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Governor



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Chairperson, Board of Agriculture

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State of Hawaii  
DEPARTMENT OF AGRICULTURE  
1428 South King Street  
Honolulu, Hawaii 96814-2512

February 22, 2011

Mr. Dan Davidson  
Executive Director  
Land Use Commission  
235 South Beretania Street  
Suite 406  
Honolulu, Hawaii 96813

2011 FEB 22 A 10:41  
LAND USE COMMISSION  
STATE OF HAWAII

Dear Mr. Davidson:

Subject: Petition for Declaratory Order to Designate Important Agricultural Lands  
Docket No. DR10-42  
Castle & Cooke Homes Hawaii, Inc.  
902.066 acres (Waialua, Wahiawa, Waikele, Oahu)

Thank you for this opportunity to comment on this important petition. The Department of Agriculture expresses its appreciation to the petitioner for their interest in and effort to identify potential Important Agricultural Lands (IAL). This is the first IAL petition involving agricultural lands on the island of Oahu.

Based on the information in the petition and additional information, the Department of Agriculture offers partial support of the petitioner's request for IAL designation. We support IAL designation for the Waialua (242 acres) and Mililani South (232 acres) sites, provided that farmers are offered leases and/or subleases with longer terms that are necessary to support maximum agricultural production. Both sites satisfactorily meet most of the eight IAL criteria. Both sites are in intensive agricultural production, have generally good soils, appear to receive a sufficient amount of committed irrigation water, the properties are of reasonable size and contiguity, and have access to support infrastructure.

We do not support IAL designation for the Whitmore and Dole Plantation sites. The Whitmore site (205 acres) does not currently have agricultural activity or access to irrigation water. Although the soils on the site are rated "B" and mostly "Prime" and "Unique" according to the Agricultural Lands of Importance to the State of Hawaii, the



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cultivable land area is fragmented by gulches that occupy more than one-third of the petition area.

The Dole Plantation site (223 acres) has 31 acres in agricultural production with irrigation. However, the 64 acres of other cultivable land is unused and fragmented, and is situated alongside a gulch that occupies more than 50 percent of the petition site. The gulch contains an irrigation reservoir that is important to the agricultural lands in the area, providing irrigation water to over 2,500 acres to the north and west of the petitioned site, however none of these adjacent agricultural lands are part of this IAL petition.

We could reconsider the Department's position for both the Whitmore and Dole Plantation sites if they were part of a petition for a larger contiguous and cultivable agricultural area with secure access to sufficient irrigation water sources.

Regarding the Mililani South site, we would encourage the petitioner to consider the agricultural lands to the south of the proposed 120-acre solar farm in a petition for IAL. This area appears to presently support agricultural activities and the soils, while rated by the LSB as "D" and "E", would have been rated "A" if irrigation had been available at the time of the study.

Our detailed review of each of the four sites is attached to this letter.

This is the fourth petition for Important Agricultural Lands (IAL) designation by the voluntary process described in Section 205-45, HRS. We note that the petitioner is not seeking a reclassification of land pursuant to Section 205-45(b), in conjunction with this petition to designate IAL. The petitioner is also voluntarily waiving all rights to claim any credits pursuant to Section 205-45(h) (Petition, page 11).

This is the first petition that identifies non-contiguous parcels as potential IAL. The petition occasionally combines the information on the four separate areas being sought for designation. We believe each area should be judged on its individual merits. We have disaggregated the information found in the petition for each of the areas and found each has significantly different characteristics and circumstances.

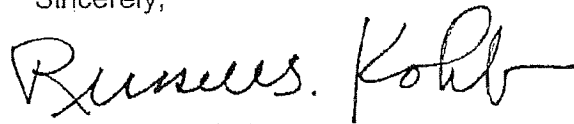
The Department appreciates the willingness of landowners/farmers who commit their lands to promote long-term access for agricultural production. However, petitions for agricultural lands that are identified as potential IAL through either the voluntary process or the county process should be held to a high standard of evidence as only the farmers and landowners of designated IAL may enjoy the IAL Incentives that are not available to non-IAL farmers and landowners. Furthermore, the Land Use Commission would have the most complete and relevant information on which to base its decision.

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We understand that Section 205-44 provides that lands identified as IAL need not meet every one of the eight IAL criteria. Further, the Commission is to give collective consideration of the IAL criteria and determine whether they meet the constitutionally mandated purposes in article XI, section 3, of the Hawaii Constitution and the objectives and policies for important agricultural lands in Sections 205-42 (IAL definitions and objectives) and 205-43 (IAL policies). We encourage the Commission to fully consider all eight IAL identification criteria in its deliberations.

Thank you, again, for this opportunity to comment on this important petition.

Sincerely,



Russell S. Kokubun  
Chairperson, Board of Agriculture

Attachment

c: Office of Planning  
City Department of Planning and Permitting

Castle&Cooke-IALfinal.e11

## Individual Site Analysis

### 1. Dole Plantation site summary

#### **Recommendation:**

Department of Agriculture does not support designation of the Dole Plantation site (223 acres) as IAL. There is approximately 31 acres currently in agricultural use with irrigation. Another 64 acres of former pineapple land have no agricultural use and are found in irregularly-shaped and isolated areas alongside the gulch which occupies 57% of the site. This 64-acre area does not appear to have access to irrigation water

The gulch comprises the remaining 128 acres and does not appear to have any potential for agricultural use. The Tanada reservoir, ditch, and pump, are found within the gulch and supplies irrigation water to the 31 acres of cropland found on the petitioned site. The reservoir is said to irrigate 2,508 acres of agricultural land to the north and west, however none of these lands are designated IAL and are not part of the four land areas comprising the overall petition.

We could reconsider the designation of this site as IAL if it included the adjacent agricultural lands to the north and south as well as the cultivable agricultural lands receiving irrigation water from the Tanada reservoir.

#### **Dole Plantation 223 acres**

##### **1. Is the land currently used for agricultural production?**

Yes, but only 31 (14%) of the 223 acres petitioned site is in agricultural production.

Of the 223 total acres:

About 95 acres (43%) are farmable, of which

- 31 acres are presently in agricultural cultivation (pine, fruit trees, flowers at the Dole plantation botanical garden) and irrigated from the reservoir and ditch found within the petitioned area (Exhibit A, page 2)
- 64 acres are not in agricultural production and are located in narrow remnant pieces of land along the banks of the gulch (Exhibit A, Figure 3B)

The 95 acres had a long history of pineapple production.

The remaining 128 acres (57%) do not appear farmable as they are in the gulch.

**2. Does the land have soil qualities and growing conditions that support agricultural production of food, fiber, or fuel – and energy-producing crops?**

Yes, but on less than half of the property and not in a contiguous piece.

About 94 acres (42%) of the total 223-acre petitioned area have Land Study Bureau (LSB) overall productivity ratings of "B" and "C" with good to fair productivity potential for most crops. The remaining 129 acres (58%) have a LSB rating of "E" which indicates very poor productivity potential for most crops.

*Land Study Bureau Maps 70, 71, 84, 85*  
(Exhibit A, page 4 and Figure 3B)

94 acres (42% of 223-acre total area) meet criterion 2.

84 acres "B-121" rated with 0-10% slopes, non-stony, machine tillable (includes the 31 acres in ag cultivation), also small area of "B-12" and "B-21"

10 acres "C-122" rated with 11-20% slopes, non-stony, moderately machine tillable

However, as noted for Criterion 1, the 64 acres not in agricultural production are located in narrow remnant pieces along the banks of the gulch.

129 acres (58% of 223-acre total area) do not meet criterion 2.

105 acres "E-107" rated with slopes of 36-80%, rocky and not suited to machine tilling (located in the gulches to the east and west of the Tanada reservoir)

24 acres not rated (the Tanada reservoir)

The primary limiting feature for these lands is the 36-80% slope which does not appear to be useable for agricultural production.

Solar radiation ranges from 400 to 450 calories per square centimeter per day. Air and soil temperatures are somewhat lower than that found at lower elevations and may affect a farmer's choice of crops.

**3. Are the lands identified under agricultural productivity ratings systems, such as the agricultural lands of importance to the State of Hawaii (ALISH) system adopted by the board of agriculture on January 28, 1977?**

Yes, but less than one half of the petitioned site is classified under ALISH.

About 43% of the total 223-acre petitioned area has ALISH classification of "Prime" and "Unique". The remaining 57% of the petitioned area which is within the gulch is not classified according to ALISH.

*ALISH*

93 acres "Prime" agricultural land (the lands outside the gulches)  
2 acres "Unique" agricultural land  
128 acres Not Classified (gulch and reservoir)

The footprint of the ALISH "Prime" and "Unique" and LSB "B" and "C" soils found on the petitioned property are very similar. Likewise the ALISH "Not Classified" and LSB "E" and not-rated classifications are similar.

**4. Are the land types associated with traditional native Hawaiian agricultural uses, such as taro cultivation, or unique agricultural crops and uses, such as coffee, vineyards, aquaculture, and energy production?**

With the exception of traditional native Hawaiian crops that may be found in the 31-acre Dole Plantation botanical garden, there appears to be no similar crops on the remaining land, nor are there unique crops or uses, nor land types such as Pearl Harbor clay or Hanalei silty clay that would support cultivation of traditional native Hawaiian agricultural uses.

**5. Do the lands have sufficient quantities of water to support viable agricultural production?**

Yes, but only the 31 acres of the Dole Plantation botanical garden have sufficient quantity of water from rainfall and irrigation water supplied from the reservoir within the petitioned site. The 64 acres of fallowed pineapple land have the same rainfall but appears to not have access to irrigation water. The remaining lands in the gulch are not useable for agricultural production.

Rainfall is approximately 60 inches annually (Exhibit A, Figure 6B). The distribution of rainfall is about 5.5 inches per month from October through April and 2.5 inches per month from May through September ("Median Rainfall, State of Hawaii – Circular C88, DLNR June 1982, page 37). In our opinion, supplemental irrigation is necessary to maintain optimal plant growth, particularly during the summer months, as it is unreasonable to assume that rainfall can be expected to fall evenly.

The gulch that occupies most of the petition also contains the 158 million gallon Tanada Reservoir which the petitioner claims is an "...essential component of Petitioner's and surrounding agricultural operations as a water source for irrigation and drainage." (Exhibit A, page 2) The reservoir has a pump to deliver water to the 31 acres of crops planted at Dole Plantation botanical garden (Exhibit A, page 3).

The Tanada reservoir, pump, and ditch also provide irrigation water to the adjacent and nearby lands that are not part of the petition:

- 503 acres on neighboring Dole Food Company land
- 40 acres of crops at Helemano Plantation

- 1,965 acres of Dole Food Company pineapple (Exhibit A, pages 2-3)

Our findings, based on the information provided in the petition and exhibit is as follows:

There is approximately 31 acres currently in agricultural use and is irrigated (Exhibit A, page 2). Another 64 acres of fallowed pineapple land that are irregularly-shaped and in isolated areas alongside the gulch are not said to have access to irrigation water.

The gulch comprises the remaining 128 acres and does not appear to have any potential for agricultural use. The Tanada reservoir, ditch, and pump, are found within the gulch and supplies irrigation water to the 31 acres of cropland found on the petitioned site along Kamehameha Highway. The reservoir is said to irrigate 2,508 acres of agricultural land situated to the north and west of the petitioned site, however none of these lands are designated IAL and none are part of the four land areas comprising the petition.

6. **Are these lands whose designation as Important Agricultural Lands is consistent with general development and community plans of the County?**

Yes, the petitioned site is entirely within the Agriculture designation within the North Shore Sustainable Communities Plan.

7. **Do these lands contribute to maintaining a critical land mass important to agricultural operating productivity?**

In our opinion, at this time, the 31 acres presently in cultivation and the 64 acres of fallowed agricultural lands that border the gulch containing the ditch and reservoir do not appear to constitute "land that contributes to maintaining a critical land mass important to agricultural operating productivity." If the petitioned site were part of a larger IAL petition area including the adjacent lands and lands irrigated with water from the Tanada reservoir infrastructure, we would likely agree that the petitioned site would be contributing to maintaining a critical land mass.

8. **Are these lands with or near support infrastructure conducive to agricultural production, such as transportation to market, water, or power?**

Yes, the lands have irrigation infrastructure and adjoin a major public roadway providing access. Electrical power is assumed to be present, given the location of the Dole Plantation visitor site.

## 2. Whitmore site summary

### Recommendation:

Department of Agriculture does not support designation of the Whitmore site (205 acres) as IAL. There is no access to irrigation water. There is no current agricultural use. The 130 acres of "B" rated land is divided into two areas, separated by gulches.

We could reconsider the designation of this site as IAL if were part of a larger contiguous and cultivable IAL petition area and irrigation water is made available.

### Whitmore 205 acres

#### 1. Is the land currently used for agricultural production?

No. The site was in pineapple production prior to 2001 and is currently leased to Dole Food Company. The petitioner states the site "...is currently being evaluated for agricultural uses including seasonal crops, sugar cane, biofuel crops, forestry, and ranching." (Petition, page 6)

#### 2. Does the land have soil qualities and growing conditions that support agricultural production of food, fiber, or fuel – and energy-producing crops?

Yes, about 130 acres (63%) of the Whitmore site has a Land Study Bureau (LSB) overall productivity rating of "B" with good to fair productivity potential for most crops but these lands are divided into two areas separated by a gulch. The remaining 75 acres (37%) are in gulches and have an LSB rating of "E" with no agricultural production potential. (Exhibit A, page 4)

Solar radiation ranges from 350 to 400 calories per square centimeter per day. Air and soil temperatures are somewhat lower than that found at lower elevations and may affect a farmer's choice of crops.

#### 3. Are the lands identified under agricultural productivity ratings systems, such as the agricultural lands of importance to the State of Hawaii (ALISH) system adopted by the board of agriculture on January 28, 1977?

Yes, 125 acres (61%) of the 205-acre Whitmore petition site has "Prime" and "Unique" ALISH classification but the lands are not contiguous because of gulches.

About 80 acres (39%) of the 205-acre petitioned site is within gulches and not classified according to ALISH.



4. **Are the land types associated with traditional native Hawaiian agricultural uses, such as taro cultivation, or unique agricultural crops and uses, such as coffee, vineyards, aquaculture, and energy production?**

No. There are no unique crops or uses, nor land types such as Hanalei silty clay in the gulches that would support cultivation of traditional native Hawaiian agricultural uses.

5. **Do the lands have sufficient quantities of water to support viable agricultural production?**

No, the Whitmore site does not have access to irrigation water. The rainfall is about 60 inches per year and distribution is approximately the same as the Dole Plantation site. There is no irrigation reservoir within or serving the Whitmore site.

Rainfall is approximately 60 inches annually (Exhibit A, Figure 6B). The distribution of rainfall is about 5.5 inches per month from October through April and 2.5 inches per month from May through September ("Median Rainfall, State of Hawaii – Circular C88, DLNR June 1982, page 37). In our opinion, supplemental irrigation is necessary to maintain optimal plant growth, particularly during the summer months, as it is unreasonable to assume that rainfall can be expected to fall evenly.

The gulches that occupy about one-third of the petition site is said to be essential for drainage (Exhibit A, page 5). The gulches do not have any potential for agricultural use. At least one other petition for IAL (Molokai Properties) excluded gulches from their IAL request.

6. **Are these lands whose designation as Important Agricultural Lands is consistent with general development and community plans of the County?**

Yes, the petitioned site is entirely within the Agriculture designation within the Central Oahu Sustainable Communities Plan.

7. **Do these lands contribute to maintaining a critical land mass important to agricultural operating productivity?**

No, the petition site is fragmented into two pieces, separated by gulches. It is not evident from the information in the petition that there is a roadway connecting both pieces to each other and a public roadway.

If the petitioned site were part of a larger IAL petition area including the adjacent lands and lands irrigated with water we would likely agree that the petitioned site would be contributing to maintaining a critical land mass.

**8. Are these lands with or near support infrastructure conducive to agricultural production, such as transportation to market, water, or power?**

There is no information in the petition that the properties have access to a major public roadway or whether electrical power is available.

Castle&cooke-IAL-Whitmore-site.e11

### 3. Mililani South site summary

#### Recommendation:

Department of Agriculture supports the designation of the Mililani South site (232 acres) as IAL. Sixty acres is leased and farmed by Mililani Ag Park, LLC, and the remaining 172 acres are under sublease by approximately 50 farmers (Exhibit A, page 3). Irrigation water is sourced from the Waiahole Ditch and in an allocation that appears to be sufficient to meet demand (Petition, page 9). According to our information, the petitioner is a member of the Kunia Agricultural Cooperative that has a water contract with the Agribusiness Development Corporation until January, 2019. The Land Study Bureau Overall Productivity ratings for the site are almost entirely "A" and "B" with a very small area of "D" and "E" at the southern edge. Likewise, the Agricultural Lands of Importance to the State of Hawaii (ALISH) classified almost the entire site as "Prime" agricultural lands.

We understand from a Honolulu Advertiser article (May 27, 2010, by Andrew Gomes) that the petitioner's proposed 120-acre solar farm will be located in the area just east of the petitioned site, on "D" and "E" LSB lands. The lessee farmers occupying the solar farm were offered to relocate, presumably to the petitioned site. The remaining farming area south of the proposed solar farm appears to remain intact. The petition does not indicate if this area will remain in agricultural production and be considered for IAL designation or be subject to future expansion of the solar farm.

We support the designation of this site as IAL, provided that farmer/tenants will be offered longer-term leases and/or subleases as anticipated in Section 205-43 (IAL policies). The petitioner may wish to consider the agricultural lands to the south of the proposed 120-acre solar farm for petition to IAL. This area appears to have agricultural activities and the soils, while rated by the LSB as "D" and "E", would have been rated "A" if irrigation had been available at the time of the study.

#### Mililani South 232 acres

##### 1. Is the land currently used for agricultural production?

Yes. Nearly the entire site is in cultivation by the lessee, Mililani Ag Park, LLC, (about 60 acres) or about 50 sublessees (about 172 acres) who grow a wide variety of agricultural crops from landscaping grasses to fruit trees (Exhibit A, page 3; and Petition, pages 5-6). The site was in pineapple production until the early 1990's. Lease and sublease terms are not provided.

We notice from an aerial image of the general area that there appears to be a few structures on the petition site.

2. **Does the land have soil qualities and growing conditions that support agricultural production of food, fiber, or fuel – and energy-producing crops?**

Yes, about 225 acres (97%) of the Mililani South site has Land Study Bureau (LSB) overall productivity ratings of "A" or "B" with good productivity potential for most crops. The remaining 7 acres (3%) are in gulches and have LSB ratings of "D" or "E" with limited or no agricultural production potential. (Exhibit A, Page 4 and Figure 3C)

The agricultural lands to the east of the petition site, where a 120-acre solar farm is proposed, has LSB overall productivity ratings of "D" and "E" (LSB Detailed Land Classification, Island of Oahu, Map 164), but if irrigation water was available at the time the study was done, the productivity ratings would have been "A".

Solar radiation ranges from 400 to 450 calories per square centimeter per day. Air and soil temperatures are somewhat higher than that found at higher elevations and may increase a farmer's choice of crops.

3. **Are the lands identified under agricultural productivity ratings systems, such as the agricultural lands of importance to the State of Hawaii (ALISH) system adopted by the board of agriculture on January 28, 1977?**

Yes, 209 acres (91%) of the 232-acre Mililani South petition site has a "Prime" ALISH classification with the remaining 14 acres not classified (Exhibit A, Figure 5C).

4. **Are the land types associated with traditional native Hawaiian agricultural uses, such as taro cultivation, or unique agricultural crops and uses, such as coffee, vineyards, aquaculture, and energy production?**

No. With the exception of ti plants and taro of an unspecified acreage (Petition, page 8) there are no other unique crops or uses, nor land types such as Hanalei silty clay that would support cultivation of traditional native Hawaiian wetland agricultural uses.

5. **Do the lands have sufficient quantities of water to support viable agricultural production?**

Yes, the Mililani South site is entirely irrigated from Waiahole Ditch. The amount of irrigation water allocated from the Ditch appears to be sufficient to meet needs on a daily and annual basis (Exhibit A, page 6). According to our information, the petitioner is a member of the Kunia Agricultural Cooperative that has a water contract with the Agribusiness Development Corporation until January, 2019. The rainfall is about 32 inches per year with the dry period from May to October (less than 2 inches per month).

A gulch that occupies a very small fraction of the petition site is said to be essential for drainage (Exhibit A, pages 4). The gulch does not have any potential for agricultural use. At least one other petition for IAL (Molokai Properties) excluded gulches from their IAL request.

**6. Are these lands whose designation as Important Agricultural Lands is consistent with general development and community plans of the County?**

Yes, the petitioned site is entirely within the Agriculture designation within the Central Oahu Sustainable Communities Plan.

**7. Do these lands contribute to maintaining a critical land mass important to agricultural operating productivity?**

Yes. The petition site has ten sublessees with farm lots of five to 45 acres each, and 40 sublessees with half-an-acre to four acre lots. The petitioned site is narrowly configured and does not encompass the entire agricultural area south of Mililani that extends eastward from the petition site to Kipapa Gulch and is apparently under the same master lessee. If the petition were to include these lands, excluding the 120 acres set aside for the solar farm, and there is sufficient irrigation water available, the combined area would clearly be a substantial contribution to maintaining a critical land mass.

**8. Are these lands with or near support infrastructure conducive to agricultural production, such as transportation to market, water, or power?**

Somewhat. The entire eastern boundary of the petition area appears to be a roadway. There is no discussion in the petition whether electrical power is available.

Castle&cooke-IAL-Mililani-site.e11

## 4. Waialua site summary

### Recommendation:

Department of Agriculture supports the designation of the Waialua site (242 acres) as IAL. Irrigation water for the petitioned site and the surrounding agricultural lands is sourced from Waialua Pump No. 1 and the supply appears to be sufficient to meet demand. Almost the entire area is under crop cultivation by 6 farmer tenants growing a wide variety of vegetables, fruit trees, root crops, melons, and flowers. The Land Study Bureau Overall Productivity ratings for the site are almost entirely "A" and "B" with a very small area of "E" and unclassified lands, however about 20 percent of the "B" rated soils may have been mislabeled in the map book and should be "E". The Agricultural Lands of Importance to the State of Hawaii (ALISH) classifies two-thirds of the site as "Other Important" agricultural lands and most of the remainder as "Prime" agricultural lands.

We support the designation of this site as IAL, provided that farmer tenants will be offered longer-term leases as anticipated in Section 205-43 (IAL policies).

### Waialua 242 acres

#### 1. Is the land currently used for agricultural production?

Yes. Nearly the entire site is in cultivation by six farmer tenants on lots ranging from 13 to 64 acres and growing vegetable, fruit trees, root crops, flowers, corn, and other crops (Petition, page 5 and Exhibit A, page 2). The site was in sugar cane production until 1996. Terms of tenancy has not been provided.

#### 2. Does the land have soil qualities and growing conditions that support agricultural production of food, fiber, or fuel – and energy-producing crops?

Yes, much of the 242 acres of the Waialua site has Land Study Bureau (LSB) overall productivity ratings and land types of "A-100i", "A-124i", "B-77i", "B-32i", and "B-16i". With the exception of "B-32i", the other soils have fair to very good productivity for most agricultural crops.

The "B-32i" soil, comprising perhaps 20% of the petition site, has very poor productivity potential for most agricultural crops. There may have been an error in the overall productivity rating or the selected crop productivity ratings for "B-32i". According to the Soil Conservation Service (now Natural Resources Conservation Service) Soil Survey (Oahu, August 1972), the area of "B-32i" soils correspond to the area with Pearl Harbor clay (maps 33 and 39) which is subject to severe use restriction due to wetness of the soil (i.e. flooding). This indicates to us that the overall productivity rating is incorrect. There appears to be a streambed that crosses the petition area and the "B-32i" soils near the western edge of the parcel boundary indentation.

Poor quality soils may require more soil amendments and require additional management to achieve production yields needed to achieve economic viability.

Solar radiation averages 450 calories per square centimeter per day. Air and soil temperatures are higher than that found at higher elevations and may increase a farmer's choice of crops.

3. **Are the lands identified under agricultural productivity ratings systems, such as the agricultural lands of importance to the State of Hawaii (ALISH) system adopted by the board of agriculture on January 28, 1977?**

Yes, 77 acres (32%) of the 242-acre Waialua petition site have a "Prime" ALISH classification, 160 acres (66%) have an "Other Important" classification and 5 acres (2%) are not classified according to ALISH. with the remaining 14 acres not classified (Exhibit A, Figure 5A).

4. **Are the land types associated with traditional native Hawaiian agricultural uses, such as taro cultivation, or unique agricultural crops and uses, such as coffee, vineyards, aquaculture, and energy production?**

It may be possible that a portion of the petition site that has Pearl Harbor clay with its wet characteristics is capable of supporting taro cultivation, provided there is sufficient water. There are also ti plants. Otherwise, there are no other unique crops or uses.

5. **Do the lands have sufficient quantities of water to support viable agricultural production?**

Yes, the Waialua site is entirely irrigated from Waialua Pump No. 1 located about 1.5 miles to the east-south-east (Petition, page 9; Exhibit A, page 5 and Figure 6A). The well's capacity is 6 million gallons per day. The average daily draw is 1.2 million gallons. There is no information on the terms of water service to the petition site. The rainfall is about 32 inches per year with the dry period from April to November (less than 2 inches per month).

6. **Are these lands whose designation as Important Agricultural Lands is consistent with general development and community plans of the County?**

Yes, the petitioned site is entirely within the Agriculture designation within the North Shore Sustainable Communities Plan.

7. **Do these lands contribute to maintaining a critical land mass important to agricultural operating productivity?**

Yes. The petition site has six farmer tenants with lots of 13 to 64 acres. If the petition were to the agricultural lands to the south and east and the

irrigation water source, storage, and distribution is secured, and the farmer tenants offered long-term leases, this would represent a significant contribution to agricultural productivity on the Mokuleia plain.

**8. Are these lands with or near support infrastructure conducive to agricultural production, such as transportation to market, water, or power?**

The petition site is somewhat with or near support infrastructure. Farrington Highway runs along the southern boundary of the petition. There is no discussion in the petition whether electrical power is available. Honolulu, the largest market for produce, is 30 miles distant.

Castle&cooke-IAL-Waialua-site.e11