Community Identity	
3.3.2 Public Services	
3.3.3 Roads and Access	
3.3.4 Archaeological and Historic Resources	
3.3.5 Cultural Impacts	
3.3.6 Land Use	
3.4 Growth-Inducing, Cumulative, and Secondary Impacts	
3.5 Required Permits and Approvals	
4.0 CONSISITENCY WITH PLANS, POLICIES, AND REGULATIONS	
4.1 Federal Policies Supporting Low-income Housing on Agricultural Land	
4.2 Hawaii State Policies Supporting Low-income Housing on Agricultural Land	
4.3 City and County Policies Supporting Low-Income Housing on Agricultural Land	
5.0 SUMMARY OF IMPACTS AND MITIGATION MEASURES	
5.1 Determination of Significance.	
6.0 COMMENTS AND COORDINATION	
6.1 Agencies and Organizations Contacted	
6.2 Public Coordination and Individuals Consulted	
7.0 LIST OF DOCUMENT PREPARERS	
8.0 BIBLIOGRAPHY	57

Figures

- Figure 1-1: Site location near the southwest corner of Oahu
- Figure 1-2: Kunia Village Aerial Photograph from Google Earth 2013
- Figure 1-3: Kunia Village Site plan showing major buildings and divisions
- Figure 1-4: Pineapple plantation land near Kunia Village in 2007
- Figure 1-5: Typical 3 bedroom home in Kunia Village
- Figure 1-6: Pineapple harvest circa 1950
- Figure 1-7: Market Demand for Farm Worker Housing in Kunia Village
- Figure 2-1: Village Map Showing the Extent of Project 1
- Figure 2-2: Floor Plan for 2-bedroom Replacement Housing
- Figure 2-3: Floor Plan for 3-bedroom Replacement Housing
- Figure 2-4: Floor Plan for 4-bedroom Replacement Housing
- Figure 2-5: Bar Chart of proposed income allocation for housing units within Kunia Village
- Figure 2-6: Existing Village Housing Plan
- Figure 2-7: Proposed Full Development Plan showing land-use within the Village
- Figure 3-1: Kunia Village in the 1960s
- Figure 3-2: Kunia Village aeration tower and potable water reservoir in 2007
- Figure 3-3: Pineapple Harvests circa 1950
- Figure 3-4: Kunia Drive Showing houses to be restored near the entrance to Kunia Village
- Figure 3-5: Houses to be renovated near the entrance to Kunia Village
- Figure 3-6: Land Study Bureau Land Classification Map
- Figure 3-7: Pineapple Plantation near Kunia Village in 2007

Tables

- *Table 2-1: Income guidelines for qualifying housing units allowable under 201-H*
- Table 2-2: Income allocations for Kunia Village at full development of 200 housing units
- Table 2-3: Kunia Village housing size allocation between affordable and over-affordable
- Table 3-1: 2000 to 2010 Census Comparison for ZIP Code 96759
- Table 3-2: ZIP Code 96759 2010 Census Demographics
- Table 5-1: Summary of Impacts and Mitigation Measures

Appendices

Appendix A: Agency Letters of Support: Wahiawa Neighborhood Board State Historic Preservation Division

1.0 PROJECT LOCATION, PURPOSE AND NEED

1.1 Project Location

Kunia Village and Agribusiness Complex (KVAC) is located off of Kunia Road approximately 6 miles north of the intersection between Kunia Road and H-1 Freeway, at Latitude (north) 21 ° 18' 46, Longitude (west) 158° 05' 07 (See Figure 1-1). This location is approximately 2 miles south of the Wheeler Army Air Field in Central Oahu. The site elevation ranges from approximately 835 feet to 890 feet above Mean sea level (MSL). The subject property is accessed only by Kunia Road, and is within approximately 12,000 acres of agricultural land in Central Oahu (Figure 1-2). The subject property tax key map is shown in Figure 1-3.



Figure 1-1: Site location South of Schofield Barracks and west of Mililani.



Figure 1-2 Kunia Village Aerial Photograph from Google Earth 2013

1.2 Need for HRS 343 Environmental Assessment

HRS 343 requires public disclosure and environmental assessment for any proposed program or project that proposes one or more land uses or administrative acts that are identified in the Statute. Actions that involve use within any Historic Site or District as designated in the National or Hawaii Register of Historic Sites are covered by HRS 343. Kunia Village is on both the State and National Historic Registers. The proposed renovations will be partially funded using tax credits which constitute public funds. These two aspects of the proposed projects necessitate preparation of an Environmental Assessment.



Figure 1-3 Kunia Village site plan showing major buildings and roadways

1.3 Site History

Kunia Village also known as Kunia Camp was originally established in the second decade of the 20th century by the predecessor of Del Monte Corporation. It was continuously used as a permanent residence for Del Monte farm workers between 1920 and 2009 when Del Monte withdrew from pineapple production in Hawaii. The Village then reverted to the landowner The James Campbell Company, which subdivided out the Village property from a larger parcel. It was deeded to Hawaii Agriculture Research Center, (HARC) a 501 C (3) tax exempt organization in 2009, specifically to facilitate the preservation

of housing for retired Del Monte agricultural workers.

HARC, formerly The Hawaiian Sugar Planters' Association, came into existence in 1895. It had operations on Oahu, Maui, Kauai and the Big Island. It manages private, state and federal grants; it manages its own rental property and maintains several facilities. It has survived and thrived during the downsizing of the sugarcane industry to continue serving its members while broadening its research scope and clientele. Education and outreach have been integral parts of

HARC's mission. HARC is well recognized and respected by the agricultural community, and it has attracted 6 private sector partners who are contributing to the facility redevelopment and leasing space in this project.

HARC acquired The Kunia Village from The James Campbell Company, LLC in 2009 after Del Monte's lease expired and the Company withdrew from the Hawaii Market. By the action HARC prevented demolition of the residential and commercial agricultural infrastructure and continued its traditional functions for farm residences and agribusiness. Agricultural

warehousing, mechanical shops, administrative areas processing buildings and cold storage facilities are badly needed in this rapidly growing market. The existing Kunia Camp residences are maintained for agricultural workers. The proposed action described in this assessment is to rehabilitate, replace and expand the Kunia Village residential capacity within its current boundaries.

HARC established a wholly-owned subsidiary The Kunia Village Title Holding Corporation (KVTHC) to own and operate the asset on HARC's behalf. The deed has restrictions associated with it that require that in perpetuity, a minimum of ninety (90) and up to one hundred and fifteen (115) of such residential units shall be used for affordable rental housing. The property will be kept as affordable rental housing for farm workers, farmers and their families in perpetuity through deed restrictions and KVTHC's charter.

1.4 Purpose and Need

The parcel retains its zoning as Ag-1, restricted agricultural land as is all of the surrounding land which is otherwise actively used for agriculture. Worker housing and agriculturally related structures are permitted on Ag-1 land by a farming operation. Because HARC is an agricultural







research organization and not a commercial farm, a variance was obtained (#2008/VAR-26) to allow a higher density of farm dwellings on Ag-1 restricted land. Ag-1 land allows 1 farm dwelling per 5 acres. The property had 121 units per 119 acres. The variance was approved by the county for the existing 121 units so that they could be repaired or replaced.

Hawaii's economy depends on tourism, government spending and agriculture in that order. Whereas tourism is thought to have the greatest opportunity for growth, the growth in agricultural diversity has been surprisingly reliable and steady over the past 2 to 3 decades. As the 2 major agricultural businesses, sugarcane and pineapple, have reduced their contribution to the economy, specialty crops have risen substantially to form a stable economic contribution. This transition from a relatively few large-scale farms based on the

commodity crops of sugarcane and pineapple to many smaller scaled specialty agricultural businesses continues to occur. However, the pressures and future opportunities to convert prime agricultural lands to non-agricultural uses have increased during the downsizing of plantation-style agriculture. Nowhere in the State is this more evident than Central Oahu.

The region has been in an extended transition which began with the closing of Oahu Sugar in 1992 and continues today. The economic impact of Del Monte's closing was not published, but is likely to have reduced the agricultural economy by over 30 million dollars per year. Most of the plantations have given way to urban expansion or small and medium sized farming operations that supply local markets. The new agribusinesses are vertically integrated and like residential developers, they are aggressively seeking new areas for expansion.

With the closing of the Del Monte pineapple plantation over 550 workers were laid off. The conditions of the Del Monte lease required the return of the property to its former condition. This would mean that the houses, the infrastructure and the industrial complex as well as the irrigation distribution system would be destroyed and removed. The loss of this housing and agriculture infrastructure would minimize the opportunity for other agricultural enterprises to be

initiated due to the high costs associated with land and infrastructure in Hawaii.

There are approximately 12,000 acres in the Kunia area, significant portions being prime agricultural land suitable for row crops. Within this area there are or will be agricultural opportunities for employment as all the property west of Kunia Road has recently been purchased by agricultural based companies and much of the property on the east side of Kunia Road is



Figure 1-4: Pineapple plantation land near Kunia Village in 2007

currently leased to agricultural operations. The scale up of these operations is continuing. In addition, the Hawaii Department of Agriculture is establishing an agricultural park on 150 acres east of Kunia Road allowing more opportunities for small agricultural businesses. It is anticipated that there will be well over 1,300 agricultural positions available in this area as well as the opportunity for up to 100 new farm sites. The Kunia Village and Agribusiness Complex will serve these clients.

With the departure of Del Monte, James Campbell Company, LLC, the former owner of the subject property subdivided the housing and industrial portions of the property from the rest of the agriculturally zoned property. That subdivided portion, the subject property, consists of 119.086 acres comprised of: farm dwellings and accessory buildings on 48.368 acres; an office,



Figure 1-5: Typical 3 bedroom home in Kunia Village

warehouse and workshop area on 5.413 acres and a processing area on 16.095 acres; and two agricultural land areas which total 49.21 acres. The subject property is completely surrounded by agricultural lands which are leased to farming operations by Island Palms Communities (IPC) a partnership consisting of a private company and the military.

The early growth of the smaller agricultural operations has often been on what was available; relatively small areas of marginal land. As large blocks of land are marketed these smaller operations are either not suited to the larger areas and/or are unable to finance these large tracts of land. Consequently, it is difficult for small

agricultural businesses to acquire land or lease it under reasonable terms for production or processing of agricultural products. These issued directly impact the availability of locally produced agricultural products because much of the large corporate production is exported.

The availability of the subject property under KVTHC's ownership allows for the creation of a stable agribusiness residential and commercial center. It also facilitates affordable housing for farm labor and workforce development by providing a nucleus for these activities. This project fits into more than one economic area of opportunity:

- Provides affordable housing which is an impediment in every industry cluster;
- Provides facility infrastructure to produce value-added export marketing, import substitution, master branding-planning and workforce development; and
- Adds sustainable infrastructure which involves energy, water, and waste recycling.

Kunia Village was built prior to City zoning code standards. Plantation housing units date from 1910 to the 1920s, with the majority of the structures dating to the 1920s. Historical records and remaining infrastructure indicate that the Village contained more than 121 residential units and

two dormitories as recently as the 1970s. The existing limit of 121residentia-il units that are now permitted under variance #2008/VAR-26 only reflects the condition of the village in 2009 at the time it was sold to HARC. HARC's objective for this property is to retain badly needed infrastructure for agricultural operations evolving during the transition from plantation toward diversified agriculture. In order to implement this objective with the least risk to HARC's research mission, it created KVTHC, which is a 501C (2) tax exempt organization, a division of the tax code created to manage assets for a 501C (3).

The plantation houses currently in use in Kunia Village were never designed to withstand 50 to 75 years of service and many are beyond repair. KVTHC has struggled to maintain all the units in a safe condition, but the maintenance costs exceed practical rent to serve low-income farm workers. In March 2013 HARC, KVTHC, Rural Community Assistance Corporation (RCAC) and the new entity, the Kunia Village Development Corporation (KVDC), applied for and received funding commitments from a combination Low Income Housing Tax Credits,, Historic Tax Credits, federal loans and guarantees, bond sales and private and non-profit lenders which will allow for the redevelopment of 82 of the 112 habitable housing units. The redevelopment plan calls for 37 of the houses to be demolished and replaced with new units that fit the historical character and appearance of the existing units. The remaining 45 units will be fully renovated. The housing and infrastructure will be owned by Kunia Village Housing Partnership, I L.P. After 15 years, KVTHC will reacquire ownership of the units along with debt obligation. Rents for farm tenants will be indexed to the households income and be no more than 30% of the gross family income. The US Department of Agriculture (USDA) will provide rental assistance which will reduce the tenants rent to no more than 30% of the households adjusted income. Under Federal Low Income Housing Tax Credit (LIHTC) requirements, a majority of the housing units must be restricted to households earning less than or equal to 60% of the median family income. The resultant reduction in allowable income will make many of the current residents ineligible, including some of the retirees who have resided in Kunia Village for decades.

The purpose and need for maintaining and expanding Kunia Village residential housing is to:

- 1. Continue to provide affordable housing to farm workers,
- 2. Maintain farm worker housing as rental units in perpetuity. Housing units will not be sold,
- 3. Provide housing to farm workers in the lower income brackets,
- 4. Meet the growing demand for farm worker housing,
- 5. Continue to provide housing for retirees of the former Del Monte Fresh Fruit Company, and other aging farm workers now residing in Kunia Village.



Figure 1-6: Pineapple harvest circa 1950

1.4.1 Demand for Farm Worker Housing in Central Oahu

In March 2013 the Kunia Village Development Corporation commissioned a market study to determine the probable demand for low income farm worker housing. The study was done by Rick Cassiday at Data@Work, Inc. This study provides information on the probable demand for rental housing units for farm workers in Central Oahu. Notable conclusions from the Market Study include:

US Census data estimated there are 3,502 jobs in the agricultural labor sector on the island of Oahu. This however, would include some managerial positions, whose salaries would be sufficiently high so as to exclude them from qualifying. As such, we think that a conservative estimate for farm laborers on Oahu who qualify both by income and profession (laborers) for this project would number between 1,600 and 1,800. As explained in a subsequent section, we believe a large percentage of these employees would be attracted to a newly remodeled single family home in the center of Oahu's agricultural farmland, with an easy commute to work. Given there will be only 200 total units available, we think that there will be more than an ample demand from farm workers who qualify and apply.

AFFORDABLE INVENTORY: In the universe of two, three and four bedroom affordable single family housing units on Oahu targeted on families making an AMI of 60% and 80%, there are no rental projects. There are two single-family projects targeting families making an AMI of 30%. For this segment, there are a total of 61 units. First, the long waiting list times for these projects indicate the market is very tight for these units. Second, the absolute number of units in the area is tiny, relative to the whole island demand. And, third, they only serve the lowest market segment, leaving the others making higher incomes, at the mercy of the open market. Thus, we believe that the project, well located in the heart of the agricultural area of Oahu, close to modern amenities, in a renovated condition, at below market rates, should be able to capture a large percentage of the potential farm worker demand. This was previously estimated on a conservative basis at 1,600-1,800 employees. We believe at least a quarter of those workers would be attracted to the project, and that half of those will apply and qualify, or 200-250 applicants.

Finally, the project will be able to offer their units to the existing 115 households in Kunia Village, most of who meet the eligibility criteria, and who will have priority for occupancy in the 80 renovated or newly constructed units. This will result in a very short rent-up period. Given this, it is possible that none of these remodeled units will be offered to those who currently aren't residing in this plantation community. In the event that there are un-rented units, then we believe there are, as explained above, at least 200-250 qualified farm laborers who will apply for a unit. Thus, we foresee that this project will be able to achieve 100% occupancy within the first six to twelve months of availability.

Given the rapidly developing diversified agriculture industry on former James Campbell Estate lands and the lack of affordable housing in the area, this assessment concludes that there will be a high demand for single family homes in Central Oahu which are set aside for low-income farm workers and retirees. One major factor limiting the expansion of agriculture on Oahu may be the inability of farming families to find suitable accommodations. The new family farmers now working in agricultural parks bordering Kunia Village are not considered farm workers by the USDA. The USDA's definition does not change their basic need to find housing close to their farms. Additional housing units provided in the proposed action will serve these farmers as well as those workers employed by commercial farm companies.



HUD Fair Market Rent for Honolulu

In addition the rise in the Fair Market Rental rates, the Honolulu Area Median Gross Income levels at the county level just were released for 2013, and show a noticeable increase from 2012, thanks to the economic recovery.



2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 Proposed Action (Project Description)

The redevelopment of the village is planned to occur as 2 projects:

- PROJECT 1- the renovation and/or construction of 82 units with funding through state and federal Low Income Housing Tax Credits, Historic Tax Credits, USDA Rural Development Agriculture Housing 514 Program, conventional loans and self-financing;
- PROJECT 2- the processing of a 201-H Low Income Housing county application to legitimize the community service and related buildings located on Ag-1 land, and allow for expansion up to 200 agriculturally related worker housing units and community facilities.

Project 1 (a.k.a. Project 82)

Project 1 is the first and most substantial renovation of the Village. It has been dubbed Project 82 because 82 of the 121 housing units will be either renovated or replaced with similar units. Forty-five of the existing single family homes will be completely renovated, and thirty-seven will be replaced with comparable new housing units (Figure 2-1). The project will also replace or renovate essential Village infrastructure including potable water distribution lines, wastewater collection piping and it will resurface some of the Village streets within the project. The project will include no grubbing or grading. Excavation will be limited to utility trenching and replacement of block footings for the houses.

The construction characteristics of any new additions or renovations must be consistent with the historic character of the Village and plans must be approved by the State Historic Preservation Division (SHPD) of the Department of Land and Natural Resources (DLNR). Renovated and replacement housing will remain single story, wood-frame housing build on post and piers. Kunia Village has worked with Honsador to produce compatible models of the 2, 3, and 4 bedroom housing that have been approved by SHPD. Replacement housing within the project is shown in Figures 2-2 (2 bedroom units) Figure 2-3 (3 bedroom units), and Figure 2-4 (4 bedroom units). Replacement housing has been specifically designed and approved to match the existing architectural character of the Village.

Housing to be renovated includes repair and replacement of flooring walls and beams that have been damaged by termites or wood rot. The internal spaces will be opened up to make the kitchen and living room into a single larger space. An additional bathroom will be added, and the units will get new electrical service, flooring, cabinets, countertops, kitchen and bathroom fixtures and roofing. Kunia Village expects that the quality of homes to be renovated is equivalent to that of the new homes to be constructed. Construction is expected to begin in early 2015 and continue for a period of 18 months. The majority of residents now living in these houses will be relocated within the village by keeping a block of existing units vacant for those that are displaced. The Village will be renovated 3 to 5 houses at one time.





]
		KUNIA PLANTATION VILLAGES MODEL 864
		DATE OCT 2013
		91-151 Malakole Road Campbell Industrial Park Kapolei, Hawaii 96707
11/2", 11/2" AIL	IG TOP RAIL	An Honsador Eumber Building Solutions for Hausell
ANDRAIL DE		
3" = 1' - <i>O</i> "		
Comes on™ OR	This plan must not be copied in part or in whole by sources outside of Honsador Lumber LLC without the sypress written consent of Wayne K. Lincoin, Vice President of Sales & Marketing. Any attempts to reuse portions or all of these building plans without this express written consent will result in Copyright infrigement and we will prosecute to the fullest extent of the law.	PROJECT NAME - ADDRESS
KUNIA PL	ANTATION VILLAGES 864	A I TA
t of ilding 5 be ttered MBER	THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.	SHEET NO.
eet ale of You iance		864-2
	SIGNATURE	L

Figure 2-2: Profile and floor plan for 2-bedroom replacement housing





Figure 2-3: Profile and floor plan for 3-bedroom replacement housing



Figure 2-4: Profile and floor plan for 4-bedroom replacement housing

Funding for the Project 82 comes from:

•	Department of Agriculture (USDA) Section 514 1% loans	\$6,000,000
٠	Commercial loan (Wells Fargo, Inc.)	\$9,110,000
٠	Sale of Federal LIHTC \$1,080,375	\$16,205,625
٠	Sale of State LIHTCs	\$8,222,820
٠	Business Solar Tax credits	\$244,713
٠	Federal and State Historic Tax Credits	\$1,424,160

Project 1 has completed the submittals for final approval by the federal agencies, including USDA Environmental Review; approval for 2 loans from USDA Agricultural Worker housing; and housing subsidies for up to 76 units for qualified tenants over the life of the project.

Approval of funding from HHFDC for state and federal Low-Income Housing Trust Corporation (LIHTC) requires a HRS 343 review under the public funding trigger. This document is intended to satisfy that requirement. Upon its completion the project will receive the final approval of construction financing totally approximately \$16 million for the 82 units.

Kunia Village has always been reserved for low income farm workers or farmers. KVTHC has monitored income and employment for Village residents since its inception. The USDA housing subsidies carry additional restrictions that make qualification more restricted than the Kunia Village in-house income qualifications. This project's two primary restrictions includes 76 units are reserved for tenants at or below 80% of the county's AMI. The Low Income Housing Tax Credit requires that 74 units are further restricted to 60% of the County's AMI. Income is adjusted based on the number of family members. Many of the Del Monte retirees to whom Kunia Village is obligated to provide housing have income levels above the 60% AMI range and will not qualify for this project. In addition, residents in this project must qualify under USDAs definition of "farm worker", which is restricted to employees of farm corporations or other entities. A person who is a sole proprietor farmer does not qualify under the USDA definition. Since most farm land available is leased and those leases do not allow for the farmers to live on their leased land, there is a need for housing for low income farmers and agricultural workers above the 60% AMI. These are the target groups necessitating the Project 2.

Project 2 (201-H Permit)

After 2/3 of the housing units are renovated and replaced under Project 82 KVTHC proposes to use internal returns from its assets or identify other sources of funding to renovate the remaining 39 existing units of the allowable 121 units in the existing Variance (2008/VAR-26) and construct additional housing units to in-fill existing vacant lots within the Village. The 201-H application will seek to expand the allowable number of housing units to 200. Increasing the number of housing units beyond the limit authorized in the village variance obtained in 2008 requires approval of the Honolulu City Council under State Statutes contained in the Hawaii Revised Statutes Section 201-H. One of the requirements of a 201-H permit application is an approved Environmental Assessment. Project 2 does not have a dedicated source of financing and will be completed over a longer period as funding is acquired. Portions of the money required for Project 2 have been provided by the ILWU through a HUD grant. Other portions will be derived from lease payments and note payments on Project 1. KVTHC will dedicate most

of its in-house resources to the development of the Village, and other private sources of funding will be developed. The renovation of the remaining 39 units and construction of up to 79 new units may require up to a 20 years for completion unless new sources of funding are identified.

The proposed action is to obtain a permit under the Hawaii Revised Statutes Chapter 201(H) to expand the number of residential units within the existing footprint of the Village, allow for community service buildings within the Village, gain relief from certain other design standards and fees required in the Land Use Ordinance.

HRS Chapter 201 H was enacted into law to provide a process whereby an affordable housing project may be granted exemptions from any statutes, ordinances and rules of any governmental agency relating to planning, zoning and construction standards that do not negatively affect the health and safety of the general public. The City and County of Honolulu Department of Planning and Permitting (DPP) administers this law.

Exemptions from Development (or Sustainable Community) Plan designations and zoning district requirements such as allowing an apartment building in a residential district, or residential uses of agricultural land are considered under 201-H. Other exemptions include relief from park dedication requirements, and subdivision requirements. Building height or density exemptions are also typical requests.

Affordable housing projects are eligible for the 201-H process if at least half of the units are made affordable to income target groups established by City rules. These rules are based on guidelines established by the US Department of Housing and Urban Development (HUD). The target groups are defined as a percentage of the median income for Honolulu. Normally projects must contain at least 50 dwelling units, although there are exceptions for projects that cater to individuals with special needs. Project 82 is providing 76 affordable housing units which are more than the half requirement imposed by 201-H.

In order to qualify for the 201-H process a project developer must submit an application to DPP for review. Subsequent to a wider agency review, the application is delivered to the Honolulu City council for consideration along with DPP's recommendations. If approved by the City Council the project may obtain exemptions to certain development standards without rezoning or changing land-use designations contained in the County's planning documents. The purpose of the 201-H process is intended to facilitate qualifying affordable housing projects.

The proposed action is to obtain development exemptions under the 201-H permit in order to maintain the existing housing and commercial facilities within Kunia Village and increase the number of housing units through infill of now-vacant areas within the Village footprint.

KVTHC and HARC retained JAS Architects and Mason Architects to prepare a Village Master Plan that includes:

• Adding up to 79 new residential units to bring the capacity of the village to 200 family housing units and include multi-family units, such as, duplexes and quadraplexes. New Housing units will be placed within the existing residential footprint.

- Improving the green space and visual buffers within the community,
- Creating new space for community services such as administration area for community providers, classrooms, medical/dental clinic, cafeteria, community kitchen, restaurant, farmers' market, etc.

At full development the Village Plan is to contain 200 housing units. The Master Plan includes both Projects 1 and 2. Project 1 will consist of the rehabilitation or replacement of 82 housing units. Under USDA guidelines accepted as a condition of the project 76 of the 82 units will be reserved for families with incomes of 80% or less of the median income for Honolulu (AMI). Project 2 will include 39 existing housing units and an additional 79 to be constructed in the future. These Project 2 units will also be maintained for farm workers and farmers, but are intended to be used for a range of income families from with incomes of 140 percent or lower with a small fraction to be leased at market rate

The 201-H requirements for affordable housing are shown in Table 2-1.

Table 2-1: Income guidelines for qualifying housing units allowable under 201-H assuming that the final development contains 200 housing units.

Income Category of Resident	201-H %	Allowable # of Units for 201-H
Low Income households (<u><</u> 60% AMI)	NA	NA
Lower income households (<u><</u> 80% AMI)	10	20
Moderate Income households (81-120%)	20	40
Gap group households (121% - 140%)	30	40
Allowable Market Rate rentals	50	100
Total number of Housing units		200

The proposed income allocation within Kunia Village at full development are presented in Table 2-2,

Table 2-2: Income allocations for Kunia Village at full development of 200 housing units.

Category of resident	%	# of Units in Kunia Village
Low Income households (<u><</u> 60% AMI)	37	74
Lower income households (<u><</u> 80% AMI)	20	39
Moderate Income households (81-120%)	23	45
Gap group households (121% - 140%)	11	22
Market Rate rentals	10	20
Total number of Housing units		200

Table 2-3 shows the distribution of 1 bedroom to 4 bedroom housing units within the Village. Note that the fraction of affordable units is higher in the 3 and 4 bedroom units than in the 1 and 2 bedroom units.

Table 2-3: Kunia Village housing size allocation between affordable and over-affordable.

Unit Size	#	size	% afford	# affordable	# above affordable
	units				

Studio	0				
1-BR	30	630	67%	20	10
2-BR	39	630	69%	27	12
3-BR	110	960-1200	85%	93	17
4-BR	21	1300	86%	18	3
Total	200			158	42

Figure 2-5 shows the number of housing units which are at or below each income category that are recognized by USDA, and Low Income Housing Tax Credit (LIHTC), and 201-H criteria of affordable housing.



Figure 2-5: Bar Chart of proposed income allocation for housing units within Kunia Village and the minimum requirements for affordable housing. Note that 201-H has no requirement for (LIHTC defined) low income families ($\leq 60\%$), but the largest component of Kunia Village will be less than or equal to 60% AMI.

All improvements would be contained within the existing village footprint while maintaining its rural character and sense of community. Most additional units will be placed in vacant lots within the Village or in formerly-used residential areas that are now vacant due to the demolition of older homes.

Future construction during Project 2 will begin by renovating the existing single family houses that are salvageable. Expansion housing will consist of single family units, duplexes and 4-plex units that are designed under consultation with a qualified historic architect and approved by SHPD. Some of the duplexes and quadraplexes are intended for older retirees, single farm workers and two person households.

Figure 2-6 is a map of the existing Kunia Village as permitted under Variance # 2008/VAR-26. Figure 2-7 is the proposed Master Plan showing the final layout of the Village at full development.

The proposed redevelopment in Project 2 will not occur in a single step or as a major construction project. The Kunia Village Title Holding Corporation will seek grants and use inhouse funding to add housing units as funding allows. The final build out may require more than 10 years for completion.





2.3 Exemptions to LUO to be Requested

The proponent will request exemptions to the City land-Use Ordinance (LUO) through the 201-H permit application process. A preliminary list of exemptions to be requested includes:

(1) The existing dwelling units are not in compliance with LUO Section 21-3.50-2(b),- Site Standards:

(b) The maximum number of farm dwellings in an AG-1 district agricultural cluster shall not exceed one unit per five acres.

Expanding the maximum allowable number of residential units to 200 within the 119 acre site would result in a density of one unit per 0.595 acres, which exceeds the maximum density required by the LUO. KVTHC will request an exemption from LUO Section 21-3.50-2(b) through the 201-H permit application.

- (2) Existing uses that were established by Del Monte to provide essential services that are not specifically allowed by the Land-Use Ordinance (Table 21-3) include:
 - (1) gym/community center
 - (1) church
 - (1) temporary farm worker dormitory
 - (1) Post office
 - (1) research building necessary to service the Superfund maintenance activities,
 - (1) wastewater treatment plant
 - (1) Village administration building
 - (1) Village Maintenance Shop
 - (1) Neighborhood store

Planned land uses which are not now in existence include:

- General purpose building to accommodate community services such as: Medical/dental clinic, administration areas for community providers, agricultural associations, day care, cafeteria for children and this community's elders,
- Housing Rental Office
- Housing Maintenance Shop
- Community Commercial Kitchen including shop with outdoor and indoor retail market areas
- Classrooms for job training for low income families- adult education, sustainable agricultural certifications, English as a second language, financial services and related community support services
- Solar voltaic fields to reduce the cost of water pumping

KVTHC will request an exemption from LUO Table 21-3 through the 201-H permit application.

(2) The 201-H application will request an exemption from height limits specified in Section 21-3.50-4(1) for the existing and planned community service infrastructure. (1) Height. The maximum height may be increased from 15 to 25 feet if height setbacks are provided

The existing Community Center exceeds the height limit imposed by the Land Use Ordinance. A request for exemption will be made to allow the existing buildings to remain taller than 25 feet.

Section 3.3.6.1 contains a more detailed discussion of land use constraints within agricultural zoned land.

2.4 Alternative Actions Considered and Rejected

Discussion of several alternatives was provided in Variance request #2008/VAR-26, including agricultural cluster, zone change, and historic site designation. These alternatives and the no action alternative have been considered.

Agricultural Cluster: According to Ord. 99-12 (May 1999), "agricultural clusters are permitted in any agricultural district to promote economy or services and utilities and the most efficient use of the remainder area for agricultural pursuits." For this request, an agricultural cluster alternative for Kunia Village is not feasible because the maximum number of farm dwellings in an Ag-1 district agricultural cluster is not allowed to exceed one unit per five acres, though the spirit of the Agricultural Cluster is present in the proposal. There are 115 existing farm dwelling structures (121 dwelling units) on the 119.086-acre Kunia Village site. The agricultural cluster alternative is not feasible because it would require more acreage per dwelling than allowed within the Ag-1 zoning. In addition, the agricultural cluster alternative requires each dwelling to be sited on a lot not to exceed 5,000 square feet. The majority of dwellings now and in the future will be located on 10,000 sf lots. These criteria make the Agricultural cluster alternative infeasible.

Zone Change: Kunia Village is located within the City and County of Honolulu's Ag-1 Restricted Agricultural zoning district and the State Agricultural district. The request of a zone change, for example to a residential district, for Kunia Village would not be feasible because rezoning would alter the essential character of the neighborhood and the intent and purpose of the zoning ordinance for this area. In addition, a zone change alternative would not be commensurate with the Central Oahu Sustainable Communities Plan (2002) for the area which states, "The existing rural forms and historic character exhibited within the villages should be preserved and enhanced. This includes the perpetuation of rural agriculture functions and activities in the surrounding area, in conjunction with village land uses." The zone change alternative would also require alteration of the Agricultural Lands of Importance to the State of Hawai'i (ALISH) because Kunia Village is located within unique and other agricultural lands. In addition, the essential purpose and intent of Kunia Village is related to that of the agriculturalzoned district as it is historically associated with agricultural activity by providing residences for agricultural workers and promoting diversified agricultural activities. A zone change request is not consistent with the general plan and functional plans for the area and therefore, the zone change alternative is not feasible.

State Historic Landmark Designation: In Variance request #2008/VAR-26 a State Historic Landmark Designation was considered and rejected because it would not serve the objective of making the existing housing units compliant with the zoning ordinance. Since that time Kunia Village has been placed on the State and National historic registers. The redevelopment activities proposed for the Village are approved by the State Historic Preservation Division of DLNR. All future changes and additions will also require approval from SHPD. Therefore, the State Historic Landmark alternative will require additional permitting approvals for renovation and additions to the Village but is otherwise unrelated to the proposed action to expand the number of housing units.

No Action Alternative: The no-action alternative is to maintain the existing situation, which is limited to 121 residential units. The increase in the maximum number of residential units is needed to meet the expanding demand for affordable housing for farm workers and retirees to support Oahu's resurgent agriculture industry.

The proposed action is selected because it meets the increasing demand for farm worker housing, it is compatible with existing planning objectives, and consistent with the character of the existing community.

3.0 ENVIRONMENTAL SETTING AND IMPACTS

3.1 Physical Environment

3.1.1 Geology and Soils

The Island of Oahu covers 597 square miles, and is the third-largest island in the Hawaiian chain. The island was formed about 4 million years ago by two volcanoes: Waianae and Koolau. Waianae, the older of the two, created the mountain range on the western side of the island, whereas Koolau shapes the eastern side. Central Oahu is an elevated plateau bordered by the two mountain ranges, with Pearl Harbor to the south. Oahu's most famous natural landmarks, including Diamond Head and Hanauma Bay, are tuff rings and cinder cones formed during a renewed volcanic stage (roughly 1 million years ago).

The subject property has soils from the Wahiawa series (WaA) and Kolekole series (KuB). Both soil types are similar. The following soil description is from the Soil Survey of the Island of Hawaii (US Soil Conservation Service, 1972).

Wahiawa Series

This series consists of well-drained soils on uplands on the island of Oahu. These soils developed in residuum and old alluvium derived from basic igneous rock. They are nearly level to moderately steep. Elevations range from 500 to 1,200 feet. Rainfall amounts to 40 to 60 inches annually; most of it occurs between November and April. The mean annual soil temperature is 71° F. Wahiawa soils are geographically associated with Kunia, Lahaina, Leilehua, and Manana soils. These soils are used for sugarcane, pineapple, pasture, and homesites. The natural vegetation consists of bermudagrass, guava, honohono, koa haole, and lantana.

Wahiawa silty clay, 0 to 3 percent slopes (WaA).

This soil occurs on smooth, broad interfluves. Included in mapping were small areas of Kunia, Lahaina, and Leilehua soils. In a representative profile the surface layer is very dusky red and dusky red silty clay about 12 inches thick. The subsoil, about 48 inches thick, is dark reddish-brown silty clay that has subangular blocky structure. The underlying material is weathered basic igneous rock. The soil is medium acid in the surface layer and medium acid to neutral in the subsoil. Permeability is moderately rapid. Runoff is slow, and the erosion hazard is no more than slight. The available water capacity is about 1.3 inches per foot in the surface layer and about 1.4 inches per foot in the subsoil. In places roots penetrate to a depth of 5 feet or more.

Kolekole Series

This series consists of well-drained soils on uplands on the island of Oahu. These soils developed in old gravelly alluvium mixed with volcanic ash. They are gently sloping to moderately steep. Elevations range from 500 to 1,200 feet. The annual rainfall amounts to 35 to 50 inches, most of which occurs between November and April. The mean annual soil temperature is 71° F. Kolekole soils occur on the windward slopes of the Waianae Range. They are geographically associated with Kunia, Mahana, and Wahiawa soils. These soils are used for sugarcane, pineapple, and pasture. The natural vegetation consists of guava, lantana, Bermuda grass, and Natal redtop.

Kolekole silty clay loam, 1 to 6 percent slopes (KuB).

This soil occurs on smooth slopes. Included in mapping were small areas of Kunia and Mahana soils, small-eroded spots, and steep side slopes along drainageways.

In a representative profile the surface layer is dark reddish-brown silty clay loam about 12 inches thick. The subsoil, about 48 inches thick, is dark reddish-brown silty clay loam and silty clay that has subangular and angular blocky structure. The substratum is old gravelly alluvium. A compact, panlike layer typically occurs at a depth of 24 to 40 inches. The soil is extremely acid to strongly acid in the surface layer and medium acid to very strongly acid in the subsoil.

Permeability is moderate to the pan-like layer and moderate in the compact subsoil. Runoff is slow, and the erosion hazard is slight. The available water capacity is about 1.3 inches per foot of soil. Roots are restricted by the compact layer.

The soil at the subject property appears to support vegetation including grasses, weeds, shrubs and trees. Small gardens located within the Village have been productive for many years. These soil types tend to be quite slippery when wet and dusty when dry.

3.1.2 Surface Water

Kunia Village is roughly 7 miles upgradient from the Pacific Ocean at Pearl Harbor, 8 miles from the Waianae Coast, and 9 miles from the North Shore. All open Coastal waters are classified as Class A or AA Open Coastal Marine waters. Storm water is likely to drain into Waikele Gulch, and ultimately into the Middle Loch of Pearl Harbor. Pearl Harbor has a special classification for water quality standards. The nearest surface water body is Lake Wilson (Wahiawa Reservoir) approximately 2.5 miles to the northeast and upgradient from the subject property.

There are two branches of a normally dry stream bed which occur within the Village. The stream beds flood during extreme storm events; with flows normally lasting only a few hours. The site is located in FEMA flood zone D (not studied); however, it is outside the 100-year floodplain. A copy of the Flood Insurance Rate Map (FIRM) is not available for this site. It is also outside the Oahu Civil Defense Tsunami inundation zone. Kunia Village has existing erosion control measures in those locations that are prone to stormwater runoff. Construction contractors will be required to obtain NPDES and other required permits prior to the start of construction. During construction they will be required to use best management practices to control stormwater runoff

3.1.3 Groundwater Resources

The groundwater at the site is within the Ewa section of the Schofield High Level Water Body (SHLWB) aquifer system. This is a dike impounded aquifer which is maintained several hundred feet above the level of basal aquifers. Perched groundwater is known to be trapped at approximately 100 feet below ground surface atop a low permeable rock layer. The basal and perched aquifers beneath the site are contaminated with pineapple fumigants and trichloroethylene (TCE) due to past land uses. An active superfund remedial action continues on the subject property due to an accidental spill in the late 1970s. As part of the consent decree, Del Monte Hawaii operates a pump-and-treat system that removes approximately 750,000 gallons of groundwater per day. Water is stripped of volatile contaminants within an aeration tower and subsequently mixed with irrigation water for use by farmers in Central Oahu. Potable

water at the site is being treated as a result of dumping or spill of trichloroethylene. After extensive environmental investigations no source was ever identified; however, the US Army garrison, Hawaii provides aeration for potable water in order to volatilize TCE levels to below acceptable drinking water standards.

The boundary between non-drinking water aquifers and underground sources of drinking water is generally referred to as the "UIC Line". Restrictions on injection wells differ, depending on whether the area is inland (*mauka*) or seaward (*makai*) of the UIC line. The subject property is inland of the UIC line, and therefore injection of domestic or industrial wastewater is prohibited.

3.1.4 Climate and Air Quality

The project site has a mild, semi-tropical climate of characteristic of most regions of Oahu. The average maximum daily temperature ranges from 78 °F to 87 °F, with an average minimum temperature ranging from 60 °F to 68 °F depending on the season (Atlas of Hawaii 1992). Rainfall for this area is averages 45 inches annually, with much of it occurring between November and April. Winds from the northeast, known as trade winds, are the most predominant over the Hawaiian Islands. Typical wind velocities range from 3 to 14 knots. There is an occasional shift in the wind patterns to the westerly "Kona" winds which are sometimes quite strong.

In Hawaii, both federal and state environmental health standards pertaining to outdoor air quality are generally met due to prevalent trade winds. Aircraft operations at Wheeler Army Airfield are likely the largest source of stationary air emissions in the vicinity, yet due to the consistent winds, the regulated air pollutants in the area are within the air quality limits established by the Clean Air Act.

There are no significant air emissions sources associated with Kunia Village. During construction there may be additional traffic with temporary contributions to air pollution from fugitive dust and automobile emissions. Automobile and fuel power construction equipment will be limited to that necessary to build the project, and fugitive dust will be managed under best management practices as defined by the State of Hawaii. The proposed action does not include construction and renovation of 82 units under the bond sale, as that has been previously assessed. Expansion of the remaining portions of the Village is expected to be completed in increments as funding is identified.

3.1.5 Noise and Odor

Kunia Village is relatively quiet. Ambient noise levels are characteristic of rural communities. Helicopter traffic into Wheeler Army Airfield is the largest source of ambient noise. Flight operations exist day and night. Noise associated with the proposed action to rebuild Kunia Village will include construction noise during business hours. This construction noise is expected to be intermittent, temporary, and confined to business hours during construction periods. Additional vehicular traffic is also expected to be minimal.
3.1.6 Scenic Value and View Plane

The topography of the area is gently sloping toward the east southeast. The land begins to slope much more rapidly about one mile to the west where the eastern flank of the Waianae range begins. There are limited ocean views from the upper (west) side of the property. View planes toward the west from the Village are of farmland and the back side of the Waianae range. Views to the north, east and south are also of farmland. The majority of which is used for corn production. The small farm plats to the south of the Village are particularly scenic due to the windbreaks and row crops that are seen on the hillsides immediately below the Village.

The proposed action consists of infill and subtle changes to the Village infrastructure. All new construction will be consistent with the Village character. The design of all major improvements will be subject to approval by the State and Federal Historic preservation agencies.

With the exception of those existing views that are created by having a vacant house lot nearby which is filled, the proposed actions covered within the proposed 201(H) exemptions are not expected to create noticeable changes in the view planes or scenic vistas from within or around the Village.

3.1.7 Hazardous Substances

Construction equipment using fossil fuels and hydraulic power will be used in grading and building the facility. There is some possibility of leaks, spills or accidents during construction. The construction contractors will be required to develop and maintain an emergency action plan for management and recovery of any release to the environment. Aging houses may also have asbestos containing materials and lead-based paint. Demolition and/or repair of the structures will be governed by the contractor's best management practices to reduce exposure of both workers and nearby residents to hazardous materials during construction and demolition.

3.2 Biological Environment

3.2.1 Vegetation

The subject property is slightly over 100 acres, rhomboidal (See Figure 3) with the eastern boundary along Kunia Road. Slopes along the stream bed are occasionally quite steep; otherwise the property is gently sloping with 40 to 60 foot maximum elevation difference. Most of the subject property is developed with roadways and paved work surfaces. Vegetation consists of grass and bare soil, with trees only where planted for fruit or shade. The stream bed and other depressions and other areas that are not actively managed support dense stands of guinea grass and invasive trees or shrubs. There are no natural lands within the subject property only those that are actively managed and those whose management has lapsed. During the period when the Plantation managed the property most undeveloped areas were mowed. The dominant vegetation types are Saint Augustine grass in lawns, with planted fruit, or ornamental trees, and vegetable gardens. Land that is not actively managed begins to grow Koa haole (*Leucaena leucocephala*) and kiawe (*Prosopis pallida*) are both introduced and considered invasive species.

3.2.2 Wildlife

The subject property has been residential for over 75 years. Wildlife that transits the property would originate primarily on the slopes of the Waianae Range in the conservation land to the west. Those areas may be relatively important habitat for endemic Hawaiian birds including the Oahu elepaio (*Chasiempis sandwichensis ibidis*), Apapane, (*Himatione sanguinea*) and Amakihi (*Hemignathus virens*). Other species common to the area include northern cardinal (*Cardinalis cardinalis*), spotted dove (*Streptopelia chinensis*), red-vented bulbul (*Pycnonotus cafer*), Indian myna (*Acridotheres tristis*) and gray francolin (*Francolinus pondicerianus*). Feral mammals include pigs (*Sus scrofa*), Indian mongoose (*Herpestes javanicu*)s, rats (*Rattus rattus or Rattus norvegicus*) and common mice (*mus musculus*) and cats (*Felis domesticus*).

3.2.3 Special-Status Species

The Hawaii Biodiversity and Mapping Program (HBMP) provided information for occurrences within one-half mile of the proposed site. Past reports have indicated that the general area may contain two varieties rare plants, the Ewa Plains Akoko and Red Ilima. The known locations of these plants are away from the subject property. A letter to the US Fish and Wildlife Service in October 2013 did not identify any special-status species or critical habitats located on the subject property. As referenced above the Waianae Range conservation land contains a relatively important habitat for endemic species of insect, and plants. These are separated from the subject property by more than one mile of farm land which is under relatively constant management for agricultural production.

3.3 Socioeconomic

Table 3-1 from the US Census Bureau shows the statistical description of Kunia Village. There are no other residential areas within the Zip code included in these statistics, therefore all housing units were owned and operated by Del Monte in 2000 and KVTHC in 2010. In 2000, the economics of pineapple were not favorable and Del Monte planned to close the Hawaii Plantation but had not announced the closing date. By 2010 Del Monte had withdrawn from the Hawaii Market and Kunia Village was in transition. Many of the former Del Monte employees had not yet found employment and many had moved away. Almost all of the Del Monte retirees remained and still reside in Kunia Village.

SEX AND AGE	2000	2010	% Change	
Total population	667	457	-31.48%	
Median age (years)	32.6	34.9	+7.06%	
HOUSEHOLDS BY TYPE	2000	2010	% Change	
Total households	157	109	-30.57%	
Family households (families) [7]	129	95	-26.36%	

Table 3-1: 2000 to 2010 Census Comparison for ZIP Code 96759

With own children under 18 years	65	39	-40.00%
Two adult family	98	70	-28.57%
With own children under 18 years	51	34	-33.33%
Single Female householder	18	14	-22.22%
With own children under 18 years	10	5	-50.00%
Nonfamily households [7]	28	14	-50.00%
Householder living alone	21	9	-57.14%
Households with individuals under 18 years	86	58	-32.56%
Households with individuals 65 years and over	47	37	-21.28%
Average household size	4.11	4.19	+1.95%
Average family size [7]		4.42	-2.43%
HOUSING OCCUPANCY		2010	% Change
Total housing units	167	119	-28.74%
Occupied housing units		109	-30.57%
Vacant housing units		10	0%
For seasonal, recreational, or occasional use		0	0%
Homeowner vacancy rate (percent) [8]	0	0	0%
Rental vacancy rate (percent) [9]	3.3	8.5	+157.58%

Table 3-2: ZIP Code 96759 2010 Census Demographics

2010 Population:	457
Households per ZIP Code:	109
Average House Value:	\$0
Avg. Income Per Household:	\$31,875
Persons Per Household:	4.19

The population of the State of Hawaii was 1,360,301 in 2010, which represents an average annual growth rate of 1.2% from 2000 to 2010 (US Census Bureau 2010). This compares with an average annual growth of 0.9% for the remainder of the nation. The vast majority of Oahu neighborhoods lost population over the past decade. Few neighborhoods lost as many as Kunia (31.4%). During this decade Del Monte Hawaii left Hawaii and during 2010 the transition between Del Monte and HARC was still on-going. The James Campbell Estate was also liquidating assets but the new buyers had not made structural changes to allow them to put land back into service. Many farm workers left the area to look for new employment; in some cases it was the first time that Del Monte was not their employer and landlord.

3.3.1 Social Factors and Community Identity

Community identity is strong within Kunia Village, and some current residents have spent the majority of their lives within its boundaries. A significant fraction of Hawaii's local population



Figure 3-1: *Kunia Village in the* 1960s

either lived in a plantation camp or had relatives who did during their early years. This type of close-knit community recalls a simpler time in our history. During much of this period fathers, sons and daughters worked the same fields, stayed close together and faced life's challenges as part of this community. It is a part of our history that was lost with the loss of the sugar and pineapple plantations. Many social support mechanisms were lost at the same time. Kunia Village has been a community of Pineapple workers since 1910. Most employees walked or rode a bicycle to assembly point for assignments. The Plantation paid the bills, ran the store, and clinic, provided church buildings and recreational facilities. This was a place where neighbors came together when one of their neighbors was sick or injured. The plantation lifestyle was lost as the price paid to support progress. Many wonder if the price was too high.

Kunia Village is now on the State and Federal Historic Registers as one of the few remaining intact plantation villages. It will be run as an agricultural village in perpetuity; supporting many farms instead of one. While not all of the amenities of the original village can be kept, KVTHC will maintain as much of the social fabric and community identity of Kunia Village as possible.

3.3.2 Public Services

Much of the infrastructure in the vicinity of the subject property is privately-owned by KVTHC. The infrastructure inherited from Del Monte, like the structures is in need of repair and maintenance. KVTHC owns, operates and maintains (through contracts) the roads, water distribution system, wastewater treatment plant, and some of the electrical distribution infrastructure.

3.3.2.1 Electricity

The majority of power poles and lines within Kunia Village belong to Hawaiian Electric Company. Electrical power is provided through a Hawaiian Electric Company (HECO) substation located on the East side of Kunia Road near the center of the Village. 46-kilovolt (kV) power is reduced and distributed to pole-mounted transformers for local distribution through a combination of 11.5 kV and 46 kV overhead power lines. Commercial areas are supplied with 480V three phase power, while residential areas have 115 and 220 volt single phase power.

Local generation activities are being considered, but are not designed or contracted at this time. The total demand for Kunia Village is less than 1 MW. The island Oahu total electric demand is estimated at 1.3 GW. The proposed action may include local power generation which cannot be further specified at this time, but due to the small contribution is not expected to significantly affect the stability of the grid or impact the Utility's ability to provide quality electric service to its customers.

3.3.2.2 Telecommunications

Telephone systems in Kunia Village are currently owned and operated by Hawaiian Telephone or Oceanic Cable Company. No changes of the existing telephone services are planned. Cable and internet services may be obtained from various providers and is left to the discretion of tenants. No changes in the existing arrangement are planned for cable or internet.

3.3.2.3 Potable Water

The primary components of the existing potable water system are Del Monte Well 3 (aka: Navy Well), Del Monte Well 4, an air stripping tower, 305,000-gallon tank, distribution pipelines from the wells to the stripping tower, and transmission and distribution pipelines to service Kunia Village and the commercial buildings. Both wells and the distribution system to the air stripping tower are operated through Second City Property Management (SCPM) a service contractor for the Kunia Water Association. The air stripping tower is paid for by the United States Army, but operated by SCPM. The 305,000 gallon tank, fire suppression system for the village, and potable distribution system is owned by KVTHC and operated by SCPM.

Well 3 was drilled in 1959 to a depth of 1020 feet below ground elevation of 857 feet, and 661 feet of 16" solid casing and 226 feet of 16" perforated casing was installed in the well. The pump is a vertical line shaft pump driven by a 500 horsepower (HP), 2300 volt electric motor rated at 1500 gallons per minute (gpm) at 990 feet of head, and 1400 gpm at 1050 feet of head. The pump shaft is lubricated with food grade oil. Well 3 is the main source of potable water for Kunia Village and agricultural irrigation water for the entire area. It is activated only during the day and power turns off between 4:45 p.m. and 9:00 a.m. every day. Liquid sodium hypochlorite for disinfection is injected into the water at the well head before the water is pumped to the air stripping tower.

Well 4 was drilled in 1979 to a depth of 990 feet which is below sea level. Ground elevation is 872 feet above sea level. 830 feet of 16" solid casing was installed in the well. No perforated casing was installed. Until recently it was a driven by a 500 horsepower (HP) diesel engine. The engine was replaced with an electric motor in summer 2013 with vertical line shaft pump and the diesel engine is only used for standby via a right angle drive. Well 4 is mainly used to supply the agricultural irrigation system. However, the well can be used to supply the potable water system when needed.

The purpose of the air stripping tower is to remove contaminants (Trichloroethylene and 1,2,3 Trichloropropane) in the water from past activities by the United States Army at the adjacent Schofield Barracks. Therefore, all costs associated with this tower and its ancillary equipment, including operation and maintenance costs, are borne by the U.S. Army. The major ancillary equipment includes the fan that blows air into the tower and the generator that provides standby power for this fan. The stripping tower is rated for 1,300 gallons per minute (gpm) to 1,500 gpm and is activated when the Kunia Well pump is energized. Water from the well enters the top of the stripping tower and exits at the bottom for discharge into the adjacent 305,000 gallon potable water storage tank.

The 305,000 gallon tank is a rectangular structure with a corrugated sheet metal roof, with the majority of the structure being below grade. The tank is located next to the stripping tower. The outlet from the tank is a 10" PVC line that services Kunia Village.

The Village water distribution system has been installed and repaired many times and is in need of replacement. All buried pipelines are of iron, or polyvinyl chloride (PVC). The larger 10" and 12" transmission lines are a mix of PVC. iron, and IPS pipe of varying classes. The 3"



Figure 3-2: Kunia Village aeration to wer and potable water reservoir in 2007

and smaller distribution lines are a mix of iron, PVC, and IPS pipe of varying classes.

A recent Preliminary Engineering Report by Austin Tsutsumi and Associates recommended that the water distribution system be replaced because of its age and improper installation depth. This action is required before a booster pump can be installed to bring Village water pressure up to a range that is considered acceptable by City and County standards. The report also pointed out other minor deficiencies in the systems, which are being addressed at the time of this writing. Improvement of the water and wastewater systems (section 3.3.2.4) is part of the proposed actions assessed in this document.

3.3.2.4 Wastewater

The Kunia Village Title Holding Corporation owns and, through subcontractors, operates wastewater collection and treatment systems.

Wastewater from Kunia Village is conveyed to the Kunia wastewater treatment plant (WWTP) for treatment to produce an effluent that is intended for irrigation use. Wastewater from the residential units of Kunia Village discharges into individual grease traps for removal of fats, oils and grease (FOG) and then into one of three septic tanks for removal of solids that can settle by gravity within these septic tanks, before continuing to flow by gravity to the WWTP.

The treatment process at the WWTP is an aerobic intermittent re-circulating reactor (AIRR) with a fixed media trickling filter, for which DOH approval for use was issued on October 2, 1991 for a design flow of 55,000 gallons per day (gpd). The quality of the effluent was originally intended to conform to what is now classified by DOH for reuse as R-2 Water. This classification allows for subsurface (mainly drip) irrigation with the effluent, and under controlled conditions inclusive of buffer areas, spray irrigation of non-edible crops during limited hours of the day. There are currently 32 acres of land near Kunia Village which is being used for forage and which is being sub-surface irrigated with effluent from the WWTP. Current plans are to remove 13 acres from this reuse area and add an area across Kunia Road to be used for banana production. The effluent is stored in a 1.4 million gallon (MG) reservoir near the WWTP. The treatment capacity and effluent quality were upgraded in 2003, primarily as a result of installing a duplex DynaSand Filter system and improving the chlorine contact tank. The capacity was increased to 70,000 gpd, with the intent of producing an R-1 water effluent, which allows for spray irrigation without the restrictions of R-2 Water. The ability to consistently produce R-1 Water is marginal, and thus, the effluent is considered to be R-2 Water. The Preliminary Engineering Report recommended that wastewater collection system be replaced in order to increase the slope of lines, and provide adequate cover over the drainage lines. The facility does experience increased flows during rainy periods as do municipal wastewater plants.

Wastewater generation is now estimated to be around 27,000 gallons per day from all sources within Kunia Village. Assuming that 90% is generated from residences, the 85 occupied farm dwellings that are now in use generate less than 25,000 gallons per day or less than 295 gallons per household per day. Using a design figure of 300 gallons per day, the proposed addition of 79 housing units is expected to add a similar amount or a total of 23,700 gpd of wastewater. At full development the wastewater treatment plant will be operating at less than 50,000 gallons per day or approximately 90% capacity. The proposed increase wastewater volumes resulting from the proposed action will be within the design and operating capacity of the WWTP. Should the wastewater volumes increase beyond these design capacities the Wastewater treatment plant will be upgraded to handle additional flow requirements.

3.3.2.5 Solid Waste

Solid waste generated within the community is collected by the City and County of Honolulu. Waste generated by the commercial establishments within the Village is collected by various licensed contractors and disposed at a permitted disposal facility on Oahu in accordance with State and County requirements. No changes in this system are envisioned.

3.3.2.6 Drainage

Infiltration of stormwater at the project site is rapid until the saturation point is reached, at which time the project site is subject to relatively rapid runoff. The area is subject to heavy rainfalls on occasion. Stormwater from the site drains toward one of the many swales and small gulches within the Village area. These conveyances flow into Waikele gulch and ultimately to Pearl Harbor. All areas with exception of house gardens are consistently maintained with a grass covering in order to minimize erosion. Flooding is localized to the gulch bottom areas, but this can be significant during major storm events. No permanent structures or activities are contained within the gulches. Housing is all on post and pier. No flood damage has been reported within the Village due to its rolling topography and construction type.

During construction periods, best management practices will be employed to reduce soil erosion from wind and stormwater. These practices may include minimal grading, soil mats, erosion-control socks, or silt fences. The proposed action may not be required to obtain an NPDES industrial stormwater permit, but will obtain a construction stormwater permit in advance of any site grading exceeding 1 acre. New impervious surfaces will consist of roofs and footings for the houses, which are not expected to be a large fraction of the total area. The proposed action is not expected to have a major impact on stormwater drainage at the site or in the vicinity.

3.3.3 Roads and Access

Access to the site is through the signalized intersection at Kunia Road, State Highway 750, and Kunia Drive, which is near the south end of the property. A commercial entrance exists on the north boundary of the property. This is used primarily by tenants of the north commercial area, and parents accessing the Head Start facility at the northwest corner of the subject property. Internal roadways include 8 paved residential roadways and 3 unimproved fire lanes and roadways. Roads will be patched or improved as funding allows. Some are in good condition and do not require resurfacing others may be resurfaced.

Construction related traffic will be light over an extended period to accommodate one to 3 renovation projects going on at any time until the Village is completely renovated. Construction will be accomplished primarily using the existing staff and supplemented by 2-3 specialty tradesmen during the construction period. The proposed action will not contribute significantly to local traffic impacts.

3.3.4 Archaeological and Historic Resources

The ground surface across the entire parcel has been graded, filled and heavily disturbed over the past 100 years. No archaeological resources have been recorded or observed within the property boundaries. Given the extensive grading and development that exists, no such resources are expected to remain intact if any were ever present.

Kunia Village has sufficient historic value for placement on the State and Federal Historic Registers. The following draws heavily on or directly from Mason Architects' National Register of Historic Places nomination for Kunia Camp Historic District.

The proposed Kunia Camp Historic District is significant under Criterion A [Property is associated with events that have made a significant contribution to the broad patterns of our history] for its association with the pineapple industry, which during the midtwentieth century was Hawaii's second largest industry. Kunia Camp is also associated with the California Packing Company (CPC later known as Del Monte), one of the major pineapple operators in Hawaii from its inception in 1916 until the closing of the Kunia facility in 2007.

Throughout the 20th Century, the importance of pineapple in Hawaii's agricultural industry was second only to sugar... With plantations and/or canning facilities on almost every Hawaiian island, the industry was responsible for the cultivation of thousands of acres of land, the employment of thousands of workers, and the processing of millions of pineapples. In addition to the economic impact of the industry, the fruit became a powerful icon of the Territory and State of Hawaii.



Beginning around 1960, the Hawaiian pineapple industry began to lose both a portion of its world market share and its place as one of Hawaii's leading industries. This happened as countries such as Brazil, Mexico, the Philippines, and Thailand expanded their production of fresh and canned fruit, and as tourism and the military became the state's most valuable industries.



Figure 3-4: Kunia Drive showing houses to be restored near the entrance to Kunia Village

As canned pineapple from other countries began filling the market, Hawaiian canneries began to close and plantations, once located on Maui, Oahu, Molokai, Lanai, and Kauai, began to shrink. Del Monte cannery closed in 1985, and Dole cannery in Iwilei closed in 1991. During the end of the 1990s and into the 21st century the value of fresh Hawaiian pineapple overtook the value of canned Hawaiian pineapple...

The proposed Kunia Camp Historic District is also significant under Criterion C as a concentration of Plantation Style residences. The residences display the distinctive characteristics of the Hawaiian Plantation Style of architecture, which includes vertical boards (tongue-and-groove and board-and-batten) on the exterior, single-wall construction (some with girts), and pitched roofs [some hipped] with wide, overhanging eaves.

The single-wall construction of the camp is characteristic of Hawaiian Plantation Style houses... This construction method was perfected around 1917 by Japanese construction workers on the plantations in Hawaii. It is a structurally sophisticated method of construction that exemplifies economy of material and labor.

Single wall construction also reflected the difficulty of importing building materials from the mainland and the use of standardized components. Plans utilizing single wall design were subsequently codified by the Hawaii Sugar Plantation Association (HSPA) throughout the islands and ultimately migrated into urban construction.

The Period of Significance is ca. 1928 to ca. 1972, which is a span of time that reflects the initial development and prime functioning years of the camp, which loosely correlates with the peak of the pineapple industry in Hawaii. It begins with the first phase of construction at the Old Camp (pre-1928, 1928-1940), covers several decades of use and expansion as a pineapple plantation camp, and ends with the final build-out of the New Camp in 1972, when a grouping of residences was moved to the property and integrated into lots found within the existing street layout.

Still surrounded by agricultural land, Kunia Camp is the last intact pineapple plantation housing community under one ownership on Oahu... Its unique collection of plantation residences illustrating [the] architectural evolution of the single wall structure concept; and introduction of neighborhood planning features such as indoor plumbing, individual yards, grid street patterns, and community amenities (gymnasium, churches, and school) that were increasingly... provided by companies to workers desiring a stable, family-oriented workforce for the plantation.

The Kunia Camp Historic District is established under Criteria A and C; it retains its historic integrity; and the majority of its individual resources within the district are at least 50 years old.

3.3.5 Cultural Impacts

Cultural resources, as used in Chapter 343, HRS, refer to the "practices and beliefs of a particular cultural or ethnic group or groups". The types of cultural practices and beliefs to be assessed may include "subsistence, commercial, residential, agricultural, access-related, recreational, and religious and spiritual customs (OEQC 1997), and may also include traditional cultural properties or other historic sites that support such beliefs and practices.

Cultural impact assessment studies have been completed for the project site in 2006 (NRC, 2006) and the Military areas immediately north of the subject property in 1998 and again in 2005 (PACNAVFACENGCOM, 1998), (NAVFAC Pacific, 2005). These cultural impact assessment studies involved interviews with individuals and groups who are knowledgeable about the proposed project area, its resources and traditional uses. Archival research was also used to identify any traditional beliefs and customs. The findings of the cultural impact assessments include several significant features of the Central Oahu Plain but nothing of relevance within the project site.

The areas of the central plain were the site of many battles between competing Alii before the unification of Hawaii by Kamehameha I. These areas were thought to be continuously vegetated by grasslands with only sparse tree covering. They were probably chosen because of the open nature, which allows for unrestricted movement of foot soldiers, the distance from the coastline, and the space to amass people for battles. Kūkaniloko, the birthing stones are located 3.4 miles northeast of the project site. Kūkaniloko is a traditional birthing place which some historians describe as "one of the two famous places in the Hawaiian Islands for the birth of children of



Figure 3-5: Housing units to be renovated.

tapu chiefs" (McAllister, 1933). This tradition is believed to have been established at Kūkaniloko sometime during the 14th or 15th century by the chief Nanaka'oko and his wife, for the birth of their son Kapawa (Fornander, 1880). Today Kūkaniloko is a state monument managed by the State Office of Hawaiian Affairs. No culturally significant locations or traditional practices were identified within the boundaries or near the project site.

3.3.6 Land Use

Kunia Village is surrounded by unique and other agricultural lands which have been rated as potentially among the most productive lands in the State for diversified agriculture and as lands for production of specific high-value food crops of statewide or local importance. For example, the State Department of Agriculture's November 1977 study, Agricultural Lands of Importance to the State of Hawaii (Revised) (ALISH), indicates that the lands along Kunia Road north of Wahiawa and surrounding Mililani are uniquely suited for pineapple production. In addition, the University of Hawaii Land Study Bureau's December 1972 bulletin, Detailed Land Classification - Island of Oahu, rated productive capacity of the former sugar fields along Kunia Road, north of Wahiawa, and surrounding Mililani as predominately "B." (An "A" rating was given to the lands with the highest productivity, "E" was given to the lowest and "N" was given to unclassified lands.) A soil classification of "N" was given to the Village because it was in use for residential purposes.



Kunia Village is located near the middle of 12,000 acres of prime agricultural land. When the former James Campbell Estate land was sold its Hawaii holdings in 2008 - 2011, it was sold to agricultural companies or groups that intended to place the land into agricultural service. The exception to this statement is Parcel 7 and 9, which was sold to a joint venture between Actus Lend lease and the US Army to possibly establish additional military housing at Schofield Barracks and a buffer between the Army Post and civilian



development. All of the parcels, including Parcel 7 are now actively utilized for crop production. Kunia Village is bounded on all sides by farmland leased and farmed by Monsanto Corporation or tenants of the agricultural parks under its authority.

3.3.6.1 Land Use Constraints

The subject property is within the State agricultural district and is zoned restricted agriculture (AG-1) by the City and County of Honolulu. Land-use constraints originate from multiple sources:

- Title restriction placed on the parcel at the time of sale which requires that a number of units in the Village be dedicated to affordable rental units in perpetuity.
- Environmental restrictions placed on the property by consent decree between Del Monte Corporation and the United States Environmental Protection Agency.
- City Land-use Ordinances, some of which may be exempted under the 201-H permit exemptions, if the permit is approved by the Honolulu City Council.

An 11-acre portion of the subject property continues to be remediated by Del Monte Corporation after a pesticide spill in 1979 that contaminated the potable water source used by the Village. 201-H exemptions are allowed for any land-use restriction that does not impact public health or the environment. The activity use limitations and engineering controls established under consent decree between Del Monte and the EPA are, by definition, designed to protect public health and will not be appealed or requested for exemption.

Some land-use restrictions defined by The City and County of Honolulu Land-Use ordinance (LUO) may be appealed for exemption under Ch. 201-H The LUO describes the purpose and intent of agricultural zoning districts in Section 21-3.50 as:

- (a) The purpose of the agricultural districts is to maintain a strong agricultural economic base, to prevent unnecessary conflicts among incompatible uses, to minimize the cost of providing public improvements and services and to manage the rate and location of physical development consistent with the city's adopted land use policies. To promote the viability and economic feasibility of an existing agricultural operation, accessory agribusiness activities may be permitted on the same site as an adjunct to agricultural uses. These accessory activities must be compatible with the on-site agricultural operation and surrounding land uses.
- (b) The intent of the AG-1 restricted agricultural district is to conserve and protect important agricultural lands for the performance of agricultural functions by permitting only those uses which perpetuate the retention of these lands in the production of food, feed, forage, fiber crops and horticultural plants. Only accessory agribusiness activities which meet the above intent shall be permitted in this district.

(c) The following guidelines shall be used to identify lands which may be considered for the AG-1 restricted agricultural district:

- (1) Lands which are within the state-designated agricultural district and designated agricultural by adopted city land use policies;
- (2) Lands which are predominantly classified as prime or unique under the agricultural lands of importance to the State of Hawaii system; and
- (3) Lands where a substantial number of parcels are more than five acres in size.

The proposed action described herein is supported by the purpose and intent of LUO Section 21-3.50. By providing affordable housing that is reserved for agricultural workers within the agricultural zone, Kunia Village is promoting (a) the viability and economic feasibility of the existing agricultural operations in Central Oahu, and (b) perpetuating the retention of these lands by making it possible to afford to live on farm wages near the jobsite. All of the land surrounding Kunia Village is zoned AG-1, in large parcels and it is all actively farmed in part by current residents of Kunia Village.

The LUO also specifies the density of farm dwellings as follows:

Sec. 21-5.250 Farm dwellings.

- (a) In the AG-1 district, the number of farm dwellings shall not exceed one for each five acres of lot area. In the AG-2 district, the number of farm dwellings shall not exceed one for each two acres of lot area.
- (b) Each farm dwelling and any accessory uses shall be contained within an area not to exceed 5,000 square feet of the lot.

A primary reason for the 201-H application and this Assessment is to obtain an exemption from LUO Section 21-5.250, which restricts the number and density of farm dwellings allowed on the

subject property. The 121 existing farm dwelling units are not in compliance with LUO Sections 21-5.250, which requires a minimum of five acres per farm dwelling. The existing density allowed under Variance 2008/Var-26 allows an overall density of approximately 0.98 acres per dwelling. If 79 additional residential units are constructed the overall density would increase to 0.595 acres per dwelling. This will be a requested exemption in the 201-H application.

In addition the community service structures within the village such as the Community Center/Gym, Post Office, Administration Building and the Church may not be in compliance with LUO Section 21-3.5. Allowance for community service structures will be an exemption requested by the 201-H application.

Accessory to agriculture buildings may exceed the height limits or other construction standards. An exemption for the accessory buildings will be requested.

An exemption from property taxes and building permit fees commensurate with low-income housing will be requested through the 201-H process.

Hawaii Revised Statutes (HRS Chapter 205 Section 4.5 empowers the Land Use Commission to set the permissible uses within the State Agriculture Districts as follows:

§205-4.5 Permissible uses within the agricultural districts. (a) Within the agricultural district, all lands with soil classified by the land study bureau's detailed land classification as overall (master) productivity rating class A or B shall be restricted to the following permitted uses:

- (1) Cultivation of crops,
- (2) Game and fish propagation;
- (3) Raising of livestock,
- (4) Farm dwellings,
- (5) Public institutions necessary for agricultural practices;
- (6) Public and private open area types of recreational uses,
- (7) Public, private, and quasi-public utility lines and roadways;
- (8) Retention, of historic or scenic interest;
- (9) Agricultural-based commercial operations
- (10) Buildings directly accessory to agriculture or energy;
- (11) Agricultural parks;
- (12) Plantation community subdivisions,
- (13) Agricultural tourism conducted on a working farm,
- (14) Agricultural tourism activities,
- (15) Wind energy facilities;
- (16) Biofuel processing facilities,
- (17) Agricultural-energy facilities,
- (18) Construction and operation of wireless communication antennas;
- (19) Agricultural education programs
- (20) Solar energy facilities
- (21) Geothermal resources exploration and development,

(b) Uses not expressly permitted in subsection (a) shall be prohibited, except the uses permitted as provided in sections 205-6 and 205-8, and construction of single-family dwellings on lots existing before June 4, 1976. Any other law to the contrary notwithstanding, no subdivision of land within the agricultural district with soil classified by the land study bureau's detailed land classification as overall (master) productivity rating class A or B shall be approved by a county unless those A and B lands within the subdivision are made subject to the restriction on uses as prescribed in this section and to the condition that the uses shall be primarily in pursuit of an agricultural activity.

(c) Within the agricultural district, all lands with soil classified by the land study bureau's detailed land classification as overall (master) productivity rating class C, D, E, or U shall be restricted to the uses permitted for agricultural districts as set forth in section 205-5(b).

(d) Notwithstanding any other provision of this chapter to the contrary, golf courses and golf driving ranges approved by a county before July 1, 2005, for development within the agricultural district shall be permitted uses within the agricultural district.

(e) <u>Notwithstanding any other provision of this chapter to the contrary, plantation community</u> <u>subdivisions as defined in this section shall be permitted uses within the agricultural district, and</u> <u>section 205-8 shall not apply</u>.

(f) Notwithstanding any other law to the contrary, agricultural lands may be subdivided and leased for the agricultural uses or activities permitted in subsection (a).

§205-8 Nonconforming uses. The lawful use of land or buildings existing on the date of establishment of any interim agricultural district and rural district in final form may be continued although the use, including lot size, does not conform to this chapter; provided that no nonconforming building shall be replaced, reconstructed, or enlarged or changed to another nonconforming use and no nonconforming use of land shall be expanded or changed to another nonconforming use. In addition, if any nonconforming use of land or building is discontinued or held in abeyance for a period of one year, the further continuation of such use shall be prohibited.

The community service uses and structures detailed in Section 2.3 are not permitted uses under Chapter 205-4.5 (e.g. gym, church, future clinic). Section 205-4.5 (e) exempts Kunia Village from Section 205-8 so long as it is still considered a plantation community under the intent of the law. Based on the conclusion that Kunia Village remains a Plantation Community there is no requirement for an exemption from HRS 205 permitted uses.

3.4 Growth-Inducing, Cumulative, and Secondary Impacts

Indirect effects may include other impacts related to changes induced by the proposed action such as growth-induced changes in land-use patterns, or air and water quality impacts associated with population growth. Cumulative impacts may be defined as impacts on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes the action. A secondary impact is one that is caused by the proposed action but is removed in time or space from the project (Council on Environmental Quality, 1997). An exemption to increase the maximum number of residential units to 200 would expand the population of Kunia Village by roughly 40%. All services would be required to expand by a similar amount. Cumulative and secondary impacts may be expected if services were inadequate to handle the increase in population. As discussed in the preceding sections, the existing capacity of roads, water, wastewater, solid waste disposal, telephone, cable and electric power are capable of increasing by more than 40% without stretching the limits of service. Water, wastewater and roads owned by Kunia Village were designed for the much higher use required by Del Monte's intensive industrial agribusiness as opposed to the current 121 housing units and small scale agribusiness which has replaced it. These are growth inducing factors within Kunia Village, but they are small in comparison to the overall population trends. The availability of additional rental housing is not expected to draw new farm workers from outside the State, but it may bring farm families closer to the jobsite from Waipahu, Pearl City, Ewa, Waipio, the North Shore and Waianae. The proposed development may reduce traffic along Kunia Road, or at least reduce the miles commuted by residents of Kunia Village.

This assessment finds the growth inducing, cumulative and secondary impacts to be manageable without significantly impacting the quality of life within the Village or surrounding communities.

3.5 Required Permits and Approvals

Discussion follows for of the major permit approvals required prior to the start of construction.

State of Hawaii HRS Chapter 201-H permit for low-income housing

HRS 201-H is administered by the City and County of Honolulu and requires a vote of the City Council. This is the major discretionary permit required for the proposed action. Approval allows certain exemptions from City ordinances or statutes.

City and County of Honolulu, Building and Grading. The proposed project will be required to obtain all building and grading permits from the City and County of Honolulu.

State of Hawaii NPDES Construction Stormwater Permit. The Clean Water Act regulates discharge of all types of water from industrial sources and construction sites as well as discharge of process waters of all types. An NPDES Construction Stormwater Discharge Permit is required of construction projects that are grading areas greater than one acre. Although little on no grading will occur, the Project 1 site covers more than 29 acres. If an area larger than 1 acre in total is disturbed, an NPDES Notice of Intent and Form C will be prepared and approved prior to the start of construction. There are no industrial discharges or construction dewatering associated with the project.

State Historic Preservation Division of DLNR. An approval for the Master Plan and overall improvements will be obtained the State Historic Preservation Division prior to the start of construction.

Although the project is within the approach zones to Wheeler Army Airfield, there are no developments that are expected to exceed the existing height limitations or the existing buildings. FAA authorization will not be required.

The proposed project does not involve stationary sources or air pollution and is not required to obtain Clean Air Act permits.

4.0 CONSISITENCY WITH PLANS, POLICIES, AND REGULATIONS

4.1 Federal Policies Supporting Low-income Housing on Agricultural Land

Kunia Village has been approved to receive grants and loans through USDA Rural Development to support the rehabilitation or replacement of 82 of the 121 housing units within Kunia Village. USDA supports redevelopment of low income housing for farm workers through the Section 514 Farm Labor Housing loans and Section 516 FLH grant program, USDA Rural Development awards loans and grants to increase the supply of available rental housing for domestic farm laborers. *The housing is intended for any domestic farm laborer who receives a substantial portion of his/her income from the primary production of processed or unprocessed agricultural or aquacultural commodities.*

4.2 Hawaii State Policies Supporting Low-income Housing on Agricultural Land

HRS 226 "The Hawaii State Planning Act" was originally prepared in 1978. The purpose of this chapter was to prepare the Hawaii State Plan which serves as a guide for the future long-range development of the State; identify the goals, objectives, policies, and priorities for the State. The Hawaii State Plan was further divided into 12 functional plans that addressed the priority subjects. At the time The State Agriculture Functional Plan was prepared the State's agricultural priorities addressed measures to support plantations. At that time the Plantation communities were thriving company towns which did not need preservation or much scrutiny from government at all. The functional plans do not directly address plantation communities or low-income housing, but the broader objectives contained in these plans are still quite relevant.

The objectives for agriculture that are outlined in HRS 226-7 include;

(13)	Promote economically competitive activities that increase Hawaii's
	agricultural
	self-sufficiency
(15)	Institute and support programs and activities to assist the entry of displaced
	agricultural workers into alternative agricultural or other employment.
(16)	Facilitate the transition of agricultural lands in economically nonfeasible
	agricultural production to economically viable agricultural uses.

HRS Chapter 205 is the Statue which defines the four different land use districts used by State law, and describes the permissible uses within each district. HRS 205-4.5(a) includes as a permissible use of agricultural land:

- (4) Farm dwellings, employee housing, farm buildings or activities related to farming or animal husbandry..., and
- (5) Plantation community subdivisions, which as used in this paragraph means a cluster of employee housing, community buildings or acreage established on land currently or formerly owned, leased or operated by sugar or pineapple plantations and in residential use by employees or former employees of the

plantation; provided that the employees or former employees shall have a property interest in the land.

HRS 205-4.5 16 (e) States:

Notwithstanding any other provision in this chapter to the contrary, plantation community subdivisions as defined in this chapter shall be permitted uses within the Agriculture district, and Chapter 205-8 shall not apply.

Chapter 205-8 states that non-conforming uses may remain, but if non-conforming structures are demolished or non-conforming uses are discontinued they may not be replaced.

4.3 City and County Policies Supporting affordable Housing on Agricultural Land

The Proposed 2013 **General Plan for Oahu** (DPP 2012) proposes overarching policies goals for Oahu. The proposed action is supported by the following policies:

Housing: Objective A: To ensure a wide range of housing opportunities, choices and prices for all residents.

Policy 2

Streamline approval and permit procedures for housing and other development projects. *Policy 7*

Provide financial and other incentives to encourage the private sector to build homes for low and moderate-income residents.

Policy 8

Encourage and participate in joint public- private development of low- and moderate- income housing.

Policy 9

Encourage the preservation of existing housing which is affordable to low- and moderate-income persons.

Policy 10

Promote the construction of affordable dwellings which take advantage of Oahu's year-round moderate climate.

Policy 11

Encourage the construction of affordable homes within established low-density communities by such means as 'ohana' units, duplex dwellings, and cluster development.

Policy 12

Encourage the production and maintenance of affordable rental housing.

Policy 13

Encourage the provision of affordable housing designed for the elderly and the handicapped.

Objective C: To provide the people of Oahu with a choice of living environments which are reasonably close to employment, recreation, and commercial centers and which are adequately served by public utilities.

Policy 2

Encourage the fair distribution of low- and moderate-income housing throughout the island. Policy 3

Encourage the co-location of residential development and employment centers, and provide commercial, educational, social and recreational amenities

Policy 7

Preserve and encourage re-investment in older communities through infrastructure upgrades, public amenity improvements, tax incentives, and other governmental programs

Each of the objectives and policies listed above are supported by maintenance of an adequate supply of affordable housing for farm workers in Central Oahu. In the section on Economic Activity the General Plan is clear.

Objective C: To ensure the long-term viability and continued productivity of agriculture on O'ahu

Policy 1

Foster a positive business climate for agricultural enterprises and agricultural entrepreneurs to ensure the continuation of agriculture as an important component of Oahu's economy. *Policy 4*

Remove unnecessary impediments to developing, marketing and distributing locally grown food and products.

Policy 5

Promote small-scale farming activities and other operations, such as truck farming, flower growing, aquaculture, livestock production, taro growing, and subsistence farms

The proposed action addresses affordable housing in proximity to employment by perpetuating the Plantation Camp models developed under Sugar and Pineapple industries. Among the primary impediments to successful agriculture, particularly on small farms is the availability of affordable housing for farm workers that are located in proximity to the farms.

The Policies for culture and recreation are defined as:

Objective B: To protect, preserve, and enhance Oahu's cultural, historic, architectural, and archaeological resources

Policy 2

Identify, and to the extent possible, preserve and restore buildings, sites, and areas of social, cultural, historic, architectural, and archaeological significance.

Objective B-2 is precisely the objective of the proposed action. Of the existing 121 housing units approximately 2/3 will be renovated to their original layout and quality, and 1/3 will be replaced with housing that is in character with the historic housing in the Village.

The City began revising the General Plan in 2010. One of the planning studies commissioned for the Plan is the Affordable Housing Trend Report (Helber, Hastert and Fee, 2010). It identifies four factors inhibiting the development of affordable housing in Hawaii:

- 1. Cost of production
- 2. Development risk
- 3. Maintenance cost, and
- 4. Regulatory and infrastructure barriers

The report provides examples of regulatory and infrastructure barriers which include:

- Lack of capacity and poor condition of existing infrastructure systems (e.g., sewer, drainage, water)
- Inappropriate development standards such as applying urban street standards in rural areas
- Inflexible building codes that require the use of expensive materials and building systems in low-rise housing units, and
- Zoning regulations that discourage redevelopment if the lot is small or nonconforming

Kunia Village has experienced all four of the factors inhibiting development of affordable housing. The 201-H permit application addresses these primary regulatory and infrastructure barriers.

The **Central Oahu Sustainable Communities Plan** was prepared in 2001 for the period expiring in 2025. The Plans assumptions are out- dated but its principals are valid and the recommendations support the proposed action.

At the present time, neither Kunia nor Poamoho seem at risk of significant changes in operation or management. They are likely to be maintained, at least to minimum levels, for the foreseeable future. However, their long term future currently depends on the future of pineapple production. The villages could also serve a function as affordable housing for workers from new diversified agricultural activities on lands along Kunia Road and north of Wahiawa.

Central Oahu's plantation era heritage and physical reminders of that period are important to preserve as the region becomes urbanized. The existing village structures in the two villages should be rehabilitated or adapted for reuse. Related affordable housing could be developed to support diversified agricultural employees.

PLANNING PRINCIPLES

Planning principles for the Kunia and Poamoho Plantation Villages include:

Historic Function and Character. The existing rural forms and historic character exhibited within the villages should be preserved and enhanced. This includes the perpetuation of rural agriculture functions and activities in the surrounding area, in conjunction with village land uses.

Preservation of Historic Structures. Existing buildings of historical, cultural and/or architectural significance should be preserved.

Housing Affordability. Where feasible, existing housing units should be retained and rehabilitated in a manner which allows them to remain affordable to the existing residents.

New Development Forms. The design, visual appearance and placement of any new structures within or adjoining the existing villages, should reflect and complement their original historic character and forms.

GUIDELINES

To implement the general policies and planning principles for the Central Oahu Plantation Villages, the following guidelines should be followed.

Method of Preservation

- Existing historic plantation houses should be rehabilitated as part of an assisted housing program.
- *Rental dwellings should be rehabilitated and converted for sale, giving preference to existing residents to minimize displacement and retain the sense of community.*
- The historic development pattern, architectural character and street appearance should be preserved by varying conventional subdivision and other development codes, as appropriate. Structures that must be razed should be replaced, and other vacant areas developed with new in-fill development that respects the historic character of the original village.

The Central Oahu Sustainable Communities Plan contains land use designation maps in Appendix A of the document. Kunia Village is identified on the land use designation maps as agriculture or agriculture and preservation land. Although it is a residential community, Kunia Village is a agricultural community. Its residents are farm workers, many are still picked up by a bus owned by the farm, and some can walk to their farm lots within the ag-parks adjacent to the Village. Kunia Village was designed by the plantation to allow farm workers a long-term stable and affordable housing within easy commute to the jobsite. This function is still intact.

The proposed action preserves and promotes agriculture by providing affordable housing to farm workers. The commercial areas are all accessory to agriculture use, with exception to the single retail area that remains from the Kunia Store. The proposed action is supported by Federal, State, and County policy declarations.

5.0 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Affected Environment	Level of Concern	Impact and Mitigation
Water Resources and Drainage	Low	<i>Impact:</i> Potential stormwater runoff during construction <i>Mitigation:</i> NPDES construction permitting. No large scale grading
Seismic and Geological	No	None
Soils and Agriculture	No	No new development outside footprint of the existing Village
Flora and Fauna	No	None: Area is residential, previously disturbed and dominated by landscaped areas
Air Quality	No	No emissions sources. Fugitive dust minimized by small-scale construction, little grading
Visual Character	No	No changes from the existing conditions
Noise	Low	Impact: construction noise (carpentry) during business hours
		<i>Mitigation:</i> small scale construction. Work time is restricted to business hours.
Odor	No	None
Social	Positive	Improved living conditions due to new or renovated housing.
Historical and Archaeological	No	Site is on historic registers. All development to be approved by SHPD
Economic	Positive	Provides affordable housing to more farming families in areas near to jobsite.
Cultural	No	No traditional practices or important cultural sites identified
Public Facilities and Services	No	Essential services are designed to accommodate proposed increase in local populations
Roads and Traffic	No	Roadways are designed to accommodate proposed increase in local populations. Positive
		impact on area traffic.
Consistency with Govt. Plans	Consistent	Plantation communities supported by Federal, State and Local Plans
and Policies		
Irretrievable Commitment of	Positive	Proposed action supports local agriculture to displace imports.
Resources		

5.1 Determination of Significance

In determining whether an action may have a significant effect on the environment under HRS 11-200, the proponent must consider every phase of a proposed action, the expected consequences, both primary and secondary, and the cumulative as well as the short-term and long-term effects of the action.

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;

The proposed action would not result in an irrevocable commitment, loss or destruction of any protected natural resource. No threatened or endangered species were identified within the development area. Previous archeological studies concluded that there is no evidence of traditional practices or cultural artifacts within the area of the proposed action. Kunia Village is historically significant for its architecture and association with the pineapple industry. The historical character and architectural elements will be protected by its placement on both State and Federal Historic Registers.

2. Curtails the range of beneficial uses of the environment;

Kunia Village has been in this location for nearly 100 years, and will continue in its function to provide affordable housing for Hawaii's farm workers and their families. The proposed action will benefit agriculture. Agriculture is a beneficial use of the environment. No new natural areas will be developed in the proposed action.

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;

Plantation communities are protected by state statutes and city ordinances, and supported by planning documents at all levels of the government. The proposed action is consistent with the County General Plan, and the Central Oahu Functional Plans.

4. Substantially affects the economic welfare, social welfare, and cultural practices of the community or State;

The proposed action has beneficial impacts on the social and economic welfare of the County and State. The objective of the proposed action is to maintain a supply of affordable rental housing that is reserved for Oahu's farm workers.

5. Substantially affects public health;

Public facilities and services are adequate to manage the increase in population within Kunia Village. The proposed action benefits public health by supporting local agriculture.

6. Involves substantial secondary impacts, such as population changes or effects on public facilities;

Secondary impacts are defined as those displaced in time or space from the proposed action, yet resulting directly from the action. Population changes and increased use of public facilities and services resulting from the proposed action will be within the design capacities of the Village and will have negligible impacts on the quality of life within the target population. These impacts will be mitigated by improving the quality of housing and community support facilities.

7. Involves a substantial degradation of environmental quality;

Temporary impacts associated with construction will be mitigated through best management practices. Noise and fugitive dust are not expected to be substantial or lasting. During operations the level of use is not expected to result in degradation of the quality of life or the environment within the community.

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

Provision of farm-worker housing supports local agriculture and exerts positive impacts on the State's health and balance of trade. No commitment for larger actions is required.

9. Substantially affects a rare, threatened, or endangered species, or its habitat;

A letter from the US Fish and Wildlife Service in June 2009 did not identify any specialstatus species or critical habitats located on the subject property.

10. Detrimentally affects air or water quality or ambient noise levels;

Temporary impacts associated with construction will be small and mitigated through best management practices. During operations there are no sources of regulated emissions or noise. The proposed action is not expected to result in degradation of the quality of life or the environment within the community

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;

The project site is within a traditionally used agricultural area. Land disturbance over more than 100 years has defined the biological communities that are present. These traditional farm lands are not normally considered environmentally sensitive areas.

12. Substantially affects scenic vistas and view planes identified in county or state plans or studies; or,

The scenic vistas and unique view planes, and unique community character will be preserved by the proposed action.

13. Requires substantial energy consumption.

The proposed project will require fossil fuel consumption during construction and increase electrical power consumption during operation. The quantities of both sources are minimal by community standards and these services are available using existing infrastructure.

Based on analysis of the 13 significance criteria listed above, the proposed action is not expected to result in significant adverse environmental impacts when conducted within the constraints of the required plans and permits. Comments received from the public and various agencies during this DEA review period, will provide new information and be considered in the final conclusion of this assessment. Pending receipt of comments from agencies and interested parties the proponent anticipates a finding of No Significant Impact.

6.0 COMMENTS AND COORDINATION

6.1 Agencies and Organizations Contacted

The following agencies were contacted for assistance during preparation of the Draft Environmental Assessment.

Director State Historic Preservation Division, DLNR Kakuhihewa Building, 601 Kamokila Blvd., Suite 555, Kapolei, Hawai`i, 96707

Mr. George Atta and Mr. Jaime Pierson Department of Planning and Permitting City and County of Honolulu 650 S. King St. Honolulu, HI 96823

Wahiawa Neighborhood Board, Jean Ishikawa Chairman

6.2 Public Coordination and Individuals Consulted

The following individuals and public interest groups were contacted for assistance during preparation of the Draft Environmental Assessment.

The Wahiawa Neighborhood Board November 18, 2013; January 27, 2014 Kunia Village residents on 12/17/2013

7.0 LIST OF DOCUMENT PREPARERS

This document was prepared under the direction of The Department of Planning and Permitting, City and County of Honolulu Document preparation and technical research was done by:

Kunia Village Title Holding Corporation, David Robichaux, President

Hawaii Agriculture Research Center, Ms. Stephanie Whalen, Executive Director Ms. Cindy Pinnick

Rural Community Assistance Corporation Denise Boswell The preparers also wish to thank the following for their contributions and advice:

George Atta, Director of the Department of Planning and Permitting, City and County of Honolulu, Jamie Peirson, Chief Planner, Department of Planning and Permitting, City and County of Honolulu, Nelson Armitage, Planner Department of Planning and Permitting, City and County of Honolulu, Ming-Yi Wang, Mason Architects, and

Jessica L. Puff, State Historical Preservation Office

8.0 BIBLIOGRAPHY

City and County of Honolulu Department of Planning and Permitting (1992) Oahu General Plan Objectives and Policies as amended 2002.

http://www.honoluludpp.org/Portals/0/pdfs/planning/generalplan/GPReport.pdf

City and County of Honolulu Department of planning and Permitting (2012) Public Review Draft Oahu General Plan Proposed 2013 edition http://www.honoluludpp.org/Portals/0/pdfs/planning/generalplan/PubRevDraft_Part1_Nov2012.pdf

Fornander, Abraham. *An Account of the Polynesian Race, its Origin and Migrations,* Volume II. Trubner & Company, London. 1880.

Hawaii Department of Agriculture (1977) Agriculture Lands of Importance, State of Hawaii.

Hawaii Agriculture Research Center, Kunia Substation, Kunia, HI: Issuance of Environmental Assessment and Finding of No Significant Impact for License Amendment A Notice by the Nuclear Regulatory Commission on 06/29/2006 **[FR Doc. E6-10265 Filed 6-28-06; 8:45 am]**

Helber Hastert and Fee, 2010 Honolulu General Plan Update – Affordable Housing Trend Report <u>http://www.honoluludpp.org/Portals/0/pdfs/planning/generalplan/GPUpdate/TrendReports/Affor</u> <u>dableHousing.pdf</u>

McAllister, J. Gilbert. *Archaeology of O'ahu*. B.P. Bishop Museum Bulletin 04. Bishop Museum Press, Honolulu. 1933

NAVFAC Pacific. Draft Cultural Impact Assessment for the Hawaii Regional Security Operations Center (HRSOC) Project, Naval Computer and Telecommunications Center Area Master Station Pacific (NCTAMS PAC), Wahiawā, Oʻahu, Hawaiʻi. Prepared by Social Research Pacific, Inc. 2005.

PACNAVFACENGCOM. Cultural Resources Study, Naval Security Group Activity Kunia, Oʻahu,

Hawai'i. Prepared for Commander, Navy Region Hawaii. 1998.

Appendix A Agency Letters of Support

Wahiawa Neighborhood Board State Historic Preservation Division final is in prep.

February 6, 2014

???

Dept. of Planning and Permitting City and County of Honolulu 650 South King Street, 7th floor Honolulu, Hawaii 96813

APPLICANT: KUNIA VILLAGE TITLE HOLDING COMPANY, A Subsidiary of Hawaii Agriculture Research Center

Project: 201H Application to Increase the Number of Units in a Low Income Housing Project in Kunia Village 92-1700 Kunia Road Kunia, HI. 96759 (TMK: 92 005 0023) from 120 Units up to 200 Unit

APPLICANT: ENVIRONET, INC.

Project: Installation of Photovoltaic Panels and System within Kunia Village 92-1700 Kunia Road Kunia, HI. 96759 (LCE 7, DPP File No. 2012/CUP-51(st).

Dear _____???_____:

The "Applicants," Dave Robichaux (Kunia Village Title Holding Co.) and Stephanie Whalen (Hawaii Agriculture Research Center) made their initial presentation on the above-listed project at the Wahiawa-Whitmore Village Neighborhood Board No. 26 meeting on November 18, 2013. They returned with Colete Sakoda of Environet, Inc., to do an updated presentation at our January 27, 2014 meeting. There was good dialogue with the community and the Applicants ably addressed all concerns raised.

Following lengthy discussion and a review of the Applicants' requests, the NB26 made the motion to vote simultaneously on the two applications:

At the January 27, 2014 Regular Meeting, the Wahiawa-Whitmore Village Neighborhood Board No. 26 voted simultaneously to **SUPPORT** the 201H Application Request to Increase the Number of Units in a Low Income Housing Project in Kunia Village from 120 Units up to 200 Units, and to **SUPPORT** the LCE 7, DPP File No. 2012/CUP-51(st) Application for the Installation of a Photovoltaic Panel System in Kunia Village. **The motion passed with a vote of six (6) Ayes, with two (2) Abstaining.** Wahiawa, Whitmore Village, and Kunia Village are closely tied through our friendships, our families, and our agricultural history, and we thank you for this opportunity to submit comments on these Applications for development projects in our neighboring community.

Sincerely,

Jeanne Ishikawa Chair, Wahiawa-Whitmore Village NB26

cc: Neighborhood Commission Office D. Robichaux S. Whalen C. Sakoda NEIL ABERCROMBIE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES WILLIAM J. AILA, JR. CHARPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

JESSE K. SOUKI

WILLIAM M. TAM

AQUATIC RESOURCES BOATING AND OCEAN BEOREATION BUREAU OF CONVEY ANCES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND ROSOURCES ENFORCEMENT ENGINEERING FORESTRY AND WILDLER HISTORIC PRESERVE TOM KAHOOLAWE ISLAND RESERVE COMMISSION

LAND STATE PARKS

LOG: N/A DOC: 1410JLP24

STATE HISTORIC PRESERVATION DIVISION KAKUHIHEWA BUILDING

> 601 KAMOKILA BLVD, STE 555 KAPOLEI, HAWAII 96707

DATE: October 27, 2014

TO: David M. Robinchaux President Kunia Village Holding Corporation PO Box 100 Kunia, HI 96759

SUBJECT:Section: Survey & Inventory/Section 106 – Cultural Resource Management Review
Project: Draft Kunia Village Affordable Housing Environmental Assessment
Location: Kunia, Oahu, Hawaii
Tax Map Key: (1) 9-4-005:023

Aloha Mr. Robinchaux,

Mahalo for the opportunity to review the Draft Kunia Village Affordable Housing Environmental Assessment (EA); which was received by the Hawai'i State Historic Preservation Division (SHPD) on September 14, 2014. SHPD understands that future development of Kunia Village will include the rehabilitation or replacement of 82 residential housing units, with the rehabilitation of an additional 39 existing historic units and construction of an additional 79 single and multi-family residential units at a later phase. The EA has been prepared in accordance with HRS §343 to support an application under HRS §201-H for the Kunia Village and Agribusiness Complex, Affordable Housing Project on the Island of Oahu, Hawai'i.

In addition, the Kunia Villages Affordable Housing project has received funding from the United States Department of Agriculture and has gone through the Section 106 consultation process, outlined in 36 CFR §800, per the National Historic Preservation Act [NHPA § 101.b(3)(E) and (F)].

The proposed project, as outlined within the EA, will not have an adverse effect on historic properties within the project's Area of Potential Effect (APE). All proposed work associated with this project will be reviewed and approved by the SHPD for appropriateness and consistency with the Secretary of Interiors Standards for Rehabilitation of Historic Resources.

We look forward to the opportunity to review and provide our concurrence with the final draft of the Kunia Village Affordable Housing Environmental Assessment. If you have any questions please contact Jessica Puff, SHPD Architectural Historian at (808) 692-8023 or by email at <u>Jessica.L.Puff@hawaii.gov</u>. **Please reference our DOC number in all communication with this office regarding this undertaking.**

Sincerely,

Dr. Alan Downer Deputy State Historic Preservation Officer