November 10, 2020

Mr. Keith Kawaoka, Acting Director
Office of Environmental Quality Control
235 South Beretania Street, Room 702
Honolulu, Hawai‘i 96813-2437

Dear Mr. Kawaoka:

Subject: Docket No. A18-805/Church Conservation District Boundary Amendment
Final Environmental Assessment (FEA) and Finding of No Significant Impact (FONSI)
South Hilo, County of Hawai‘i, State of Hawai‘i
Tax Map Keys: (3) 2-9-003: 029 and 060

On January 23, 2019, the Land Use Commission of the State of Hawai‘i (“LUC”) made a determination at its hearing that the subject project (“Proposed Action”) triggered the requirement for HRS Chapter 343 review and that the LUC would be the approving agency. Petitioner had requested the LUC take notice of a previously approved FEA/FONSI by DLNR dated June 22, 2016. At that time the LUC, requested the Petitioner resubmit his EA through the environmental review process in order that the LUC, government agencies, and public would have an opportunity to review and comment upon the document prior to Commission action.

On December 23, 2019, the Petitioner published in the Environmental Notice (Church Conservation District Boundary Amendment) Draft Environmental Assessment (“Draft EA”) for public review.

On June 25, 2020, based on the LUC’s analysis of the significance criteria set forth in HAR §11 200.1-13 and the public comments received on the Draft EA, the LUC voted 7-0 to:
(a) find that the Proposed Action will not likely have significant impacts on the environment; and
(b) determine that a finding of no significant impact (“FONSI”) is warranted for the Proposed Action.

With this letter, the LUC hereby transmits: (a) its Determination or Notice of a FONSI; and (b) the Final Environmental Assessment (“Final EA”) for the State Land Use District.
Boundary Amendment situated at Tax Map Key No. (3) 2-9-003: 029 and 060, in the South Hilo district on the Island of Hawai‘i, together with necessary materials for publication in the next available edition of the Environmental Notice.

Enclosed please find the following:

1. A completed OEQC Publication Form;
2. A searchable Adobe Acrobat PDF file of the same; and,
3. An electronic copy of the publication form in MS Word.

Applicants

The applicants for the Proposed Action are Ken Stanley Church and Joan Evelyn Hildal, ("Applicants").

Approving Agency

The approving agency for the Proposed Action is the LUC.

Brief Description of the Proposed Action

Applicants have petitioned the LUC to reclassify approximately 3.4 acres of land located at South Hilo, County and State of Hawai‘i, from the SLU Conservation District to the SLU Agricultural District. The Applicants are pursuing the OBA to allow for the continuation of existing agricultural uses and structures previously permitted.

Determination

The LUC has determined that the Proposed Action will not likely have significant impacts on the environment and that a FONSI is warranted.

Reasons Supporting Determination

The LUC’s analysis and determination of a FONSI is based upon the significance criteria set forth in HAR §11-200.1-13. In summary, the LUC determined that, given the size, nature, and scope of the Proposed Action, as well as the surrounding environment and neighboring land uses, the Proposed Action:

(a) will not impact any threatened or endangered plant or animal species;
(b) will not impact any archaeological or cultural resources, or the exercise of traditional and cultural practices;
(c) will not inhibit public access or impact public views;
(d) will not impact or otherwise degrade the natural environment or any environmental resources, including air and water quality;
(e) will not impact public health, services or facilities, or the socioeconomic welfare of the people of the State and County of Hawai‘i; and
(f) will not result in secondary or cumulative impacts.
Representative of Approving Agency

The representative for the LUC, as the approving agency for the Proposed Action, is Scott A.K. Derrickson, AICP. Mr. Derrickson is a Staff Planner for the LUC. Mr. Derrickson’s contact information is as follows: scott.a.derrickson@hawaii.gov; 808-587-3921; P.O. Box 2359, Honolulu, Hawai‘i, 96804-2359.

Sincerely,

[Signature]

DANIEL E. ORODENKER
Executive Officer

Enclosures

cc: Ken Church
    Mary Alice Evans, OP
    Michael Yee, Hawai‘i County Planning
<table>
<thead>
<tr>
<th><strong>Action Name</strong></th>
<th>Church Conservation District Boundary Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Document/Determination</strong></td>
<td>Final environmental assessment and finding of no significant impact (FEA-FONSI)</td>
</tr>
<tr>
<td><strong>HRS §343-5(a) Trigger(s)</strong></td>
<td>(7) Propose any reclassification of any land classified as a conservation district</td>
</tr>
<tr>
<td><strong>Judicial district</strong></td>
<td>South Hilo, Hawai‘i</td>
</tr>
<tr>
<td><strong>Tax Map Key(s) (TMK(s))</strong></td>
<td>(3) 2-9-003:029 and 060</td>
</tr>
<tr>
<td><strong>Action type</strong></td>
<td>Applicant</td>
</tr>
<tr>
<td><strong>Other required permits and approvals</strong></td>
<td>State Land Use District Boundary Amendment</td>
</tr>
<tr>
<td><strong>Discretionary consent required</strong></td>
<td>State Land Use District Boundary Amendment</td>
</tr>
<tr>
<td><strong>Approving agency</strong></td>
<td>State Land Use Commission</td>
</tr>
<tr>
<td><strong>Agency contact name</strong></td>
<td>Scott Derrickson</td>
</tr>
<tr>
<td><strong>Agency contact email (for info about the action)</strong></td>
<td><a href="mailto:scott.a.derrickson@hawaii.gov">scott.a.derrickson@hawaii.gov</a></td>
</tr>
<tr>
<td><strong>Agency contact phone</strong></td>
<td>(808) 587-3822</td>
</tr>
</tbody>
</table>
| **Agency address**     | 235 South Beretania Street, 6th Floor  
P.O. Box 2359  
Honolulu, Hawaii 96804  
United States  
[Map It](#) |
| **Applicant**          | Ken Stanley Church and Joan Evelyn Hildal |
Applicant contact name

Ken Church

Applicant contact email

dockline3@yahoo.com

Applicant contact phone

(707) 343-0107

Applicant address

P.O. Box 100014
Hakalau, Hawaii 96710
United States

Was this submittal prepared by a consultant?

No

Action summary

No new use is proposed. The Property has been in agricultural use since around 1850; and includes legally-permitted accessory uses such as a residence (which is under construction and an existing agricultural storage and processing structure. The Property is zoned agricultural (A-20a) by the County. Agricultural use of the Property is allowed according to HAR §13-5-7.

The owners have offered to provide and maintain a buffer zone in grasses and woody plants along the Property's makai side. The Property is near coastal, and a State-owned parcel separates the Property from the ocean. The reclassification will harmonize the Property's use and zoning, and will eliminate confusion at the State and County administrative levels, the general public, etc. There exists a prior 2005 FONSI issued by the LUC which described an intended residence and agricultural use of the Property. The residence which is under construction was also issued a FONSI by the DLNR.

Reasons supporting determination

The LUC’s analysis and determination of a FONSI is based upon the significance criteria set forth in HAR §11-200.1-13. In summary, the LUC determined that, given the size, nature, and scope of the Proposed Action, as well as the surrounding environment and neighboring land uses, the Proposed Action:

(a) will not impact any threatened or endangered plant or animal species;
(b) will not impact any archaeological or cultural resources, or the exercise of traditional and cultural practices;
(c) will not inhibit public access or impact public views;
(d) will not impact or otherwise degrade the natural environment or any environmental resources, including air and water quality;
(e) will not impact public health, services or facilities, or the socioeconomic welfare of the people of the State and County of Hawai‘i; and
(f) will not result in secondary or cumulative impacts.

Attached documents (signed agency letter & EA/EIS)

- A18-805_Church_OEQC-Transmittal_Ltr_FEA-FONSI_11-12-2020.pdf

Shapefile

- The location map for this Final EA is the same as the location map for the associated Draft EA.

Authorized individual
<table>
<thead>
<tr>
<th>Authorization</th>
</tr>
</thead>
<tbody>
<tr>
<td>- The above named authorized individual hereby certifies that he/she has the authority to make this submission.</td>
</tr>
</tbody>
</table>
PART 1: PROJECT DESCRIPTION

- TMK description .......................................................... 6
- Forward and Abstract .................................................. 9
- Introduction ................................................................. 10, 14
- Property description, Contiguous Properties, History ........ 48-54
- Recent Ownership History ............................................. 59
- Land Use Designations ................................................. 59
- Additional Background Information ................................. 54-56

ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION

including effects if Allowed and if Denied and alternatives, if any for each referenced section.

- Socioeconomic and Cultural ........................................... 62-63
- Cultural Impact Analysis (Ka Pa 'akai O Ka 'Ama) .............. 56-58
- Archaeological, Cultural and Historic Resources ............... 63-70
- Beneficial Uses of the Environment ................................. 70-73
- State's long-term environmental policies, goals etc.
  - HRS 344-1 Purpose ...................................................... 73-76
  - HRS 344-3 Environmental policy .................................. 76-83
- SMA and HRS 344-4 Guidelines for
  - Population .................................................................... 84
  - Natural Resources ...................................................... 84
  - establish preserves .................................................. 89
  - land use planning including State and County plans .......... 92
  - solid waste .................................................................. 94
  - Flora and fauna ........................................................ 94
  - agricultural resources ............................................. 96
  - self-sufficiency ......................................................... 98-101
  - shorelines .................................................................. 97
  - open space .................................................................. 96, 99
  - economic development ............................................. 101
preserve agricultural lands for agriculture .................................. 102-106
energy ............................................................... 108
community and housing .................................................. 109-113
education and culture .................................................. 113
citizen participation .................................................... 115-117
economic welfare, social welfare ........................................ 117
public health .......................................................... 117
secondary impacts ...................................................... 118
degradation of environmental quality ................................ 118
cumulative effects ...................................................... 120
endangered species ..................................................... 122
detrimental effects to air, water, noise ................................ 124
environmentally sensitive areas ....................................... 126
energy ............................................................... 129
geology .................................................................. 129
soils ................................................................... 131
climate ................................................................. 133
hydrology and drainage ............................................... 134
water quality .......................................................... 136
flora and fauna ........................................................ 139
air quality ............................................................. 141
noise .................................................................. 141
scenic resources ......................................................... 142
social, cultural and economic ........................................ 142-144
adjacent land uses ...................................................... 144
public facilities and services ......................................... 145-148
archaeology, historic and cultural resources ....................... 148

Summary of potential short and long term adverse environmental impacts and proposed mitigation measures .................. 151-152

Alternatives .................................................................. 152-154

Relationship to land use plans and policies ............................ 154-172
Determination, Findings and Reasons

It is important that it is understood that the project does not involve a new land use nor an intended or likely new use of land. The property is already fully developed as an agricultural property. The property's use is currently for agricultural use and uses incidental and accessory to agricultural use. The DLNR and the County have already permitted a residence on the property and an agricultural use storage and processing structure both of which currently exist. The purpose of the requested rezoning of the property from the State Land Use Conservation District to the State Land Use Agricultural District and this EA is intended to effect that the land's use becomes consistent with its zoning in order to secure the Petitioner(s) investments in the Property and eliminate confusion among the professional and administrative communities and the general public regarding the Property's agricultural use which may appear to some as inconsistent with its zoning in the State's Conservation District. The Property is already zoned as Agricultural by the County of Hawaii. It is also zoned in the State Conservation District's Resource Sub-zone.

Reasoning

Because there is no new use contemplated nor likely that will result from the Project the Environmental Assessment ("EA") of the effect of the Project will likely result in a Finding Of No Significant Impact ("FONSI"). Furthermore, an improvement over the existing allowed land use, a buffer zone is offered in the Petition in order to separate the intense agricultural use area of the Property from the coastal pali which is beneficial to the environment, and the scenic resources.
Draft Environmental Assessment ("EA")

Re: Petition A18 805 submitted to the Land Use Commission for the State of Hawaii to rezone TMK(s) 3 2-9-003; 029, 060 from the State Conservation District to the State Agricultural District, a TMK map and County's Property Description is attached as exhibit 14.
<table>
<thead>
<tr>
<th>Index........</th>
<th>Page #</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMK description of Property</td>
<td>6</td>
</tr>
<tr>
<td>Identification of Petitioner(s), address, contact info</td>
<td>6</td>
</tr>
<tr>
<td>Approving agency</td>
<td>6</td>
</tr>
<tr>
<td>List of Acronyms</td>
<td>8</td>
</tr>
<tr>
<td>Forward and abstract</td>
<td>9</td>
</tr>
<tr>
<td>The draft draft EA in detail</td>
<td>14</td>
</tr>
<tr>
<td>Consideration of previous FONSI's</td>
<td>47</td>
</tr>
<tr>
<td>Property description with contiguous properties and history</td>
<td>48</td>
</tr>
<tr>
<td>Additional background information</td>
<td>54</td>
</tr>
<tr>
<td>Cultural Impact Analysis: Ka Pa’akai 0 Ka ‘Ama assessment</td>
<td>56</td>
</tr>
<tr>
<td>Recent ownership history</td>
<td>59</td>
</tr>
<tr>
<td>Land use designations</td>
<td>59</td>
</tr>
<tr>
<td>HAR 11-200-12 significance criteria</td>
<td>61</td>
</tr>
<tr>
<td>Social, Cultural and Economic setting</td>
<td>62</td>
</tr>
<tr>
<td>Archaeology, Historical and Cultural resources</td>
<td>63</td>
</tr>
<tr>
<td>Benefical uses of the environment</td>
<td>70</td>
</tr>
<tr>
<td>States long term environmental policies</td>
<td>73</td>
</tr>
<tr>
<td>Conserve natural resources</td>
<td>76</td>
</tr>
<tr>
<td>Quality of life</td>
<td>79</td>
</tr>
<tr>
<td>Communities</td>
<td>81</td>
</tr>
<tr>
<td>Reduce drain on Natural Resources</td>
<td>83</td>
</tr>
<tr>
<td>Affects economic and social welfare etc.</td>
<td>117</td>
</tr>
<tr>
<td>Public health</td>
<td>117</td>
</tr>
<tr>
<td>Secondary impacts - population, public facilities</td>
<td>118</td>
</tr>
<tr>
<td>Degradation of environmental quality</td>
<td>118</td>
</tr>
<tr>
<td>Cumulative effect</td>
<td>120</td>
</tr>
<tr>
<td>Affects rare, threatened etc. species and habitat</td>
<td>122</td>
</tr>
<tr>
<td>Affects air or water quality</td>
<td>124</td>
</tr>
</tbody>
</table>
State's Constitution 155
HRS 205 156
HAR 15-15 158
  HAR 15-15-19 Agricultural district 159
  HAR 15-15-19 vs. -20's Conservation district 162
  HAR 15-15-20 Conservation district standards 165
Hawaii's State plan HRS 226 172
  226-7 Objectives -agriculture 172
  226-11 Objectives -physical environment 175
  226-12 Objectives -scenic and historic 176
  226-13 Objectives for the physical environment 177
Hawaii's Coastal zone management program 179
County General Plan 180
Required permits and approvals 181
Further SMA discussion 181
  Historic 183
  Scenic 188
  Coastal ecosystems 190
  Economic uses 191
Potential impacts and mitigation measures 193
  Coastal hazards 193
  Managing development 194
  Public participation 195
  Beach protection 196
  Marine resources 197
Consultation with State and County agencies and general public 198
  DLNR 199
  County and State Offices of Planning 199
  Councilor Valerie T. Poindexter 202
  Adjacent lot owners 202
State LUC official mailing list 203
OEQC representive Tom Eisen 204
Links to other relevant FONSI(s) 204

Exhibit list 205
This draft EA is submitted to the Land Use Commission for the State of Hawaii intended in support of Petition A18 805 to rezone TMK(s) 3 2-9-003; 029, 060 from the State Conservation District to the State Agricultural District

Date: July 2018

TMK’s : (3) 2-9-003; 060 (herein also referred to as the "North lot") and contiguous TMK’s 029 (herein also referred to as the "Middle lot").

When both TMK's are referred to jointly(collectively) herein they will be referred to as the "Property". Lot 029 is 1.116 acres in size and Lot 060 is 2.252 acres in size, total 3.368 acres.

The Property is located on the east side of the Island of Hawaii, approximately 14.5 miles north of Hilo.

Petitioner(s)

Name / Agency: Ken Church and Joan Hildal, husband and wife, herein referred to as the "Petitioner(s)"

Address: P.O. Box 100014, Hakalau, Hi. 96710
- Contact Person & Title: same as above
- Email: dockline3@yahoo.ca
- Interest in Property: joint owners

Approving Agency:

Mailing Address:

State of Hawai’i Land Use Commission
Dept. of Planning Business, Economic Development & Tourism
P.O. Box 2359
Honolulu, Hawai`i 96804-2359

**Office Location and contact information of Approving Agency:**
State Office Tower
Leiopapa A Kamehameha
235 South Beretania Street, Room 406
Honolulu, Hawai`i 96813                     Scott Derickson

**Telephone:** (808) 587-3822
**Fax:** (808) 587-3827
**Email:** dbedt.luc.web@hawaii.gov
LIST OF ACRONYMS.....

Land use Commission “LUC”

Department of Land and Natural Resources “DLNR”

Board of Land and Natural Resources “BLNR”

Office of Conservation and Coastal Lands “OCCL”

Conservation District use Application “CDUA”

Conservation District use Permit “CDUP”

Site Plan Approval “SPA”

Environmental Assessment “EA”

EA - Finding of no significant impact “FONSI”

Tax Map Key “TMK”

Hawaii Administrative Rule(s) “HAR”

Special Management Area “SMA”

Also note: The terms "land use" and "use of land", in plural or singular, found throughout this EA. The terms are generally found throught the State's Conservation District's Rules, HAR 13-5 which describe specific types of uses of land that may require review and/or conditional permitting by the DLNR.
Forward and abstract:

The Petition that this draft EA is intended to support is to rezone the Property from the State Conservation District to the State Agricultural District.

The Property.......

1) is currently in agricultural use,
2) has a residence under construction on it and,
3) has a 720 s.f. storage and processing structure accessory to the agricultural use of the Property on it.

The Property is now fully developed for agricultural use with a residence and an agricultural use storage and processing structure. No new use is contemplated nor is likely. No zoning change at the County level is petitioned as the Property is zoned A-20a by the County which is an agricultural use designation.

The former owners of the Property unsuccessfully petitioned the LUC in 2005 that the, then grassy, open field, undeveloped, Property be rezoned from the State's Conservation District to the State's Agricultural District. A DLNR representative testified to the LUC describing the DLNR's belief that the Property would benefit from its continuing administrative role in considering the uses of the Property, particularly the DLNR representative cited concerns regarding............

- the future placement of structures away from the Coastal pali,
- erosion (both soil and coastal pali) and,
- scenic views.

As the Property is now fully developed with DLNR and County approved/allowed structures on it the Petitioner(s) believe that the DLNR's role in administering the
Property's uses no longer serves a compelling continuing purpose that the Property remain in the State's Conservation District.

Throughout this draft EA the term "HRStatute and HARule allowed" will be found. The reference is to the Hawaii Revised Statute relating to the State Conservation District ("HRS") 183C-5 Nonconforming uses and HAR 13-5-7 Nonconforming use Rule.

*Note:* the Petitioner(s) have variably added highlights to quoted texts throughout the draft EA and Petition in order to bring emphasis to certain portions of the quoted text that the Petitioner(s) believe are particularly relevant to the discussion/analysis of the EA.

HRS 183C-3 Definitions clause describes, in part........

"**Nonconforming use** means the lawful use of any building, premises or land for any trade, industry, residence or other purposes which is the same as and no greater than that established prior to October 1, 1964, or prior to the inclusion of the building, premises, or land within the conservation district."

HRS 183C-5 states.............

"Neither this chapter nor any rules adopted hereunder shall prohibit the continuance of the lawful use of any building, premises, or land for any trade, industrial, residential, or other purpose for which the building, premises, or land was used on October 1, 1964, or at the time any rule adopted under authority of this part takes effect. All such existing uses shall be **nonconforming uses.** Any land identified as a kuleana may be put to those uses which were historically, customarily, and actually found on the particular lot including, if applicable, the construction of a single family residence. Any structures may be subject to conditions to ensure they are consistent with the surrounding environment."

The discussion in the draft EA and the Petition evidences and points to a State Auditor General's report to the Governor, which brings certainty that HRS 183-C (the law which
governs the DLNR, which administers the uses of State Conservation Districted lands), intended that any previous use of land that occurred before the creation of the State Conservation District be continued to be allowed without conditional permitting being considered/ applied by the DLNR or the County and not just the use of the land immediately at the time that the land was zoned into the State Conservation District.

The Property was cleared and prepared for agricultural use dating from a period in the mid-1800's. Of significance to the draft EA and Petition the historical agricultural use included the cultivation of the Property's soils right up to the top of the makai coastal pali property which pali property is owned by the State. While the historical sugar cane agricultural farming operation ceased in 1992 the Property continues to benefit from the HRS 183C allowed agricultural use to this day without any conditional use permitting being required.

As an incentive to the LUC and others that may consider this draft EA and Petition, if the rezoning is allowed, the Petitioner(s) have offered that a "buffer zone" be established to be maintained in woody plants and grasses where no cultivation of the soils would occur in order to protect the environment from agricultural waste, pesticides, fertilizers and soil erosion on to the State owned pali property and into the ocean and on to its reefs below, ref., exhibit 22, pictures showing various cultivated and field crop areas of the Property.

HAR 13-5, the DLNR's administrative rules, which govern its administration of State Conservation Districted lands, gains its authority from HRS 183-C, states.............

HAR 13-5-7 Nonconforming use Rule

"§13-5-7 Nonconforming uses and structures.

(a) This chapter shall not prohibit the continuance, or repair and maintenance, of nonconforming land uses and structures as defined in this chapter."

Agriculture is defined as a land use in HAR §13-5-23, L-1 Agriculture Rule............
"(D-1) Agriculture, within an area of more than one acre, defined as the planting, cultivating, and harvesting of horticultural crops, floricultural crops, or forest products, or animal husbandry."

The Rule does not appear to differentiate between personal agricultural use nor commercial agricultural use. The Petitioner(s) believe that both personal and commercial agriculture uses are captured by the "defined" word/use "agriculture" and therefore both are currently "allowed". The Petitioner(s) have provided evidence to the DLNR and the County, including historical: maps, pictures, field use records and the like in order that they be allowed agricultural use of the Property without formal administrative review and/or conditional permitting of such use being applied by either, ref. exhibit 23 application submitted to the OCCL for a Determination.

Introduction: In brief........... The draft EA and Petition, which the draft EA is intended to support, may not be what they first appear to be to the readers of this draft EA.

Particularly no new land use is contemplated nor is likely to result from the Petition if allowed. All existing uses are already permitted and/or allowed. The Property is fully developed for agricultural use and uses incidental and accessory to such use. The existing agricultural use and structures on the Property commit the Property to continuing long term agricultural use.

Furthermore the Petitioner(s) believe it to be an irrelevant consideration that continuing DLNR administration of the Property's agricultural uses would serve a purpose if, at some time in the future, a new owner of the Property ceased agricultural use. HAR 13-5-7 allows that agriculture may be resumed at any time in the future anyway. Also current County administered SMA guidelines, regarding any further development of most forms of structures on the Property, still apply.

As described, and of particular significance to the Environmental impact Assessment, if the Petitioned rezoning is allowed, the Petition offers a reduction in the intensity of the
existing "HRStatute and HARule allowed" agricultural use of the Property. A buffer zone is offered that will be maintained in grasses and woody plants separating the intense agricultural use area of the Property from the ocean-side coastal pali property, which pali is owned by the State ref., exhibit 22, pictures cultivated field crop areas of the Property.

If the Petition is allowed, the allowed intensity of the agricultural use of the Property will decrease in the immediate area of the coastal pali, effectively a buffer zone will be maintained in grasses and agricultural plant species along with existing wild growth that do not require regular cultivation of the soils in the buffer zone area ie. woody plants. The Property will be rezoned into the State's Agricultural District. The Property's use will be consistent with its zoning and will be administered by the County. Confusion regarding the proper use of the Property at all administrative levels and including the Property owners and the general public, will cease. This will represent an improvement over the current situation.

If the Petition is denied, the 'allowed' intensity of the agricultural use of the Property will continue to exist. No buffer zone will be established. The land's uses will be administered by the DLNR and the County of Hawaii. Cultivation of the Property's soils immediatly adjacent to the coastal pali will continue to be 'allowed'. This may result in an increased potential for erosion of soils, agricultural waste, pesticides, fertilizers and the like on to the coastal pali and inevitably into the ocean and its reefs which lie below the Property. Confusion regarding the proper use of the Property at all State and County administrative levels and including the Petitioners, the adjacent property owners and the general public, will continue.

The State of Hawaii's Department of Agriculture developed the ALISH classification system of lands suitable for agricultural zoning, in part, in order to assist the regulatory authorities in the consideration of proper zoning of lands and the State and County's administration of same. The abbreviated term 'ALISH' means 'Agricultural Lands of Importance to the State of Hawaii'. The Property is described in the ALISH classification.
of agricultural suitability as "Prime" meaning that 'it has the capacity, soil type and moisture supply for intense cultivation of agricultural crops if managed properly.'

Since purchasing the Property in 2014 the Petitioner(s) have used the Property for agricultural use now for over four years. Initially a few orchard species plants were added. Subsequently beginning in 2016 the Petitioner(s) began intensifying and increasing the agricultural uses of the Property. The increased use included field crops of pineapples, sweet potatoes, dragon fruit, fruiting orchard species, bananas, coconuts, ginger, bamboo, plant development and propagation. In 2015 the Petitioner(s) constructed a DLNR and County approved 720 sq. ft. agricultural use storage and processing structure on the Property.

While agricultural uses are already extensive the Petitioner(s) intend to continue to expand their agricultural use of the Property. The Petitioner(s) do not intend to create the impression that a large farming operation exists or may exist. The Property is relatively small in size. The intended agricultural use is modest, due, in part, to the small size of the Property. The Petitioner(s) agricultural use of the Property only adds a supplemental income and personal agricultural use of the Property and a more meaningful retirement lifestyle to the Petitioner(s).

The Petition proposes an improvement over the existing situation. A buffer zone is offered by the Petitioner(s) to separate and limit the scope of the "HRStatute and HARule allowed" agricultural use area of the Property away from the coastal pali if the Petition is allowed. The Petitioner(s) believe that this will result in a benefit to the State, the County, the Petitioner(s), the environment and the community by reducing the potential for the earlier described soil erosion etc. ocean-ward, pali erosion and subsidence and sudden cliff fall and eliminate confusion.

The draft EA in detail:
While it is generally believed that State Conservation Districted land's use is highly restricted, the Property does not fit neatly in what the general public understands Conservation Districted lands to be. The draft EA and the Petition describe that there exists a general incorrect perception that State Conservation Districted land(s) ought to be preserved in their natural state and not developed or used, except for public use and enjoyment of their natural state, scenic views, preservation of botanical and/or historic and/or archaeological features etc.

Specifically the Petitioner(s) have identified to the State and County administrative authorities and adjacent land owners that agriculture is a Statute and Rule allowed use of the Property without formal administrative review and conditional permitting by the DLNR as is normally the case for State Conservation Districted lands, and particularly coastal and near coastal lands such as the Property.

The Property's zoning in the State's Conservation District has resulted, and continues to result, in general confusion for the Petitioner(s), the various administrative regulatory authorities and the community and has effectively resulted in............

1. delayed land use,
2. uncertainty of land use,
3. loss of economic benefit,
4. added costs,
5. uncertainty of the security of investments that the Petitioner(s) have made in the Property,
6. delayed forward land use planning,
7. an enormous volume of correspondence exchanged between the Petitioner(s) and the regulatory authorities etc.
8. a continuing waste of the neighbouring property owner's, community's and the general public's time and resources,
9. a continuing waste of scarce DLNR, County and LUC administrative resources administering the Property's use and zoning designation.

The Property's HRStatute and HARule allowed use does not appear consistent with its current zoning nor is its agricultural use consistently recognized as allowed by the administrative authorities and the general public.

The described general confusion lies at the heart of what the Petitioner(s) have experienced, therefore the Petitioner(s) have Petitioned the LUC that the Property be rezoned from the State's Conservation District to the State's Agricultural District in order to ease and secure the Petitioner(s) agricultural use and investments in the Property.

The sometimes overlapping jurisdictional administrative authorities and complicated Rules are difficult to understand and properly adhere to and to navigate through the State and County administrative processes. This has resulted in the Petitioner(s) wasting time and both the State and County's administrative resources unnecessarily particularly regarding the agricultural use of the Property. The DLNR's Rules for uses are particularly tedious in submitted evidence required and application processes which sometimes can extend through periods measured in years with an uncertain outcome delaying land use on an ongoing basis.

Requests for informal meetings and/or correspondence planning discussion exchanges between the DLNR’s OCCL and the Petitioner(s) were effectively denied by the OCCL which rather required the more formal approach to land use planning through formally submitted applications and the like. Even then formal Petitioner(s) requests and applications often resulted in unanswered questions resulting in repeated correspondence in a seemed unending stream of communications sometimes over period measured in years.
The Petitioner(s) have concluded that the DLNR does not have a clear, evenly applied, administrative policy regarding its administration of its Rules, HAR 13-5-7 Nonconforming Use Rule and HAR 13-5-30 requests for official Determinations and the application of HRS 183C-5., ref., exhibit 17, item K-1, its page 4, BLNR meeting.

On-the-other-hand the Petitioner(s) have found that County administrative processes are much easier to navigate. The County has always encouraged informal meetings and has processed formal communications, requests and applications in a timely and clear manner. The Petitioner(s) have concluded that their use of the Property for efficient agriculture would benefit substantially if the Property was rezoned.

In the case of the Petitioner(s) nonconforming agricultural land use, a seemed "HRStatute and HARule allowed" use, the DLNR administered processes resulted in loss of use of the Property for intended increasing agricultural use for a period measured in years despite the Petitioner(s) exchanging hundreds of pages of written communications with the DLNR's OCCL administrative authority during the period requesting a "Determination", ref., HAR 13-5-30 (the DLNR's Land Use Rule), regarding whether or not the Property qualified for allowed nonconforming agricultural use according to HAR 13-5-7's Nonconforming Use Rule, ref., exhibit 23, first formal requested Determination.

While the Petitioner(s) eventually came to believe that the Property did qualify for allowed nonconforming agricultural use they sought the requested "Determination" in order to secure their investment in the Property's agricultural use and uses incidental and/or accessory to same. Furthermore they sought to remove the likelihood that their agricultural use may result in a fine applied against their use or the hassle and cost of defending their use of the Property. The Petitioner(s) repeatedly sought clarity from the OCCL and instead got uncertainty, obfuscation and delay. The very obvious lack of clear communications from the DLNR, resulting in uncertainty, is of great concern
to the Petitioner(s) and, in part, also lays at the heart of the reasoning that the Petitioner(s) have sought that the Property be rezoned.

Generally the resulting confusion and uncertainty ......

- exposes the Petitioner(s), and continues to expose the Petitioner(s), to the potential for fines administered by the DLNR on a continuing basis as the DLNR does not appear to have a clear and/or evenly applied interpretation of its own administrative rules in such regards, .., ref., exhibit 17, item K-1, page 4.

- is also a problem for the general public and particularly the local community as there exists a general perception that Conservation Districted lands use for agriculture including the cultivation of soils in coastal areas is a violation of State and County laws.

The Petitioner(s) assert the confusion exists as ..........

- it has been their direct experience of same,
- the immediate previous Property owner(s), the McCully(s) described their experience of same,
- the manager of the sugar cane farming operation, which existed on the Property up to 1992, described same,
- other property owners, immediately adjacent to the Property have described same,
- realtors have described same,
- visitors to the Property have described same,
- the State's Auditor General has described same,
- land use planning professionals have described same (the Petitioner(s) have discussed this directly with at least seven professionals),
- the County of Hawaii's planning department representatives have described same to the Petitioner(s),
- the County's elected representative, Valarie Poindexter for the district of the Property, has described same,
Land Use Commissioners generally described same during the former Property owner(s) LUC petition A05 757 during the period from 2005-6 and again at a LUC meeting in Hilo on January 25, 2019.

The Petitioner(s) believe that confusion will not change unless the Property is rezoned to the State's Agricultural District. The Petition and this draft EA describes that the Property's current zoning in the State's Conservation District does not provide a significant benefit to the public and its use for agriculture mistakenly appears to many confusingly in conflict with its zoning.

The State and the County have variably implemented zoning overlays on historically agriculturally used lands, along the Hamakua Coast progressively, over the last 70 years, including the Property. It would seem, generally and variably, that there was an intention to apply a higher level of administrative review of new land uses of coastal properties in the area between Hilo and Hakalau for various reasons which reasoning, in the case of the Property, was never recorded by either the County nor the State, ref., exhibit 1, County representative's, Norman Hayashi, testimony to LUC in its entirety.

Generally testimony to the LUC in a hearing in 2005 by a County of Hawaii Planning Department representative, Mr. Hayashi, (quoted in detail later herein) appears to describe that the Property's zoning resulted from the State and County's desire to generally preserve scenic open space along the Hamakua Coast. It is noteworthy that he did not identify erosion concerns. Confusingly the word scenic implies that an area can be seen from public areas. In the case of the Property there does not exist views towards the Property from public use areas.

Conflicting with the generality of the described testimony and adding to the described confusion, it has been the Petitioner(s) experience that similar coastal lands leading north of Hakalau and variably between Hilo and Hakalau were zoned variably for continuing agricultural use and other lands were allowed to continue agricultural use as a
nonconforming use. **This further supports the Petitioner(s) belief that erosion was not a concern to the regulators when the Property was first zoned into the State's Conservation District.**

The County's testimony in *exhibit 1*, to the LUC describes that *existing* land uses were not intended to suffer the new added layer of DLNR or County administrative review process when the new districting occurred. In the case of the State such uses continued to be *allowed* as nonconforming uses. Particularly *exhibit 1, County testimony to the LUC*, describes that while the County "*designated*" the coastal and near coastal lands along the Hamakua coast "*Open*" in its General Plan first in 1971 for land zoning it intended that existing agriculture continue to be allowed on such lands as they were zoned A20-a.

**Further and continuing to add to the confusion**, despite the referenced, *exhibit 1*, County representative testimony to the LUC the Petitioner(s) spoke to Jeff Darrow, a land use Planner with the County. He described that the County's *'designation'* of "*Open*" described by Mr. Hayashi may be easily misunderstood. Confusingly being *'designated'* "Open" vs. being zoned "Open" may be two distinctly different descriptions/classifications? **Mr. Darrow emphasized that the Property is zoned A20-a, ref., also exhibit 4, County letter**, and that if zoned "Open" (which he stated that the Property is not) the land's use would be highly restricted by the County which seems to the Petitioner(s) to be correct.......................

*ref., exhibit 18, an excerpt from the County General Plan's Open designation section and exhibit 19, LUPAG map North Hilo District and ref., exhibit 4, County letter.*

Mr. Hayashi also did describe to the LUC in 2005 that agriculture is an allowed use of the Property..................

*ref., exhibit 1, beginning on page 6........., its line 23...*
"A. In 1971. And that was our first comprehensive General Plan. It was both a policy document as well as a map form. The map was a component of the General Plan.

Now, at that time we decided to place the lands, many of the lands along the shoreline or coastline and designate a strip of those areas open would be a band of open designation for those areas that were not urban in nature.

This particular property was one of those areas. At that time we did not necessarily designate -- the open designation did not necessarily coincide with the state land use Conservation District line.

However, back in 2005 when we started the review of the 2005 General Plan there was a policy decision to designate a majority of the lands within the state land use Conservation District into the County's General Plan conservation area or an open area.

For this particular area the open designation was still retained. We do have also areas such as that are basically areas for preservation like areas mauka of the Kealakekua Bay which is designates Conservation District. And we designated those areas as conservation on our General Plan. So there are two categories, conservation and open.

The Conservation District in our General Plan is conservation in the true sense of the word. These areas are areas of natural reserves or watershed areas, areas of preservation. Those areas are designated conservation on the General Plan.

Other areas along the Hamakua Coast and along the shoreline we just designated areas open. These areas are basically for recreation purposes or areas that are basically shoreline properties."
The Property is not an area 'of natural reserves or watershed areas, areas of preservation'. Rather the Property ended up being designated Open by the County in its General Plan because it was 'basically a near shoreline property'.

Resuming Mr. Hayashi's testimony.............

Now, as far as the county's open designation the General Plan open designation, we do allow agricultural lands or agricultural uses. This is one of the policies of the General Plan. The General Plan in the policy states agricultural uses may be permitted within the areas designated open."

The Petitioner(s) examined the Policy section of the County's General Plan for Open zoned lands. Confusingly it does not describe that agriculture is allowed on Open 'designated' lands..........

"14.8.3 Policies
(a) Open space shall reflect and be in keeping with the goals, policies, and standards set forth in the other elements of the General Plan.
(b) Open space in urban areas shall be established and provided through zoning and subdivision regulations.
(c) Encourage the identification, evaluation, and designation of natural areas.
(d) Zoning, subdivision and other applicable ordinances shall provide for and protect open space areas.
(e) Amend the Zoning Code to create a category for lands that should be kept in a largely natural state, but that may not be in the Conservation District, such as certain important view-planes, buffer areas, and very steep slopes."

Resuming now with Mr. Hayashi's testimony........
"So in this particular case the current designation of the land zoned designation which is **agricultural 20 acres** and the proposed use of the property for agricultural purposes would be consistent with the county's open designation on the General Plan."..........................

Continuing with Mr. Hayashi's testimony, ref., exhibit 1, page 14, lines 14.....,

"**THE WITNESS:** Okay. We have to understand that although this land is designated open on the General Plan, the county's designation is **agriculture 20 acres**. So they can do agricultural use. **They can have agricultural related structures like the surround shades, that kind of stuff.**

**They can also have farm dwellings or in this particular case because these lands are preexisting prior to 1976 they can have single-family dwellings on it.........."**

Generally what is described above is confusing to everyone. The Petitioner(s) believe that land zoning ought to be consistent with an **allowed** use in order that transparency and certainty for everyone may exist.

Generally the DLNR is the primary administrative body which reviews State Conservation Districted land uses and the like such as the Property before being reviewed by the County, if required. **The described general confusion begins at the DLNR's administrative level, its OCCL.** The Petition and this draft EA describe that it has been the Petitioner(s) experience that the DLNR does not have a clear and evenly applied policy regarding **"HRStatute and HARule allowed"** nonconforming agricultural use of lands which it administers which is consistent with its own Statute, HRS 183-C and Rules HAR 13-5. **It is no wonder that the general confusion, that the Petitioner(s) describe, has resulted all the way down through the State and County administrative authorities, the land use professional community, the general public and the local community.**
Particularly, after **two years of exchanged written communications** between the DLNR and the Petitioner(s), the DLNR's OCCL only issued a letter to the Petitioner(s), *ref., exhibit 5, DLNR letter*, describing that it had **previously allowed** that the Petitioner(s) may use the Property for agriculture **after** the Petitioner(s) informed the OCCL that they intended to advance their requested Determination that the Property qualified under HAR 13-5-7's Nonconforming Use Rule for agriculture to a higher level of authority.

The Petition describes that the only communication that the DLNR's OCCL **previously** issued in this regard was a "**Determination**" that the Petitioner(s) may grow "**sugar cane**" which was never requested by the Petitioner(s). Seemingly the OCCL determined that only the growing of **sugar cane** was allowed by its Nonconforming use Rule and not agriculture. When the Petitioner(s) formally requested that their requested Determination be referred to a higher level of authority, the BLNR, *ref., exhibit 5, DLNR letter*, it was denied by the OCCL.

The goals of the State and County, when the Property was first zoned into the State's Conservation District, seems to have been the restriction/regulating of **new** uses of coastal properties, and near coastal such as the Property, through zoning. The Petition evidences that no assessment of the physical characteristics of the Property was conducted by either the State or the County before the Property was zoned into both the State's Conservation District and the County's **Open/A20-a** District. In each authority's case the authorities were dealing with huge tracts of land when considering zoning.

Official State and County records appear to indicate that the Property was first zoned into the State's Conservation District in the 1960's. At that time it does not appear that the County had a General Plan. It seems that coastal lands and near coastal lands in certain areas along the Hamakua Coast were zoned Conservation with the stroke of a pen on a map without particular consideration to their characteristics regarding suitability for Agriculture zoning or Conservation zoning. Thereafter in 1971 the County developed its General Plan.
Testimony to the LUC in 2005 by the County's representative, Norman Hayashi, indicated that the County *designated* the land Open in 1971 in its General Plan without a recorded reason. It is likely that no particular consideration was given to the characteristics of the Property measured against HRS 205 and State and County HARules was specifically applied. HRS 205 identified that in considering zoning the Agricultural District's boundaries would encompass lands with a *high capacity for agricultural production* be given the "*greatest*" protection. Both today and in 1971 the land had the characteristic of a capacity to produce sustained *high yields of crops on a continuous basis* and, in fact, was producing same at that time and had for some continuous period around 100 years previously.

The administrative office of the LUC described to the Petitioner(s) that the Property's State zoning was determined to be the mauka boundary of the Property between the State's Agricultural district and the State's Conservation district in the 1970's.

Mr. Hayashi's testimony went on to describe that the County again adopted a new General Plan in 1989 and again in 2005. He stated that in 1989 the County's new General Plan did not mirror the existing State Conservation District line which was the mauka border of the Property. It was likely still just a line on a map with no reference yet to property lines. Rather the only consideration remained at that time that it was a near coastal Property in agricultural use like most similar Hamakua coastal lands.

Mr. Hayashi's testimony went on further to describe that when the County again adopted a new General Plan in 2005 it specifically identified the mauka border of the Property as being the dividing line between the County Agricultural district and the County Open district. He referred that the County did this to reflect the existing State Conservation District line which already existed on the mauka side of the Property.
Mr. Hayashi also described the development of the "Northeast Hawaii Community Plan" which was adopted in 1979. He went on to describe, ref., exhibit 1, top of page 9.....

"The ag zoning for this area and other properties along the Hamakua Coast that were in sugar production were designated zoned agricultural 20 acres since 1968."

The transcript, exhibit 1, describes that a general "green belt" was identified on a map back in the 1960's by the State, ref., bottom of page(11-12), a general un-described line on a map that was not consistent with property boundaries lines. If an owner of property, that was generally in the "green belt", desired certainty they may write to the LUC for an official "boundary interpretation", ref., HAR 15-15-22(b) in order that a determination of where the boundary line lay be made by the LUC's Executive Officer. The Executive Officer is required to consider HAR 15-15-22 Interpretation of district boundaries Rule against "all applicable commission records", ref., HAR 15-15-22(d), and issue a "boundary interpretation".

Seemingly rather than assess individual properties characteristics and/or pre-existing uses and the land's suitability for the planned zoning, properties were zoned without on-site inspections/evaluations against the planned new zoning Rules which describe characteristics and/or ongoing uses of such land to assist in applying Statute required zoning, ref., HAR 15-15-19's Agricultural Rule or -20's Conservation District Rule which describe such characteristics of land for applying zoning of land.

Rather the resulting State and County Rules and Regulations provided a pathway for......
(1) correction for incorrect zoning through petitions to the LUC or,
(2) evidencing to the DLNR that "HRStatute and HARule allowed" past uses of such properties may continue as 'allowed' nonconforming uses if a land owner so chose, ref., HAR 13-5-7's Nonconforming Use Rule's section (f).......  
"The burden of proof to establish that the land use or structure is legally nonconforming shall be on the applicant".

26
Also see exhibit 7, OCCL letter to Petitioner(s).

The Petition and the draft EA describe that the Petitioner(s) first chose option (2). The Petitioner(s) submitted an application to the DLNR's OCCL with evidenciary proof and requested a Determination, ref., HAR 13-5-30, Permits, generally Rule, in order to establish that the Property qualified for agricultural use under HAR 13-5-7's Nonconforming Use Rule, ref., exhibit 23, letter. The exchange of correspondence in regards to same spanned a period greater than two years without a result which was satisfactory to the Petitioner(s). The Petitioner(s) are now proceeding with option (1).

When the zoning Rules were established the authorities were likely faced with the problem that if they created a zoning regulation which restricted/eliminated existing land uses, such as agriculture, they probably would have been forced to buy the lands or pay compensation to land owners. This is well established in land use law characterized with term/word descriptions such as eminent domain, taking of land and inverse condemnation.

Later in this draft EA and the Petition it is described that such restrictions would also be in conflict with the State's Constitution which places a priority on agricultural self sufficiency of the State and............

HRS 205-2 (3) Districting and Classification of Lands which states............

"In establishing of the boundaries of agricultural districts the greatest possible protection shall be given to those lands with a high capacity for intensive cultivation; and,"

It is difficult to understand how the Property which had "a high capacity for intensive cultivation", and a long-standing history of intense agricultural production, could have resulted in its zoning in the State's Conservation District. The meaning of the term "a high
"capacity for intensive cultivation" is suitably described in the State of Hawaii's ALISH classification of lands which is described in more detail later herein.

It seems clear that the LUC enabling HRS statute intended to protect "lands with a high capacity for intensive cultivation" through the "establishing district boundaries" by zoning agricultural suitable lands in the State's Agricultural District. The Petitioner(s) believe that the only reasonable explanations that their Property was zoned in the State's Conservation District was that............

1. either a proper 'on site' visit to the Property by the County or the State to assess its characteristics and use did not occur when it was zoned in the State's Conservation District over 50 years ago or,

2. there was an intention to limit the development of new structures and land uses through an added layer of administrative authority. The Petitioner(s) believe that this was due to public use considerations or scenic views from public use areas. ref., exhibit 1, page 7, beginning on line 25....... "Other areas along the Hamakua Coast and along the shoreline we just designated areas open. These areas are basically for recreation purposes or areas that are basically shoreline properties."

The Petitioner(s) believe therefore that scenic concerns were the primary reason the Property was zoned into the State's Conservation District. Such concern was likely intended to be administered through the DLNR's administrative permitting particularly relative to the placement of structures. It is clear that soil erosion seaward was not an issue as the Property was in agricultural use at the time and it was allowed to continue without restriction or any particular administrative regulation as "HRStatute and HARule allowed".
The Petition and this draft EA evidence that the Property's agricultural values have not been protected by the Property's zoning in the State's Conservation District, ref., HRS 205-2 (3) Districting and Classification of Lands which states ..........

"In establishing of the boundaries of agricultural districts the greatest possible protection shall be given to those lands with a high capacity for intensive cultivation; and,"

The Petition and this draft EA describe that the opposite has occurred. The Petitioner(s) sought a "Determination" from the DLNR that the Property qualified for allowed nonconforming agricultural use, ref., exhibit 23. The DLNR resisted issuing the requested Determination for a period measured in years without ever giving a clear response to the Petitioner(s) repeated requests regarding same. When the Petitioner(s) finally requested that the applied for Determination be referred to the BLNR that request was denied, ref., exhibit 5, OCCL letter. The result was not that "In establishing of the boundaries of agricultural districts the greatest possible protection shall be given to those lands with a high capacity for intensive cultivation" as a result of the Property being zoned into the State's Conservation District as is required by HRS 205-2(3).

As described there may have been an intention to restrict new uses of certain coastal and near coastal lands, such as added structures, leading north from Hilo along the Hamakua coast but no intention to restrict continuing agricultural uses. Now, over 50 years on, the physical characteristics of the Property have changed. It is now a fully developed agricultural use Property including fully permitted ag. related structures thereon. The Petitioner(s) believe that the administration of further development of the Property by the DLNR is now sufficiently completed that its continuing administration of use of the Property is no longer necessary.

The Property is now fully developed with approved and seemingly approved......
1. a 720 sq. ft. agricultural use storage and processing structure,
2. a residence which is currently under construction,
3. County approved septic systems
4. access roads,
5. County water supply,
6. cultivated field crop areas,
7. woody orchard plant species,
8. bananas, ginger, bamboo, dragon fruit,
9. a potted plant nursery area,
10. various woody plant species under evaluation for propagation/sale etc.
11. solar p.v. electrical installation etc.

There exist no scenic views either towards the Property or the ocean from public use areas as the coastal highway is cut deeply through a hillside in the area of the Property, ref., exhibit 20, two pictures.

The Petitioner(s) believe that they have also somewhat established that agricultural use is accepted now by the DLNR. Agriculture, by its very nature, may include the cultivation of soils (the word somewhat is meant to imply that the DLNR never issued the requested Determination but rather finally issued a letter describing that it had previously allowed agricultural use of the Property). A Determination that agriculture was an allowed use was requested and was never issued. It is obvious that the DLNR's administration of the Property did not “allow and encourage the highest economic use” of the Property (see pages 34-35...).

Clearly the zoning authorities were not considering the potential for soil erosion or the interruption of agricultural activities as the reasoning for the Property's zoning in the State's Conservation District. There must have been other(s) characteristic(s) of the Property which the authorities intended to Preserve and Protect (without an on-site inspection), such as scenic views, which do not exist either.

30
A complete and professional archaeological, historical and botanical study of the Property were conducted. ref., exhibits 10 and 24. Nothing that needed Preserving or Protecting was identified. Also the DLNR administration has subsequently permitted structures on the Property with specific consideration to limiting size, location and scenic views from neighboring lots. While at the time of the Property's zoning in the period dating from the 1960(s) archaeological, historical, botanical, potential for coastal pali landslides and scenic characteristics or planned public use of the Property may have been intended to be further considered by the authorities they no longer apply to the Property today. The Property is now a fully developed agricultural use Property.

The Petition and later in this draft EA provide an analysis of the Property(s) characteristics against the characteristics described in HAR 15-15-19 Agricultural Districting Rule and HAR 15-15-20's Conservation Districting Rule. The Petitioner(s) believe that none of the Rules will be found to compellingly apply to the Property that require its continued zoning in the State's Conservation District. Furthermore the Petitioner(s) have offered an improvement over the existing allowed uses, the provision of a buffer zone along the coastal pali, where no cultivation of the soils of the buffer zone area would continue to be allowed if the Petition is granted.

It is described herein that the regulators created the confusing web of language in the zoning rules and regulations. On the one hand the regulators seemed to want to regulate new uses of coastal agricultural lands, like the Property, without restricting existing uses. Therefore in order to avoid conflicting with the State's Constitution and its Statutes, which may have resulted in the cost of the "taking of land" to be borne by the public, the existing current web of confusing regulations appear to have evolved. Even more confusing, same was done, without a detailed analysis of individual properties characteristics measured against LUC zoning Rules.
The Petitioner(s) believe that the Petitioned rezoning is now appropriate as the Property is now fully developed as an agricultural use Property with structures thereon already fully approved by all of the regulating authorities and existing and planned agricultural use. The Petitioner(s) believe that continuing administration of the Property's use by the DLNR serves no compelling purpose measured against characteristics of the Property as described in HAR 15-15-20 Conservation District Rules vs. HAR 15-15-19 Agricultural District Rules and HRS 205.

The question may emerge whether allowing the Petition to rezone the Property will set a precedent? The Petition evidences, in its text by reference to case law, that neither the LUC nor the DLNR are bound by precedence. On-the-other-hand precedence may be found not to be such a bad thing if it removes uncertainty and increases transparency in land use regulation ie....

- State and County regulative Authorities,
- the land use professional community,
- realtors,
- land owners,
- the general public.

Come now the Petitioner(s) today, after suffering variable levels of years of loss of use, uncertainty and frustration in securing their agricultural use of the Property, after having wasted their time and valuable public administrative and personal resources, offering a buffer zone restricting cultivation of the Property's soils in the area of the coastal pali, in return for the Petitioned rezoning of the Property. The Petitioner(s) hope that this added inducement may persuade the regulators to correct a problem that seems that they created
in the first place. Effectively the Petitioner(s) have offered a reduction in the intensity of the existing "HRStatute and HARule allowed" agricultural use of the Property.

Not only, if allowed, this will effect a benefit to the environment and by extension to the State, the County and the community at large but it will also remove the uncertainty of regulation which is described by the Petitioner(s) in the Petition and this draft EA to exist and ease and formally secure their agricultural use of the Property.

The **buffer zone** that is proposed will separate the area of cultivated soils from the coastal pali which agricultural use is believed to be a "HRStatute and HARule allowed" use. The suitability/favorability of a buffer zone by the DLNR, if a Petition is allowed, is described in the Petition, with excerpts of quoted testimony by a DLNR representative, **Sam Lemmo**, to the LUC. Particularly after a site visit by the Administrator of the OCCL and the LUC Commissioners, in January of 2006, the DLNR representative described that this would be an outcome that would be acceptable to the DLNR after his on-site observation of the characteristics of the Property which, at that time, was being generally maintained as an open space with grasses covering the field area of the Property. His advice to the LUC was that the DLNR believed that the Property would continue to benefit from the DLNR's administration as he described that the placement (location) of structures was a concern.

The Petitioner(s) existing agricultural use of the Property has relied on HAR 13-5-7's Nonconforming Use Rule which describes that a previous land use, which existed before the Conservation District was overlaid on it, is "HRStatute and HARule allowed" as a nonconforming use. The Property's area was a former sugar cane field dating from the era around 1850. The DLNR and the County have been aware of the Property's current nonconforming agricultural use for the current period exceeding two years.

The proposed buffer zone will represent a reduction in the "HRStatute and HARule allowed" intensity of agricultural use of the Property and the potential of resulting
erosion of soils ocean-ward and pali subsidence. Since first zoning of the Property, coastal lands and near coastal lands like the Property, dating since the 1960(s), in the State's Conservation District it has become an increasing concern of the State, the County and the community that erosion of soils ocean-ward and protection of the environment are now substantially more important today than were formerly. The Petitioned rezoning will bring the Property's zoning into conformance with its use and reduce the potential for soil erosion ocean-ward.

It is not surprising that generally, the State and County regulatory authorities, the public and land use professional community and particularly even the DLNR, its OCCL and the BLNR have a misconception regarding "HRStatute and HARule allowed" and/or allowable land uses within the State's Conservation District. This is described in a report that the State Auditor General provided to the Governor in 1992. The report is exhibited hereto as exhibit 6.

The following represent selected excerpts of text from that report which are believed by the Petitioner(s) to be applicable to the existing situation which are useful in consideration of the Petition and this EA. While the State Auditor's report was specifically intended to deal with nonconforming residential use of State Conservation Districted land the report describes that it equally applies to other "HRStatute and HARule allowed" nonconforming land uses, ref., exhibit 6, the State Auditors review of Conservation District regulations, beginning on it’s page 15........

“Citizens concerned with preserving the natural wonders of the state have turned to the land use law (Chapter 205, Hawaii Revised Statutes) and the forest and water reserve zones law (Section 183-41, HRS) for help in protecting the conservation district. It is in these laws that scenic and natural values find their expression. But the laws, and the rules adopted under them, are bound to disappoint many. They do not have, as some might wish, an orientation that is purely preservationist. Instead, the laws contain the dual public purposes of preservation and conservation. Preservation
seeks to protect land areas from any kind of development, while conservation seeks to manage natural resources and fully use them.

The dual public purposes of preservation and conservation are apparent in the land use law and the forest and water reserve zones law. The land use law speaks of “protecting,” “preserving,” and “conserving”; it also speaks of uses “not detrimental to a multiple use conservation concept.” In multiple use, land is used for two or more purposes (for example, water conservation, timber production, and foraging) in order to increase the benefits derived from an area.”

(reference is made here by the State Auditor to the Hawaii, Legislative Reference Bureau, Public Land Policy in Hawaii: The Multiple-Use Approach, Report No. 1, 1965 (Rev. 1969), Honolulu, page7.)

“The forest and water reserve zones law requires DLNR both to “maintain, improve, protect, limit the future use of, or otherwise conserve open spaces” and to “allow and encourage the highest economic use” consistent with maintaining pure water supplies.”

It is clear to the Petitioner(s) that the DLNR's administration of the Property has not 'allowed and encouraged its highest economic use'.

Continuing with the Auditor’s report………

“The dual public purposes of preservation and conservation can also be found in the Constitution of the State of Hawaii: For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii’s natural beauty and all natural resources, including land, water, air, minerals, and energy sources, and shall promote the development and utilization of
these resources in a manner consistent with their conservation and in furtherance of
the self-sufficiency of the State.”…

The Auditor refers to Article XI, Section 1, the Constitution of the State of Hawaii. The Petitioner(s) believe that their use of the Property for agriculture and uses incidental and accessory to agriculture clearly fall within the referenced ...........

(1) State Constitution purpose/policy guide and,
(2) HRS 183c-5, Nonconforming Use law and,
(3) HAR 13-5-7's Nonconforming Use Rule.

The Auditor's report goes on to state...........

“Concerned citizens have wondered if residential construction violates the intent of the conservation district. The Legislature, through the forest and water reserve zones law, apparently intended to allow residences. The provisions of nonconforming use in that law permit certain preexisting residential uses to continue and allow certain land previously intended for residential use to be developed in that manner. That law also names residences as a possible permitted land use in the conservation district.”

"The land use law and the forest and water reserve zones law therefore cannot now protect the conservation district to the degree some might want. This chapter suggests some improvements to make the regulatory framework more effective. But ultimately the protection desired by many citizens cannot be achieved without taking additional steps."

While the State Auditor's report focused on residential construction in the State's Conservation District, the nonconforming use Rule that captures such use equally applies to all past land uses, ref., page 30, Auditor's Report........
"The first statutory definition of nonconforming use is consistent with usual regulatory practice. It "grandfathers" uses that existed prior to the enactment of the law."

The Property's capacity for intense 'high volume' agricultural production dates from the 1850's when the land was cleared and agricultural use began, ref., exhibit 21, 1905 map of "cane fields" which area included the Property.

HAR 13-5-7's Nonconforming Use Rule states....... 
"§13-5-7 Nonconforming uses and structures.  
(a) This chapter shall not prohibit the continuance, or repair and maintenance, of nonconforming land uses and structures as defined in this chapter."

Agriculture is defined as a land use in HAR §13-5-23, L-1 Agriculture Rule............ 
"(D-1) Agriculture, within an area of more than one acre, defined as the planting, cultivating, and harvesting of horticultural crops, floricultural crops, or forest products, or animal husbandry."

In the case of the State the LUC zoned the Property in the State's Conservation District and the DLNR created HAR rules to administer such lands around a period dating first in the 1960's (HAR 13-2 and subsequently 13-5) and amended them again in the 1990's and again around 2012..... effectively the Conservation District Rules, HAR 13-5-7's Nonconforming Use Rule today allows preexisting land uses to continue to be allowed without the administrative authority of the DLNR to be applied against such land use in perpetuity, ref., HAR 13-5-7 Nonconforming Use Rule.

In the case of the County it created its Rules. The County has described that the Property is zoned as A20-a, an agricultural use designation.

In the case of the Property it has continued in agricultural use since the mid-1850's through to present despite whatever confusion regarding its subsequent zoning occurred
without the regulators expressing an intention to restrict same in any way whatsoever. However today the Petitioner(s) encountered considerable resistance in securing continuing "HRStatute and HARule allowed" agricultural use through DLNR administered processes.

The Petition and this draft EA describe that it has been the Petitioner(s) experience that the State (the DLNR) may be persuaded, reminded and prodded into accepting that agricultural use of the Property today is already a "HRStatute and HARule allowed" use without any permitting requirements. It has been the Petitioner(s) experience that there exists not only a misconception by the general public, the land use professional community but the State and County regulators also appear to believe that Conservation Districted lands, particularly, are not to be used for agriculture without substantial administrative review and conditions of use being applied.

During petition A05 757 the LUCommissioners, the LUC's administrative office, the former Property owner(s), the State Office of Planning, the County Office of Planning, the Attorney General's representative to the LUC, the DLNR's witness to Petition A05 757 and land use professionals that testified to the LUC did not appear to identify and consider that the Property already qualified for allowed nonconforming agricultural use without permitting restrictions being applied. Even the quoted Auditor General in his report identified that everyone is confused!

It ought not be required that the confusion and uncertainty continue to exist. The Petitioner(s) believe that the Petition is properly placed with the LUC to rezone the Property into the State's Agricultural District.

It took the Petitioner(s) over two years of written communications, consisting of hundreds of pages of text, between them and the DLNR to seemingly establish that the Property qualified for "HRStatute and HARule allowed" agricultural use. In the end no formal application (CDUA, SPA or the like) or management plan was required to be provided.
The Petitioner(s) believe that the current "HRStatute and HARule allowed" nonconforming use has always been provided for in the DLNR's Rules however the Rules also provide a lot of discretionary authority to the DLNR which may also result in large fines being applied against property owners for violations which it may believe exist. Despite the Petitioner(s) repeated attempts to resolve that the Property qualified for nonconforming agriculture and uses accessory and incidental to same with the OCCL the OCCL obfuscated its responses leaving the Petitioner(s) in an uncertain situation which exists to this day.

(1) HRStatute, (2) HAR 15-15 LUC Rules and (3) County Rules are all consistent with and effectively support the Petitioned rezoning...........

Effectively, in reverse order, the Rules are promulgated and gain their authority from the Statute and the Statute is a law consistent with the Constitution. The Petitioner(s) believe that no Rule ought to conflict with the Statute from which the Rules are promulgated, ref., exhibit 6, Auditor's Report, its page numbered 18, 3rd paragraph.

The State Constitution requires....... that it’s ‘agencies place a priority’ on preserving and promoting suitable agricultural lands for agricultural uses in its section 11.3 Agricultural lands.............

“The State shall conserve and protect agricultural lands, promote diversified agriculture, increase agricultural self-sufficiency and assure the availability of agriculturally suitable lands.”

The Petitioner(s) agricultural use of the Property is for both personal, self-sufficiency, and intended commercial agricultural production which will add to the State's self-sufficiency in food production. The DLNR has not promoted its continuing agricultural use the way the State's laws intended.
The State's LUC enabling Statute Law LUC HRS 205-2 (3) states that...........

"In establishing of the boundaries of agricultural districts the greatest possible protection shall be given to those lands with a high capacity for intensive cultivation; and,"

The word greatest does not need definition. Effectively the word greatest means that there be no other land zoning characteristic given greater priority provided in the Statute or HARules which result from the Statute. The Statute is succinct in requiring that ‘in establishing district boundaries’ no other land zoning designation than 'Agricultural' be given to land if it has a 'high capacity for intensive cultivation.'

The Property has a 'high capacity for intensive cultivation' which is an established fact. For certain HRS 205 does not state any characteristic of lands being considered for Conservation Districting requiring that they be given equal or greater protection than land that has a 'high capacity for intensive cultivation be zoned in the Agricultural District.'

HRS 205 sections (d) and (e) go on to list various characteristics of lands to be zoned into the State's Agricultural and Conservation Districts.

The listed characteristics clearly go on to describe that the Property ought to be zoned in the State's Agricultural District more compellingly than in the State's Conservation District. Notwithstanding the foregoing, on-the-other-hand, if the County or State have a plan for public use of the Property in any way what-so-ever it is incumbent on them to identify same. The Property has been zoned in the State's Conservation District for over 50 years and neither the State nor the County have identified same.

Particularly the flow of HRS 205-2 first describes what districts are to be established in its section (a) quoted above. Again it is required that the Rules reflect the intent of the Statute, ref., exhibit 6, Auditor's Report, its page numbered 18, 3rd paragraph.
HRS 205-2 then goes on through its subsequent section (d) 'Agricultural districts shall include:' to describe uses in (d) (1) rather than the earlier described capacity characteristic, ref., LUC HRS 205-2 (3).

"(d) Agricultural district shall include:
(1) Activities or uses as characterized by the cultivation of crops, crops for bioenergy, orchards, forage, and forestry,"

The Agricultural section (d) goes on to describe in its clauses (2) - (11) various other uses, activities and services that characterize what the Agricultural district include.

The Petitioner(s) are also using the Property for the 'cultivation of crops' and an 'orchard' and the Property has a 'high capacity for intensive cultivation. '

Comparatively section (e) Conservation district describes............

"Conservation districts shall include areas necessary for protecting watersheds and water sources; preserving scenic and historic areas; providing park lands, wilderness, and beach reserves; conserving indigenous or endemic plants, fish and wildlife, including those which are threatened or endangered; preventing floods and soil erosion; forestry; open space areas whose existing openness, natural condition, or present state of use, if retained, would enhance the present or potential value of abutting or surrounding communities, or would maintain or enhance the conservation of natural or scenic resources; areas of value for recreation purposes; other related activities; and other permitted uses not detrimental to a multiple use conservation concept."

While the word "shall" is a "mandatory" designation it does not superceed the Statute requirement that agriculturally suitable lands be given the greatest possible protection. Agriculture is an allowed and existing use of the Property. The Property is fully
developed with structures and agricultural plantings. No particular *scenic or open space* resources exist that need protection. No *archaeological, historical or botanical characteristics* have been identified that need the protection of Conservation district zoning. *Soil erosion* cannot be reasonably argued to be a characteristic that needs protection against as... agriculture, tilling of the soil etc., is a "**HRStatute and HARule allowed**" use.

In summary of HRS 205-2 Districting and classification of lands......
The lawmakers clearly intended that the LUC implement its Rules, to provide a preferential priority, *ie.* the "**greatest protection be given**", that lands with a '**high capacity for intensive cultivation**' be zoned agricultural. There does not exist any more compelling characteristic in the Conservation district section that the Property remain in the Conservation district. **Again the word "greatest" is a succinct instruction. If the LUC's enabling Rules state otherwise they are in conflict with the Statute.**

**The LUC enabling Rule** HAR §15-15-01 Purpose Rule seemingly confirms that the Statute is to be administered as preemptive to the Rules........

"**This chapter governs the practice and procedure before the land use commission, and shall be construed to secure the just and efficient determination of every proceeding. This chapter shall be liberally construed to preserve, protect, and encourage the development and preservation of lands in the State for those uses to which they are best suited in the interest of public health and welfare of the people of the State of Hawai‘i. The rules under this chapter are promulgated pursuant to authority provided by sections 205-1 and 205-7, HRS."**

**The LUC enabling Rule** HAR 15-15-04 Rule also establishes how the LUC design district boundary Rules in a preferential order. Particularly........

**§15-15-04 Grammatical usage. ............**

**(c) The word "shall" is always mandatory.**
(d) The word "may" is always permissive.

The Petitioner(s) believe that the word "may" implies a discretionary authority to the LUC and the word "shall" implies a mandatory requirement.

The Petitioner(s) believe that the following Rules are particularly relevant to the Petition in this regard, ref., HAR 15-15..........


15-15-19 Standards for determining "A" agricultural district boundaries. Except as otherwise provided in this chapter, in determining the boundaries for the "A" agricultural district, the following standards shall apply:

(1) It shall include lands with a high capacity for agricultural production;

§15-15-04 Grammatical usage. ...........
(c) The word "shall" is always mandatory.
(d) The word "may" is always permissive.

Herein may lie an inconsistency between HRS 205 and HAR 15-15. HRS states that "in establishing district boundaries the greatest possible protection be given to lands with a high capacity for intensive cultivation,' " whereas HAR 15-15 Rules both for State Conservation District and State Agricultural District Rules state at their beginning.....

"Except as otherwise provided in this chapter."
It is not clear to the Petitioner(s) whether there exists another section in HAR 15-15's Rules whether it is "otherwise provided in this chapter" that lands with a "high capacity for intensive cultivation" may be appropriately zoned or, in the case of the Property, remain zoned in the State's Conservation District however, referring back to the Statute HRS 205-2 (3) states that...........

"In the establishment of the boundaries of agricultural districts the greatest possible protection shall be given to those lands with a high capacity for intensive cultivation; and,"

While it is indisputable that the word greatest is succinct there may also exist the discretionary consideration that the term..... "the greatest possible protection be given to lands with a high capacity for intensive cultivation" has not suffered a reduction in protection by the Property's zoning in the State's Conservation District. However the required protection is described to apply to the 'establishment of agricultural district boundaries' and not the 'establishment of conservation district boundaries'.

It has been the Petitioner(s) experience that the Property's zoning has resulted in delayed and uncertainty of use. Furthermore its zoning in the Conservation district did not 'protect' its 'Statute allowed' nonconforming agricultural use, for a prolonged period of time despite the Petitioner(s) attempts to resolve same with the DLNR but rather "limited" such use seemingly because the DLNR does not have a clear and evenly applied policy regarding such use.

Because both HAR 15-15-19 and -20 Rules which promulgate from HRS 205 contain the words "shall" and "may" in their Rules a balance of discretionary consideration is presumably allowed regarding certain characteristics of land described with the term "may". The Petitioner(s) believe, therefore, that one needs to refer back to the earlier quoted HRS 205-2 (3) in determining whether any of the "mandatory" ("shall") considerations in the HAR 15-15-20 Conservation District Rules outweigh the
HAR 15-15-19 Agricultural District Rules as they apply to the current characteristics of the Property, which is now a fully developed agricultural use Property.......

"(1) It shall include lands with a high capacity for agricultural production;"

The stipulation in the Statute....... "in establishing district boundaries the greatest possible protection be given to lands with a high capacity for intensive cultivation” is believed by the Petitioner(s) to be preemptive.

The Property has a "high capacity for agricultural production" relevant to it’s size. This is not just a statement by the Petitioner(s) but is evidenced in the ALISH classification of the Property and also its history of agricultural production.

The word capacity refers as a standard measured against the physical size of a property and the word capacity will be specifically referred to and discussed in the ALISH classification and definition paragraphs below. The Property has a history of intense cultivation exceeding one hundred (100) years, ref., exhibit 12, John Cross letter (the former agribusiness manager of the Property), and exhibit 13, ALISH description of what constitutes prime agricultural land and exhibit 11, ALISH map, which identifies the Property’s area as ‘Prime Agricultural Land’ and the County’s designation of zoning of the Property as A-20a.

Prime agricultural land is defined in the ALSH system, ref., exhibit 13, ALISH definition of Prime Agricultural Land, page 3......

“PRIME AGRICULTURAL LAND is land best suited for the production of food, feed, forage and fiber crops. The land has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically when treated and managed, including water management, according to modern farming methods.”
By inference the Property has a "capacity" to "produce sustained high yields of crops economically". Comparatively HRS 205-2 (3) states..........

"In the establishment of the boundaries of agricultural districts the greatest possible protection shall be given to those lands with a high capacity for intensive cultivation; and,............"

The Petitioner(s) believe that the Petition is properly placed with the LUC and the Petitioned rezoning is consistent with the State's Constitution, the Statutes and the Rules describing that the Property now be rezoned to the State's Agricultural District.

The Petitioner(s) believe that the Petition is offering to add a new level of protection to the Property. Significantly, also, if the Petition is denied............

- **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

- the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

the State's requirement to 'promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,' ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District. the environment measured
against the "HRStatute and HARule allowed" agricultural use of the Property, a buffer zone, is offered.

Consideration of previous relevant determinations (FONSI's)

HRS s/s 11-200-13 (a) Department of Health Environmental Impact Statement Rules state..........

"Chapter 343, HRS, provides that whenever an agency proposes to implement an action or receives a request for approval, the agency may consider and, when applicable and appropriate, incorporate by reference, in whole or in part, previous determinations of whether a statement is required, and previously accepted statements."

(b) Previous determinations and previously accepted statements may be incorporated by applicants and agencies whenever the information contained therein is pertinent to the decision at hand and has logical relevancy and bearing to the action being considered.

(c) Agencies shall not, without considerable preexamination and comparison, use past determinations and previous statements to apply to the action at hand. The action for which a determination is sought shall be thoroughly reviewed prior to the use of previous determinations and previously accepted statements. Further, when previous determinations and previous statements are considered or incorporated by reference, they shall be substantially similar to and relevant to the action then being considered."

The Petitioner(s) request that the LUC approve that the following FONSI(s) be incorporated by reference in this draft EA as relevant and applicable by issuing a letter to the OEQC describing 'an anticipated finding of no significant impact'.

FONSI #1, exhibited hereto as exhibit 2, a 2005 FONSI in support of the McCully(s) 2005 petition, A05 757, to the LUC to rezone 3 TMK lots, which included in part all of
the area of the Property, from the State's Conservation District to the State's Agricultural District. Effectively the Petitioner(s) describe that the FONSI described that the rezoning of the Property to the State's Agricultural District would have No Significant Impact.

FONSI #2, exhibited hereto as exhibit 3, a 2016 FONSI in support of the Petitioner(s) CDUA-CDUP for a residence on the Property. Particularly the Petitioner(s) 2016 FONSI described that the planned residence was intended to support their "HRStatute and HARule allowed" nonconforming agricultural uses of the Property in over 40 places therein. Effectively the Petitioner(s) describe that the FONSI to also be relevant and applicable to this draft EA and the Petition.

Note: the electronic version of this draft EA contains both of the above referenced FONSI's in whole. The hard copies of this draft EA references on-line location references where the exhibited FONSI(s) may be found. The Petitioner(s) discussed this with Tom Eisen of the Department of Environmental Quality Control on January 25, 2019 by telephone. He indicated that such was reasonable, actually he expressed preference, but he also stated that it was up to the LUC to make a final determination of same. Therefore, for reference, the existing FONSI(s) may be found exhibited to the electronic version of this draft EA and on-line at..........


Property description, along with contiguous properties and history:

The Petitioner(s) purchased the Property in 2014 from the McCully(s).
The McCully(s) petitioned the LUC in 2005, petition A05 757 that the LUC rezone the Property from the State's Conservation District to the State's Agricultural District. That petition was supported by a FONSI which is exhibited hereto as *exhibit 2 in the EA's electronic version but not in the hard paper copy*. The LUC denied that Petition. There is a discussion of the LUC's reasoning for the denial which is included in the Petition (five of the seven Commissioners voted to allow the petition, the Rules require six affirmative votes). The Petitioner(s) describe that the reasoning for the LUC's two dissenting Commissioner votes denying the McCully(s) petition no longer applies to the existing characteristics of the Property and its permitted and/or allowed uses.

The Property lays makai of the coastal highway approximately 14.5 miles north of Hilo.

Access to the Property from the coastal highway is on a security gated paved driveway which crosses a neighboring, privately owned, property on an eased area.

At the time of the purchase of the Property, it was maintained in field grasses and limited agricultural plantings. Since that time the Petitioner(s) have increasingly implemented agricultural uses of the Property including cultivated field crops, woody orchard species, a potted plant nursery and specimen plantings of woody plants have been planted which are generally intended for use for growing on, propagation use and/or sale. Personal agricultural use of the Property is also intended by the Petitioner(s).

The Petitioner(s) have build a 720 square ft. agricultural use storage and processing structure on the Property and a residence is currently under construction also. The structures were properly reviewed by the DLNR and the County.

The Property is zoned in the Resource subzone of the State's Conservation District. The Property is designated *"Open"* by the General Plan Land Use Pattern Allocation Guide.
The Property is zoned Agricultural (A-20a) by the County, ref. exhibit 4, County Letter. The Property is bounded on its makai side by the edge of a high ocean-side pali property (ranging between 100 to 140 feet above mean sea level and variably around 100 feet in width) which is characteristic of the Hilo - Hāmākua Coastline.

The pali leading down to the high water mark belong to the State of Hawai‘i and is also zoned in the State Conservation District. Effectively the Property is not ocean front as it is separated from the ocean by the pali property. Effectively, if this Petition is allowed, there remains a strip of State owned land separating the Property from the Ocean.

The center of Puahanui Stream serves as the Northern boundary of the Property and TMK: (3) 2-9-003; 013 serves as the Southern boundary. The Puahanui Stream is an intermittent stream. The only area of the Puahanui Stream that is zoned in the State Conservation District is the area where it crosses the Property. On the agricultural zoned and use lot immediately mauka of the Property no area of the stream is zoned in the State's Conservation District.

The Property is bounded mauka by four parcels, TMKs: (3) 2-9-003: 048, 049, 050 and 051. The Property is separated from the coastal highway by the mauka properties.

The mauka properties are all zoned in the State's Agricultural district and as A20-a by the County. The lot immediately mauka to the Property has a large agricultural use greenhouse on it. It is a substantial agribusiness employing several people. The owners also reside in a residence on that lot.

Lot 013, which shares a southern border with the Property is zoned similar to the Property as Conservation and is also separated from the coastal highway by the mauka properties. Lot 013 is undeveloped, however the current owner has stated an intention to build a residence on it. A copy of the Petition and this draft EA has been provided to that land
That property owner has directly stated to the Petitioner(s) support for the Petitioned rezoning.

The above described properties, including the Property, are located in a private, security gated, subdivision with no public views or access.

The 7 lot subdivision area and the ocean beyond cannot be seen from the coastal highway as the highway is cut deeply through a hillside along its boundary with the properties in the subdivision, ref., exhibit 20, pictures.

There also exists another 32 acre property beginning at the center of Puahanui Stream and extending northward. That property is similar in characteristics to the Property. It spans the entire distance between the coastal highway and the ocean-side pali property which pali property is also owned by the State. The Petitioner(s) believe a portion of the 32 acre property is also zoned in the State's Conservation District, however, no boundary interpretation appears to exist which defines what portion of that lot is in the Conservation District. That property is fenced and maintained in field grasses.

The Property and the other described lots herein lie in an area bounded by Kolekole gulch to the south and the village of Hakalau to the north. The area is also bounded by the coastal highway mauka and is bordered makai by the ocean-side pali property(s) which are owned by the State.

All of the above described properties are believed to be zoned A20-a by the County of Hawaii.

All of the above described properties were in agricultural use (sugar cane production) since a period beginning in the mid 1850 period to 1992.
The properties which are contiguous to the ocean-side pali are also in the County's SMA area.

An incidental use to the historic agricultural use of all of the properties included the deep cultivation of the soils during the period of sugar cane production.

In the case of the properties which lie adjacent, mauka, to the ocean-side pali property the cultivation of the soils included the area immediately up to the top of the ocean-side pali properties.

Historically there did not exist any particular State or County regulations to mitigate the effect of eroded soil, which resulted from the agricultural use of the properties.

The County of Hawaii issued a SMA letter of Determination to the Petitioner(s) that identifies that agriculture is allowed on the area of the Property, ref. exhibit 4 County letter.

The DLNR has been responsible for administering the land uses of all of the properties zoned in the State's Conservation District since a period beginning in the 1960's through its administration of Hawaii Administrative Rules ("HAR") 13-2 and subsequently a more recent amended version, HAR 13-5.

Only the properties, described above, which share a boundary with the ocean-side pali are either partially or entirely zoned in the State's Conservation District.

Conservation Districted land's rule, HAR 13-5-7's Nonconforming Use Rule, provides that uses of land which existed at any time before properties were zoned into the State's Conservation District may continue as "Statute and Rule allowed nonconforming uses" without any formal review and permitting administered by the DLNR. Unlike other land use zoning restrictions in other districted lands there is no provision in HAR 13-5 which
prohibits resumption of properly evidenced historical land uses, when/if interrupted for a period of years.

The Petitioner(s) are aware that the DLNR has reviewed and formally allowed the resumption of nonconforming land uses on lands which uses were interrupted for a period of many years (principally residential use). In at least one case, however, agriculture also was recognized as a "HRStatute and HARule allowed" nonconforming use that may be resumed, ref., exhibit 17, its item K-1 on page 4, Sam Lemmo, Administrator, OCCL testimony to the BLNR.

The Petitioner(s) point particularly to the above referenced exhibit 17's item K-1 as a very clear and comparable example that lays at the heart of the confusion and uncertainty of agricultural use of the Property which the Petitioner(s) experienced when they also requested of Mr. Lemmo that the OCCL issue a Determination, according to HAR 13-5-30's Land Use Rule, that the Property qualified for "HRStatute and HARule allowed" nonconforming agricultural use.

After exchanging correspondence regarding same with the OCCL for a period exceeding two years the requested Determination was never issued by the OCCL. It is clear to the Petitioner(s) that the DLNR does not clearly and evenly apply its HAR 13-5-7 Nonconforming Use Rule. The Petitioner(s) formally appealed that Mr. Lemmo refer the requested Determination to the BLNR. That request was denied by Mr. Lemmo, ref., exhibit 5, OCCL letter. The Petitioner(s) subsequently filed the Petition to the LUC that the Property be rezoned from the State's Conservation District to the State's Agricultural District with the incentive of an offered buffer zone separating the intense agricultural use area from the State owned Pali property which is owned by the State.

Particularly the Petitioner(s) believe that they have reasonably evidenced with all of the appropriate regulatory authorities that "agriculture" was the historical land use. The Petitioner(s) have supplied such evidence in the form of maps, aerial photos, field plans
and a letter from the field manager for the Property to the DLNR and the County of Hawaii's Planning Office.

The DLNR wrote a letter to the Petitioner(s) in January of 2017 stating that it had previously allowed that the Petitioner(s) may conduct nonconforming agricultural use of the Property, ref., exhibit 5, DLNR letter. HAR 13-5 does not provide for the DLNR to administratively review or restrict such use.

The Property is presently fully developed for uses accessory and incidental to the agricultural use of the Property. The Petitioner(s) intend to continue to expand the agricultural use of the Property.

The described land uses that have been implemented on the Property represent a long term commitment of the Property's use to agriculture.

The Petitioner(s) first inquired of the DLNR during a period of 2014-2015 what "proof" was required in order to establish that the Property qualified for "HRStatute and HARule allowed" nonconforming agricultural use. The DLNR advised that 'photos and records' were sufficient. The Petitioner(s) supplied such evidence to the DLNR and the County Office of Planning and identified that they are using the Property for agricultural use.

The DLNR finally wrote a letter to the Petitioner(s) in January of 2017 describing that it had previously allowed that they may use the Property for nonconforming agricultural use, ref., exhibit 7, DLNR letter.

**Additional background information:**

The Petitioner(s) have filed Petition A18 805 with the State LUC and copies with the County of Hawaii and State Planning Department (the submission of the Petition was around July of 2018). The Property is already fully developed in agricultural use including
uses accessory and incidental to the agricultural use of the Property. **No new use is contemplated or likely** and therefore the Petitioner(s) believe there will not be any **significant effect** resulting from the Petitioned rezoning and/or the Property's continuing agricultural use.

The Petitioner(s) describe that the various State and County agencies that are consulted in regards to such a draft EA were already invited to comment on the very similar 2005 McCully(s) draft EA for LUC Petition, A05 757, for a very similar Petition which included the Property and the South Lot. In that petition the LUC filed a FONSI, ref., exhibit 2 *FONSI*, in the event that the Property was subsequently rezoned from the State's Conservation District to the State's Agricultural District.

Comparative to today's situation, during the time of the McCully(s) petition, no particular substantial/intensive land use existed on the Property. The Property can generally be described at that time as an open field area which had field grass growing on it and limited agricultural plantings which Property was also regularly mowed. The Property had some volunteer woody plant growth along its northern border and along the coastal pali. The McCully(s), the DLNR and the LUC seemed unaware that the Property qualified for "**HRStatute and HARule allowed**" nonconforming agricultural use according to HAR 13-5-7's Nonconforming use Rule.

In the LUC's denial of the McCully(s) petition the potential for erosion of the property's soils and pali subsidence were cited, in part, as reasoning supporting the denial and that the development and placement of structures and the Property's uses, would be better considered through the DLNR administrative permitting role.

During the LUC hearings a witness, the administrator of the OCCL, testified a DLNR position that the land ought to remain in the Conservation District in order to monitor and control future development of structures on the property. The DLNR's representative testified that, in the event that the LUC allow the petitioned re-zoning into the State's
Agricultural District, at a minimum, a 40 ft. buffer zone be provided that remained in the State's Conservation District. Effectively the Petition describes that a "deed restriction" or other suitable instrument be provided that prevents the cultivation of the soils of the Property in the buffer zone area in perpetuity.

Comparative to the current Petition the McCully(s) petition described contemplated land uses including a farm dwelling (a residence) and a greenhouse. This Petition describes that the Property is now fully developed for agricultural uses with field crops, woody orchard species, nursery plant production along with a potted plant nursery. No new land uses are contemplated nor are they likely as the Property has been fully developed for long term agricultural use and uses accessory and incidental to such use.

The soils of the property are classified as "Prime Agricultural land" under the ALISH classification system. The Property's soils are deep and fertile. The Property receives adequate rainfall to support agricultural use. The Property is not particularly steep. The Property cannot be seen from public use areas. The Petitioner(s) describe that there exists no public benefit that the Property remain in the State Conservation District.

**A CULTURAL IMPACT ANALYSIS: Ka Pa’akai 0 Ka ‘Ama** assessment and EA(s) and FONSI(s) are on file with the LUC for the property which the Petitioner(s) submit are relevant to the applied for re-zoning, ref., exhibits 2 & 3. An Archaeological study exhibited in exhibit 24 describes same and meets the current requirements in the law particularly described in its page numbered ii. .......

**EXECUTIVE SUMMARY**

............The fieldwork produced no evidence of traditional Hawaiian artifacts or features. Also, there is no evidence that the area is currently being accessed for the exercise of traditional and customary practices associated with any traditional cultural properties or resources. As part of the current study, the Office of Hawaiian Affairs and other organizations and individuals were contacted in an effort to obtain
information about any potential traditional cultural properties and associated practices that might be present or have occurred in this portion of Wailea Ahupua'a. None of the organizations/individuals contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the current project area; nor did they provide any information indicating past or current use of the area for traditional and customary practices.

and on page 13........

PROJECT EXPECTATIONS

.........For the last 100 years, however, the area has been utilized for sugar cane cultivation and associated transportation and employee housing infrastructure. It is likely that these historic era modifications have largely destroyed any traditional Hawaiian features once present in the project area.

and on page 18........

CONSULTATION

As part of the current study, the Office of Hawaiian Affairs (Ululani Sherlock) and Kepa Maly (Kumu Pono Associates) were contacted in an effort to obtain information about any potential traditional cultural properties and associated practices that might be present or have occurred in this portion of Wailea Ahupua'a. Neither had any specific information relative to this project area, however, the Office of Hawaiian Affairs suggested we contact the Laupahoehoe Hawaiian Civic Club. To that end, we contacted Lucille Chung and Walter Victor, who in turn recommended that we contact Jack or Waichi Ouye, Yukio Takaya, or Lorraine Mendoza. Lorraine in turn suggested contacting Kiyoshi Kubo and Masaichi Chinen. Interviewees remembered that the railway ran across the property until the 1946 tsunami destroyed the Kolekole Bridge. On the adjacent property to the Hilo side of the study area there was a pig farm in the gulch used by camp residents and a trail that accessed the shore. Fisherman used this trail and there was good fishing immediately shoreward of the study area.
None of the organizations/individuals contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the current project area; nor did they provide any information indicating past or current use of the area for traditional and customary practices.

and continuing on page 18........

CONCLUSIONS
Systematic survey of three parcels (TMK 3-2-9-03: 13, 29, 60) produced no evidence of traditional Hawaiian remains or evidence that the area was currently being accessed for the exercise of traditional and customary practices.

It has been the Petitioner(s) experience that the DLNR lacks a clear and evenly applied policy regarding administratively recognizing and allowing nonconforming agricultural use of property in cases properly evidenced to it. The DLNR's administration of the agricultural use of the Property has added an enormous burden, tedium, cost, delay and economic loss of the use of the Property for agriculture and uses accessory and incidental to such use.

The Petitioner(s) applied for an official Determination according to HAR 13-5-30's Rule that the Property qualified for nonconforming agricultural use without a satisfactory result. The exchange of written communications in this regard exceeded a period of two years. The administrative burden of DLNR administration is the same whether it be for a large property with a lot of economic potential and a small property such as the Property. This disproportionate burden substantially reduces the viability of the Petitioner(s) rightful Property use.

More recently, in 2016, the DLNR filed a FONSI with the OEQC for the Petitioner(s) planned residence on the Property. That FONSI described in some 40 places that the residence was intended in order to support the Petitioner(s) agricultural use of the
Property. The DLNR determined a Finding of No Significant Impact, ref., exhibit 3, FONSI.

The Petitioners have also mailed a description of the re-zoning Petition to the LUC's State's "Official mailing list" which is comprised of some 250 interested parties. The LUC's website on the Petition's page does not presently describe any party's concerns or resistance. To the contrary both the County and the State Offices of Planning issued letters supporting that no additional EA and FONSI be required. However the LUC ruled on January 23rd, 2019 that a new draft EA be submitted and reviewed.

**RECENT OWNERSHIP HISTORY**

From 1992 to 2014 the McCully(s) owned the Property. In July of 2014 the McCully(s) sold the Property to the Petitioner(s).

**LAND USE DESIGNATIONS**

The Property is situated within the State Land Use Conservation District **Resource** sub-zone.

The Property is zoned A20-a by the County of Hawaii, an agricultural use designation, ref., exhibit 4, County letter.

The Property is also located within the Special Management Area (SMA) and the Property lies immediately mauka of a State property which State property has frontage along the coastline.

The Property's zoning by the State and the County is confusing, to say the least, which lies at the heart of what the Petitioner(s) have experienced. Effectively the State and the County have variably implemented zoning overlays on land along the Hamakua Coast.
progressively, over the last 70 years. It would seem, generally, that there was an intention to intermittently restrict land uses of coastal properties in the area.

While the goals of the State and County were the restriction/regulating of the use of coastal properties, through zoning, the regulators were faced with the problem that if they created a regulation which restricted existing uses, such as agriculture, they probably would have been forced to buy the lands. Therefore the regulators seemingly created confusing zoning rules and regulations which continue to this day.

Effectively the Conservation District Rules, HAR 13-5 allows preexisting land uses to continue to be "HRStatute and HARule allowed" without the administrative function of the DLNR to be applied against such property's use in perpetuity, ref., HAR 13-5-7 Nonconforming Use Rule. In the case of the County it created a land description known, in the case of the Property, as A20-a, an agricultural use designation.

Mr. Hayashi's testimony in exhibit 1 describes the County's zoning as A20-a. It has been the Petitioner(s) experience that County and the State may be persuaded, reminded and prodded into accepting that agricultural use of the Property today is already a "HRStatute and HARule allowed" use without any permitting requirements. The general public have been confused into believing that Conservation Districted and Open described land uses are to be highly regulated.

Particularly exhibit 6, a State of Hawaii's report to the Governor, indirectly describes that confusion exists regarding allowed agricultural uses of the Property.

Today the Northeast Hawaii Community Development Plan and the County General Plan LUPAG Map Open' designations relate to the State Land Use Conservation District designation for the Property. The County's representative Norman Hayashi testified to the LUC on August 12, 2005 during the McCully(s) very similar petition A05 757,
describing how the Property became designated "Open" in the County's General Plan and yet agriculture use is still allowed by the County, ref., exhibit 1, LUC testimony.

What appears to be described, in reference to the Property, is that the County, first simply captured coastal lands, with the stroke of a pen on a map without specific reference to property boundary lines. Subsequently the County more specifically defined the open zoned lands border lines as being lands that had been zoned in the State Conservation District many years earlier when it developed the County's General Plan which exist today.

Perhaps of some relevance, generally, the County zoning border between Agricultural lands and Conservation District lines began at the top of the coastal pali, ref., exhibit 8, Ninole boundary interpretation............

"For your information, the designation of the subject parcels was established on August 4, 1969, and in accordance to Hawaii Administrative Rules Subchapter 16, 15-15-111. As depicted on the official State Land Use (SLU) District Boundaries Map H-59. Papaaloa Quadrangle, the landward portion of the subject parcels was designated SLU Agricultural. Any coastal lands from the "Top of Sea Pali" was deemed SLU Conservation District."

The Petitioner(s) have been unable to discover why, generally, lands comparable to the Property, which both were Prime Agricultural lands according to the ALISH system of classification, north of Hakalau were zoned differently than lands extending from Hilo to Hakalau.

HAR 11-200-12 Significance criteria
(a) In considering the significance of potential environmental effects, agencies shall consider the sum of effects on the quality of the environment, and shall evaluate the overall and cumulative effects of an action.

Overview...... The proposed action is that the Property be rezoned from the State's Conservation District to the State's Agricultural District. No new land use is proposed nor is likely. The Property is already fully developed as an agricultural use Property including agricultural plantings, an existing agricultural use storage and processing structure and a residence is under construction. The agricultural use is a "HRStatute and HARule allowed" use according to HAR 13-5-7's Nonconforming Use Rule which allows that the Property qualifies for agricultural use in perpetuity. HAR 13-5-7's Nonconforming Use Rule provides that such agricultural use includes the "HRStatute and HARule allowed" right to cultivate the Property's soils immediately adjacent to the ocean-side pali property which is owned by the State. The Petitioner(s) intend to fully develop and utilize the Property's agricultural resources whether the Petition is allowed or not, however, if the Petitioned rezoning is allowed, a buffer zone is offered to reduce the intensity of the land's use immediately mauka of the State owned pali property.

(b) In determining whether an action may have a significant effect on the environment, the agency shall 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. In most instances, 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 resources,

Social, Cultural and Economic Setting
Socioeconomic Characteristics
Setting.........................
Hawai‘i County's population increased by more than 56,000 persons between 1980 and 2000. Between 1980 and 1990, Hawai‘i Island's population increased 30.7 percent, and increased by 23.6 percent between 1990 and 2000. The April 1, 2000 population figure for Hawai‘i County was 148,677 according to census figures compiled by the County of Hawai‘i, Department of Research and Development.

The South Hilo district had a population of 47,386 in 2000 which represented approximately 32 percent of the total population for Hawai‘i Island. The City of Hilo is the largest population center on the island with the main offices of the County government, branch offices of Federal and State agencies located there. The island’s major deep draft harbor and international airport are also located in Hilo. In addition to industrial, commercial and social service activities, the University of Hawai‘i Hilo and Hawai‘i Community College and affiliated research programs play an important role in Hilo's economy.

Hilo and the rest of the East Hawai‘i’ communities are adjusting to the loss of the sugar industry in the mid 1990's. The continuation of agriculture in the district has required a major shift from large scale single-commodity production to smaller scale, multi-commodity multi-market base. The shift to diversified agriculture is characterized by larger numbers of self-employed and smaller scale independent businesses.

**Potential Impacts and Mitigation Measures**

Other properties in the immediate vicinity of the Property are utilized for a variety of diversified agricultural activities including a certified orchid nursery, the propagation of foliage stock and the cultivation of edible ginger and Chinese taro as well as residential uses. The rezoning will not have any significant effect on the socioeconomic characteristics of the area.

**Archeology, Historic and Cultural Resources**

*Setting*
An archaeological assessment of the property was conducted by Rechtman Consulting, LLC, in July of 2004. The Property was systematically and intensively examined, and one site (SIHP Site 50-10-26-24212) (two historic-period railroad features) were discovered. These features were identified as a possible railroad grade section and a railroad trestle abutment. A copy of the consultant’s report is found as exhibit 24.

In summarizing its findings, the archaeological consultant states the following:

“Systematic survey of three parcels (TMK 3-2-9-03: 13, 29 60) produced no evidence of traditional Hawaiian remains or evidence that the area was currently being accessed for the exercise of traditional and customary practices.”

“One historic era site-SIHP Site 24212, was recorded. The site contains two features associated with the Hamakua Division of Hilo Railroad-Hawaii Consolidated Railway which were recorded in the northwestern portion of the Property. One is a possible section of railroad grade and the other is a railroad trestle abutment. The features were in active use by the railroad from 1911 to 1946. Their primary function was to facilitate the transport of raw sugar from the many mills along the Hilo and Hamakua Coasts to the harbor at Hilo Bay. In later years, they also served the secondary function of facilitating tourism.”

The archaeological consultant provided the following significance evaluation and treatment recommendations:

“Site 24212 is considered significant under Criteria D for the information it has yielded regarding early twentieth century agriculture (sugar cane production), transportation infrastructure. As the current inventory survey project recorded Site 24212 in detail, however, no further work is recommended.”

“In the unlikely event that archaeological resources are encountered during future development activities at TMK: 3-2-9-03: 13, 29, and 60, work in the immediate area of
the discovery should be halted and DLNR-SHPD contacted as outlined in Hawaii Administrative Rules 13§13-275-12.”

By letter dated December 22, 2004, DLNR-SHPD accepted and agreed with the archaeological consultant’s recommended treatment of Site 24212 and noted that the consultant’s report was adequate to meet the requirements of Section 13-276, HAR. The report was accepted as final. Rechtman Consulting, LLC, also conducted a cultural assessment for the Property. Archival and documentary information was reviewed, including Mahele Land Awards and Grants and historic maps. The Consultants report can be found as exhibit 24.........

This research did not reveal any documentation of any previous or ongoing traditional or customary practices. The area was historically known as Hilo-pali-Ku (Hilo of the upright cliffs) and there are a few accounts that indicate this area, which encompasses the sheer cliffs stretching along the Hāmākua Coast from the Wailuku River to Waipi`o and beyond, once supported a large pre-contact Hawaiian population that subsisted on crops.

This research did not reveal any documentation of any previous or ongoing traditional or customary practices. The area was historically known as Hilo-pali-Ku (Hilo of the upright cliffs) and there are a few accounts that indicate this area, which encompasses the sheer cliffs stretching along the Hāmākua Coast from the Wailuku River to Waipi`o and beyond, once supported a large pre-contact Hawaiian population that subsisted on crops such as taro, sweet potato, banana, and coconut. Other agricultural resources such as ‘awa, bamboo and sugarcane were also cultivated on the kula lands that stretched from South Hilo to Hāmākua. In the second half of the nineteenth century, the transportation difficulties that had delayed the large-scale commercial exploitation of the kula lands were overcome and sugarcane plantations replaced the subsistence agriculture and grazing as the dominant land use.
In order to identify cultural resources and potential traditional cultural practices associated with the Property and this portion of the Wailea ahupua`a, the consultant contacted Ululan Sherlock of the Office of Hawaiian Affairs (OHA) and Kepa Maly of Kumu Pono Associates in June of 2004. Neither had any specific information relative to the Property. However, OHA suggested contacting the Laupahoehoe Hawaiian Civic Club. Lucille Chung and Walter Victor were contacted, and they, in turn, referred the consultant to Jack or Waich Ouye, Yukio Takeya and Lorraine Mendoza, who were contacted in June and July of 2004.

The interviewees recalled that the railway used to run across the property until the Kolekole Bridge was destroyed by the tsunami of 1946. On the adjacent property to the south of the 7 lot subdivision, there used to be a pig farm that was used by camp residents and a trail that accessed the shore. This trail allowed the residents and local fisherman access to the shoreline below the pali that bounds the property to the East. This trail was not located on the Property nor did it cross such Property."

The consultant summarized its findings regarding cultural resources relating to the Property as follows...............

“None of the organizations or individuals that were contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the Petition Area; nor did they provide any information indicating past or current use of the area for traditional and customary practices. It is unlikely that there are any traditional utilized for sugarcane cultivation and associated transportation for over 100 years. Any traditional Hawaiian features that may have been associated with former cultural practices that may have occurred in the Property would have been destroyed by the sugarcane cultivation and related uses.”

Petitioner(s) interviewed the field manager of the agricultural farming business which occupied the Property up to 1992. The field manager stated that this particular Property
and the surrounding 7 lot subdivision was maintained as a ‘seed farm’ for their agricultural business for over 40 years and all public access from all directions was strictly prohibited in order to not contaminate the seed production on the Property. Thus there exists no recent history of public access to the Property or the subdivision mauka after the closure of the railroad around 1950.

A complete copy of the Archaeological Inventory Survey and Limited Cultural Assessment of TMKs: (3) 2-9-003: 013, 029, and 060 is provided as exhibits 24. The comment letter from the State Historic Preservation Division dated December 22, 2004 and a supplemental letter from the consultant Rechtman Consulting, LLC, dated January 24, 2005 can be found beginning on page 89 of exhibit 2.

Potential Impacts
There were no cultural or historic properties, other than Site 24212, identified in the Property area. There were also no traditional or customary cultural practices found to be associated with the Property. The Petitioned rezoning is therefore anticipated to have “no effect” on significant historic sites or traditional and customary cultural practices. The Historic use of the Property was for Agriculture. The Petitioned rezoning will not have any significant adverse impact on the Archeology, Historic and Cultural Resources. No new use is contemplated nor is it likely. The agricultural use of the Property is already a "HRStatute and HARule allowed" use. (the Historic use).

The agricultural use of the Property will contribute very modestly but none-the-less positively to the economy in general. There exists a shift to diversified agriculture in the region as characterized by larger numbers of small agricultural lots.

The proposed action is that the Property be rezoned from the State's Conservation District to the State's Agricultural District. No new land use is proposed nor is likely. The Property is already fully developed as an agricultural use Property including agricultural plantings, an existing agricultural use storage and processing structure and a residence is
under construction. The agricultural use is a "HRStatute and HARule allowed" use according to HAR 13-5-7's Nonconforming Use Rule which allows that the Property qualifies for agricultural use in perpetuity.

HAR 13-5-7's Nonconforming Use Rule provides that such agricultural use includes the "HRStatute and HARule allowed" right to cultivate the Property's soils immediately adjacent to the ocean-side pali property which is owned by the State. The Petitioner(s) intend to fully develop and utilize the Property's agricultural resources whether the Petition is allowed or not.

If the Petition is allowed a 40 ft. wide "buffer zone" is proposed between the pali and the cultivated soil areas of the Property. The proposed buffer zone will be maintained in grasses and woody plant species in order to reduce the potential effect of soil erosion and pali subsidence and landfall. Effectively the intensity of agricultural use of the buffer zone area will decrease.

The Petitioned rezoning will not result in an irrevocable commitment to loss or destruction of any natural or cultural resources. The Property's use for agriculture is already a "HRStatute and HARule allowed" right in perpetuity. Historical agricultural use of the Property, including the cultivation of its soils are likely to have destroyed any natural or cultural resources on the Property, if in fact, they ever did exist. There exists a botanical study and an archaeological study for the Property found as exhibits 10 and 24. Particularly nothing was identified that required further protection. The Petitioned rezoning will bring the Property's long-standing use for agriculture into conformance with its zoning.

Significantly the Petitioned rezoning will:

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,
• secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

• provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

• **promote the development and utilization of** the Agricultural **resources** of the Property **in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State**, ref., State Auditor's Report, exhibit 6,

• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the **"greatest"** protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is **"mandatory"** that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied** the Petitioner(s) will continue to be **"HRStatute and HARule allowed"** to cultivate the soils in the described **buffer zone** area. An increased potential for erosion of soil and pali subsidence and landfall will continue to exist, a possibility for a negative effect on the environment, which undoubtedly does not serve the interest of the State, the County nor the community.

Significantly, also, if the Petition is denied.............

• **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,
• the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

• no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

• the State's requirement to 'promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,' ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

(2) Curtails the range of beneficial uses of the environment,

The Petitioned rezoning will curtail the range of beneficial uses of the environment in a way that is beneficial to the environment. This will be a Significant Positive Effect.

The proposed action is that the Property be rezoned from the State's Conservation District to the State's Agricultural District. No new land use is proposed nor is likely. The Property is already fully developed as an agricultural use Property including agricultural plantings, an existing agricultural use storage and processing structure and a residence is under construction. The agricultural use is a "HRStatute and HARule allowed" use which allows that the Property qualifies for agricultural use in perpetuity. HAR 13-5-7's Nonconforming Use Rule provides that such agricultural use includes the "HRStatute and HARule allowed" right to cultivate the Property's soils immediately adjacent to the
ocean-side pali property which is owned by the State. The Petitioner(s) intend to fully
develop and utilize the Property's agricultural resources whether the Petition is allowed or
not but the Petitioner(s) offer to reduce the intensity of the agricultural use area
immediately mauka of the State owned pali property is contingent on the Petitioned
re zoning of the Property to the State's Agricultural District.

If the Petition is allowed, a 40 ft. wide "buffer zone" is proposed between the "HRStatute and HARule allowed" cultivated area and the ocean-side makai pali property. The proposed buffer zone will be maintained in grasses and woody plant species in order to reduce the potential effect of soil erosion and pali erosion, subsidence and landfall. Effectively the intensity of agricultural use of the buffer zone area will decrease. The Property's use for agriculture is already a "HRStatute and HARule allowed" right in perpetuity. The Petitioned rezoning will bring the Property's long-standing use for agriculture into conformance with its zoning.

Significantly the Petitioned rezoning will:

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

- promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6.
• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied** the Petitioner(s) will continue to be "HRStatute and HARule allowed" to cultivate the soils in the described buffer zone area. An increased potential for erosion of soil and pali subsidence and landfall will continue to exist, a possibility for a negative effect on the environment, which undoubtedly does not serve the interest of the State, the County nor the community.

Significantly, also, if the Petition is denied.............

• **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

• the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

• no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

• the State's requirement to *promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,*' ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly
reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

- **promote the development and utilization of** the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6, bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

(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,

**[§344-1] Purpose.** The purpose of this chapter is to establish a state policy which will encourage productive and enjoyable harmony between people and their environment, promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humanity, and enrich the understanding of the ecological systems and natural resources important to the people of Hawaii.

**If the Petition is allowed...........**

The Petitioned rezoning will promote efforts which will prevent or eliminate damage to the environment. This will be a Significant Positive Effect. Agriculture is already a "HRStatute and HARule allowed" use on the Property according to HAR 13-5-7's
Nonconforming Use Rule. The "HRStatute and HARule allowed" agricultural use of the Property includes the right to cultivate the Property's soils immediately adjacent to the Property's border with the ocean-side pali property makai. The Petitioner(s) have established substantial agricultural use of the Property. No new land use is anticipated nor is believed to be likely.

Furthermore the Petitioner(s) are proposing an improvement over the existing "HRStatute and HARule allowed" conditions. A buffer zone is proposed that will be maintained in grasses and woody plant species in order to reduce the potential effect of soil erosion, pali subsidence and landfall. Effectively the intensity of agricultural use of the buffer zone area will decrease.

Significantly the Petitioned rezoning will:

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

- promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6,

- bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural
District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied**

The "HRStatute and HARule allowed" agricultural use of the Property will continue.

The "HRStatute and HARule allowed" right to cultivate the Property's soils in the vicinity of the makai boundary of the Property with the ocean-side pali will continue. An increased potential for erosion of soil, pali subsidence and landfall will continue to exist, a possibility for a negative effect on the environment, which undoubtedly does not serve the environment well nor the interest of the State, the County nor the community.

Significantly if the Petition is denied............

- **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

- the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

- no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

- the State's requirement to *promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,* ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules.

As is earlier described in the draft EA the State's Statutes and Rules particularly
reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in its Agricultural District.

[§344-3] Environmental policy. It shall be the policy of the State, through its programs, authorities, and resources to:

(1) Conserve the natural resources, so that land, water, mineral, visual, air and other natural resources are protected by controlling pollution, by preserving or augmenting natural resources, and by safeguarding the State’s unique natural environmental characteristics in a manner which will foster and promote the general welfare, create and maintain conditions under which humanity and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of the people of Hawaii.

If the Petition is allowed...........

The Petitioned rezoning will conserve the natural resources, so that land, water, mineral, visual, air and other natural resources are protected by controlling pollution, by preserving or augmenting natural resources, and by safeguarding the State’s unique natural environmental characteristics in a manner which will foster and promote the general welfare, create and maintain conditions under which humanity and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of the people of Hawaii.

This will be a Significant Positive Effect. Agriculture is already a "HRStatute and HARule allowed" use on the Property according to HAR 13-5-7's Nonconforming Use Rule. The "HRStatute and HARule allowed" agricultural use of the Property includes the right to cultivate the Property's soils immediately adjacent to the Property's border with the ocean-side pali property makai. The Petitioner(s) have established substantial
agricultural use of the Property. No new land use is anticipated nor is believed to be likely.

Furthermore the Petitioner(s) are proposing an improvement over the existing "HRStatute and HARule allowed" conditions. A buffer zone is proposed that will be maintained in grasses and woody plant species in order to reduce the potential effect of soil erosion, pali subsidence and landfall. The Petition provides that a buffer zone stipulation to the Petition be negotiated between the State and County Offices of Planning and the Petitioner(s) and incorporated into the Petition considerations by the LUC. Effectively the intensity of agricultural use of the buffer zone area will decrease.

Significantly the Petitioned rezoning will....

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

- promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6,

- bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable
lands and the LUC Rule, HAR 15-15-19 describes that it is *mandatory* that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied.......**

The *HRStatute and HARule allowed* agricultural use of the Property will continue. The *HRStatute and HARule allowed* right to cultivate the Property's soils in the vicinity of the makai boundary of the Property with the ocean-side pali will continue. An increased potential for erosion of soil, pali subsidence and landfall will continue to exist, a possibility for a negative effect on the environment, which undoubtedly does not serve the environment well nor the interest of the State, the County nor the community.

Significantly if the Petition is denied............

- *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

- the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

- no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

- the State's requirement to *promote the development and utilization of* the Agricultural resources of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,* ref., *State Auditor's Report, exhibit 6,* will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the *greatest* protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes
that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

(2) Enhance the quality of life by:

(A) Setting population limits so that the interaction between the natural and artificial environments and the population is mutually beneficial;

Not applicable.

(B) Creating opportunities for the residents of Hawaii to improve their quality of life through diverse economic activities which are stable and in balance with the physical and social environments;

If allowed the Petitioned rezoning will bring the Property's zoning into line with its "HRStatute and HARule allowed" use. The proposed buffer zone will result in an improvement over the existing "HRStatute and HARule allowed" conditions of the Property. Effectively it will keep the agricultural use more in balance with the physical and social environments.

Significantly the Petitioned rezoning will....

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,
• *promote the development and utilization of* the Agricultural resources of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State*, ref., State Auditor's Report, exhibit 6.

• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

**If denied** the Property's agricultural use will continue to exist as a nonconforming use. The resulting economic activities will likely be less in balance with the physical and social environments.

LUC rule HAR15-15-28 Statement of intent states......

"This subchapter is intended to expedite the eventual elimination of existing uses or structures that are not in conformity with the provisions of subchapter 3 because their continued existence violates basic concepts of health, safety, and welfare as well as principles of good land use. However, in applying subchapter 3, no elimination of nonconforming uses or structures shall be effected so as to cause unreasonable interference with established property rights."

The Petitioned rezoning will bring the Property's agricultural use into conformity to its zoning. The continued existence of the "HRStatute and HARule allowed" agricultural use will no longer violate basic concepts of health, safety, and welfare as well as principles of good land use.

Significantly if the Petition is denied.............
• **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

• the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

• no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

• the State's requirement to *promote the development and utilization of* the Agricultural resources of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,* ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the *"greatest"* protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is *"mandatory"* that agriculturally suitable lands be zoned in it's Agricultural District.

(C) Establishing communities which provide a sense of identity, wise use of land, efficient transportation, and aesthetic and social satisfaction in harmony with the natural environment which is uniquely Hawaiian; and

**If allowed** the Petitioned rezoning will bring the Property's zoning into line with its *"HRStatute and HARule allowed"* use. The proposed buffer zone will keep the agricultural use *in balance with the Community.* The area around the Property is an agricultural community.

Significantly the Petitioned rezoning will....
• reduce and eliminate **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

• secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

• provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

• *promote the development and utilization of* the Agricultural **resources** of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State*, ref., State Auditor's Report, exhibit 6,

• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "**greatest**" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "**mandatory**" that agriculturally suitable lands be zoned in it's Agricultural District.

**If denied** the Property's use will continue to exist as a nonconforming use.

LUC rule HAR15-15-28 Statement of intent states......

"*This subchapter is intended to expedite the eventual elimination of existing uses or structures that are not in conformity with the provisions of subchapter 3 because their continued existence violates basic concepts of health, safety, and welfare as well as principles of good land use. However, in applying subchapter 3, no elimination of nonconforming uses or structures shall be effected so as to cause unreasonable interference with established property rights.*"
The Petitioned rezoning will bring the Property's agricultural use into conformity to its zoning. The *continued existence* of the "HRStatute and HARule allowed" agricultural use will no longer violate basic concepts of health, safety, and welfare as well as *principles of good land use.*

Significantly if the Petition is denied.............

- *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

- the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

- no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

- the State's requirement to *promote the development and utilization of* the Agricultural *resources* of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,*’ ref., *State Auditor's Report, exhibit 6,* will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules.

As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "*greatest*" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "*mandatory*" that agriculturally suitable lands be zoned in it's Agricultural District.

*(D) Establishing a commitment on the part of each person to protect and enhance Hawaii’s environment and reduce the drain on nonrenewable resources.*
§344-4 Guidelines. In pursuance of the state policy to conserve the natural resources and enhance the quality of life, all agencies, in the development of programs, shall, insofar as practicable, consider the following guidelines:

(1) Population.

(A) Recognize population impact as a major factor in environmental degradation and adopt guidelines to alleviate this impact and minimize future degradation;

(B) Recognize optimum population levels for counties and districts within the State, keeping in mind that these will change with technology and circumstance, and adopt guidelines to limit population to the levels determined.

(2) Land, water, mineral, visual, air, and other natural resources.

(A) Encourage management practices which conserve and fully utilize all natural resources;

If the Petition is allowed........

The Petitioned rezoning will encourage management practices which conserve and fully utilize all natural resources. This will be a Significant Positive Effect. Agriculture is already a "HRStatute and HARule allowed" use on the Property according to HAR 13-5-7's Nonconforming Use Rule. The "HRStatute and HARule allowed" agricultural use of the Property includes the right to cultivate the Property's soils immediately adjacent to the Property's border with the ocean-side pali property makai. The Petitioner(s) have established substantial agricultural use of the Property. No new land use is anticipated nor is believed to be likely.

Furthermore the Petitioner(s) are proposing an improvement over the existing "HRStatute and HARule allowed" conditions. A buffer zone is proposed that will be maintained in
grasses and woody plant species in order to reduce the potential effect of soil erosion, pali subsidence and landfall. The Petition provides that a buffer zone stipulation be incorporated into the Petition considerations by the LUC. Effectively the intensity of agricultural use of the buffer zone area will decrease.

Significantly the Petitioned rezoning will....

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

- **promote the development and utilization of** the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6,

- bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied.......

The "HRStatute and HARule allowed" agricultural use of the Property will continue.
The "HRStatute and HARule allowed" right to cultivate the Property's soils in the vicinity of the makai boundary of the Property with the ocean-side pali will continue. An increased potential for erosion of soil, pali subsidence and landfall will continue to exist, a possibility for a negative effect on the environment, which undoubtedly does not serve the environment well nor the interest of the State, the County nor the community.

Significantly if the Petition is denied............

- **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

- the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

- no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

- the State's requirement to *promote the development and utilization of* the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, *ref., State Auditor's Report, exhibit 6,* will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules.

As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the *greatest* protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is *mandatory* that agriculturally suitable lands be zoned in it's Agricultural District.

**(B) Promote irrigation and waste water management practices which conserve and fully utilize vital water resources;**
The Property already receives adequate rainfall to support the existing agricultural use of the Property.

(C) Promote the recycling of waste water;

Not applicable.

(D) Encourage management practices which conserve and protect watersheds and water sources, forest, and open space areas;

If the Petition is allowed...........

The Petitioned rezoning will encourage management practices which conserve and protect watersheds and water sources, forest, and open space areas; This will be a Significant Positive Effect. Agriculture is already a "HRStatute and HARule allowed" use on the Property according to HAR 13-5-7's Nonconforming Use Rule. The "HRStatute and HARule allowed" agricultural use of the Property includes the right to cultivate the Property's soils immediately adjacent to the Property's border with the ocean-side pali property makai. The Petitioner(s) have established substantial agricultural use of the Property. No new land use is anticipated nor is believed to be likely.

The Petitioner(s) are proposing an improvement over the existing "HRStatute and HARule allowed" conditions. A buffer zone is proposed that will be maintained in grasses and woody plant species in order to reduce the potential effect of soil erosion, pali subsidence and landfall. The Petition provides that a buffer zone stipulation to the Petition be negotiated between the State and County Offices of Planning and the Petitioner(s) and incorporated into the Petition considerations by the LUC. Effectively the intensity of agricultural use of the buffer zone area will decrease.

Significantly the Petitioned rezoning will....
• reduce and eliminate **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

• secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

• provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

• **promote the development and utilization of** the Agricultural **resources** of the Property **in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State**, ref., State Auditor's Report, exhibit 6,

• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "**greatest**" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "**mandatory**" that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied**

The "**HRStatute and HARule allowed**" agricultural use of the Property will continue. The "**HRStatute and HARule allowed**" right to cultivate the Property's soils in the vicinity of the makai boundary of the Property with the ocean-side pali will continue. An increased potential for erosion of soil, pali subsidence and landfall will continue to exist, a possible negative effect on the environment, which undoubtedly does not serve the environment well nor the interest of the State, the County nor the community.

Significantly if the Petition is denied.............
• uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

• the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

• no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

• the State's requirement to 'promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,' ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

(E) Establish and maintain natural area preserves, wildlife preserves, forest reserves, marine preserves, and unique ecological preserves;

Botanical and archaeological studies of the Property have occurred. No significant elements or plants were identified that need preserving. When the Property was first considered to be zoned into the State's Conservation District it was in intense agricultural use and had been for over 100 years previously. The State determined to allow that agricultural use be allowed to continue as the State also desired to preserve/reserve and protect agriculturally suitable lands for agricultural use. The soils of the Property are
designated to be "Prime" according to the ALISH classification system, *ref., exhibit 11 ALSISH map.*

**If allowed** the Petitioned rezoning will bring the Property's zoning into line with its "HRStatute and HARule allowed" use. The Statute and the Rules provide that any prior use of the Property continues to be allowed as a nonconforming use. The soils of the Property have been cultivated for agricultural use for a period around 150 years. The natural area that previously existed no longer exists. Even the small area of the gulch at the north end of the Property was substantially modified when a railroad was built which crossed the Property and the gulch. The stream was diverted along a new channel which was created. Subsequently the stream reverted to its original path.

During the period before mechanization was introduced to the farm industry the area of the slopes leading into the gulch was used for agriculture as manual labor could go where machines later did not, *ref., exhibit 21, 1905 field map.* Therefore, it is believed by the Petitioner(s) that, agricultural use of that area continues to be an allowed use today. The proposed buffer zone will reduce the intensity of the agricultural use area immediately adjacent to the coastal pali property. It is further noteworthy that the area of the stream/gulch that lays immediately mauka of the Property is not zoned in the State's Conservation District but rather in the State's Agricultural District which is what is proposed in the Petition to apply to the Property. The stream is listed as an intermittent stream by the U.S. Geological Survey.

Significantly the Petitioned rezoning will...

- reduce and eliminate *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,
• provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

• **promote the development and utilization of** the Agricultural **resources** of the Property **in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State**, ref., State Auditor's Report, exhibit 6,

• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

• **If denied** the Property's agricultural use will continue to exist as a nonconforming use. No buffer zone along the coastal pali will be established.

Significantly if the Petition is denied............

• **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

• the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

• no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

• the State's requirement to **promote the development and utilization of** the Agricultural **resources** of the Property **in a manner consistent with their conservation**
and in furtherance of the self-sufficiency of the State,' ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules.

As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

(F) Maintain an integrated system of state land use planning which coordinates the state and county general plans;

The State has the Property zoned in the State's Conservation District which Rules 'allow' that it may be used for nonconforming agriculture. The County's zoning for the Property is A20-a. Agriculture is an allowed use.

If allowed the Petitioned rezoning will bring the land's use into conformance with its zoning.

Significantly the Petitioned rezoning will....

• reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

• secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

• provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,
• **promote the development and utilization of** the Agricultural **resources** of the Property **in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,** ref., State Auditor's Report, exhibit 6.

• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

**If denied** the Property's agricultural use will continue to exist as a nonconforming use.

Significantly if the Petition is denied............

• **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

• the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

• no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

• the State's requirement to 'promote the development and utilization of' the Agricultural **resources** of the Property **in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,**' ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly
reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in its Agricultural District.

(G) Promote the optimal use of solid wastes through programs of waste prevention, energy resource recovery, and recycling so that all our wastes become utilized.

The Petitioner(s) endeavor to minimize all waste through Best Management Practices. This will continue whether the Petitioned rezoning is allowed or not. Agricultural waste is composted on site and used in support of the agricultural use of the Property.

(3) Flora and fauna.

(A) Protect endangered species of indigenous plants and animals and introduce new plants or animals only upon assurance of negligible ecological hazard;

The botanical consultants report exhibited in exhibit 2 and 3 describe that there does not exist any particular endangered plant or animal species on the Property. The Petitioner(s) use of the Property for agriculture, whether the Petition is allowed or not, will remain unchanged. Agricultural use of the Property is already an "HRStatute and HARule allowed" use. The State has also identified that agriculturally suitable lands are to be preserved for same use.

(B) Foster the planting of native as well as other trees, shrubs, and flowering plants compatible to the enhancement of our environment.

The Petitioner(s) intend to continue to use the Property for agricultural use. As the Petitioner(s) will reside on the Property it is likely that the physical environment will be improved over time through the planting of esthetically pleasing plants in areas. Various orchard species woody plants already exist on the Property. Such plants are compatible to
the enhancement of the environment. The Petitioner(s) intend to identify and develop, for propagation and sale, orchard and non orchard woody plant species that are compatible with windy coastal conditions and the salty air which result from the wave washed boulder fields below the Property. The Petitioner(s) have already identified several plant species which are and are not compatible with the coastal environment.

If the Petition is allowed........ an improvement over the exiting situation will result. The general area of the Property and the proposed buffer zone area will be utilized for woody plant species which are compatible to the enhancement of the environment.

Significantly the Petitioned rezoning will....

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

- promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6,

- bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.
If the Petition is denied, cultivation of the soils of the buffer zone area will continue to be an "HRStatute and HARule allowed" use which is not as compatible to the enhancement of the environment.

Significantly if the Petition is denied............

- **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

- the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

- no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

- the State's requirement to *promote the development and utilization of* the Agricultural resources of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,* ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules.

As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

(4) Parks, recreation, and open space.

(4) Establish, preserve and maintain scenic, historic, cultural, park and recreation areas, including the shorelines, for public recreational, educational, and scientific uses;
Archaeological and botanical studies have been conducted for the Property. No scenic, historic or cultural elements were identified that needed further protection.

The Property is located in a private, gated subdivision. No public views exist either toward the property or the ocean beyond. The Petitioner(s) intend to continue to use the Property for agricultural use. The State owned ocean-side pali property is steep and dangerous ranging in height generally exceeding 100 ft. Any attempt to promote access to the wave washed boulder fields below the Property would be irresponsible.

The scenic area of the Property will continue unchanged. Agriculture is already and allowed use. The proposed buffer zone will further enhance the scenic nature of the Property as its use will be particularly for woody plant species and maintained grasses.

**Whether the Petition is allowed or not**, the existing situation will remain unchanged. Agricultural use of the Property is already an "HRStatute and HARule allowed" use. The State has also identified that agriculturally suitable lands are to be preserved for same use.

(B) *Protect the shorelines of the State from encroachment of artificial improvements, structures, and activities;*

Fully permitted structures already exist on the Property.

If the Petition is allowed............. with the provision of the described buffer zone it will provide for an added level of protection to the shoreline of the State. The intensity of the agricultural activities of the Property's area in the proposed buffer zone area will decrease, a likely improvement over the existing "HRStatute and HARule allowed" site conditions.

Significantly the Petitioned rezoning will....
• reduce and eliminate *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

• secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

• provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

• *promote the development and utilization of* the Agricultural resources of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State*, ref., State Auditor's Report, exhibit 6,

• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the *"greatest"* protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is *"mandatory"* that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied**........... no such added level of protection to the shoreline of the State which may result from the *"HRStatute and HARule allowed"* agricultural activities.

Significantly if the Petition is denied...........

• *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,
• the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

• no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

• the State's requirement to 'promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,' ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

  (C) Promote open space in view of its natural beauty not only as a natural resource but as an ennobling, living environment for its people.

Agriculture is already a "HRStatute and HARule allowed" use. The State has also identified a priority to promote and preserve the agricultural use of its lands that are particularly suitable for agriculture. The area of the Property has been identified by the State's ALISH classification system as "Prime".

If the Petition is allowed .......... with the provision of the described buffer zone it will provide for an added level of scenic open space. This will result in an improvement over the existing "HRStatute and HARule allowed" site conditions.

Significantly the Petitioned rezoning will....
• reduce and eliminate *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

• secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

• provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

• *promote the development and utilization of* the Agricultural resources of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State*, ref., *State Auditor's Report, exhibit 6*.

• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "*greatest*" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "*mandatory*" that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied.......** no such added level of *scenic open space* of the buffer zone area is provided.

Significantly if the Petition is denied...........

• *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,
- the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

- no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

- the State's requirement to 'promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,' ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

(5) Economic development.

(A) Encourage industries in Hawaii which would be in harmony with our environment;

The Petitioner(s) believe that their use of the Property for agriculture is in harmony with the local environment.

The State has also identified a priority to promote and preserve the agricultural use of its lands that are particularly suitable for agriculture. The area of the Property has been identified by the State's ALISH classification system as "Prime".

If the Petition is allowed.......... the Petitioner(s) will be encouraged to continue to invest their time and money pursuing their agricultural use of the Property. This will be a
positive effect.

Significantly the Petitioned rezoning will...

- reduce and eliminate *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

- *promote the development and utilization of* the Agricultural *resources* of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State*, *ref., State Auditor's Report, exhibit 6,*

- bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the *"greatest"* protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is *"mandatory"* that agriculturally suitable lands be zoned in it's Agricultural District.

*If the Petition is denied.........* the Petitioner(s) agricultural use of the Property will continue in uncertainty of use.  *This will be a negative effect.*

Significantly if the Petition is denied...........

- *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,
• the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

• no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

• the State's requirement to 'promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,' ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

     (B) Promote and foster the agricultural industry of the State; and preserve and conserve productive agricultural lands;

Agriculture is already a "HRStatute and HARule allowed" use.

If the Petition is allowed............. the Petitioner(s) will be encouraged to continue to invest their time and money pursuing their agricultural use of the Property. This will be a positive effect.

The Petitioned rezoning will further promote and foster the agricultural industry of the State; The Petitioner(s) believe that it is incumbent on the State's administrative authorities to allow the Petition which will further preserve and conserve productive agricultural lands.
The Petitioner(s) believe that it is incumbent on the authorities to *preserve and conserve productive agricultural lands* such as the Property.

Significantly the Petitioned rezoning will:

- reduce and eliminate *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

- *promote the development and utilization of* the Agricultural resources of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State*, ref., State Auditor's Report, exhibit 6,

- bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the *"greatest"* protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is *"mandatory"* that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied**............. the Petitioner(s) agricultural use of the Property will continue in uncertainty of use. *This will be a negative effect.* The continuing uncertainty will not *preserve and conserve productive agricultural lands* such as the Property.
Significantly if the Petition is denied............

- **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

- the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

- no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

- the State's requirement to *'promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,'* ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the *"greatest"* protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is *"mandatory"* that agriculturally suitable lands be zoned in it's Agricultural District.

(C) Encourage federal activities in Hawaii to protect the environment;

Not applicable.

Agriculture is already a *"HRStatute and HARule allowed"* use.

(D) Encourage all industries including the fishing, aquaculture, oceanography, recreation, and forest products industries to protect the environment;
Agriculture is already a "HRStatute and HARule allowed" use.

If the Petition is allowed, it will securitize the Petitioner(s) investments in their agricultural use of the Property and thus encourage its agricultural use. **This will be a positive effect.**

Significantly the Petitioned rezoning will....

- reduce and eliminate *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

- *promote the development and utilization of* the Agricultural resources of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6,*

- bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the *"greatest"* protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is *"mandatory"* that agriculturally suitable lands be zoned in it's Agricultural District.

If the Petition is denied........ the State will not effectively *Encourage all industries* such as the agricultural use of the Property. **This will be a negative effect.**
Significantly if the Petition is denied

- **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

- the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

- no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

- the State's requirement to *promote the development and utilization of the Agricultural resources* of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,* ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the *"greatest"* protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is *"mandatory"* that agriculturally suitable lands be zoned in it's Agricultural District.

(E) Establish visitor destination areas with planning controls which shall include but not be limited to the number of rooms;

Not applicable.

Agriculture is already a *"HRStatute and HARule allowed"* use.

(F) Promote and foster the aquaculture industry of the State; and preserve and conserve productive aquacultural lands.
Not applicable.

Agriculture is already a "HRStatute and HARule allowed" use.

(6) Transportation.

(A) Encourage transportation systems in harmony with the lifestyle of the people and environment of the State;

Not applicable.

Agriculture is already a "HRStatute and HARule allowed" use.

(B) Adopt guidelines to alleviate environmental degradation caused by motor vehicles;

Not applicable.

Agriculture is already a "HRStatute and HARule allowed" use.

(C) Encourage public and private vehicles and transportation systems to conserve energy, reduce pollution emission, including noise, and provide safe and convenient accommodations for their users.

Not applicable.

Agriculture is already a "HRStatute and HARule allowed" use.

(7) Energy.

(A) Encourage the efficient use of energy resources.

The Petitioner(s) have designed the structures on the Property to utilize p.v. power.

Agriculture is already a "HRStatute and HARule allowed" use.
(8) Community life and housing.

(A) Foster lifestyles compatible with the environment; preserve the variety of lifestyles traditional to Hawaii through the design and maintenance of neighborhoods which reflect the culture and mores of the community;

Agriculture is already a "HRStatute and HARule allowed" use.

The Petitioner(s) believe that their land use is compatible with the environment; and preserves the variety of lifestyles traditional to Hawaii through the design and maintenance of neighborhoods which reflect the culture and mores of the community;

The Petition, if allowed, will securitize the Petitioner(s) investments in their agricultural use of the Property and thus encourage its agricultural use. This will be a positive effect.

Significantly the Petitioned rezoning will:

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

- promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6,

- bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the
draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied......... This will be a negative effect.**

Significantly if the Petition is denied.............

- **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

- the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

- no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

- the State's requirement to *promote the development and utilization of* the Agricultural resources of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,* ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

*(B) Develop communities which provide a sense of identity and social satisfaction*
in harmony with the environment and provide internal opportunities for shopping, employment, education, and recreation;

(C) Encourage the reduction of environmental pollution which may degrade a community;

(D) Foster safe, sanitary, and decent homes;

(E) Recognize community appearances as major economic and aesthetic assets of the counties and the State; encourage green belts, plantings, and landscape plans and designs in urban areas; and preserve and promote mountain-to-ocean vistas.

Regarding (A) to (E) above.........Agriculture is already a "HRStatute and HARule allowed" use.

The Petitioner(s) believe that their agricultural use and uses incidental and accessory to agriculture of the Property are compatible with (B), (C), (D) and (E).

If the Petition is allowed it will be a positive effect.

Significantly the Petitioned rezoning will....

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,
• *promote the development and utilization of* the Agricultural *resources* of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State*, ref., *State Auditor's Report, exhibit 6.*

• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the *"greatest"* protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is *"mandatory"* that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied** will be a negative effect.

Significantly if the Petition is denied............

• *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

• the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

• no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

• the State's requirement to *'promote the development and utilization of' the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,'* ref., *State Auditor's Report, exhibit 6,* will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly
reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

(9) Education and culture.

(A) Foster culture and the arts and promote their linkage to the enhancement of the environment;

(B) Encourage both formal and informal environmental education to all age groups.

Agriculture is already a "HRStatute and HARule allowed" use.

The Petitioner(s) believe that their agricultural use and uses incidental and accessory to agriculture of the Property are comparable with section (9) (A) and (B).

If the Petition is allowed will be a positive effect.

Significantly the Petitioned rezoning will:

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,
• *promote the development and utilization of* the Agricultural *resources* of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State*, ref., *State Auditor's Report, exhibit 6*.

• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the *"greatest"* protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is *"mandatory"* that agriculturally suitable lands be zoned in it's Agricultural District.

If the Petition is denied will be a negative effect. Significantly if the Petition is denied............

• *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

• the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

• no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

• the State's requirement to *'promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,'* ref., *State Auditor's Report, exhibit 6*, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly
reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

(10) Citizen participation.

(A) Encourage all individuals in the State to adopt a moral ethic to respect the natural environment; to reduce waste and excessive consumption; and to fulfill the responsibility as trustees of the environment for the present and succeeding generations; and

Agriculture is already a "HRStatute and HARule allowed" use.

If the Petition is allowed will be a positive effect. The Petitioner(s) have proposed a deed restriction for a buffer zone that would reduce the intensity of the agricultural use of the Property which will reduce the potential for soil erosion and pali subsidance and landfall in perpetuity.

Significantly the Petitioned rezoning will....

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,
• **promote the development and utilization of** the Agricultural **resources** of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State*, *ref., State Auditor's Report, exhibit 6,*

• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "*greatest*" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "*mandatory*" that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied** will be a negative effect. The deed restriction would eliminate any rights that exist that allow cultivation of the soils immediately adjacent to the pali in perpetuity.

Significantly if the Petition is denied..............

• **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

• the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

• no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

• the State's requirement to '**promote the development and utilization of** the Agricultural **resources** of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,*' *ref., State Auditor's Report, exhibit 6,* will not be adhered to and bring the Property(s) zoning into conformity with
the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in its Agricultural District.

(B) Provide for expanding citizen participation in the decision making process so it continually embraces more citizens and more issues.

Agriculture is already a "HRStatute and HARule allowed" use.

Not applicable. The Property is privately owned. Whether the Petition is allowed or not will not likely have an effect on government administrative functions or programs.

Now resuming HAR 11-200-12's Significance criteria Rule at its section (4)............

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

Agriculture is already a "HRStatute and HARule allowed" use.

No new land use is contemplated nor is likely. The existing agricultural use including incidental and accessory uses are already an "HRStatute and HARule allowed" use. The agricultural use is likely to continue whether the Petition is allowed or not and will have no particular effect on the economic welfare social welfare, and cultural practices of the community or State.

(5) Substantially affects public health,

Agriculture is already a "HRStatute and HARule allowed" use.
No new land use is contemplated nor is likely. The agricultural use is likely to continue whether the Petition is allowed or not and will have no effect on public health.

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

No new land use is contemplated nor is likely. The existing agricultural use is already a "HRStatute and HARule allowed" use. The agricultural use is likely to continue whether the Petition is allowed or not and will not likely result in substantial secondary impacts.

(7) Involves a substantial degradation of environmental quality;

No new land use is contemplated nor is likely. The existing agricultural use is already a "HRStatute and HARule allowed" use. The agricultural use is likely to continue whether the Petition is allowed or not.

If the Petition is allowed, provides for a buffer zone between that will be maintained in grasses and woody plants. The buffer zone will reduce degradation of environmental quality resulting from the existing agricultural use of the Property. This will be a positive effect on environmental quality.

Significantly the Petitioned rezoning will:

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,
- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,
- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,
• promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6.

• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

If the Petition is denied, the deed restriction will not exist and the resulting potential for soil erosion, pali subsidance and landfall will continue to exist. This will be a negative effect.

Significantly if the Petition is denied ..............

• uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

• the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

• no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

• the State's requirement to promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,' ref., State Auditor's Report,


*exhibit 6,* will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the *"greatest"* protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is *"mandatory"* that agriculturally suitable lands be zoned in it's Agricultural District.

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

No new land use is contemplated nor is likely. Agriculture is already a *"HRStatute and HARule allowed"* use. The agricultural use is likely to continue whether the Petition is allowed or not.

**If the Petition is allowed,** provides for a buffer zone that will be maintained in grasses and woody plants. The buffer zone will reduce the intensity of the agricultural use of the Property's *effect upon the environment.* This will be a *positive* effect on *environmental quality.* No new land use is planned. The Property's agricultural uses and uses incidental and accessory to agriculture fully commit the Property to long term agriculture whether the Petition is allowed or not *involve a commitment for larger actions.*

The question may emerge whether allowing the Petition to rezone the Property will set a precedent? The Petition *evidences,* in its text by reference to case law, that neither the LUC nor the DLNR are bound by precedence. On-the-other-hand *precedence may be found not to be such a bad thing if it removes uncertainty and increases transparency in land use regulation* ie....

- State and County regulative Authorities,
- the land use professional community,
- realtors,
• land owners,
• the general public.

Significantly the Petitioned rezoning will....
• reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,
• secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,
• provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,
• *promote the development and utilization of* the Agricultural resources of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6,*
• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied,** the deed restriction will not exist and the resulting potential for soil erosion, pali subsidance and landfall will continue to exist. This will be a negative effect on environmental quality.

Significantly if the Petition is denied............
• **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

• the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

• no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

• the State's requirement to 'promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,' ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules.

As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

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

No new land use is contemplated nor is likely. Agriculture is already a "HRStatute and HARule allowed" use. The agricultural use is likely to continue whether the Petition is allowed or not. No rare, threatened, or endangered species exist on the Property. The Petition, if allowed, provides for a buffer zone between that will be maintained in grasses and woody plants. The buffer zone will provide an improvement over the existing "HRStatute and HARule allowed" site conditions. A botanical study was conducted on
the Property. No rare, threatened, or endangered species was identified.

If the Petition is allowed, provides for a buffer zone between that will be maintained in grasses and woody plants. The buffer zone will provide that the area adjacent to the coastal pali will be more conducive to the harboring of rare, threatened, or endangered species that may not result if the "HRStatute and HARule allowed" agricultural use of the Property continues to exist. This will be a positive effect on rare, threatened, or endangered species, and their habitat.

Significantly the Petitioned rezoning will...

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

- promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6,

- bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the greatest protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is mandatory that agriculturally suitable lands be zoned in it's Agricultural District.
**If the Petition is denied**, the deed restriction will not exist and the potential for a reduction in the habitat for rare, threatened, or endangered species may result. This will be a negative effect.

Significantly if the Petition is denied............

- **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

- the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

- no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

- the State's requirement to *promote the development and utilization of* the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,* ref., State Auditor's Report, exhibit 6,* will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules.

As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the *"greatest"* protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is *"mandatory"* that agriculturally suitable lands be zoned in it's Agricultural District.

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

No new land use is contemplated nor is likely. Agriculture is already a *"HRStatute and HARule allowed"* use. The agricultural use is likely to continue whether the Petition is
allowed or not.

**If the Petition is allowed** the likelihood of soil erosion and pali subsidence, affecting water quality, will be reduced, a buffer zone is provided, which will have a positive effect on water quality. There will likely be very little positive or negative effect on ambient noise levels or effects on air quality.

Significantly the Petitioned rezoning will....

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

- **promote the development and utilization of** the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6,

- bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied**, the deed restriction will not exist and the resulting potential for
soil erosion, pali subsidance and landfall will continue to exist. This will be a **negative**
effect on **water quality**. There will likely be **very little positive or negative effect** on
**ambient noise levels** or effects on **air quality**.

Significantly if the Petition is denied.............

- **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and
  the local community and the general public regarding the allowed use of the Property
  will continue to exist,

- the Petitioner(s) investments in the agricultural uses and uses incidental and accessory
to same will not be fully secured,

- no buffer zone separating intense agricultural use areas of the Property from the ocean
  and its reefs will exist,

- the State's requirement to *promote the development and utilization of* the
  Agricultural **resources** of the Property *in a manner consistent with their conservation
  and in furtherance of the self-sufficiency of the State,* ref., State Auditor's Report,
  *exhibit 6,* will not be adhered to and bring the Property(s) zoning into conformity with
  the earlier described State's Constitutional requirements, its Statutues and its Rules.
  As is earlier described in the draft EA the State's Statutes and Rules particularly
  reference that the State Agricultural District zoning provide the *"greatest"* protection
  be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes
  that it is *"mandatory"* that agriculturally suitable lands be zoned in it's Agricultural
  District.

(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 Property is not located in a flood plain or tsunami zone. While the Property is in a
beach erosion-prone area the water line adjacent to the pali is comprised of boulders. No access exists to the shoreline area as the pali is high and steep. No new land use is contemplated nor is likely. Agriculture is already a "HRStatute and HARule allowed" use. The agricultural use is likely to continue whether the Petition is allowed or not.

**The Petition, if allowed**, provides for a buffer zone between the agricultural use area and the pali and ocean below. The buffer zone will be maintained in grasses and woody plants. The buffer zone will provide an improvement over the existing "HRStatute and HARule allowed" site conditions. Particularly soil erosion and the potential for pali subsidance will be reduced through the provision of the buffer zone. **This will be a positive effect** on the State owned pali property, the high water mark boulder field area and the coastal waters beyond.

Significantly the Petitioned rezoning will....

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

- **promote the development and utilization of** the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6,

- bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural
District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied**, the deed restriction will not exist and the resulting potential for soil erosion, pali subsidence and landfall will continue to exist. This will be a negative effect on the State owned pali property, the high water mark boulder field area and the coastal waters beyond.

Significantly if the Petition is denied............

- **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

- the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

- no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

- the State's requirement to 'promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,' ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules.

As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.
(12) Substantially affects scenic vistas and viewplanes identified in county or state plans or studies;

No new land use is contemplated nor is likely. The existing agricultural use including incidental and accessory uses are already a "HRStatute and HARule allowed" uses. The agricultural use is likely to continue whether the Petition is allowed or not. The area of the Property does not lie within viewplanes identified in county or state plans or studies.

Neither the Property nor the ocean beyond cannot be seen from public use areas. Therefore the Petition, whether allowed or denied will have no effect on viewplanes identified in county or state plans or studies.

(13) Requires substantial energy consumption.

No new land use is contemplated nor is likely. Agriculture is already a "HRStatute and HARule allowed" use. The agricultural use is likely to continue whether the Petition is allowed or not. The structures on the Property are equipped with p.v. electric power.

The Petition, whether allowed or denied will have no significant effect on energy consumption.

The following is an additional analysis of the proposed rezoning measured against SMA requirements. The Property is located in the SMA district. The following generally has more detail than the preceding analysis.

Particularly the fact that Agriculture is already a "HRStatute and HARule allowed" use applies to all of the following analysis without repeating at each category of analysis.

- Geology........

The Property is located on the lower eastern slopes of Mauna Kea and consists of the Hāmākua volcanic series. These lava flows are chiefly basaltic with layers of Pahala ash.
(Stems and Macdonald, 1946.) The Island of Hawaii is susceptible to four main types of natural hazards including tsunami, volcanism, seismic activity and hurricanes. Volcanic hazard, as assessed by the United States Geological Survey, is "8" on a scale of ascending risk 9 to 1. The zone "8" designation includes the lower slopes of Mauna Kea, most of which have not been affected by lava flows for the past 10,000 years. (Heliker, 1990.)

The Island of Hawaii is one of the most seismically active areas in the world and has experienced more than twenty large earthquakes (magnitude 6 or larger) over the past 166 years, the most recent occurring in October of 2006. (Wyss and Koyanagi, 1992.) Magnitude 6 earthquakes can be expected to cause structural damage to non-reinforced buildings. The Building Code rating for the entire Island of Hawaii is seismic Zone 4, which has the highest risk for seismic activity.

Three significant hurricanes have affected the Island of Hawaii over the past 50 years. Damage from hurricanes results from coastal waves/surge and high winds. The Project site is not within a coastal hazard area for hurricanes or tsunami inundation. The hazards from hurricane winds are far more extensive and unpredictable than the water hazard. Winds may blow from variable directions and may be amplified by topographic conditions. (County of Hawaii, 2003.)

Shoreline areas in Hawaii, particularly those on the northeast side exposed to the prevailing winds and heaviest wave attack, are subject to shoreline retreat. The rate of retreat in Hawaii has been estimated at an average rate of a couple of inches a year. (Macdonald and Abbott, 1977.) Some locations may experience sudden and rapid retreat due to land slides which may be associated with sea cliff collapse.

Helicopter and physical site reconnaissance was conducted by Yogi Kwong Engineers ("YKE") in November of 2005. Based on the reconnaissance, a review of various historical and topographic photos and maps and the height of the pali, YKE has
concluded that a 70-foot setback from the top of the pali appears sufficient to protect the proposed improvements from potential coastal hazards caused by intensive or storm wave action, tsunami, and related coastal flooding, ref. exhibit 9, YKE letter.

- Soils

Environmental Setting

The soils of the Property are classified as Hilo silty clay loam with 0 to 10 percent slopes (“HoC”) by the U.S. Department of Agriculture Soil Conservation Service (“SCS”) Soil Survey. (U.S. Soil Conservation Service, 1973.)

Under the Agricultural Lands of Importance to the State of Hawaii (“ALISH”) classification system, there are four categories: prime, unique, other important agricultural lands and unrated. The Property is designated prime agricultural lands under the ALISH system, ref., exhibit 13 description of the ALISH classification system, as are other similar properties along the Hilo - Hāmākua Coast that were Historically utilized for intensive cultivation of agricultural crops. ref. exhibit 11, ALISH Map.

Short term impacts to the soils on the Property of agricultural use will always exist due to the ongoing agricultural use of the Property but that will exist whether the Petitioned rezoning occurs or not.

If the Petition is allowed, will result in a buffer zone being maintained in grasses and woody plants that will represent an improvement over the existing situation.

Significantly the Petitioned rezoning will....

- reduce and eliminate uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,
• secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

• provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

• promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6,

• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

If the Petition is denied no buffer zone will be provided. The potential for soil erosion, pali subsidance and landfall will continue to exist. This will represent the potential for a negative effect.

Significantly if the Petition is denied............

• uncertainty and confusion at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

• the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,
• no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

• the State's requirement to *promote the development and utilization of the Agricultural resources* of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,* ref., *State Auditor's Report, exhibit 6,* will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the *"greatest"* protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is *"mandatory"* that agriculturally suitable lands be zoned in it's Agricultural District.

• **Climate**

*Environmental Setting............*

Hawai‘i's climate is generally characterized as mild with uniform temperatures, moderate humidity, and two identifiable seasons. The "summer" season, between May and October, is generally warmer and drier. The "winter" season, between October and April, is cooler and wetter. The Property is situated along the "windward" side of the Island of Hawai‘i, which is exposed to northeasterly trade winds that cause relatively high rainfall (approximately 150 inches annually).

The average monthly minimum temperature in this area of the Hilo-Hāmākua Coast ranges from the low to high 60s (degrees Fahrenheit) while the average monthly maximum temperature ranges from the high 70s to the high 80s. (University of Hawai‘i Press, 1983.)

*Potential Impacts and Mitigation Measures*
The Petitioned rezoning *whether allowed or not will not have any impact on the climatic conditions* in the area of the Property. The rezoning will not result in a new land use. Agriculture is already an existing "HRStatute and HARule allowed" use.

- **Hydrology and Drainage**

  *Environmental Setting...........*

  The Island of Hawai`i is generally characterized as having basal groundwater floating on salt water. The aquifer system underlying The Project area has a sustainable yield of approximately 150 million gallons per day. (County of Hawai`i Department of Water Supply, 1991.)

  According to the Flood Insurance Rate Map ("FIRM") prepared by the Federal Emergency Management Agency dated September 16, 1988, the Project Area is situated within Flood Zone "X" (areas determined to be outside the 500 year flood plain). The center of Puahanui Stream serves as the northern boundary of the Property and is encumbered with a watercourse easement which dated from the sugar cane days and likely effective flushing of harvested materials through flumes.

*Potential Impacts and Mitigation Measures*

**If the Petition is allowed** the proposed buffer zone will represent *an improvement over the existing situation* and will assist in reducing the potential for soil erosion into the ocean below.

Significantly the Petitioned rezoning will....

- reduce and eliminate *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,
• secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

• provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

• **promote the development and utilization of** the Agricultural **resources** of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6,

• bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

**If the Petition is denied** it may result in a negative effect on the potential for soil erosion.

Significantly if the Petition is denied............

• **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

• the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

• no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,
the State's requirement to 'promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,' ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

Water Quality

Environmental Setting...........

The center of Puahanui Stream serves as the Northern boundary of TMK No.: (3) 2-9-003:060. The Pacific Ocean lies immediately below the high pali, which serves as the Eastern boundary of the Property. Puahanui Stream appears to be an unnamed intermittent stream on U.S. Geological Survey Maps and was not included in the Hawai‘i Stream Assessment conducted from 1988-1990, which inventoried and assessed available information on Hawai‘i’s streams in four resource categories: aquatic resources, riparian resources, cultural resources and recreational resources.

The coastal waters fronting the subject property are classified “A” by the State of Hawai‘i. These waters are to be protected for recreational purposes and aesthetic enjoyment.

Potential Impacts and Mitigation Measures........

The Petitioned rezoning is not expected to have any direct impact on Puahanui Stream. The agricultural use of the Property is already an "HRStatute and HARule allowed" use. No new use is contemplated nor is likely.
The provision of the buffer zone will represent **a reduction in the intensity of the agricultural use of the Property.**

**If the Petition is allowed** the proposed buffer zone will represent **a reduction in the intensity of the agricultural use of the Property** which will represent **an improvement over the existing situation** and will assist in reducing the potential for *water* contamination issues.

Significantly the Petitioned rezoning will:

- reduce and eliminate *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,

- **promote the development and utilization of** the Agricultural *resources* of the Property *in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State*, ref., *State Auditor's Report, exhibit 6*,

- bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the *"greatest"* protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is *"mandatory"* that agriculturally suitable lands be zoned in it's Agricultural District.
If the Petition is denied the proposed buffer zone will not be established. Intensive agricultural use of the entire property will continue to be an "HRStatute and HARule allowed" use. This will result in the potential for negative effects on water quality.

The structures on the Property are serviced by individual wastewater systems which were approved by the Department of Health, which will limit the potential for the discharge of any wastewater into near-shore marine waters.

The Island of Hawai`i is generally characterized as having basal groundwater floating on salt water. The aquifer system underlying The Property has a sustainable yield of approximately 150 million gallons per day. (County of Hawai`i Department of Water Supply, 1991.)

Significantly if the Petition is denied.............

- **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

- the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

- no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

- the State's requirement to *promote the development and utilization of the Agricultural resources of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,* ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules.

As is earlier described in the draft EA the State's Statutes and Rules particularly
reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in its Agricultural District.

- **Flora and Fauna**

*Environmental Setting........................*

Most of the Property has been extensively utilized for intensive cultivation of agricultural crops for a period of approximately 100 years. Exhibited is a 2014 biological assessment update to the earlier described biological assessment, ref., exhibit 10.

No new use is contemplated nor is it likely. The agricultural use of the Property is already an "HRStatute and HARule allowed" use.

**If the Petition is allowed** the provision of the buffer zone will represent a reduction in the intensity of the agricultural use of the Property and provide for a better environment for the Flora and Fauna that is existing or likely to exist on the Property.

Significantly the Petitioned rezoning will....

- reduce and eliminate *uncertainty and confusion* at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property,

- secure the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same,

- provide a buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs,
- **promote the development and utilization of** the Agricultural **resources** of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State, ref., State Auditor's Report, exhibit 6.

- bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutes and its Rules. As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in it's Agricultural District.

If the Petition is denied no deed restriction providing for a buffer zone will exist. This may result in a **negative effect** on flora and fauna.

Significantly if the Petition is denied............

- **uncertainty and confusion** at all levels of government agencies, the Petitioner(s) and the local community and the general public regarding the allowed use of the Property will continue to exist,

- the Petitioner(s) investments in the agricultural uses and uses incidental and accessory to same will not be fully secured,

- no buffer zone separating intense agricultural use areas of the Property from the ocean and its reefs will exist,

- the State's requirement to 'promote the development and utilization of the Agricultural **resources** of the Property in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State,' ref., State Auditor's Report, exhibit 6, will not be adhered to and bring the Property(s) zoning into conformity with the earlier described State's Constitutional requirements, its Statutues and its Rules.
As is earlier described in the draft EA the State's Statutes and Rules particularly reference that the State Agricultural District zoning provide the "greatest" protection be given to agriculturally suitable lands and the LUC Rule, HAR 15-15-19 describes that it is "mandatory" that agriculturally suitable lands be zoned in its Agricultural District.

- **Air Quality**

  *Environmental Setting............*
  
The Project area and surrounding area is affected by pollutants derived from the volcanic emissions from the ongoing Kilauea eruption. Other sources of air pollutants to a limited degree include vehicle exhaust emissions along the Hawai‘i Belt Road. In general, however, the ambient air quality of the Property meets all Federal and State standards as evidenced by its designation as an "attainment" area by the State Department of Health, Clean Air Branch.

  *Potential Impacts and Mitigation Measures*
  
  No new use is contemplated nor is it likely. The agricultural use of the Property is already a "HRStatute and HARule allowed" use. The provision of the buffer zone will represent a reduction in the intensity of the agricultural use of the Property and provide for improved air quality.

- **Noise**

  *Environmental Setting................*
  
  Ambient noise levels at the Property are low to moderate and are typical for a rural agricultural area near the ocean. The primary noise generators in the area are the wind, ocean waves, vehicles on the Hawai‘i Belt Road and vehicles entering the Property.

  *Potential Impacts and Mitigation Measures*
  
  No new use is contemplated nor is it likely. The agricultural use of the Property is already a "HRStatute and HARule allowed" use. The provision of the buffer zone will represent
a reduction in the intensity of the agricultural use of the Property and provide for less noise that may result from more intense agricultural use of the Property.

- **Scenic Resources**

  *Environmental Setting*

  The predominant scenic views in the vicinity of the Property are of the Pacific Ocean, the high, near vertical pali and the wave washed boulder field shoreline area. No beach area exists at the waterline. There are no views of the Property from the Hawai`i Belt Road because the road is cut deeply below grade along an embankment mauka of the Property, ref., exhibit 20 pictures.

  The Property is situated between two sites listed as examples of natural beauty in the Hawai`i County General Plan: Kolekole Gulch and Hakalau Bay/Gulch. Hakalau Bay/Gulch is situated approximately 5,000 feet north of the Property and Kolekole Gulch is situated approximately 1,200 feet south of the Property.

  *Potential Impacts and Mitigation Measures*

  No new use is contemplated nor is it likely. The agricultural use of the Property is already a "HRStatute and HARule allowed" use. The provision of the buffer zone will represent a reduction in the intensity of the agricultural use of the Property and provide for better scenic resources of the site and surrounding community.

  Finally the term ‘Scenic’ implies that the Property can be seen by the General Public which is described herein to not be the case as there exists no public views of the Property.

- **Social, Cultural and Economic Setting**

  *Socioeconomic Characteristics*

  Setting..........................

  Hawai`i County's population increased by more than 56,000 persons between 1980 and 2000. Between 1980 and 1990, Hawai`i Island's population increased 30.7 percent, and
increased by 23.6 percent between 1990 and 2000. The April 1, 2000 population figure for Hawai‘i County was 148,677 according to census figures compiled by the County of Hawai‘i, Department of Research and Development.

The South Hilo district had a population of 47,386 in 2000 which represented approximately 32 percent of the total population for Hawai‘i Island. The City of Hilo is the largest population center on the island with the main offices of the County government, branch offices of Federal and State agencies located there. The island’s major deep draft harbor and international airport are also located in Hilo. In addition to industrial, commercial and social service activities, the University of Hawai‘i Hilo and Hawai‘i Community College and affiliated research programs play an important role in Hilo's economy. Hilo and the rest of the East Hawai‘i’ communities are adjusting to the loss of the sugar industry in the mid 1990's. The continuation of agriculture in the district has required a major shift from large scale single-commodity production to smaller scale, multi-commodity 29 multi-market base. The shift to diversified agriculture is characterized by larger numbers of self-employed and smaller scale independent businesses.

Potential Impacts and Mitigation Measures
The agricultural use of the Property is already a "HRStatute and HARule allowed" use. No new use is contemplated nor is likely.

Other properties in the immediate vicinity of the Property are utilized for a variety of diversified agricultural activities including a certified orchid nursery, the propagation of foliage stock and the cultivation of edible ginger and Chinese taro as well as residential uses. The rezoning will not have any significant effect on the socioeconomic characteristics of the area.
No new use is contemplated nor is it likely. The agricultural use of the Property will contribute very modestly but none-the-less positively to the economy in general. There exists a shift to diversified agriculture in the region as characterized by larger numbers of small agricultural lots.

- Adjacent Land Uses

*Existing Setting..................

The areas immediately West (mauka) of the Property are situated in the State Land Use Agricultural district. The areas immediately North, South, and East are designated Conservation.

The parcels immediately adjacent to the Property have the same general characteristics of the Property. Of the five adjoining parcels in the subdivision, three are currently vacant and two have been developed with single-family dwellings. An orchid nursery business has also been established on TMK No.: (3) 2-9-003: 048 along with a single family dwelling. The adjoining communities of Hakalau and Honomu include a mixture of agriculture, residential and limited commercial uses. The majority of the residences in these communities are remnants of the former sugar plantation camps. A number of newer homes have been constructed on parcels Historically utilized for sugar production.

*Potential Impacts and Mitigation Measures*

The agricultural use of the Property is already a "HRStatute and HARule allowed" use. No new use is contemplated nor is likely.

The Property's agricultural use is consistent with the character of the parcels within the immediate vicinity of the Property. It is also consistent with the character of the neighboring Hakalau and Honomu communities. Other properties in the immediate vicinity of the Property are utilized for a variety of diversified agricultural activities
including a certified orchid nursery, the propagation of foliage stock and the cultivation of edible ginger and Chinese taro as well as residential uses. The rezoning will not have any significant effect on the adjacent land uses.

The provision of the buffer zone will represent a reduction in the intensity of the agricultural use of the Property but will continue to be used for woody orchard species and thus continue to positively contribute to the economy of the region.

Public Facilities and Services

- Roads

Existing Setting

Hawai‘i Belt Road (Highway 19) is a State highway providing the major route for cross-island transportation. The State highway is situated approximately 360 feet west of the Property. An access and utility easement provides access to the Property's lots.

One of the easements is currently improved with a 12-foot wide pavement from the State highway down to the edge of the Property, which is the Middle lot.

Potential Impacts and Mitigation Measures

No significant impact on traffic or the highway system is anticipated. No new use is contemplated nor is it likely. The agricultural use of the Property is already a "HRStatute and HARule allowed" use. The provision of the buffer zone will represent a reduction in the intensity of the agricultural use of the Property.

- Water System

Existing Setting

The County’s Department of Water Supply has confirmed, by letter dated April 4, 2005, that water is available to the Project via an existing six-inch waterline along the Old Mamalahoa Highway, on the opposite side of the Hawai‘i Belt Road. The previous
property owners, the McCully(s), installed the necessary service laterals to serve the Property.

Potential Impacts and Mitigation Measures

The agricultural use of the Property is already a "HRStatute and HARule allowed" use. No new use is contemplated nor is likely. The provision of the buffer zone will represent a reduction in the intensity of the agricultural use of the Property. The Property generally receives sufficient rainfall to support the existing agricultural use of the Property.

- **Protective Services**

  *Existing Setting*
  
The closest fire and police stations to the House Site are the district stations situated in the community of Laupahoehoe approximately 9 miles to the Northwest. The Property is also situated within the service area of the main police and fire stations that are approximately 19 miles away in Hilo.

  *Potential Impacts and Mitigation Measures*
  
The agricultural use of the Property is already a "HRStatute and HARule allowed" use. No new use is contemplated nor is likely.

- **Schools**

  *Existing Setting*
  
The Property is served by Kalanianaole School and Hilo High School. Kalanianaole School is located approximately 9 miles southeast and Hilo High School is located approximately 19 miles south of the Property.

  *Potential Impacts and Mitigation Measures*
The agricultural use of the Property is already a "HRStatute and HARule allowed" use. No new use is contemplated nor is likely.

- **Power and Communication Systems**
  
  *Setting*
  The area of the subdivision in which the Property is located is serviced by the Hawaii Electric Light Company and Hawaiian Telecom as well as local cell phone communication towers. The Petitioner(s) have installed a P.V. system on the Property and intend to remain off grid electrically.

  *Potential Impacts and Mitigation Measures*
  The Petitioned rezoning will not have any significant adverse impact on the power and communication systems serving the region. The agricultural use of the Property is already a "HRStatute and HARule allowed" use. No new use is contemplated nor is likely.

- **Wastewater**
  
  *Setting*
  The Property is not within the service limits of the County waste-water disposal system.

  *Potential Impacts and Mitigation Measures*
  The Residence will dispose of septic water on site and will comply with County waste water septic permitting and requirements. The Petitioned rezoning will not have any adverse impact on wastewater. The agricultural use of the Property is already a "HRStatute and HARule allowed" use. No new use is contemplated nor is likely.

- **Solid Waste**
  
  *Setting*
  There is no municipal collection system for solid waste in the County of Hawai`i. The County provides a solid waste transfer station near Honomu, approximately 1 mile from the Project site.
Potential Impacts and Mitigation Measures

The Petitioned rezoning will not have any significant adverse impact on the solid waste systems serving the region. The agricultural use of the Property is already a "HRStatute and HARule allowed" use. No new use is contemplated nor is likely.

• Archeology, Historic and Cultural Resources

Setting

An archaeological assessment of the property was conducted by Rechtman Consulting, LLC, in July of 2004. The Property was systematically and intensively examined, and one site (SIHP Site 50-10-26-24212) (two historic-period railroad features) were discovered. These features were identified as a possible railroad grade section and a railroad trestle abutment. A copy of the consultant’s report can be found as exhibited hereto as an exhibit to exhibit 2 and 3.

In summarizing its findings, the archaeological consultant states the following:

“Systematic survey of three parcels (TMK 3-2-9-03: 13, 29 60) produced no evidence of traditional Hawaiian remains or evidence that the area was currently being accessed for the exercise of traditional and customary practices.”

“One historic era site-SIHP Site 24212, was recorded. The site contains two features associated with the Hamakua Division of Hilo Railroad-Hawaii Consolidated Railway which were recorded in the northwestern portion of the Property. One is a possible section of railroad grade and the other is a railroad trestle abutment. The features were in active use by the railroad from 1911 to 1946. Their primary function was to facilitate the transport of raw sugar from the many mills along the Hilo and Hamakua Coasts to the harbor at Hilo Bay. In later years, they also served the secondary function of facilitating tourism.”
The archaeological consultant provided the following significance evaluation and treatment recommendations:

“Site 24212 is considered significant under Criteria D for the information it has yielded regarding early twentieth century agriculture (sugar cane production), transportation infrastructure. As the current inventory survey project recorded Site 24212 in detail, however, no further work is recommended.”

“In the unlikely event that archaeological resources are encountered during future development activities at TMK: 3-2-9-03: 13, 29, and 60, work in the immediate area of the discovery should be halted and DLNR-SHPD contacted as outlined in Hawaii Administrative Rules 13§13-275-12.”

By letter dated December 22, 2004, DLNR-SHPD accepted and agreed with the archaeological consultant’s recommended treatment of Site 24212 and noted that the consultant’s report was adequate to meet the requirements of Section 13-276, HAR. The report was accepted as final. Rechtman Consulting, LLC, also conducted a cultural assessment for the Property. Archival and documentary information was reviewed, including Mahele Land Awards and Grants and historic maps.

This research did not reveal any documentation of any previous or ongoing traditional or customary practices. The area was historically known as Hilo-pali-Ku (Hilo of the upright cliffs) and there are a few accounts that indicate this area, which encompasses the sheer cliffs stretching along the Hāmākua Coast from the Wailuku River to Waipi`o and beyond, once supported a large pre-contact Hawaiian population that subsisted on crops such as taro, sweet potato, banana, and coconut. Other agricultural resources such as ‘awa, bamboo and sugarcane were also cultivated on the kula lands that stretched from South Hilo to Hāmākua. In the second half of the nineteenth century, the transportation difficulties that had delayed the large-scale commercial exploitation of the kula lands were overcome and sugarcane plantations replaced the subsistence agriculture and grazing as the
dominant land use.

In order to identify cultural resources and potential traditional cultural practices associated with the Property and this portion of the Wailea ahupua`a, the consultant contacted Ululan Sherlock of the Office of Hawaiian Affairs (OHA) and Kepa Maly of Kumu Pono Associates in June of 2004. Neither had any specific information relative to the Property. However, OHA suggested contacting the Laupahoehoe Hawaiian Civic Club. Lucille Chung and Walter Victor were contacted, and they, in turn, referred the consultant to Jack or Waich Ouye, Yukio Takeya and Lorraine Mendoza, who were contacted in June and July of 2004.

The interviewees recalled that the railway used to run across the property until the Kolekole Bridge was destroyed by the tsunami of 1946. On the adjacent property to the south of the 7 lot subdivision, there used to be a pig farm that was used by camp residents and a trail that accessed the shore. This trail allowed the residents and local fishermen access to the shoreline below the pali that bounds the property to the East. This trail was not located on the Property nor did it cross such Property.

The consultant summarized its findings regarding cultural resources relating to the Property as follows: “None of the organizations or individuals that were contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the Petition Area; nor did they provide any information indicating past or current use of the area for traditional and customary practices. It is unlikely that there are any traditional or customary practices occurring in the Property as the lands were utilized for sugarcane cultivation and associated transportation for over 100 years. Any traditional Hawaiian features that may have been associated with former cultural practices that may have occurred on the Property would have been destroyed by the sugarcane cultivation and related uses.”
Petitioner(s) interviewed the field manager of the agricultural farming business which occupied the Property up to 1992. The field manager stated that this particular Property and the surrounding 7 lot subdivision was maintained as a ‘seed farm’ for their agricultural business for over 40 years and all public access from all directions was strictly prohibited in order to not contaminate the seed production on the Property. Thus there exists no recent history of public access to the Property or the subdivision mauka after the closure of the railroad around 1950.

A complete copy of the Archaeological Inventory Survey and Limited Cultural Assessment of TMKs: (3) 2-9-003: 013, 029, and 060 is provided as exhibit 24 herein. The comment letter from the State Historic Preservation Division dated December 22, 2004 and a supplemental letter from the consultant Rechtman Consulting, LLC, dated January 24, 2005 are also included in exhibits 2 and 3. Both describe that no further work is required.

**Potential Impacts**

There were no cultural or historic properties, other than Site 24212, identified in the Property area. There were also no traditional or customary cultural practices found to be associated with the Property. The Petitioned rezoning is therefore anticipated to have “no effect” on significant historic sites or traditional and customary cultural practices. The Historic use of the Property was for Agriculture. The Petitioned rezoning will not have any significant adverse impact on the Archaeology, Historic and Cultural Resources. The agricultural use of the Property is already a "HRStatute and HARule allowed" use (the Historic use). No new use is contemplated nor is likely.

**SUMMARY OF POTENTIAL ADVERSE ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION MEASURES**

- **Short Term Impacts**
The Petitioned rezoning will not have any adverse Environmental impact in the area of the Property. The agricultural use of the Property is already a "HRStatute and HARule allowed" use (the Historic use). No new use is contemplated nor is likely.

The Petitioner(s) propose that the earlier described buffer zone be established.

- **Long Term Impacts**

The Petitioned rezoning will not have any adverse Environmental impact in the area of the Property. The agricultural use of the Property is already a "HRStatute and HARule allowed" use (the Historic use). No new use is contemplated nor is likely.

The Petitioner(s) propose that the earlier described buffer zone be established.

The existing agricultural uses and uses accessory and incidental to such uses represent a long term commitment to the likely continuing agricultural uses of the Property. Having said that once the Property is rezoned into the State's agricultural district its uses will be administered through the County's administrative processes. **However the proposed buffer zone provided for also in a "deed restriction" or other suitable instrument provides a long term protection for the land adjacent immediately to the pali. Because the Property is also in the County's SMA zone that already provides an added level of review and permitting requirements by the County.**

**ALTERNATIVES**

**Under the no action alternative**, The Property will remain in the State's Conservation District. The agricultural use of the Property is already a "HRStatute and HARule allowed" use (the Historic use). No new use is contemplated nor is likely. The agricultural use is intended to continue and expand. The Property is already fully developed with a residence and an agricultural use storage and processing structure. The
potential for cultivation of the soils on the Property will continue to be "HRStatute and HARule allowed". No new use is contemplated nor is likely. The agricultural use of the Property is allowed right up to the Property's border with the ocean-side pali property.

The Petitioner(s) agricultural use of the Property and uses incidental and accessory to such use will continue to have to exist in certain degrees of uncertainty as the Petitioner(s) have generally found the DLNR to be unresponsive to many of their inquiries and even when responses are given they are partial and often obfuscate the questions asked sometimes resulting in a string of communications without resolve over a period that has been sometimes measured in years. No buffer zone will be provided.

Confusion will continue to exist respecting the Property's zoning vs. its agricultural use. Generally the resulting confusion and uncertainty ......

- exposes the Petitioner(s), and continues to expose the Petitioner(s), to the potential for fines administered by the DLNR on a continuing basis as the DLNR does not appear to have a clear and/or evenly applied interpretation of its own administrative rules in such regards,

- is also a problem for the general public and particularly the local community as there exists a general perception that Conservation Districted lands use for agriculture including the cultivation of soils in coastal areas is a violation of State and County laws.

The Petitioner(s) assert the confusion exists as ..........

- it has been their direct experience of same,

- the immediate previous Property owner(s), the McCully(s) described their experience of same,

- the administrator of the sugar cane farming operation, which existed on the Property up to 1992, described same,
other property owners, immediately adjacent to the Property have described same, realtors have described same, visitors to the Property have described same, the State's Auditor General has described same, land use planning professionals have described same (the Petitioner(s) have discussed this directly with at least seven professionals, the County of Hawaii's planning department representatives have described same to the Petitioner(s), the County's elected representative, Valarie Poindexter for the district of the Property, has described same, Land Use Commissioners generally described same during the former Property owner(s) LUC petition A05 757 during the period from 2005-6.

The Petitioner(s) believe that confusion will not change unless the Property is rezoned to the State's Agricultural District. The Petition and this draft EA describes that the Property's current zoning in the State's Conservation District does not provide a significant benefit to the public and its use for agriculture appears to many confusingly in conflict with its zoning.

RELATIONSHIP TO LAND USE PLANS AND POLICIES
The Petitioned rezoning's consistency with relevant State and County land use plans and policies is discussed below.

- **State Land Use District**
The State Land Use Law, Chapter 205, HRS, is intended to preserve, protect, and encourage public health and welfare of Hawai‘i’s people. All lands in the State are classified into four land use districts by the SLUC: Urban, Agricultural, Conservation, and Rural. The Petition Area is currently designated within the State Conservation
District. This Petition requests the rezoning of the Property from the State's Conservation District to the State's Agricultural District.

The Petitioner(s) believe that Hawaii's Constitution, HRS 205 LUC Statute, HAR 15-15 LUC Rules and County Rules are all consistent with and effectively support the Petitioned rezoning..........

Effectively, in reverse order, the Rules are promulgated and gain their authority from the Statute and the Statute is a law consistent with the Constitution. The Petitioner(s) believe that no HARule ought to conflict with the Statute from which the Rules are promulgated.

- The State Constitution requires....... that it’s ‘agencies place a priority’ on preserving and promoting suitable agricultural lands for agricultural uses in its section 11.3 Agricultural lands.............

“The State shall conserve and protect agricultural lands, promote diversified agriculture, increase agricultural self-sufficiency and assure the availability of agriculturally suitable lands.”

The DLNR is an 'agency' of the State. The Petitioner(s) sought that their agricultural use of the Property be Determined to be an allowed use according to HAR 13-5-7 and HAR 13-5-30's Rules. Despite the exchange of letters requesting same from the DLNR for a period measured in years no Determination was ever issued that "agriculture" was an "allowed" use. The DLNR, did not "place a priority' on preserving and promoting suitable agricultural lands for agricultural uses".

The Petitioner(s) agricultural use of the Property is for both personal, self-sufficiency, and intended commercial agricultural production which will add to the State's self-sufficiency in food production.
• The State's LUC enabling Statute Law LUC HRS 205-2 (3) states that...........

"In establishing of the boundaries of agricultural districts the greatest possible protection shall be given to those lands with a high capacity for intensive cultivation; and,"

The word greatest does not need definition. Effectively the word greatest means that there be no other land zoning characteristic of greater priority provided in the Statute or HARules which result from the Statute. The Statute is succinct in requiring that ‘in establishing district boundaries’ no other land zoning designation than 'Agricultural' be given to land if it has a 'high capacity for intensive cultivation.'

The Property has a 'high capacity for intensive cultivation' which is an established fact. For certain HRS 205 does not state any characteristic of lands being considered for Conservation Districting requiring that they be given equal or greater protection than land that has a 'high capacity for intensive cultivation be zoned in the Agricultural District'. HRS 205 sections (d) and (e) go on to list various characteristics of lands to be zoned into the State's Agricultural and Conservation Districts.

The listed characteristics clearly go on to describe that the Property ought to be zoned in the State's Agricultural District more compellingly than in the State's Conservation District. On the-other-hand if the County or State have a plan for public use of the Property in any way what-so-ever it is incumbent on them to identify same. The Property has been zoned in the State's Conservation District for over 50 years and neither the State nor the County have identified same.

While the LUC, the County and the DLNR have variably described an intention to preserve 'scenic' views from the Coastal Highway towards the Ocean when reasoning why the Property may have been zoned into the Conservation District and/or remain so zoned same is irrelevant whether the Property is zoned Agricultural or Conservation as
agriculture is an "allowed" use in both Districts. Considerations regarding the placement and size of structures as they relate to 'scenic views' have already been considered and permitted by the DLNR and the County. As such the continued zoning in the Conservation District is no longer necessary.

Particularly the flow of HRS 205-2 first describes what districts are to be established in its section (a) quoted above. HRS 205-2 then goes on through its subsequent section (d)

Agricultural districts shall include: to describe uses in (d) (1) rather than the earlier described capacity characteristic.....

"(d) Agricultural district shall include:

(1) Activities or uses as characterized by the cultivation of crops, crops for bioenergy, orchards, forage, and forestry."

The Agricultural section (d) goes on to describe in its clauses (2) - (11) various other uses, activities and services that characterize what the Agricultural district shall include.

The Petitioner(s) are using the Property for the 'cultivation of crops' and an 'orchard' and the Property has a 'high capacity for intensive cultivation.'

Comparatively section (e) Conservation district describes.........

"Conservation districts shall include areas necessary for protecting watersheds and water sources; preserving scenic and historic areas; providing park lands, wilderness, and beach reserves; conserving indigenous or endemic plants, fish and wildlife, including those which are threatened or endangered; preventing floods and soil erosion; forestry; open space areas whose existing openness, natural condition, or present state of use, if retained, would enhance the present or potential value of abutting or surrounding communities, or would maintain or enhance the conservation of natural or scenic resources; areas of value for recreation purposes; other related
Agricultural use is an allowed and existing use of the Property. The Property is fully developed with structures and agricultural plantings. No particular scenic or open space resources exist that need protection. No archaeological, historical or botanical characteristics have been identified that need the protection of Conservation district zoning. Soil erosion cannot be reasonably argued to be a characteristic that needs protection against as... agriculture, tilling of the soil etc., is an allowed use.

In summary of HRS 205-2 Districting and classification of lands......
The lawmakers clearly intended that the LUC implement its Rules, to provide a preferential priority "greatest protection be given" that lands with a 'high capacity for intensive cultivation' be zoned agricultural. There does not exist any more compelling characteristic in the Conservation district section that the Property remain in the Conservation district.

- **The LUC enabling Rule** HAR §15-15-01 Purpose Rule seemingly confirms that the Statute is to be administered as pre-emptive to the Rules.........

"This chapter governs the practice and procedure before the land use commission, and shall be construed to secure the just and efficient determination of every proceeding. This chapter shall be liberally construed to preserve, protect, and encourage the development and preservation of lands in the State for those uses to which they are best suited in the interest of public health and welfare of the people of the State of Hawai'i. The rules under this chapter are promulgated pursuant to authority provided by sections 205-1 and 205-7, HRS."

- **The LUC enabling Rule** HAR 15-15-04 Rule also establishes how the LUC apply district boundary Rules in a preferential order. Particularly.........
§15-15-04 Grammatical usage. ..........  
(c) The word "shall" is always mandatory.  
(d) The word "may" is always permissive.  

The Petitioner(s) believe that the word "may" implies a discretionary authority to the LUC and the word "shall" implies a mandatory requirement.  

The Petitioner(s) believe that the following Rules are particularly relevant to the Petition in this regard, ref., HAR 15-15..........  

- The LUC enabling Rules, Rule HAR 15-15-19 and -04............  
  15-15-19 Standards for determining "A" agricultural district boundaries. Except as otherwise provided in this chapter, in determining the boundaries for the "A" agricultural district, the following standards shall apply:  
  (1) It shall include lands with a high capacity for agricultural production;  

Herein may lie an inconsistency between HRS 205 and HAR 15-15. HRS states that "in establishing district boundaries the greatest possible protection be given to lands with a high capacity for intensive cultivation,'" whereas HAR 15-15 Rules both for State Conservation District and State Agricultural District Rules state at their beginning...
"Except as otherwise provided in this chapter, ".

It is not clear to the Petitioner(s) whether there exists another section in HAR 15-15's Rules whether it is "otherwise provided in this chapter" that lands with a "high capacity for intensive cultivation" may be appropriately zoned or, in the case of the Property, remain zoned in the State's Conservation District however, referring back to the Statute HRS 205-2 (3) states that.........

"In the establishment of the boundaries of agricultural districts the greatest possible protection shall be given to those lands with a high capacity for intensive cultivation; and,"

While it is indisputable that the word greatest is succinct there may also exist the discretionary consideration that the term..... "the greatest possible protection be given to lands with a high capacity for intensive cultivation" has not suffered a reduction in protection by the Property's zoning in the State's Conservation District. However the required protection is described to apply in the 'establishment of agricultural district boundaries' and not the 'establishment of conservation district boundaries' .

It has been the Petitioner(s) experience that the Property's zoning has resulted in delayed and uncertainty of use. Furthermore its zoning in the Conservation district did not 'protect' its 'Statute allowed' nonconforming agricultural use, for a prolonged period of time despite the Petitioner(s) attempts to resolve same with the DLNR but rather "limited" such use seemingly because the DLNR does not have a clear and evenly applied policy regarding such use.

Because both HAR 15-15-19 and -20 Rules which promulgate from HRS 205 contain the words "shall" and "may" in their Rules a balance of discretionary consideration is presumably allowed regarding certain characteristics of land described with the term "may". The Petitioner(s) believe, therefore, that one needs to refer back to the earlier
quoted HRS 205-2 (3) in determining whether any of the "mandatory" ("shall")
considerations in the HAR 15-15-20 Conservation District Rules outweigh the HAR
15-15-19 Agricultural District Rules as they apply to the current characteristics of the
Property, which is now a fully developed agricultural use Property....... 

- HAR 15-15-19 Agricultural District Rules............

"(1) It shall include lands with a high capacity for agricultural production;"

The stipulation in the Statute........ "in establishing district boundaries the greatest possible
protection be given to lands with a high capacity for intensive cultivation” is believed by
the Petitioner(s) to be pre-emptive over HAR 15-15-20's Conservation District Rules.

The Property has a "high capacity for agricultural production" relevant to it’s size. This
is not just a statement by the Petitioner(s) but is evidenced in the ALISH classification of
the Property and also its history of agricultural production.

The word capacity refers as a standard measured against the physical size of a property
and the word capacity will be specifically referred to and discussed in the ALISH
classification and definition paragraphs below. The Property has a history of intense
cultivation exceeding one hundred (100) years, ref., exhibit 12, John Cross letter (the
former agribusiness manager of the Property), and exhibit 13, ALISH description of what
constitutes prime agricultural land and exhibit 11, ALISH map, which identifies the
Property’s area as ‘Prime Agricultural Land’ and the County’s designation of zoning of
the Property as A-20a.

Prime agricultural land is defined in the ALSH system, ref., exhibit 13, ALISH definition
of Prime Agricultural Land, page 3......

“PRIME AGRICULTURAL LAND is land best suited for the production of food, feed,
forage and fiber crops. The land has the soil quality, growing season, and moisture
supply needed to produce sustained high yields of crops economically when treated and managed, including water management, according to modern farming methods.”

By inference the Property has a "capacity" to "produce sustained high yields of crops economically". Comparatively HRS 205-2 (3) states..........

"In the establishment of the boundaries of agricultural districts the greatest possible protection shall be given to those lands with a high capacity for intensive cultivation; and,"

The Petitioner(s) believe that the Petition is properly placed with the LUC and the Petitioned rezoning is consistent with the State's Constitution, the Statutes and the Rules describing that the Property now be rezoned to the State's Agricultural District.

The Petitioner(s) believe that the Petition is offering to add a new level of protection to the "HRStatute and HARule allowed" agricultural use of the Property, a buffer zone, is offered.

The State does have a policy regarding the re-zoning of land, even State Conservation Districted land. Effectively HAR 15-15-19's Agricultural District Rules vs. HAR 15-15-20's Conservation Districted Rules embodies the State's policy regarding the re-zoning of land.

Comparison of HAR 15-15-19 vs. -20 in more detail........

(the Petitioner(s) apologize for the repetitive nature of the following discussion, previous discussion only included certain of the Rules, particularly the agricultural sections mandatory Rules, this discussion covers both of the mandatory and discretionary Rules for Agriculture and Conservation)
Particularly HAR 15-15-19 states...........

**15-15-19 Standards for determining "A" agricultural district boundaries.** Except as otherwise provided in this chapter, in determining the boundaries for the "A" agricultural district, the following standards shall apply:

1. *It shall* include lands with a high capacity for agricultural production;
   
   This applies to the Property.

2. *It may* include lands with significant potential for grazing or for other agricultural uses;
   
   This also applies to the Property.

3. *It may* include lands surrounded by or contiguous to agricultural lands or which are not suited to agricultural and ancillary activities by reason of topography, soils, and other related characteristics; and

   The Property is bordered mauka by properties that are zoned in the State Agricultural District and makai by a property that is zoned in the State Conservation District.

4. *It shall* include all lands designated important agricultural lands pursuant to part III of chapter 205, HRS.
   
   This Property is not designated "important agricultural land"

Effectively the Rule (1) requires that it is “mandatory” that ‘land with a high capacity for agricultural production shall be zoned as Agricultural’, the term “shall” is described in the previously quoted HAR §15-15-04 Grammatical usage Rule.
The Property has a ‘high capacity for agricultural production’ relevant to its size, and it has a history of intense cultivation for agricultural production exceeding one hundred (100) years, ref., exhibit 12, John Cross letter (the former agribusiness manager of the Property), and exhibit 13, ALISH description of what constitutes prime agricultural land and exhibited ALISH map which identifies the Property’s area in ‘Prime Agricultural Land’ and the County’s designation of zoning of the Property as A-20A, ref., exhibit 4, County letter.....

“The parcels are zoned Agricultural (A-20a).”

The Property is “capable of producing sustained high agricultural yields when treated and managed according to accepted farming methods and technology”. This assertion is well established and evidenced by the Property’s past historic use for intense agricultural production dating back some one hundred (100) years and its ALISH classification as Prime Agricultural Land, ref., exhibit 11, ALISH map 2017 for the Property and exhibited ALISH definition of Prime Agricultural Land, exhibit 13, on its page 2......

“Three classes of agriculturally important lands were established for the State of Hawaii with the intent of facilitating the SCS effort to inventory prime farmlands nationally and adapting the classification to the types of agricultural activity in Hawaii. These classes and their corresponding SCS (national) equivalents are:”

Hawaii Classification System SCS Classification System"

"Prime Agricultural land Prime Farmland
Unique Agricultural Land Unique Farmland
Other Important Agricultural Additional Farmland of Statewide Land and Local Importance"

“The criteria for classification of PRIME AGRICULTURAL LAND are identical to the criteria established by SCS for national application. The criteria for UNIQUE
AGRICULTURAL LAND and OTHER IMPORTANT AGRICULTURAL LAND were established cooperatively by the Soil Conservation Service in Hawaii, the College of Tropical Agriculture, and the State Department of Agriculture”………………

Now turning to exhibited ALISH definition of Prime Agricultural Land, page 3……

“PRIME AGRICULTURAL LAND is land best suited for the production of food, feed, forage and fiber crops. The land has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically when treated and managed, including water management, according to modern farming methods.”

Conservation District Standards

The current Resource designation of the Property appears to designate that the Property encompasses one of the following areas described below. It bears reminding, however......

This Petition requests the rezoning of the Property from the State's Conservation District to the State's Agricultural District. HRS 205 finds itself applied through the Rules of the LUC in HAR 15-15-19's Agricultural District Standards and HAR 15-15-20'S Conservation District Standards.

The two District Standards are expressed in the Rules under "discretionary" and "mandatory" standards. HAR §15-15-04 Grammatical usage Rule…..

"(a) Words used in the present tense include the future tense.
(b) The singular number includes the plural; and
the plural, the singular.

(c) The word "shall" is always mandatory.
(d) The word "may" is always permissive.

(e) Terms not defined in this chapter shall have the meaning customarily assigned to them.

§15-15-20 Standards for determining "C" conservation district boundaries. Except as otherwise provided in this chapter, in determining the boundaries for the "C" conservation district, the following standards shall apply:

(1) It shall include lands necessary for protecting watersheds, water resources, and water supplies;

The Petitioned rezoning of the Property from the State's Conservation District to the State Agricultural District is consistent with the above mandatory stipulation. No new land use is contemplated nor is it likely. The Property is already fully developed with agricultural use and uses accessory and/or incidental to agricultural use. Agriculture is already a "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning.

The current zoning of the Property in the State's Conservation District has resulted in uncertainty of use as the DLNR does not appear to have a clear policy regarding "HRStatute and HARule allowed" nonconforming agricultural use of the Property, which is provided for in HAR 13-5-7, or alternatively it has not conveyed same to the Petitioner(s) despite repeated attempts by the Petitioner(s) in this regard, for a period measured in years, without a result satisfactory to the Petitioner(s).

Therefore the mandatory stipulation (1) above does not compellingly apply to the Property.
(2) It may include lands susceptible to floods and soil erosion, lands undergoing major erosion damage and requiring corrective attention by the state and federal government, and lands necessary for the protection of the health and welfare of the public by reason of the land's susceptibility to inundation by tsunami and flooding, to volcanic activity, and landslides;

The Petitioned rezoning of the Property from the State's Conservation District to the State Agricultural District is consistent with the above discretionary stipulation. No new land use is contemplated nor is it likely. The Property is already fully developed with agricultural use and uses accessory and/or incidental to agricultural use. Agriculture is already a "HRStatute and HARule allowed" use on the Property. Particularly cultivation of the soils of the Property is included as an existing "HRStatute and HARule allowed" use. Therefore erosion concerns can hardly be described as a compelling characteristic that the Property remain in the State's Conservation District.

The Petitioned rezoning will bring the Property's use into conformance with its zoning. The current zoning of the Property in the State's Conservation District has resulted in uncertainty of use as the DLNR does not appear to have a clear policy regarding "HRStatute and HARule allowed" nonconforming agricultural use of the Property, which is provided for in HAR 13-5-7, or alternatively it has not conveyed same to the Petitioner(s) despite repeated attempts by the Petitioner(s) in this regard, for a period measured in years, without a result satisfactory to the Petitioner(s).

Therefore the discretionary stipulation (2) above does not compellingly apply to the Property.

(3) It may include lands used for national or state parks;

This does not apply to the Property.
(4) It shall include lands necessary for the conservation, preservation, and enhancement of scenic, cultural, historic, or archaeologic sites and sites of unique hysiographic or ecologic significance;

The Petitioned rezoning of the Property from the State's Conservation District to the State Agricultural District is consistent with the above mandatory stipulation. No new land use is contemplated nor is it likely. The Property is already fully developed with agricultural use and uses accessory and/or incidental to agricultural use. Agriculture is already a "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning.

The current zoning of the Property in the State's Conservation District has resulted in uncertainty of use as the DLNR does not appear to have a clear policy regarding "HRStatute and HARule allowed" nonconforming agricultural use of the Property, which is provided for in HAR 13-5-7, or alternatively it has not conveyed same to the Petitioner(s) despite repeated attempts by the Petitioner(s) in this regard, for a period measured in years, without a result satisfactory to the Petitioner(s).

While the LUC, the County and the DLNR have variably described an intention to preserve 'scenic' views from the Coastal Highway towards the Ocean when reasoning why the Property may have been zoned into the Conservation District and/or remain so zoned, same is irrelevant whether the Property is zoned Agricultural or Conservation as agriculture is an "allowed" use of the Property in both Districts. Considerations regarding the placement and size of structures as they relate to 'scenic views' have already been considered and permitted by the DLNR and the County. As such the continued zoning in the Conservation District no longer serves the intended purpose described as being reasoning why the Property was zoned into the Conservation District.

Therefore the mandatory stipulation (4) above does not compellingly apply to the Property.
It shall include lands necessary for providing and preserving parklands, wilderness and beach reserves, for conserving natural ecosystems of indigenous or endemic plants, fish, and wildlife, including those which are threatened or endangered, and for forestry and other related activities to these uses;

The Petitioned rezoning of the Property from the State's Conservation District to the State Agricultural District is consistent with the above **mandatory stipulation**. No new land use is contemplated nor is it likely. The Property is already fully developed with agricultural use and uses accessory and/or incidental to agricultural use. Agriculture is already a "**HRStatute and HARule allowed**" use of the Property. The Petitioned rezoning will bring its use into conformance with its zoning. The current zoning of the Property in the State's Conservation District has resulted in uncertainty of use as the DLNR does not appear to have a clear policy regarding "**HRStatute and HARule allowed**" nonconforming agricultural use of the Property, which is provided for in HAR 13-5-7, or alternatively it has not conveyed same to the Petitioner(s) despite repeated attempts by the Petitioner(s) in this regard, for a period measured in years, without a result satisfactory to the Petitioner(s).

Therefore the **mandatory stipulation** (5) above does not compellingly apply to the Property.

It shall include lands having an elevation below the shoreline as stated by section 205A-1, HRS, marine waters, fish ponds, and tidepools of the State, and accreted portions of lands pursuant to sections 501-33 and 669-1, HRS, unless otherwise designated on the land use district maps. All offshore and outlying islands of the State are classified conservation unless otherwise designated on the land use district maps;

This stipulation does not apply to the Property.
(7) It shall include lands with topography, soils, climate, or other related environmental factors that may not be normally adaptable or presently needed for urban, rural, or agricultural use, except when those lands constitute areas not contiguous to the conservation district;

The Petitioned rezoning of the Property from the State's Conservation District to the State Agricultural District is consistent with the above mandatory stipulation. No new land use is contemplated nor is it likely. The Property is already fully developed with agricultural use and uses accessory and/or incidental to agricultural use. Agriculture is already a "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. The current zoning of the Property in the State's Conservation District has resulted in uncertainty of use as the DLNR does not appear to have a clear policy regarding "HRStatute and HARule allowed" nonconforming agricultural use of the Property, which is provided for in HAR 13-5-7, or alternatively it has not conveyed same to the Petitioner(s) despite repeated attempts by the Petitioner(s) in this regard, for a period measured in years, without a result satisfactory to the Petitioner(s).

Therefore the mandatory stipulation (7) above does not compellingly apply to the Property.

(8) It may include lands with a general slope of twenty per cent or more which provide for open space amenities or scenic values; and

The Petitioned rezoning of the Property from the State's Conservation District to the State Agricultural District is consistent with the above discretionary stipulation. No new land use is contemplated nor is it likely. The Property is already fully developed with agricultural use and uses accessory and/or incidental to agricultural use. Agriculture is already a "HRStatute and HARule allowed" use on the Property irrespective of its
The Petitioned rezoning will bring its use into conformance with its zoning. The current zoning of the Property in the State's Conservation District has resulted in uncertainty of use as the DLNR does not appear to have a clear policy regarding "HRStatute and HARule allowed" nonconforming agricultural use of the Property, which is provided for in HAR 13-5-7, or alternatively it has not conveyed same to the Petitioner(s) despite repeated attempts by the Petitioner(s) in this regard, for a period measured in years, without a result satisfactory to the Petitioner(s).

Therefore the discretionary stipulation (8) above does not compellingly apply to the Property.

(9) It may include lands suitable for farming, flower gardening, operation of nurseries or orchards, growing of commercial timber, grazing, hunting, and recreational uses including facilities accessory to those uses when the facilities are compatible with the natural physical environment.

The Petitioned rezoning of the Property from the State's Conservation District to the State Agricultural District is consistent with the above discretionary stipulation. No new land use is contemplated nor is it likely. The Property is already fully developed with agricultural use and uses accessory and/or incidental to agricultural use. Agriculture is already a "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. The current zoning of the Property in the State's Conservation District has resulted in uncertainty of use as the DLNR does not appear to have a clear policy regarding "HRStatute and HARule allowed" nonconforming agricultural use of the Property, which is provided for in HAR 13-5-7, or alternatively it has not conveyed same to the Petitioner(s) despite repeated attempts by the Petitioner(s) in this regard, for a period measured in years, without a result satisfactory to the Petitioner(s).
Therefore the discretionary stipulation (9) above does not compellingly apply to the Property.

**Hawai‘i State Plan**

The Hawai‘i State Plan, embodied in Chapter 226, HRS, serves as a guide for goals, objectives, policies, and priority guidelines for statewide planning. The Hawai‘i State Plan provides a basis for determining priorities, allocating limited resources, and improving coordination of State and County plans, policies, programs, projects, and regulatory activities. The Hawai‘i State Plan also directs the appropriate State agencies to prepare functional plans for their respective program areas. The proposed project is consistent with the following Hawai‘i State Plan objectives and policies:

- **§226-7 Objectives and policies for the economy--agriculture.** (a) Planning for the State's economy with regard to agriculture shall be directed towards achievement of the following objectives:
  
  (1) Viability of Hawaii's sugar and pineapple industries.

  (2) Growth and development of diversified agriculture throughout the State.

  (3) An agriculture industry that continues to constitute a dynamic and essential component of Hawaii's strategic, economic, and social well-being.

  (b) To achieve the agriculture objectives, it shall be the policy of this State to:

  (1) Establish a clear direction for Hawaii's agriculture through stakeholder commitment and advocacy.

  (2) Encourage agriculture by making the best use of natural resources.

  (3) Provide the governor and the legislature with information and options needed for
prudent decision-making for the development of agriculture.

(4) Establish strong relationships between the agricultural and visitor industries for mutual marketing benefits.

(5) Foster increased public awareness and understanding of the contributions and benefits of agriculture as a major sector of Hawaii’s economy.

(6) Seek the enactment and retention of federal and state legislation that benefits Hawaii’s agricultural industries.

(7) Strengthen diversified agriculture by developing an effective promotion, marketing, and distribution system between Hawaii’s food producers and consumers in the State, nation, and world.

(8) Support research and development activities that strengthen economic productivity in agriculture, stimulate greater efficiency, and enhance the development of new products and agricultural by-products.

(9) Enhance agricultural growth by providing public incentives and encouraging private initiatives.

(10) Assure the availability of agriculturally suitable lands with adequate water to accommodate present and future needs.

(11) Increase the attractiveness and opportunities for an agricultural education and livelihood.

(12) In addition to the State’s priority on food, expand Hawaii’s agricultural base by promoting growth and development of flowers, tropical fruits and plants, livestock, feed grains, forestry, food crops, aquaculture, and other potential enterprises.

(13) Promote economically competitive activities that increase Hawaii’s agricultural self-sufficiency, including the increased purchase and use of Hawaii-grown food and food
products by residents, businesses, and governmental bodies as defined under section 103D-104.

(14) Promote and assist in the establishment of sound financial programs for diversified agriculture.

(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.

(17) Perpetuate, promote, and increase use of traditional Hawaiian farming systems, such as the use of loko i’a, māla, and irrigated lo‘i, and growth of traditional Hawaiian crops, such as kalo, ‘uala, and ‘ulu.

(18) Increase and develop small-scale farms.

The Petitioned rezoning of the Property from the State's Conservation District to the State Agricultural District is consistent with HRS §226-7 Objectives and policies for the economy--agriculture. No new land use is contemplated nor is it likely. The Property is already fully developed with agricultural use and uses accessory and/or incidental to agricultural use. Agriculture is already an "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. The current zoning of the Property in the State's Conservation District has resulted in uncertainty of use as the DLNR does not appear to have a clear policy regarding "HRStatute and HARule allowed" nonconforming agricultural use of the Property, which is provided for in HAR 13-5, or alternatively it has not conveyed same to the Petitioner(s) despite repeated attempts by the Petitioner(s) in this regard, for a period measured in years, without a result satisfactory to the Petitioner(s).
§226-11 Objectives and policies for the physical environment—land-based, shoreline, and marine resources. (a) Planning for the State's physical environment with regard to land-based, shoreline, and marine resources shall be directed towards achievement of the following objectives:

(1) Prudent use of Hawaii's land-based, shoreline, and marine resources.

(2) Effective protection of Hawaii's unique and fragile environmental resources.

(b) To achieve the land-based, shoreline, and marine resources objectives, it shall be the policy of this State to:

(1) Exercise an overall conservation ethic in the use of Hawaii's natural resources.

(2) Ensure compatibility between land-based and water-based activities and natural resources and ecological systems.

(3) Take into account the physical attributes of areas when planning and designing activities and facilities.

(4) Manage natural resources and environs to encourage their beneficial and multiple use without generating costly or irreparable environmental damage.

(5) Consider multiple uses in watershed areas, provided such uses do not detrimentally affect water quality and recharge functions.

(6) Encourage the protection of rare or endangered plant and animal species and habitats native to Hawaii.

(7) Provide public incentives that encourage private actions to protect significant natural resources from degradation or unnecessary depletion.

(8) Pursue compatible relationships among activities, facilities, and natural
(9) Promote increased accessibility and prudent use of inland and shoreline areas for public recreational, educational, and scientific purposes.

The Petitioned rezoning of the Property from the State's Conservation District to the State Agricultural District is consistent with HRS §226-11 Objectives and policies for the physical environment--land-based, shoreline, and marine resources. No new land use is contemplated nor is it likely. The Property is already fully developed with agricultural use and uses accessory and/or incidental to agricultural use. Agriculture is already an "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. The current zoning of the Property in the State's Conservation District has resulted in uncertainty of use as the DLNR does not appear to have a clear policy regarding "HRStatute and HARule allowed" nonconforming agricultural use of the Property or alternatively it has not conveyed same to the Petitioner(s) despite repeated attempts by the Petitioner(s) in this regard for a period measured in years without a result satisfactory to the Petitioner(s).

- §226-12 Objective and policies for the physical environment--scenic, natural beauty, and historic resources. (a) Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawaii’s scenic assets, natural beauty, and multi-cultural/historical resources.

(b) To achieve the scenic, natural beauty, and historic resources objective, it shall be the policy of this State to:

(1) Promote the preservation and restoration of significant natural and historic resources.

(2) Provide incentives to maintain and enhance historic, cultural, and scenic
amenities.

(3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.

(4) Protect those special areas, structures, and elements that are an integral and functional part of Hawaii’s ethnic and cultural heritage.

(5) Encourage the design of developments and activities that complement the natural beauty of the islands.

The Petitioned rezoning of the Property from the State’s Conservation District to the State Agricultural District is consistent with HRS §226-12 Objective and policies for the physical environment—scenic, natural beauty, and historic resources. No new land use is contemplated nor is it likely. The Property is already fully developed with agricultural use and uses accessory and/or incidental to agricultural use. Agriculture is already an "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. The current zoning of the Property in the State’s Conservation District has resulted in uncertainty of use as the DLNR does not appear to have a clear policy regarding "HRStatute and HARule allowed" nonconforming agricultural use of the Property or alternatively it has not conveyed same to the Petitioner(s) despite repeated attempts by the Petitioner(s) in this regard for a period measured in years without a result satisfactory to the Petitioner(s).

• §226-13 Objectives and policies for the physical environment—land, air, and water quality. (a) Planning for the State's physical environment with regard to land, air, and water quality shall be directed towards achievement of the following objectives:

(1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.

(2) Greater public awareness and appreciation of Hawaii's environmental resources.
(b) To achieve the land, air, and water quality objectives, it shall be the policy of this State to:

(1) Foster educational activities that promote a better understanding of Hawaii's limited environmental resources.

(2) Promote the proper management of Hawaii’s land and water resources.

(3) Promote effective measures to achieve desired quality in Hawaii’s surface, ground, and coastal waters.

(4) Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawaii's people.

(5) Reduce the threat to life and property from erosion, flooding, tsunamis, hurricanes, earthquakes, volcanic eruptions, and other natural or man-induced hazards and disasters.

(6) Encourage design and construction practices that enhance the physical qualities of Hawaii’s communities.

(7) Encourage urban developments in close proximity to existing services and facilities.

(8) Foster recognition of the importance and value of the land, air, and water resources to Hawaii's people, their cultures and visitors.

The Petitioned rezoning of the Property from the State's Conservation District to the State Agricultural District is consistent with HRS §226-13 Objectives and policies for the physical environment--land, air, and water quality. No new land use is contemplated nor is it likely. The Property is already fully developed with agricultural use and uses accessory and/or incidental to agricultural use. Agriculture is already an "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into
conformance with its zoning. The current zoning of the Property in the State's Conservation District has resulted in uncertainty of use as the DLNR does not appear to have a clear policy regarding "HRStatute and HARule allowed" nonconforming agricultural use of the Property, which is provided for in HAR 13-5, or alternatively it has not conveyed same to the Petitioner(s) despite repeated attempts by the Petitioner(s) in this regard, for a period measured in years, without a result satisfactory to the Petitioner(s).

**Hawai‘i Coastal Zone Management Program** (also discussed earlier in the SMA section)...........

The National Coastal Zone Management (CZM) Program was created through passage of the Coastal Zone Management Act of 1972. Hawai‘i’s CZM Program, adopted as Chapter 205A, HRS, provides a basis for protecting, restoring and responsibly developing coastal communities and resources. The coastal zone management area is defined as all lands of the State and the area extending seaward from the shoreline to the limit of the State’s police power and Island School Updated Master Plan Final Environmental Assessment management authority, including the United States territorial sea (Section 205A-1, HRS).

The Petitioned rezoning of the Property from the State's Conservation District to the State Agricultural District is consistent with **Hawai‘i Coastal Zone Management Program**. No new land use is contemplated nor is it likely. The Property is already fully developed with agricultural use and uses accessory and/or incidental to agricultural use. Agriculture is already a "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. The current zoning of the Property in the State's Conservation District has resulted in uncertainty of use as the DLNR does not appear to have a clear policy regarding "HRStatute and HARule allowed" nonconforming agricultural use of the Property, which is provided for in HAR 13-5, or alternatively it has not conveyed same to the Petitioner(s) despite repeated
attempts by the Petitioner(s) in this regard, for a period measured in years, without a result satisfactory to the Petitioner(s).

The Petitioner(s) requested a Determination from the County of Hawaii regarding their agricultural use of the Property. The County issued a Determination, ref., exhibit 4, County letter, which stated that agricultural use of the Property was exempt from SMA regulations.

Particularly the Petitioned rezoning represents an improvement over the existing "HRStatute and HARule allowed" uses of the Property. Presently cultivation of the Property's soils immediately along the top of the coastal pali. A buffer zone is proposed that will be maintained in grasses and woody plants which represents a reduction in the intensity of land use adjacent to the coastal pali. Effectively the potential for erosion of the soils in the area of the coastal pali will be better managed and reduced.

**General Plan for the County of Hawaii**

Earlier in the draft EA the Petitioner(s) pointed to the testimony of a former County Planning Department, Mr. Hayashi, to the LUC in 2005 regarding the Property, ref., exhibit 1. Mr. Hayashi described that the County designated the Property as "Open" in its General Plan. The County has described in the exhibit 4, County letter that the parcels are zoned Agricultural (A-20a). In a recent discussion with County Planning Department employee Jeff Darrow it was described to the Petitioner(s) that the A20-a designation is preemptive. Particularly the Property is not zoned "Open" by the County. This draft EA earlier describes that the Property's zoning and designation etc. is confusing for everyone and needs correction. The Petition, if allowed, will result in a correction which is satisfactory to the Petitioner(s).

The Petitioned rezoning of the Property from the State's Conservation District to the State Agricultural District is consistent with the County's General Plan. No new land use is contemplated nor is it likely. The Property is already fully developed with agricultural use and uses accessory and/or incidental to agricultural use. Agriculture
is already a "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. No new use is contemplated nor is likely. The current zoning of the Property in the State's Conservation District has resulted in uncertainty of use as the DLNR does not appear to have a clear policy regarding "HRStatute and HARule allowed" nonconforming agricultural use of the Property, which is provided for in HAR 13-5, or alternatively it has not conveyed same to the Petitioner(s) despite repeated attempts by the Petitioner(s) in this regard, for a period measured in years, without a result satisfactory to the Petitioner(s).

**Required Permits and Approvals**

With the exception of the LUC approving the Petitioned rezoning the Petitioner(s) do not believe that any permits or approvals are required.

**Further SMA guidelines discussion.........**

- **Recreational Resources**

  **Objective:** Provide coastal recreation opportunities accessible to the public.

  **Policies:**

  (A) Improve coordination and funding of coastal recreational planning and management; and

  (B) Provide adequate, accessible and diverse recreational opportunities in the coastal zone management area by:

  - Protecting coastal resources uniquely suited for recreational opportunities that cannot be provided in other areas;
Require replacement of coastal resources having significant recreational value, including, but not limited to, surfing sites, fishponds and sand beaches, when such resources would be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;

Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;

Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;

Ensuring public recreational uses of county, state and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;

Adopting water quality standards and regulating point and nonpoint sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;

Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and

Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land natural resources, and county authorities; and crediting such dedication against the requirements of section 46-6.

Discussion:
The County of Hawaii reviewed a requested Determination regarding the Petitioner(s) agricultural use of the Property. The County issued a letter of Determination that the agricultural use of the Property was SMA exempt, *ref. exhibit 4 County letter.*

Agriculture is already a "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. No new use is contemplated nor is likely.

The objective is stated to provide coastal recreation opportunities accessible to the public. The Property is located in a private gated community. There is no public access to the Property nor to the shoreline below the Property as the area is bounded by high steep cliffs. There exists no beach at the waterline.

The Petitioner(s) interviewed the field manager of the agricultural farming business which occupied the Property up to 1992. The field manager stated that this particular Property and the surrounding 7 lot subdivision was maintained as a ‘seed farm’ for their agricultural business for over 40 years and all public access from all directions was strictly prohibited in order to not contaminate the seed production on the Property. Thus there exists no recent history of public access to the Property or the subdivision to its West after the closure of the railroad around 1950.

The County's Planning Department and SMA process will allow the County to review, assess and regulate future new uses of the Property in detail.

- **Historic Resources**

  **Objective:**

  *Protect, preserve, and, where desirable, restore those natural and man made Historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.*

  **Policies:**
• Identify and analyze significant archaeological resources;

• Maximize information retention through preservation of remains and artifacts or salvage operations; and

• Support state goals for protection, restoration, interpretation, and display of historic resources.

Discussion:
Agriculture is already a "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. No new use is contemplated nor is likely.

The County of Hawaii reviewed a requested Determination regarding the Petitioner(s) agricultural use of the Property. The County issued a letter of Determination that the agricultural use of the Property was SMA exempt, ref. exhibit 4, County letter.

The County Planning Department and SMA processes will allow the County to review, assess and regulate new land uses in detail. The Property was systematically surveyed for archaeological resources and one site was discovered. The Property included one historic period railroad feature. An additional historic-era railroad feature was located on TMK: (3) 2-9-003: 060. Due to the Property’s previous agricultural use, it is highly unlikely that any additional subsurface archaeological resources exist there.

An archaeological assessment of the property was conducted by Rechtman Consulting, LLC, in July of 2004. Such Property was systematically and intensively examined, and one site (SHIP Site 50-10-26-24212) (two historic-period railroad features) were discovered. These features were identified as a possible railroad grade section and a railroad trestle abutment.
A copy of the consultant’s report is exhibited in exhibits 2 and 3 hereto.
In summarizing its findings, the archaeological consultant states the following:

“Systematic survey of three parcels (TMK 3-2-9-03: 13, 29 60) produced no evidence of traditional Hawaiian remains or evidence that the area was currently being accessed for the exercise of traditional and customary practices.”

“One historic era site-SIHP Site 24212, was recorded. The site contains two features associated with the Hamakua Division of Hilo Railroad-Hawaii Consolidated Railway which were recorded in the northwestern portion of the Property. One is a possible section of railroad grade and the other is a railroad trestle abutment. The features were in active use by the railroad from 1911 to 1946. Their primary function was to facilitate the transport of raw sugar from the many mills along the Hilo and Hamakua Coasts to the harbor at Hilo Bay.”

The archaeological consultant provided the following significance evaluation and treatment recommendations:

“Site 24212 is considered significant under Criteria D for the information it has yielded regarding early twentieth century agriculture (sugar cane production), transportation infrastructure. As the current inventory survey project recorded Site 24212 in detail, however, no further work is recommended.”

“In the unlikely event that archaeological resources are encountered during future development activities at TMK: 3-2-9-03: 13, 29, and 60, work in the immediate area of the discovery should be halted and DLNR-SHPD contacted as outlined in Hawaii Administrative Rules 13§13-275-12.”

By letter dated December 22, 2004, DLNR-SHPD accepted and agreed with
the archaeological consultant’s recommended treatment of Site 24212 and noted that the consultant’s report was adequate to meet the requirements of Section 13-276, HAR. The report was accepted as final.

Rechtman Consulting, LLC, also conducted a cultural assessment for the Property. Archival and documentary information was reviewed, including Mahele Land Awards and Grants and historic maps. This research did not reveal any documentation of any previous or ongoing traditional or customary practices. The area was historically known as Hilopali- Ku (Hilo of the upright cliffs) and there are a few accounts that indicate this area, which encompasses the sheer cliffs stretching along the Hāmākua Coast from the Wailuku River to Waipi‘o and beyond, once supported a large pre-contact Hawaiian population that subsisted on crops such as taro, sweet potato, banana, and coconut. Other agricultural resources such as ‘awa, bamboo and sugarcane were also cultivated on the kula lands that stretched from South Hilo to Hāmākua. In the second half of the nineteenth century, the transportation difficulties that had delayed the large-scale commercial exploitation of the kula lands were overcome and sugarcane plantations replaced the subsistence agriculture and grazing as the dominant land use.

In order to identify cultural resources and potential traditional cultural practices associated with The Project site and this portion of the Wailea ahupua‘a, the consultant contacted Ululan Sherlock of the Office of Hawaiian Affairs (OHA) and Kepa Maly of Kumu Pono Associates in June of 2004. Neither had any specific information relative to the Property. However, OHA suggested contacting the Laupahoehoe Hawaiian Civic Club. Lucille Chung and Walter Victor were contacted, and they, in turn, referred the consultant to Jack or Waich Ouye, Yukio Takeya and Lorraine Mendoza, who were contacted in June and July of 2004.

The interviewees recalled that the railway used to run across the property until the Kolekole Bridge was destroyed by the tsunami of 1946. On the adjacent property to the south, there used to be a pig farm that was used by camp residents and a trail that accessed
the shore. This trail allowed the residents and local fisherman access to the shoreline below the pali that bounds the Property to the East. This trail was not located on the Property nor did it cross the Property.

The consultant summarized its findings regarding cultural resources relating to the Combined Property (using the referenced Property) as follows:

“None of the organizations or individuals that were contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the Petition Area; nor did they provide any information indicating past or current use of the area for traditional and customary practices. It is unlikely that there are any traditional or customary practices occurring in the Petition Area as the lands were utilized for sugarcane cultivation and associated transportation for over 100 years. Any traditional Hawaiian features that may have been associated with former cultural practices that may have occurred in the Petition Area would have been destroyed by the sugarcane cultivation and related uses.”

A complete copy of the Archaeological Inventory Survey and Limited Cultural Assessment of TMKs: (3) 2-9-003: 013, 029, and 060 is provided exhibited in exhibits 2 and 3 hereto.

The comment letter from the State Historic Preservation Division dated December 22, 2004 and a supplemental letter from the consultant Rechtman Consulting, LLC, dated January 24, 2005 are also included therein.

**Potential Impacts**

The County of Hawaii reviewed a requested Determination regarding the Petitioner(s) agricultural use of the Property. The County issued a letter of Determination that the agricultural use of the Property was SMA exempt, *ref. exhibit 4 County letter.*
No new use is contemplated, therefore there will be no new impacts and no mitigation measures are planned, however if the Petition is allowed a buffer zone will be provided that may be beneficial to Historic elements which may exist on the Property.

There were no cultural or historic properties, other than Site 24212, identified in the Combined Property Area. There were also no traditional or customary cultural practices found to be associated with such property. Finally the Petitioner(s) interviewed the field manager of the agricultural farming business which occupied the Property up to 1992. The field manager stated that this particular Property was maintained as a ‘seed farm’ for their agricultural business for over 40 years and all public access from all directions was strictly prohibited in order to not contaminate the seed production on the Property.

*It is noteworthy* that generally the existing "HRStatute and HARule allowed" “Historic” non-conforming agricultural uses of the property described herein already allow agriculture on a substantial area of the Property. These reflect the “Historic” use of the Property as described throughout this EA.

The Petitioner(s) intend to be a good stewards of the Property and use reasonable effort to mitigate negative effects to the Historic resources on/of the Property from both the "HRStatute and HARule allowed" non-conforming agricultural operations on the Property. The agricultural use of the Property is in keeping with the shift to diversified agriculture in the region as characterized by larger numbers of self-employed and smaller scale independent businesses.

The provision of the earlier described buffer zone will have positive effect on the ‘existing "HRStatute and HARule allowed" conditions’ of the Property which will generally be the same as the existing surrounding agricultural land uses.

- **Scenic & Open Space Resources**

**Objective:**
Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.

**Policies:**
- Identify valued scenic resources in the coastal zone management area;
- Ensure that new development are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;
- Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and
- Encourage those developments that are not coastal dependent to locate in inland areas.

**Discussion:**
Agriculture is already a "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. No new use is contemplated nor is likely.

The County of Hawaii reviewed a requested Determination regarding the Petitioner(s) agricultural use of the Property. The County issued a letter of Determination that the agricultural use of the Property was SMA exempt, *ref. exhibit 4, County letter*.

The County Planning Department and SMA review processes of future new uses will allow it to review, assess and regulate the Property's use in detail. There are no public views of the Property or the ocean from the Hawai‘i Belt Road because the road is cut below a high grade along an embankment mauka of the Property, *ref., exhibit .20 pictures*.

The Property is situated between two sites listed as examples of natural beauty in the Hawai‘i County General Plan: Kolekole Gulch and Hakalau Bay/Gulch. Hakalau
Bay/Gulch is situated approximately 5,000 feet north of the Property and Kolekole Gulch is situated approximately 1,200 feet south of the Property.

**Potential Impacts and Mitigation Measures**

The County of Hawaii reviewed a requested Determination regarding the Petitioner(s) agricultural use of the Property. The County issued a letter of Determination that the agricultural use of the Property was SMA exempt, *ref. exhibited County letter.*

While the LUC, the County and the DLNR have variably described an intention to preserve *'scenic'* views from the Coastal Highway towards the Ocean when reasoning why the Property may have been zoned into the Conservation District and/or remain so zoned same is irrelevant whether the Property is zoned Agricultural or Conservation as agriculture is an *"allowed"* use in both Districts. Considerations regarding the placement and size of structures as they relate to *'scenic views'* have already been considered and permitted by the DLNR and the County. As such the continued zoning in the Conservation District is no longer necessary.

No new use is contemplated, therefore there will be no new impacts and no mitigation measures are planned, however if the Petition is allowed a buffer zone will be provided that may be beneficial to the scenic and open space resources which may exist on the Property.

- **Coastal Ecosystems**

**Objective:**
Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

**Policies:**
- Exercise an overall conservation ethic, and practice stewardship in the protection, use and development of marine and coastal resources;
o Improve the technical basis for natural resource management;

o Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;

o Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversion, channelization and similar land and water uses, recognizing competing water needs; and

o Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.

**Discussion:**
Agriculture is already a "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. No new use is contemplated nor is likely.

The County of Hawaii reviewed a requested Determination regarding the Petitioner(s) agricultural use of the Property. The County issued a letter of Determination that the agricultural use of the Property was SMA exempt, *ref. exhibit 4, County letter.*

No new use is contemplated, therefore there will be no new impacts and no mitigation measures are planned, however if the Petition is allowed a buffer zone will be provided that will be beneficial to the Coastal ecosystem makai of the Property.

- **Economic Uses**

**Objective:**
Provide public or private facilities and improvements important to the State’s
economy in suitable locations.

**Policies:**

o Concentrate coastal dependent development in appropriate areas;

o Ensure that coastal development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and

o Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:

   o Use of presently designated locations is not feasible;

   o Adverse environmental effects are minimized; and

   o The development is important to the State’s economy.

**Discussion:**

Agriculture is already a "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. No new use is contemplated nor is likely.

The County of Hawaii reviewed a requested Determination regarding the Petitioner(s) agricultural use of the Property. The County issued a letter of Determination that the agricultural use of the Property was SMA exempt, *ref. exhibit 4, County letter.*
**Potential Impacts and Mitigation Measures**

No new use is contemplated, therefore there will be no new impacts and no mitigation measures are planned, however if the Petition is allowed a buffer zone will be provided that will reduce the intensity of agricultural use of the Property.

- **Coastal Hazards**

  **Objective:**
  Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.

  **Policies:**
  o Develop and communicate adequate information about storm wave, tsunami, flood erosion, subsidence, and point and nonpoint source pollution hazards
  
  o Ensure that development comply with requirements of the Federal Flood Insurance Program; and
  
  o Prevent coastal flooding from inland projects.

**Discussion:**

Agriculture is already a "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. No new use is contemplated nor is likely, therefore there will be no new impacts and no mitigation measures are planned, however if the Petition is allowed a buffer zone will be provided that will reduce the intensity of agricultural use of the Property.

**The objective of** Hawaii Revised Statute “HRS” is to reduce hazard to life and property from tsunami, storm waves, flooding, erosion, subsidence, and pollution.
Potential Impacts and Mitigation Measures

No new use is contemplated, therefore there will be no new impacts and no mitigation measures are planned, however if the Petition is allowed a buffer zone will be provided that will reduce the intensity of agricultural use of the Property. The buffer zone will reduce soil erosion and the likelihood of cliff subsidence due to erosion of the area of the high wash of the waves below the coastal pali. The incidence of subsidence may also result in large trees falling into the ocean which may become a navigational hazard.

- Managing Development

Objective:

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

Policies:

- Use, implement and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;

- Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and

- Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

Discussion:

Agriculture is already a "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. No new use is contemplated nor is likely.
The County of Hawaii reviewed a requested Determination regarding the Petitioner(s) agricultural use of the Property. The County issued a letter of Determination that the agricultural use of the Property was SMA exempt, *ref. exhibit 4, County letter.*

**Potential Impacts and Mitigation Measures**

No new use or further development of the Property is contemplated, therefore there will be no new impacts and no mitigation measures are planned, however if the Petition is allowed a buffer zone will be provided that will reduce the intensity of agricultural use of the Property.

- **Public Participation**
  
  **Objective:**
  
  Stimulate public awareness, education, and participation in coastal management.

  **Policies:**
  
  * Use, implement and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;

  * Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and

  * Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

**Discussion:**

Agriculture is already a *"HRStatute and HARule allowed"* use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. No new use is contemplated nor is likely.
The County of Hawaii reviewed a requested Determination regarding the Petitioner(s) agricultural use of the Property. The County issued a letter of Determination that the agricultural use of the Property was SMA exempt, ref. exhibit 4, County letter.

**Potential Impacts and Mitigation Measures**

No new use is contemplated, therefore there will be no new impacts and no mitigation measures are planned, however if the Petition is allowed a buffer zone will be provided that will reduce the intensity of agricultural use of the Property.

The LUC administrative and related process allows opportunities for public participation, including the requirement for compliance with Chapter 343, Hawaiʻi Revised Statutes. The Environmental Assessment process includes a public comment period during which members of the public may submit comments on the Project.

- **Beach Protection**

  **Objective:**
  
  Protect beaches for public use and recreation.

  **Policies:**
  
  - Locate new structures inland from the shoreline setback to conserve openspace, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;

  - Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and

  - Minimize the construction of public erosion-protection structures seaward of the shoreline.
Discussion:
Agriculture is already a "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. No new use is contemplated nor is likely.

The County of Hawaii reviewed a requested Determination regarding the Petitioner(s) agricultural use of the Property. The County issued a letter of Determination that the agricultural use of the Property was SMA exempt, ref. exhibit 4, County letter. No beach areas exist makai of the Property.

Potential Impacts and Mitigation Measures
No new use is contemplated, therefore there will be no new impacts and no mitigation measures are planned, however if the Petition is allowed a buffer zone will be provided that will reduce the intensity of agricultural use of the Property.

- Marine Resources
  Objective:
  Promote the protection, use, and development of marine and coastal resources assure their sustainability.

  Policies:
  - Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial’

  - Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;
• Assert and articulate the interests of the state as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;

• Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and

• Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.

Discussion:
Agriculture is already a "HRStatute and HARule allowed" use on the Property. The Petitioned rezoning will bring its use into conformance with its zoning. No new use is contemplated nor is likely.

The County of Hawaii reviewed a requested Determination regarding the Petitioner(s) agricultural use of the Property. The County issued a letter of Determination that the agricultural use of the Property was SMA exempt, ref. exhibited County letter.

Potential Impacts and Mitigation Measures
No new use or further development of the Property is contemplated, therefore there will be no new impacts and no mitigation measures are planned, however if the Petition is allowed a buffer zone will be provided that will reduce the intensity of agricultural use of the Property.

Agencies and parties consulted.....
• **DLNR consultation/comments..........**

In late December of 2016 the Petitioner(s) advised the DLNR by letter that they intended to Petition the LUC to rezone the Property from the State Conservation District to the State Agricultural District inviting the DLNR's comments and/or issue a supporting letter. The OCCL's Administrator, Sam Lemmo responded on January 27, 2017, ref., exhibit 5, letter stating in part ........

"You have also suggested that in lieu of a discussion with the Board, the Department may issue a supporting letter for your petition to the Land Use Commission for a boundary amendment to take your properties out of the Conservation District and put them in the Agricultural District. We are unable to accommodate this request, as this would be inappropriate. However if the Land Use Commission wished to seek our input on this matter, we would be happy to respond to any inquiry from them."

Furthermore the letter stated that it would not accommodate the Petitioner(s) request that the matter be referred to the BLNR for consideration. **Unlike previous letters from the OCCL on the matter that letter was not copied to the Hawaii Board members nor the State or County Offices of Planning.**

• **County and State Offices of Planning comments..........**

In concert with the submission of LUC Petition A18 805 to the LUC in 2018 the Petitioner(s) also submitted a copy of same to the State and County Offices of Planning. Subsequently the Petitioner(s) also filed an amended motion to the LUC that the Offices of Planning accept an existing FONSI for a residence on the Property, which identified in some 40 places in it that the residence was intended, in part, to be used in support of the Petitioner(s) existing "HRStatute and HARule allowed" nonconforming agricultural use of the Property which agricultural use is also the subject of the Petition. Both the County and State Offices of Planning supported the subject motion to the LUC that it accept the
existing FONSI for the residence on the Property. The LUC determined however on
January 23rd, 2019 that it would be more appropriate that the Petition be supported by a
new draft EA that specifically identified that a Petition was filed with the LUC for the
re zoning.

The Petitioner(s) met with Jeff Darrow at the County office of Planning two times. Jeff
described that he was familiar with the Petition and did not raise any particular objections.
He offered an observation that it seemed to him that the, earlier referred to, Jan. 27th,
2017 letter from the DLNR, which is exhibited at the end of the end of the EA, seemingly
did recognize that the Petitioner(s) may use the Property for agricultural use.

The Petitioner(s) responded that the letter referred that the DLNR 'had previously
allowed' the nonconforming agricultural use of the Property. The Petitioner(s) described
to Jeff that the DLNR had very clearly obfusc ed dealing with the matter succinctly over
a period of 2 years of communications between the Petitioner(s) and the OCCL.

The Petitioner(s) had previously requested a clear "Determination" be issued that the
DLNR recognized that the Property qualified for nonconforming agricultural use according
to HAR 13-5-7's Nonconforming Use Rule and HAR 13-5-30's Permits, generally Rule.
They identified that they sought the "Determination" in order to secure their investments
in the Property's use for agriculture and uses incidental and accessory to the agricultural
use and self assure that they were not in violation of the DLNR's Rules as considerable
fines are regularly administered for violations of the DLNR's Rules. Furthermore the
Petitioner(s) pointed Jeff to the previous letter from the OCCL dated in the month of
December preceding the January letter that the OCCL stated in that letter.............

'The Office of Conservation and Coastal Lands (OCCL) is in receipt of your inquiry
regarding your non-conforming agricultural use. According to the information you
provided it appears that you have determined that your non-conforming
agricultural/horticultural use of 3.2 acres of your property has been accepted by the DLNR as an allowed land use.'

(emphasis added by the Petitioner(s))

At that point it was clear to the Petitioner(s) that the OCCL was not yet prepared to issue a clear "Determination" that the Property qualified for "HRStatute and HARule allowed" nonconforming agricultural use. Furthermore the Petitioner(s) identified to Jeff that the only "Determination" issued by the OCCL in such regard was that the Petitioner(s) were allowed to grow "sugar cane" which was never requested by them. The Petitioner(s) identified that they were highly suspicious of 'whatever the OCCL was up to'. The Petitioner(s) identified to Jeff that all of the OCCL letters that they had received up to that point were copied to the State and County Offices of Planning yet the final Jan. 27th, 2017 did not indicated in its c.c. section that it had been circulated beyond the "chair" of the DLNR.

The Petitioner(s) further described to Jeff the OCCL's obfuscation to their repeated requests over the two year preceeding period and the inconsistencies and confusion resulting from the OCCL's letters. The Petitioner(s) stated that they believed that their right to use their Property for agriculture would continue to remain uncertainly lawful. Their request that the matter be referred to the BLNR for clarity was also denied by the OCCL in the January letter.

The Petitioner(s) believed that their Property rights were being interfered with wrongfully. They saw no point to continue to seek certainty through the DLNR processes. The Petitioner(s) considered advancing the matter before a court of compitent jurisdiction with a various claims including a claim of inverse condemnation or pursue a Petition to the LUC to rezone the Property. The Petitioner(s) determined the Petition route ought to be explored first.
Jeff further described a similar property in the area where the owner, Steve Shopshire, had received a CDUP for agricultural use of his similar, former sugar cane property, rather than a nonconforming use Determination. The Petitioner(s) described to Jeff that a CDUP was not an option that they were prepared to consider.

Jeff then suggested that the Petitioner(s) may wish to consider requesting a "Determination" from the LUC that the Property qualified for nonconforming agricultural use. The Petitioner(s) said that they would take that suggestion into consideration.

Subsequently an examination of the LUC rules clearly describe that............

15-15-26 Permissible uses within the "C" conservation district. Uses of land within a conservation district shall be governed by the rules of the state department of land and natural resources, title 13, and chapter 183C, HRS

Therefore the Petitioner(s) decided that the LUC did not have the authority to make the Determination. Furthermore the Petitioner(s) had already submitted the Petition to the LUC.

- Subsequently the Petitioner(s) met with DISTRICT 1 - Valerie T. Poindexter, councilor for a Portion of South Hilo, North Hilo, Hāmākua, and Portion of Waimea, County of Hawaii at her office.

Ms. Poindexter is the councilor for the District in which the Property is located. Ms. Poindexter indicated that she was aware that the Petitioner(s) had submitted a Petition to the LUC and copied the County and was aware of the Petition's general purpose. During the one hr. meeting she did not voice any particular concerns but voiced support for agricultural land use stating that she was a strong supporter of self sufficient agricultural use of lands in Hawaii whether for personal or commercial use.

- Comments by other lot owners in the 7 lot subdivision in which the Property is
During the summer of 2018 the Petitioner(s) met with the members of the 7 lot subdivision properties where the Property is located (the Petitioner(s) own 2 lots and another party own 2 lots). All of the lot owners were in attendance at the meeting (one was by conference call). The Petitioner(s) described that they were in the process of petitioning the LUC to re-zone the Property from the State's Conservation District to the State's Agricultural District. The Petitioner(s) described that no new land use was intended and that they believed that the rezoning would simply bring the Property's use into consistency with its zoning. The lot owners had a short discussion in this regard during the meeting.

The Petitioner(s) asked if the other lot owners had seen the various orchard and field crops which had been planted on the Property. All acknowledged that they were aware. The Petitioner(s) also described to them that the Petitioner(s) had identified that HAR 13-5-7 described that they believed that they may use the Property for nonconforming agriculture. The Petitioner(s) invited comments. No questions or comments were raised by the other lot owners. The Petitioner(s) closed the discussion by advising the lot owners that should any of them have any questions or concerns they may contact the Petitioner(s) and also described to them that eventually the Petition would be posted on the LUC web site which would also provide a conduit for input if they wished to not discuss it directly with us. The Petitioner(s) are not aware that any of the property owners have contacted the LUC's administrative office.

- **Official State and County Land Use mailing list..........**

In late 2018 the Petitioner(s) mailed an Official Notice of Petition filing to the 250 names on the list. The only feedback that the Petitioner(s) got resulting from that Notice was a letter from a local resident, who lives directly mauka of Hilo, who wrote a letter inquiring why we sent her the Notice? Subsequently we responded to her explaining that her name was on the mailing list. She did not state any objection to the land being re-zoned from the
State's Conservation District to the State's Agricultural District.

- **Telephone discussion with Tom Eisen of the Hawaii Office of Environmental Quality Control.**

On January 28th, 2019 the Petitioner(s) telephoned the Hawaii Office of Environmental Quality Control and spoke with Mr. Eisen. The Petitioner(s) canvassed him for advice regarding what parties would he suggest that we contact regarding our planned draft EA filing. He stated that he recalled our EA-FONSI for our residence on the Property which we reminded him described in some 40 places that the residence was intended to be used in support of their agricultural use of the Property. The Petitioner(s) described to him that there also existed a FONSI dating from a period around 2004-5 for a similar petition to the Petition to the LUC that the Property and one other lot in the 7 lot subdivision be rezoned from the State's Conservation District to the State Agricultural District. That EA and FONSI was effectively submitted by the prior property owners, Jim and Francine McCully in support of LUC petition A05 757.

The Petitioner(s) described to Mr. Eisen that they would like to refer to these existing FONSI's as being directly relevant to our Petition and also described that they would like to refer to these FONSI(s) by reference without directly copying their hundreds of pages of text and exhibits and submitting same as exhibits with our hard copies of the EA. He advised that would be acceptable (actually preferred) to/by his department but he aslo advised that a final acceptance of that format of presentation would be up to the LUC.

Links to the electronic versions of the previous two EA/FONSI(s) are as follows............


Electronic versions of these two documents can also be found on the CD disc. supplied with this EA.

The Petitioner(s) also described to Mr. Eisen that they were already using the Property for agriculture and that they believed that it was an "HRStatute and HARule allowed" specifically according to HAR 13-5-7's Nonconforming Use Rule. The Petitioner(s) explained that it seemed a little odd to seek a FONSI for an existing land use and that the Petitioner(s) were now simply seeking to have the Property rezoned into the agricultural district in order to bring the zoning into alignment with its existing use. The Petitioner(s) asked Tom what parties they ought to pre-consult with before submitting the draft EA to the LUC?

Tom advised that the above listed contacts would probably be sufficient, particularly if the Petitioner(s) referenced the existing McCully FONSI and the Petitioner(s) subsequent FONSI for a residence on the Property which included comment sections by various authorities.

**Exhibit list**

- exhibit 1 - transcript LUC proceedings petition A05 757
- exhibit 2 - 2005 FONSI link - (no hard copy provided)
- exhibit 3 - 2016 FONSI link - (no hard copy provided)
- exhibit 4 - County SMA letter
- exhibit 5 - DLNR letter
- exhibit 6 - State Auditor General's report to the Governor
- exhibit 7 - OCCL letter
- exhibit 8 - LUC Ninole boundary interpretation
- exhibit 9 - Dr. Kwong letter
- exhibit 10 - Botanical report 2014
exhibit 11 - ALISH map
exhibit 12 - John Cross letter
exhibit 13 - ALISH definition of Prime Agricultural Land
exhibit 14 - TMK map
No exhibit 15
exhibit 16 - Quadrangle map
exhibit 17 - BLNR meeting minutes - nonconforming use is Statute Allowed
exhibit 18 - County General Plan - Open zone
exhibit 19 - LUPAG map
exhibit 20 - pictures of view towards the Property from the coastal highway
exhibit 21 - picture of 1905 historic cane field map showing a close up of the area of the Property and the date of the map
exhibit 22 - pictures
exhibit 23 - request for a Determination
exhibit 24 - Archaeological and Cultural Assessment
LAND USE COMMISSION
STATE OF HAWAI'I

HEARING

A05-757 JAMES W. McCULLY and FRANCINE M. McCULLY (Hawaii)

TRANSCRIPT OF PROCEEDINGS

The above-entitled matter came on for a public hearing at
the Waikoloa Beach Marriott, 69-275 Waikoloa Drive,
Waikoloa, Hawaii, commencing at 8:35 a.m. on Friday, August
12, 2005.

REPORTED BY: HOLLY M. HACKETT, RPR, CSR #130
Certified Shorthand Reporter

RALPH ROSENBERG COURT REPORTERS, INC.
Tel: 808-524-2090  Fax: 808-524-2596
APPEARANCES

COMMISSIONERS:
THOMAS CONTRADES
MICHAEL FORMBY
KYONG-SU IM
LISA JUDGE
DUANE KANUHA
STEVEN LEE MONTGOMERY
RANDY PILTZ
RANDALL SAKUMOTO (Chairperson)

EXECUTIVE OFFICER:  ANTHONY CHING
CHIEF CLERK:  SANDRA MATSUSHIMA
STAFF PLANNERS:  MAXWELL ROGERS

DEPUTY ATTORNEY GENERAL:  DIANE ERICKSON
AUDIO TECHNICIAN:  WALTER MENCHING

A05-757 JAMES W. McCULLY and FRANCINE M. McCULLY

For the Petitioner:  R. BENJAMIN TSUKAZAKI, ESQ.
                      JAMES McCULLY

For the County:  BOBBY-JEAN LEITHEAD-TODD, ESQ.
                        Deputy Corporation Counsel
                        NORMAN HAYASHI, Planning Dept.

For the State of Hawaii:  JOHN CHANG
                        Deputy Attorney General
                        LAURA THIELEN, ABE MITSUDA,
                        LORENE MAKI Office of Planning

RALPH ROSENBERG COURT REPORTERS, INC.
Tel: 808-524-2090  Fax: 808-524-2596
## INDEX

**DOCKET WITNESSES**

<table>
<thead>
<tr>
<th>Witness</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORMAN HAYASHI</td>
<td>Direct Examination by Ms. Leithead-Todd</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Redirect Examination by Ms. Leithead-Todd</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Cross-Examination by Mr. Tsukazaki</td>
<td>27</td>
</tr>
</tbody>
</table>
August 12, 2005

A05-757 James W. McCully and Francine M. McCully

CHAIRPERSON SAKUMOTO: Good morning. I'd like to call the meeting of the Land Use Commission to order. This is a continuation of the hearing on Docket No. A05-757 James W. McCully and Francine M. McCully to consider the reclassification of approximately 4.6 acres of land currently in the Conservation District to the Agricultural District at Wailea, South Hilo, Island of Hawaii to consolidate and resubdivide the three existing legal lots of record and the contiguous former railroad right-of-way into three lots in order to provide a more useful lot configuration.

Yesterday where we left off I believe, Mr. Kudo was still -- I'm sorry, too many Bens -- Mr. Tsukazaki was in the process of putting on his case in chief.

MR. TSUKAZAKI: No problem, Mr. Chairman. Just don't call me "Matsubara". (Laughter) It's just he's a lot older than I am. Actually we moved on beyond our direct case, Mr. Chair. And I believe we went to the Office of Planning's case. So at this point I believe the ball is in either OP's or County's hands.

CHAIRPERSON SAKUMOTO: Thank you, very much. Yesterday the County allowed the State to put on a witness out of order. So at this time I'll ask Ms. Leithead-Todd if she has any witnesses to put on.

RALPH ROSENBERG COURT REPORTERS, INC.
Tel: 808-524-2090 Fax: 808-524-2596
MS. LEITHEAD-TODD: Yes we do. We have Norman Hayashi of our Planning Department.

CHAIRPERSON SAKUMOTO: May I swear you in please.

NORMAN HAYASHI
called as a witness at the instance of County, being
first duly sworn to tell the truth, was examined and
testified as follows:

DIRECT EXAMINATION

BY MS. LEITHEAD-TODD:

Q. Mr. Hayashi, could you please state your full name and your position with the county of Hawaii.

A. I'm Norman K. Hayashi and I'm a planner with the County of Hawaii Planning Department.

Q. How long have you worked with the county Planning Department?

A. Too long. (Laughter). Strike that. About 35 years.

Q. So when did you first start with the county?

A. I started in January of 1969.

Q. So you were a county employee when the first General Plan was adopted?

A. Yes.

Q. Did you work on that?

A. Yes. I was one of the planners assigned to assist in the drafting of the General Plan.

Q. Have you worked on the -- that would have been the

RALPH ROSENBERG COURT REPORTERS, INC.
Tel: 808-524-2090 Fax: 808-524-2596
1971 General Plan. Did you also work on the 1989 General Plan?

A. Yes. The 1989 General Plan was done under my supervision.

Q. What about the one that was recently adopted in February of 2005?

A. I was also actively involved in the drafting of the current General Plan.

Q. In your career with the Planning Department were you the planning director at one point in time?

A. Yes. I was the Planning Director back in during 1990 to 1992.

Q. Okay. During your tenure with the Planning Department have you become familiar with both the County's General Plans, its zoning ordinances and subdivision codes?

A. Yes. I'm quite familiar with the codes.

Q. Okay. Could you explain a little bit about the County General Plan designations of open and conservation and we'll go to the zoning later?

A. First of all maybe a brief history as to how this area was designated open. Back in 1991 when we initially had done the General Plan, drafted the General Plan --

Q. In 1971?

A. In 1971. And that was our first comprehensive General Plan. It was both a policy document as well as a map form. The map was a component of the General Plan.
Now, at that time we decided to place the lands, many of the lands along the shoreline or coastline and designate a strip of those areas open would be a band of open designation for those areas that were not urban in nature.

This particular property was one of those areas. At that time we did not necessarily designate -- the open designation did not necessarily coincide with the state land use Conservation District line.

However, back in 2005 when we started the review of the 2005 General Plan there was a policy decision to designate a majority of the lands within the state land use Conservation District into the County's General Plan conservation area or an open area.

For this particular area the open designation was still retained. We do have also areas such as that are basically areas for preservation like areas mauka of the Kealakekua Bay which is designates Conservation District. And we designated those areas as conservation on our General Plan. So there are two categories, conservation and open.

The Conservation District in our General Plan is conservation in the true sense of the word. These areas are areas of natural reserves or watershed areas, areas of preservation. Those areas are designated conservation on the General Plan.

Other areas along the Hamakua Coast and along the
shoreline we just designated areas open. These areas are basically for recreational purposes or areas that are basically shoreline properties.

Now, as far as the county's open designation, the General Plan open designation, we do allow agricultural lands or agricultural uses. That is one of the policies of the General Plan. The General Plan in the policy states agricultural uses may be permitted within the areas designated open.

So in this particular case the current designation of the land zoned designation which is agricultural 20 acres and the proposed use of the property for agricultural purposes would be consistent with the county's open designation on the General Plan.

Q. Okay. Thank you. You anticipated my next question about the consistency. Were you also involved with the 1979 Northeast Hawaii Community Plan?

A. I was in the office at that time. I was not directly involved with the drafting of the plan. Those were done by our planning consultants at that time Hiroshi Kazumoto and Philip Yoshimura.

Q. I just wanted to confirm that that was adopted by ordinance?

A. Yes. That was adopted by ordinance by the county council in 1979.

Q. Zoning for the property, how far back would the ag
zoning to your knowledge go?

A. The ag zoning for this area and other properties along the Hamakua Coast that were in sugar production were designated, zoned agricultural 20 acres since 1968.

Q. In terms of the county process for farm dwellings is there a process if you're on ag land to be able to build a house?

A. Yes. We do inform the person that comes in for building permit that they need to comply with the farm dwelling requirement as stated in Chapter 205, the State Land Use Law.

Q. And do they have to sign a farm dwelling agreement?

A. No, they don't have to sign a farm dwelling agreement. We just make them aware that there is this requirement.

Q. Now, before somebody can get a second dwelling do they have to come in and show an actual agricultural activity?

A. That is correct. That's where they would be required to submit a farm dwelling agreement application. And with that they would have to show justification that the land is or will be used for agricultural purposes.

Q. Now, if a lot preexists 1976 do they have a right to build the farm dwelling?

A. That's correct.

Q. Or a single-family residence?

A. Yes, that's correct. That's based on state law.

Q. So if these were preexisting lots that existed prior to 1976, under state law as well as the Hawaii County Code there
would be a right to do a single-family residence if this had been just ag lands?

A. That's our understanding, correct.

Q. You've had an opportunity to take a look at some of the review and comments by the staff and staff report?

A. Yes, I have.

Q. Is there anything you'd like to add to that or respond to?

A. I think all of the concerns that are expressed by the staff and the staff's report has been covered and discussed in the application as well as in our testimony, as well as State's testimony and by the previous speakers yesterday.

Q. And the county's General Plan has several sections in it that speak to promoting agriculture and diversified agriculture?

A. Yes. We do have that agricultural element in our General Plan.

MS. LEITHEAD-TODD: I have no other questions but reserve the right to redirect.

CHAIRPERSON SAKUMOTO: Thank you. State, do you have any questions for Mr. Hayashi?

MR. CHANG: State has no questions.

CHAIRPERSON SAKUMOTO: Petitioner?

MR. TSUKAZAKI: No questions.

CHAIRPERSON SAKUMOTO: Commissioners, any questions
for Mr. Hayashi? Commissioner Formby.

COMMISSIONER FORMBY: Norman, thank you for your
testimony today.

THE WITNESS: You're welcome.

COMMISSIONER FORMBY: Just as an education to me,
drawing upon your experience with respect to a parcel like parcel
13 that the Petitioner originally purchased, I think that was
13 acres, in order for him to be able to subsequently sell off
the 4 parcels did he have to come back to the county and get some
sort of approval to be able to subdivide and sell off individual
parcels or even to be able to just sell them?

THE WITNESS: He had to come in and we had to
recognize that as preexisting lots. After that the lots were
created, reestablished and they were able to sell those 4 lots.
Yeah, 4 lots.

COMMISSIONER FORMBY: Okay. As it stands right now
there's nothing that is inconsistent between the county's
diversified agricultural goals and open zoning, correct?

THE WITNESS: That's correct.

COMMISSIONER FORMBY: Thank you.

CHAIRPERSON SAKUMOTO: Commissioner Montgomery.

COMMISSIONER MONTGOMERY: Mr. Hayashi, when you
arrived at the planning agency at the dawn of the 1970s did you
have a chance to talk with the human beings who were involved in
the first redistricting or districting under the State Land Use
Law of this green belt along the Hamakua Coast?

THE WITNESS: There may have been some discussions but I can't recall. We worked closely with the Land Use Commission back in that time also.

COMMISSIONER MONTGOMERY: I remember there was like Ramon Duran and others. I'm trying to get at what the philosophy was, what planning theory was opined on this section of the coast. Because it looks like for several hundred feet in all along there's some kind of master plan that would include some scenic easement.

Are you aware of any records we could look at to see what the thinking was?

THE WITNESS: I don't think of any records that are available for your viewing. If there are any they should be with the Land Use Commission's office.

But I think the intent was basically to, like the county, was to designate these shoreline areas or coastal areas for some kind of open type of designation for preservation of the shoreline. I don't know why the Conservation District extended beyond the shoreline area.

COMMISSIONER MONTGOMERY: Thank you.

CHAIRPERSON SAKUMOTO: Commissioner Kanuha.

COMMISSIONER KANUHA: Norman, the General Plan open designation and the conservation designation, were those always designations on the General Plan maps?
THE WITNESS: Yes. Those two designations were from
from its inception back in 1971.

COMMISSIONER KANUHA: So can you explain what the
differences are? Why a piece of property would be placed under a
conservation designation versus being in an open designation?

THE WITNESS: If I may refer to our General Plan. The
conservation area on our General Plan or designation relates to
areas -- I'm going to read from that. "Forests and water
reserves, natural and scientific reserves, areas in active
management for conservation purposes, areas to be kept in largely
natural state. And also lands within the State Land Use
Conservation District in certain areas." So that's what the
definition of conservation is in our General Plan.

As far as the open designation basically relates to
parks and other recreational areas. Like state parks are
designated open recreational areas. We have historic sites of
lands that are for historic preservation certain areas along the
shoreline. For instance, we have a site in Ku'emanu heiau in
North Kona close to the Keauhou Beach Hotel. That area is
designated open.

Other areas like this particular area along the
Hamakua Coast which is basically to delineate the shoreline areas
or coastal areas. Those areas are designated open.

COMMISSIONER KANUHA: Thank you. Thank you. That was
very good. In your opinion which of the two designations is the
more restrictive in terms of uses?

THE WITNESS:  I think, well, the Conservation District

commission designation definitely more restrictively.

COMMISSIONER KANUHA:  Thank you.

CHAIRPERSON SAKUMOTO:  Commissioner Piltz.

COMMISSIONER PILTZ:  Could you tell me what the

building requirements are or the differences as far as what you

can build on state conservation versus what the county allows to

have built on open.

THE WITNESS:  You're saying as to whether they can

build farm dwellings on farm?

COMMISSIONER PILTZ:  Farm or any type of structure as

fas as the county's open designation.

THE WITNESS:  Okay.  We have to understand that

although this land is designated open on the General Plan, the

county's designation is agriculture 20 acres.  So they can do

agricultural use.  They can have agricultural related structures

like the surround shades, that kind of stuff.

They can also have farm dwellings or in this

particular case because these lands are preexisting prior to 1976

they can have single-family dwellings on it.

The process is normally they would just come in for a

building permit with our office, I mean with the Department of

Public Works, county Department of Public Works.  The permit

would be routed through the various governmental agencies

RALPH ROSENBERG COURT REPORTERS, INC.
Tel: 808-524-2090  Fax: 808-524-2596
including the Planning Department. We would check to see whether
those uses are permitted. And we will sign off on the building
permit.

Now, as far as the state, areas designated state land
use Conservation District those plans would have to be approved
by the Department of Land and Natural Resources or the Board of
Land and Natural Resources depending on, I guess, the magnitude of
the project.

So there is the process they go if the lands is
designate in the Conservation District.

COMMISSIONER PILTZ: Thank you.

CHAIRPERSON SAKUMOTO: Commissioner Judge.

COMMISSIONER JUDGE: Thank you. Good morning, Norman.

THE WITNESS: Good morning.

COMMISSIONER JUDGE: If I understood correctly, the
open zoned designation in your County General Plan was used
mostly or in the 2005 the conservation was used mostly for
natural reserves, preservation property. And the open was
designated for recreational purposes also along the shoreline
property. And agricultural uses are allowed in the open
designation.

On the maps I noticed a lot of the shoreline in this
area because it's the Hilo Coast or the Hamakua Coast, a lot of
it is designated conservation. I'm guessing you stated was in
that open designation?
THE WITNESS: These areas have General Plan open.

COMMISSIONER JUDGE: Okay. I'm just trying to understand are there other homes and agricultural pursuits going on in that area in the open designated Conservation District?

THE WITNESS: Yes. There are other agricultural pursuits or uses conducted within these areas along the Hamakua Coast. There are some single family dwellings also situated within these areas designated open on the General Plan.

But be mindful the land is still zoned agriculture, is zoned agriculture 20 acres by the county.

COMMISSIONER JUDGE: Is it in the state Conservation District along the shoreline? I'm just trying to establish are there other people in a similar -- is diversified ag going on because it's allowed in the open, it's allowed in the county ag zoning and did they get CDUA's for it?

THE WITNESS: That I'm not aware as to whether they have received CDUA. They may or may not be. I'm not too sure as to whether these structures or homes are within the Conservation District, State Land Use Conservation District. But I know there are agricultural activities that are or were conducted in the past along this Hamakua Coast that are designated State Land Use Conservation.

COMMISSIONER JUDGE: To your knowledge right now you're not aware of any agricultural activities that exist in the state conservation/county open/ag zoned?
THE WITNESS: I believe there are lands that are being used for agricultural purposes. Whether there are any dwellings or structures within those areas designated conservation by the State Land Use Commission I'm not too sure.

COMMISSIONER JUDGE: Thank you.

CHAIRPERSON SAKUMOTO: Any other questions, Commissioners? Commissioner Im.

COMMISSIONER IM: You know, this land, the Petition Area has been divided. I'm wondering in the past most of it was, I understand, sugarcane plantation. So I imagine it was subdivided prior to Brewer taking over the property and running the sugar plantation.

How come it was subdivide into small lots if it was one big plantation?

THE WITNESS: I don't know the history of that as far as why those lots were created back in those days. But research was done by the Applicant to show that those lands were, there were preexisting lots within this given area which includes the four other lots. And that documentation was provided to our office. So we did recognize those as preexisting lots, a total of seven including some of the remnant or right of railroad reserves.

COMMISSIONER IM: Maybe you don't know but do you know when they were subdivided originally?

THE WITNESS: It would have to have been prior to 1946.
maybe. Because since 1946 we did have a subdivision code at that
time. So they would have had to comply with the various
subdivision requirements.

COMMISSIONER IM: Thank you.

CHAIRPERSON SAKUMOTO: Any other questions
Commissioners? Commissioner Formby.

COMMISSIONER FORMBY: Norman, in response to
Commissioner Im's question you said, I think, this is probably
not an exact quote but something to the effect that the Applicant
researched and showed that there were lots on parcel 13 which he
purchased as a whole.

How does that process work? In other words, he buys a
lot that's 13 acres. And then he files something with the county
to prove that there's a history showing that it was previously
parceled into lots?

THE WITNESS: That's correct. That's the general
procedure. They would be the ones responsible to verify that
those lots were preexisting.

COMMISSIONER FORMBY: But the applicant has to go back
and do the history, and bring the proof to the county the county
does some sort of verifying research, either grants or does not
grant it?

THE WITNESS: Yes, that's the general procedure.

COMMISSIONER FORMBY: So in this case, the Petitioner
in this case, the applicant back then, came to the County and was

RALPH ROSENBERG COURT REPORTERS, INC.
Tel: 808-524-2090  Fax: 808-524-2596
able to prove based upon his historical research that that
13-acre parcel was in fact seven lots.

THE WITNESS: That's correct.

COMMISSIONER FORMBY: Thank you. Ten lots, I guess, originally.

THE WITNESS: Yes. That includes the remnant portion the reserves, roadway reserves.

COMMISSIONER FORMBY: Thank you.

CHAIRPERSON SAKUMOTO: Commissioners, any other questions? Norman, I had one question. You said this is zoned agricultural 20 acres, the Petition Area, is that correct?

THE WITNESS: That's correct.

CHAIRPERSON SAKUMOTO: So I know this is an open ended question. What does that mean? If you can summarize what's agriculture 20 areas?

THE WITNESS: Generally within the County's Agricultural District we do have various designations. The agricultural 20-acre designation means that the minimum lot size within that area is 20 acres if you were to subdivide.

In this particular case we recognize, however, there's these three preexisting lots. So in that particular case they would be able to consolidate and resubdivide into the same number of lots.

Now, if this was vacant land which was 15 acres in size, no preexisting lots, then they would not be able to
subdivide the lot further unless they came through the zoning system. The minimum lot size is 20 acres.

CHAIRPERSON SAKUMOTO: How is it the lots were created in the first place if the Ag 20 designation was established? How did they get cut down into smaller than 20 acres?

THE WITNESS: Again, the lots, the preexisting lots were, well, they were preexisting prior to the adoption of the zoning code and the zoning designation for that area which was back in 1968. So those lots were already created or identified in these smaller size lots prior to 1968.

So these are basically considered to be non-conforming sized lots based on the current zoning, or zoning since 1968. And that applies to all the lands along the Hamakua. I think our zoning category for the Hamakua Coast was Agricultural 20 acres. We just took that number at that time.

CHAIRPERSON SAKUMOTO: So as a non-conforming lot can you tell me just generally what does that mean in terms of implications under zoning code or what you can do and what you can build?

THE WITNESS: Okay. If a lot is a non-conforming size it can exist. For instance, if you have a 1-acre lot within Agriculture 20 acres you can put a single-family dwelling or construct it if the lot was established prior to 1976. You can do agricultural activities. All of the uses within the Agricultural District would still have to apply, the types of

RALPH ROSENBERG COURT REPORTERS, INC.
Tel: 808-524-2090  Fax: 808-524-2596
uses. So you can't put in a commercial use or that kind of stuff. It has to be what's permitted under the county's Agricultural zoning.

CHAIRPERSON SAKUMOTO: So the only difference, then, is if I heard you correctly, that if the lots were ever consolidated to form a larger lot, they could not be then resubdivided to form more lots than three. All they can do is basically be resubdivided to form the same number of lots that were there before.

THE WITNESS: That's correct.

CHAIRPERSON SAKUMOTO: Otherwise it's indistinguishable from any other 20-acre lot in Ag 20.

THE WITNESS: Yes. And our code does allow for the consolidation of resubdivision into the same number of lots. And we waive the requirements like as long as there's no public health and safety welfare kind of problems. We allow them without the necessary water or roadway improvement conditions.

But say this particular lot, just to explain a little bit more, if this lot was consolidated into 4 acres, and not resubdivided at the same time then -- say if Mr. McCully came in today to consolidate all 3 properties into a 4-acre lot. He cannot come back tomorrow and say that "I want to subdivide this into 3 other lots." Once it's consolidated then that lot, if they were to subdivide, has to meet the minimum requirement of 20 acres.
CHAIRPERSON SAKUMOTO: I see. So he would lose the non-conforming benefit in that sense once he forms this larger lot.

THE WITNESS: Yes.

CHAIRPERSON SAKUMOTO: I understood from the staff report this property is in the special management area, is that correct?

THE WITNESS: That's correct.

CHAIRPERSON SAKUMOTO: Does that have any implications with regards to the proposed project from the Planning Department's standpoint?

THE WITNESS: Yes? They would have to come in for a SMA, Special Management Area assessment. Basically a consolidation resubdivision actually would be exempt. So the director could say that this provision is exempt from the SMA requirement.

Or if he feels that there are some impacts then he may require a minor permit. A minor permit he would be able to condition certain things as part of the approval.

CHAIRPERSON SAKUMOTO: Is the construction of dwellings, farm dwellings, are those SMA minor permit matters? Or are they exempt from the SMA permit process?

THE WITNESS: Normally as far as a single-family dwelling or a farm dwelling that would be considered to be exempt. However, if there's a number of farm dwellings on a
particular lot then it would be considered part of a larger development. So we would require them to some in for a SMA major permit. That would have to be processed and approved by the Planning Commission through a hearing process.

CHAIRPERSON SAKUMOTO: Okay. The fact that the, well, I guess at the current time the lot is in Ag 20 under the County zoning code and the state Land Use Commission district.

But did I hear correctly it's still subject to the farm dwelling agreement procedures that the Planning Department has in place even if it's not in the state land use Agricultural District?

THE WITNESS: No.

CHAIRPERSON SAKUMOTO: So you don't ask them to sign the agreement?

THE WITNESS: No. Because if the land is in the Conservation District we leave it up to the board of DLNR or the Board of Natural and Land Resources. When that person gets approval, then they'll come for a building permit with us.

As fas as our Department is concerned all we say, note on the building permit, the land is in the Conservation District and we say it's not applicable as far as the County code requirements.

CHAIRPERSON SAKUMOTO: I see. So it's really only subjected to county agricultural restrictions then at this current time because it's exempt from the state land use
agricultural requirements since it's not in the state land use Agricultural District.

It's under the county zoning Ag 20. So whatever the requirements are by the county under that designation obviously are still applicable.

THE WITNESS: It's not applicable because the land is in the Conservation District. The Conservation District -- if the Land Board approves the permit for whatever they want to do, say if they want to build a greenhouse or single-family dwelling, we would just sign off on it.

CHAIRPERSON SAKUMOTO: That's right because the state has exclusive jurisdiction.

THE WITNESS: Yes. Correct. Except because the land is within the Special Management Area they need to get SMA permit approval from us first, either an exemption, a minor permit or a major permit, depending on the situation. And that's in accordance within state law.

CHAIRPERSON SAKUMOTO: Okay. Regardless of the state land use classification this SMA permit is still going to be, the SMA standards are still going to be applied.

THE WITNESS: Yes. Technically they cannot apply to the Land Board for a Conservation District permit until they get approval, clearance on the SMA.

CHAIRPERSON SAKUMOTO: Thank you.

COMMISSIONER KANUHA: One more question, Mr. Chair.
CHAIRPERSON SAKUMOTO: Yes.

COMMISSIONER KANUHA: Norman, so is there any force and effect, then, of the county's Ag 20 zoning within the Conservation District if, you know, the county doesn't have the authority to zone within the Conservation District?

THE WITNESS: Technically no, we don't have that jurisdiction.

COMMISSIONER KANUHA: Okay. Thank you.

CHAIRPERSON SAKUMOTO: Commissioners, any other questions? Commissioner Piltz.

COMMISSIONER PILTZ: In this particular case since conservation is at the shoreline and the property is set on a cliff area, would there be a shoreline certification required by your department?

THE WITNESS: We could require them to come in for a certified shoreline certificate before granting the consolidation resubdivision action.

COMMISSIONER PILTZ: Thank you.

CHAIRPERSON SAKUMOTO: Commissioners, any other questions? Ms. Leithead-Todd, any redirect?

MS. LEITHEAD-TODD: A couple. Mainly because there were some questions about how do you end up with all these preexisting lots.

REDIRECT EXAMINATION

BY MS. LEITHEAD-TODD:
Q. Norman, on this property there's a land grant and there's a royal patent grant. When would those date from?

A. I'm not too familiar with that.

Q. But they would probably be land grants and royal patent grants were granted not by the state of Hawaii. They were granted before Hawaii was a state, right?

A. That's my understanding, correct.

Q. So these would predate 1959. And many of these grants ran mauka/makai.

MS. LEITHEAD-TODD: Maybe -- do you mind if I take and show him the map so he can take a look at it?

Q. This is the boundary interpretation from 1992. This is figure 6 in the report that was the final environmental assessment that was filed. Just as a general principle, not this particular one, but just for general principles if you have a land grant, and in this case I'm looking at there's a grant to Na'ai. And then there's a -- actually there's two. Royal patent grant 1874 to Na'ai. And then there's a royal patent grant 803 to Na'ai. Then there was a grant a 7396 to the Wailea Milling Company.

So those grants alone back when they were granted would have created three separate lots, right? It's a general concept because those were created prior to statehood an they gave title to, I guess in this case, to Na'ai and then one to Wailea.
A. I really don't know the answer to your question. I can answer yes since you're asking me the question but I don't know the answer.

Q. Okay. Well, as a general concept then when you have an existing piece of property, and then it's subsequently bisected by something like a public highway or in this case you have the railroad that went across it.

On the map it says that railroad property was deeded to Hakalau Plantation. That would have cut the existing grants into separate pieces of property because the railroad lot was granted to somebody else.

Would that be a correct assessment?

A. I think we can make that assumption, yes.

MS. LEITHEAD-TODD: No further questions.

CHAIRPERSON SAKUMOTO: Any recross-examination, Mr. Tsukazaki?

RECCROSS-EXAMINATION

BY MR. TSUKAZAKI:

Q. I wanted to ask this question earlier. Mr. Hayashi, when you were testifying about the process of establishing preexisting lots, is that a very rare occurrence? Or would you say it's a common occurrence?

A. It's a common occurrence along the Hamakua Coast.

MR. TSUKAZAKI: Thank you.

CHAIRPERSON SAKUMOTO: State, did you have any
questions?

MR. CHANG: State has no questions.

CHAIRPERSON SAKUMOTO: If there's nothing further, thank you.

THE WITNESS: Thank you.

CHAIRPERSON SAKUMOTO: County, did you have any other witnesses you wished to call?

MS. LEITHEAD-TODD: No.

CHAIRPERSON SAKUMOTO: Mr. Tsukazaki, would you like to, I guess, respond to any of the testimony that we received yesterday and this morning?

MR. TSUKAZAKI: Yes. I have discussed this with my client. Again, based upon the record prior to this hearing and the Land Use Commission's order finding no significant impact in relation to the final environmental assessment, the parties did determine that from the parties' perspective there were no major issues in this docket. So that's why the parties went forward to develop a stipulated decision.

And, quite frankly, with the points, the concerns raised by this body yesterday, I believe that my client would benefit from having an opportunity to discuss with the parties how those kinds of concerns can be addressed.

So I think it's really appropriate at this time from our point of view to seek a continuance of a hearing. I might also say that we received some additional information from the
Office of Planning yesterday evening regarding some additional input from DLNR. And that's another reason why we would like an opportunity to regroup and study all of these issues and perhaps come back with some information to present to you the next hearing.

CHAIRPERSON SAKUMOTO: I think that would be appropriate. I guess a draft of the decision and order was prepared even prior to the hearing so there were a lot of facts that came out yesterday that would be obviously germane to the document. We would want to see it incorporated.

I think the other thing we talked about yesterday if we were going to continue the hearing we wanted to hear from somebody at DLNR. I think that's probably going to be the case. So I think your request is well taken. Any further comments?

MR. TSUKAZAKI: I don't have any at this time.

CHAIRPERSON SAKUMOTO: Yes, Mr. Chang?

MR. CHANG: We have not closed our evidentiary process because we understood you may want somebody. If you could be more specific as far as what you want so we can try to obtain the proper testimony for you.

CHAIRPERSON SAKUMOTO: I think the suggestion was made because we received testimony from Ms. Thielen about the process that the DLNR goes through in terms of, I guess, determining whether or not a particular piece of property should remain in the Conservation District or need not remain in the Conservation
District. And what I wanted to make sure is that we had evidence in the record, aside from just the direct testimony of the OP director, from somebody at DLNR who could provide us with that testimony in support.

It would also give us a chance to ask questions to somebody at DLNR about their processes as well. So, you know, the people who are involved with commenting on, for example, district boundary amendment applications, those types of personnel would be helpful.

I think only one person. But if that one person has the ability to respond to those types of issues that would be helpful.

MR. CHANG: Fine. We will try to obtain that type of witness for you.

CHAIRPERSON SAKUMOTO: Okay. And I acknowledge -- do you have question other witnesses for today?

MR. CHANG: No.

CHAIRPERSON SAKUMOTO: So at this point I would entertain a motion by the Commissioners to continue this hearing to the next date that we're on the Big Island.

COMMISSIONER JUDGE: So moved.

COMMISSIONER PILTZ: Second.

CHAIRPERSON SAKUMOTO: Motion by Commissioner Judge, seconded by Commissioner Piltz. All in favor say aye.

COMMISSIONES VOTING: Aye.
CHAIRPERSON SAKUMOTO: Opposed? Seeing none, this hearing is continued until our next meeting here on the Big Island. Thank you very much. We're adjourned for today. (Gavel)

(Proceedings adjourned at 9:20 a.m.)

--oo00oo--
CERTIFICATE

I, HOLLY HACKETT, R.P.R., C.S.R. in and for the State of Hawai'i, do hereby certify;

That I was acting as shorthand reporter in the foregoing LUC matter on the 12th day of August 2005.

That the proceedings were taken down in computerized machine shorthand by me and were thereafter reduced to print by me;

That the foregoing represents, to the best of my ability, a correct transcript of the proceedings had in the foregoing matter.

I further certify that I am not counsel for any of the parties hereto, nor in any way interested in the outcome of the cause named in the caption.

DATED: This 22 day of August 2005

Holly M. Hackett

HOLLY M. HACKETT, R.P.R., C.S.R. #130
Certified Shorthand Reporter
Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
235 S. Beretania Street, Room 702
Honolulu, Hawaii 96813-2437

Dear Ms. Salmonson:

Subject: Final Environmental Assessment (“FEA”)
James W. McCully & Francine M. McCully
State Land Use Boundary Amendment – Conservation to Agriculture
TMK No: (3) 2-9-003: 013, 029 and 060; Wailea, South Hilo, Island of Hawaii

The Land Use Commission (“LUC”) respectfully request the publication of the FEA for the subject project in the June 23, 2005 OEQC Environmental Notice.

We are filing the following as transmitted by Tsukazaki, Yeh & Moore:

1. OEQC Bulletin Publication Form
2. Project Summary Description
3. Two hard copies of the FEA
4. One disk containing a digital copy of the FEA
5. One disk containing digital copies of the Publication Form and Project Summary

Should you require clarification or further assistance in this matter, please contact Max Rogers of my staff at 587-3822.

Sincerely,

[signature]

ANTHONY J. H. CHING
Executive Officer

Enclosures

c: Michael W. Moore (w/o enclosures)
   Brian T. Nishimura (w/o enclosures)
Wailea, South Hilo, Hawaii

May, 2005

Prepared For:
JAMES WILLIAM McCULLY AND FRANCINE MORALES McCULLY
40 KAMEHAMEHA AVENUE
HILO, HAWAII 96720

Prepared By:
BRIAN T. NISHIMURA, PLANNING CONSULTANT
101 Aupuni Street
Suite 217
Hilo, Hawaii 96720-4221
TABLE OF CONTENTS

1. INTRODUCTION .......................................................................................................................... 1
   1.1 Purpose ................................................................................................................................. 1
   1.2 Identification of Applicant ................................................................................................... 1
   1.3 Identification of Approving Agency ..................................................................................... 1
   1.4 Technical Description ......................................................................................................... 1
   1.5 Project Background ............................................................................................................. 1
       1.5.1 Project Concept ............................................................................................................. 5
       1.5.2 Land Use Designations ................................................................................................. 5
       1.5.3 Listing of Permits and Approvals ................................................................................ 9
   1.6 Agency and Public Consultation .......................................................................................... 9

2. ENVIRONMENTAL SETTING .................................................................................................... 10
   2.1 Physical Environment .......................................................................................................... 10
       2.1.1 Geology and Hazards ................................................................................................. 10
       2.1.2 Soils ............................................................................................................................ 10
       2.1.3 Climate ....................................................................................................................... 11
       2.1.4 Hydrology and Drainage ............................................................................................. 11
       2.1.5 Water Quality ............................................................................................................. 14
       2.1.6 Flora and Fauna ......................................................................................................... 14
       2.1.7 Air Quality .................................................................................................................. 15
       2.1.8 Noise .......................................................................................................................... 16
       2.1.9 Scenic Resources ........................................................................................................ 16
   2.2 Social, Cultural and Economic Setting ............................................................................... 16
       2.2.1 Socio-Economic Characteristics .................................................................................. 16
       2.2.2 Adjacent Land Uses .................................................................................................... 17
   2.3 Public Facilities and Services ............................................................................................ 19
       2.3.1 Roads ........................................................................................................................ 19
       2.3.2 Water System .......................................................................................................... 19
       2.3.3 Protective Services .................................................................................................... 19
       2.3.4 Schools ...................................................................................................................... 19
       2.3.5 Power and Communication Systems .......................................................................... 20
       2.3.6 Wastewater .............................................................................................................. 20
       2.3.7 Solid Waste .............................................................................................................. 20
   2.4 Archaeology, Historic and Cultural Resources .................................................................... 20

3. SUMMARY OF POTENTIAL ADVERSE ENVIRONMENTAL IMPACTS AND PROPOSED
   MITIGATION MEASURES ......................................................................................................... 23
   3.1 Short Term Impacts .............................................................................................................. 23
   3.2 Long Term Impacts .............................................................................................................. 23

4. ALTERNATIVES ....................................................................................................................... 24
   4.1 Alternative Actions Considered .......................................................................................... 24

5. DETERMINATION, FINDINGS AND REASONS FOR SUPPORTING DETERMINATION ....... 25
   5.1 Significance Criteria .......................................................................................................... 25
   5.2 Findings ............................................................................................................................. 27
   5.3 Reasons Supporting Determination .................................................................................. 27

APPENDIX A – COMMENTS RECEIVED DURING THE PRE-ASSESSMENT CONSULTATION PERIOD

APPENDIX B - BOTANICAL SURVEY

APPENDIX C – ARCHAEOLOGICAL AND LIMITED CULTURAL ASSESSMENT

APPENDIX D – COMMENTS & RESPONSES RECEIVED DURING PUBLIC COMMENT PERIOD
1. Introduction

1.1 Purpose

James William McCully and Francine Morales McCully are the owners of approximately 4.6 acres of land situated within the State Land Use Conservation District at Wailea, South Hilo, Hawaii, Tax Map Key No.s: (3) 2-9-3: 13, 29 and 60. The subject property consists of three existing lots of record and a contiguous segment of a former railroad right-of-way running along the mauka (western) boundary of all three parcels. The owners plan to consolidate and resubdivide the three existing lots with the former railroad right-of-way and will seek to amend the district boundary classification from the Conservation district to the Agricultural district. The purpose of this Environmental Assessment is to comply with the requirements of Chapter 343, Hawaii Revised Statutes (HRS) which are triggered by the proposed boundary amendment involving the Conservation District.

1.2 Identification of Applicant

James William McCully and Francine Morales McCully are the owners of the subject property and are the petitioners for an amendment to the land use boundary from the Conservation district to the Agricultural district. The mailing address for the petitioners is 40 Kamehameha Avenue, Hilo, Hawaii 96720.

1.3 Identification of Approving Agency

In accordance with Chapter 343, HRS, the State Land Use Commission is the appropriate accepting authority of the Environmental Assessment.

1.4 Technical Description

The subject property is situated along the Hamakua Coast of the Island of Hawaii, approximately 14.7 miles north of the City of Hilo. (Please see the attached Figure 1- Location Map and Figure 2 - Tax Plat Map) Access to the property is provided by a 30’ wide road and utility easement which runs a distance of approximately 360 feet east from the Hawaii Belt Road. The property is bounded on the makai (east) side by the edge of the high pali (ranging between 100 to 140 feet above sea level) which is characteristic of the Hamakua coastline. The pali and the land to the high water mark belong to the State of Hawaii. The center of Puahanui Stream serves as the northern boundary and TMK: (3) 2-9-03: 1 is situated to the south. The property is bounded on the west by four parcels, TMK: (3) 2-9-03: 48, 49, 50 and 51.

The subject property is currently vacant and was previously utilized for sugar cane cultivation. The property has remained fallow since July, 1992 and is currently maintained as a grassed lawn with scattered sections of landscape plantings. (Please see the attached Figure 3 and Figure 4 - photos of the property) The former railroad right-of-way and the area previously utilized for sugar production are gently sloping towards the eastern end of the property and are well suited for uses allowed within the agricultural district. The high shorefront pali and the steep gulch sloping down to Puahanui Stream renders these areas virtually inaccessible from the subject property and there is no evidence of any public access or use on the property.
Figure 1. Project area location (portion of USGS 7.5 minute series Punaola and Papaikou quadrangles, HI).
Figure 3. Central portion of project area, view to the south.

Figure 4. Northern portion of project area, view to the east.
The Hawaii County Planning Department has determined that the three parcels and the contiguous right-of-way, consist of the following:

a. Parcel 13 – 0.662 acre + 0.356 acre = 1.018 acres
b. Parcel 29 – 2.192 acres + 0.637 acre = 2.829 acres
c. Parcel 60 – 0.544 acre + 0.219 acre = 0.763 acres

The petitioners intend to consolidate and resubdivide the three existing lots with the former railroad right-of-way to provide a more useful configuration for the three parcels. (Please see attached Figure 5 - Proposed Consolidation and Resubdivision Map) Upon completion, the proposed consolidation and resubdivision will result in the following change for each parcel:

a. Parcel 13 - 1.11 acres, an increase of .092 acre
b. Parcel 29 – 1.12 acres, a decrease of 1.709 acres
c. Parcel 60 – 2.37 acres, an increase of 1.607 acres

1.5 Project Background

1.5.1 Project Concept

The owners believe that the State Land Use Agricultural designation is appropriate in light of the historical use of the subject property for sugar cane production that spanned nearly a hundred years before being terminated by the closure of the Hilo Coast Processing Company. Moreover, the project area is similar to other properties in the immediate vicinity which are utilized for a variety of diversified agricultural activities including a certified orchid nursery, the propagation of foliage stock, cultivation of edible ginger and Chinese taro.

1.5.2 Land Use Designations

The subject property is situated within the State Land Use Conservation District. (Please see attached Figure 6 – State Land Use Boundary Interpretation Map) The County General Plan Land Use Pattern Allocation Guide Map (LUPAG) designation for the subject area is Open while the Northeast Hawaii Community Development Plan recommendation for the area is also Open. (Please see attached Figure 7 – General Plan LUPAG Map) The County zoning designation for the property is Agricultural (A-20a). The project area is situated within the County's Special Management Area (SMA).

The Northeast Hawaii Community Development Plan and the County General Plan LUPAG Map Open designation reflect the State Land Use Conservation District designation for the project area. In addition, the Open designation reflects the County of Hawaii policy advocating that open space along the shoreline should be protected. The subject property is not visible from the Hawaii Belt Road and therefore, such policy is not anticipated to be adversely affected by the proposed boundary amendment.
Figure 7 - Hawai‘i County
General Plan Land Use Pattern
Allocation Guide (LUPAG) Map
1.5.3 Listing of Permits and Approvals

Federal
None

State of Hawaii

Land Use Commission
Approval of Boundary Amendment
Department of Health
Approval of Individual Wastewater Systems

County of Hawaii

Planning Department
Approval of Consolidation/Resubdivision Application; and
Building Permit
Department of Public Works
Building Permit

1.6 Agency and Public Consultation

The following public and private organizations and individuals were consulted during the preparation of this environmental assessment:

United States Fish and Wildlife Services, Division of Ecological Services
State of Hawaii, Department of Land and Natural Resources, Historic Preservation Division
State of Hawaii, Dept. of Land and Natural Resources, Division of Forestry and Wildlife
State of Hawaii, Department of Health
State of Hawaii, Department of Transportation
State of Hawaii, Office of Hawaiian Affairs
State of Hawaii, Department of Hawaiian Home Lands
State of Hawaii, Department of Education
State of Hawaii, Department of Business, Economic Development & Tourism, Office of Planning
County of Hawaii, Planning Department
County of Hawaii, Department of Public Works
County of Hawaii, Department of Environmental Management
County of Hawaii, Department of Water Supply
County of Hawaii, Police Department
County of Hawaii, Fire Department
2. ENVIRONMENTAL SETTING

2.1 Physical Environment

2.1.1 Geology and Hazards

*Environmental Setting*

The project area is located on the lower eastern slopes of Mauna Kea and consists of the Hamakua volcanic series. These lava flows are chiefly basaltic with layers of Pahala ash. (Stems and Macdonald, 1946)

The Island of Hawaii is susceptible to four main types of natural hazards including tsunami, volcanism, seismic activity and hurricanes. Volcanic hazard as assessed by the United States Geological Survey is "8" on a scale of ascending risk 9 to 1. The zone "8" designation includes the lower slopes of Mauna Kea, most of which have not been affected by lava flows for the past 10,000 years. (Heliker 1990)

The Island of Hawaii is one of the most seismically active areas in the world and has experienced more than twenty large earthquakes (magnitude 6 or larger) over the past 166 years. (Wyss and Koyanagi, 1992) Magnitude 6 earthquakes can be expected to cause structural damage to non-reinforced buildings. The Building Code rating for the entire island of Hawaii is seismic Zone 4 which has the highest risk for seismic activity.

Two significant hurricanes have affected the Island of Hawaii over the past 50 years. Damage from hurricanes result from coastal wave/surge and high winds. The project site is not within a coastal hazard area for hurricanes or tsunami inundation. The hazards from hurricane winds are far more extensive and unpredictable than the water hazard. Winds may blow from variable directions and may be amplified by topographic conditions. (County of Hawaii, 2003)

Shoreline areas in Hawaii, particularly those on the northeast side exposed to the prevailing winds and heaviest wave attack, are subject to shoreline retreat. The rate of retreat in Hawaii has been estimated at an average rate of a couple of inches a year. (Macdonald and Abbott, 1977) Some locations may experience sudden and rapid retreat due to landslides which may be associated with sea cliff collapse.

*Potential Impacts and Mitigation Measures*

The proposed State Land Use Boundary amendment from Conservation to Agriculture will not expose the property owner(s) or the general public to any additional hazard risk that does not already exist for the entire Hamakua Coast. The property is not situated within a tsunami inundation or storm wave zone and the volcanic hazard risk is relatively low. The Hawaii County Building Code requires that all new structures be designed to resist forces to seismic Zone 4 standards. Additional building setbacks from the pali and the gulch may be considered to minimize the threat of shoreline retreat.

2.1.2 Soils

*Environmental Setting*
The soils of the project area are classified as Hilo silty clay loam with 0 to 10 percent slopes (HoC) by the U.S. Department of Agriculture Soil Conservation Service (SCS) Soil Survey. (U.S. Soil Conservation Service 1973) The Hilo soil series consists of well drained silty clay loams formed in a series of volcanic ash layers. The Agricultural Capability Subclass rating for this soil is IIIe, nonirrigated which includes soils having severe limitations that reduce the choice of plants and may require special conservation practices due to the risk of erosion.

Under the Agricultural Lands of Importance to the State of Hawaii (ALISH) classification system, there are four categories: prime, unique, other important agricultural lands and unrated. The subject property is designated prime agricultural lands under the ALISH system as are other similar property along the Hilo-Hamakua coast which were formerly utilized for sugar cane production. (Please see attached Figure 8 – Agricultural Lands of Importance to the State of Hawaii, ALISH Map)

The Land Study Bureau’s overall master productivity rating of the subject area for agricultural use is class C or Fair. (Land Study Bureau, 1965) (Please see attached Figure 9 – Detailed Land Classification Island of Hawaii, Map No. 605) The Land Study Bureau report assigned land in the State into one of five master productivity ratings: A – Very good; B – Good; C – Fair; D – Poor; and E – Very poor.

Potential Impacts and Mitigation Measures

The soils of the project area are suitable for agricultural use but may be susceptible to erosion. As such, careful conservation practices will be employed when conducting any land disturbing activities on the property. In addition, all construction activities will comply with the applicable requirements of the Department of Public Works.

2.1.3 Climate

Environmental Setting

Hawaii’s climate is generally characterized as mild with uniform temperatures, moderate humidity, and two identifiable seasons. The "summer" season, between May and October is generally warmer and drier. The "winter" season, between October and April is cooler and wetter. The project area is situated along the "windward" side of the Island of Hawaii which is exposed to northeasterly trade winds that cause relatively high rainfall (approximately 150 inches annually). The average monthly minimum temperature in this area of the Hamakua Coast ranges from the low to high 60s (degrees Fahrenheit) while the average monthly maximum temperature ranges from the high 70s to the high 80s. (University of Hawaii Press, 1983)

Potential Impacts

The climatic conditions of the project area will not have a significant impact on the proposed project.

2.1.4 Hydrology and Drainage

Environmental Setting
Figure 9 – Detailed Land Classification – Island of Hawaii, Map No. 605
The Island of Hawaii is generally characterized as having basal groundwater floating on salt water. The aquifer system underlying the project area has a sustainable yield of approximately 150 million gallons per day. (Hawaii Department of Water Supply, 1991)

According to the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency dated September 16, 1988, the project area is situated within Flood Zone "X" (areas determined to be outside the 500 year flood plain). The center of Puahanui Stream serves as the northern boundary of the project area and is encumbered with a watercourse easement.

Potential Impacts and Mitigation Measures

The proposed project is not anticipated to have any significant adverse impact on hydrology and drainage. Any potential impacts may be mitigated by complying with State and County regulations which stipulate that increases in runoff due to development of the project site must be disposed of on-site and may not be directed toward adjacent properties.

2.1.5 Water Quality

Environmental Setting

Puahanui Stream serves as the northern boundary of TMK (3) 2-9-03: 60 and the Pacific Ocean lies immediately below the high pali which serves as the eastern boundary of the subject property. Puahanui Stream appears to be an unnamed intermittent stream on U.S. Geological Survey Maps and was not included in the Hawaii Stream Assessment conducted from 1988-1990 which inventoried and assessed available information on Hawaii’s streams in four resource categories: aquatic resources, riparian resources, cultural resources and recreational resources.

The coastal waters fronting the subject property are classified “A” by the State of Hawaii. These waters are to be protected for recreational purposes and aesthetic enjoyment.

Potential Impacts

The proposed project is not expected to have any direct impact on Puahanui Stream or marine waters inasmuch as any additional runoff generated will be disposed of on site.

2.1.6 Flora and Fauna

Environmental Setting

The entire property, with the exception of the steep gulch leading to Puahanui Stream, has been extensively utilized for the growing of sugar cane for a period of approximately 100 years. The property has remained fallow since 1992 when the last sugar crop was harvested and has been maintained as a grassed lawn.

A botanical survey of the project site was conducted in June, 2004, by Evangeline J. Funk, Ph.D. Botanical Consultants. The botanical survey identified two vegetation types on the property which included the open mowed lawn and the stream bank vegetation. The open mowed lawn includes a mix of introduced grass. The seaward edge of the lawn area includes scattered planting of green hala trees and a variety of hala with green and yellow striped
leaves. The areas along the slopes of the pali were predominately introduced ironwood trees. A variety of landscape plantings also found in the lawn area include several species of palm trees, some bamboos, some kukui trees, golden pothos and banana type plantings. The stream bank vegetation included large introduced trees such as African tulip, ironwood, coconut, and hala as well as banana, oak leaf fern and sword fern.

In conclusion, the botanical survey report states the following:

“Aside from the Kukui and hala trees, which may be early Polynesian introductions, the only native plants found on this site were some popolo berry bushes (Solanum americanum Mill). Otherwise, the vegetation of this site is all introduced plants and is found in many places in the Hawaiian Islands and will quickly regenerate if it is disturbed.”

“No candidate, proposed, or listed threatened or endangered species as set forth in the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543) are known from this site and none were found during this survey.”

The complete botanical survey report for the project site is included as an addendum to this environmental assessment as Appendix B.

Although a faunal survey was not conducted, it is highly unlikely that any candidate, proposed, or listed threatened or endangered species would be found on the project site. This is due to the extensive agricultural use of the project site for sugar cane production for approximately 100 years. In addition, the State Department of Land and Natural Resources, Division of Forestry and Wildlife and the U.S. Department of Interior, Fish and Wildlife Service did not have any comments to offer regarding the proposed project.

Impacts

Based on the extensive prior disturbance of the project site, it is highly unlikely that any candidate, proposed, or listed threatened or endangered species as set forth in the Endangered Species Act of 1973, as amended are present on the subject property. As such, the proposed project will not have any significant impact on any protected or native plant or animal species.

2.1.7 Air Quality

Environmental Setting

The air quality of the subject area is affected by pollutants derived from the volcanic emissions from the ongoing Kilauea eruption. Other sources of air pollutants to a limited degree include vehicle exhaust emissions along the Hawaii Belt Road. In general, however, the ambient air quality of the project area meets all federal and state standards as evidenced by its designation as an "attainment" area by the State Department of Health, Clean Air Branch.

Potential Impacts and Mitigation Measures

Short term impacts may result from any construction activity involved with utilizing the subject parcels including dust and exhaust from machinery and vehicles. Ongoing
agricultural activity may generate similar long term impacts of dust and exhaust from machinery and vehicles. Given the temporary or intermittent nature of these activities, the potential impacts should be minimal. As such, the proposed action will not have a significant impact on the air quality of the surrounding area.

2.1.8 Noise

*Environmental Setting*

Ambient noise levels at the project site are low to moderate and are typical for a rural residential area near the ocean. The primary noise generators in the area are the wind, ocean waves, vehicles on the Hawaii Belt Road and vehicles entering the property.

*Potential Impacts and Mitigation Measures*

Temporary noise impacts will occur from any construction activity involved with utilizing the subject property and is unavoidable. Ongoing agricultural activity may generate similar long term noise impacts from machinery and vehicles working the property. These activities will likely result in marginal increase in noise levels and will not have a significant impact on the ambient noise levels in the area.

2.1.9 Scenic Resources

*Environmental Setting*

The predominant scenic views in the vicinity of the project area are of the Pacific Ocean, the high pali and the shoreline area. There are no views of the project area from the Hawaii Belt Road because the road is cut along an embankment in the vicinity of the property.

The subject property is situated between two sites, Kolekole Gulch and Hakalau Bay/Gulch, listed as examples of natural beauty in the Hawaii County General Plan. Hakalau Bay/Gulch is situated approximately 5,000 feet north of the subject property and Kolekole Gulch is situated approximately 1,200 feet south of the property.

*Potential Impacts*

The open space and scenic resources in the vicinity of the project area will not be adversely affected by the proposed State Land Use Boundary Amendment. The project area is not visible from the Hawaii Belt Road nor is it visible from Kolekole Gulch or Hakalau Bay/Gulch. As such, the project will have no impact on the sites listed as examples of natural beauty in the Hawaii County General Plan.

2.2 Social, Cultural and Economic Setting

2.2.1 Socio-Economic Characteristics

*Setting*

Hawaii County's population increased by more than 56,000 persons between 1980 and 2000. Between 1980 and 1990, Hawaii Island's population increased by 30.7 percent, and increased by 23.6 percent between 1990 and 2000. The April 1, 2000 population figure for Hawaii
County was 148,677 according to census figures compiled by the County of Hawaii, Department of Research and Development.

The South Hilo district had a population of 47,386 in 2000 which represented approximately 32 percent of the total population for Hawaii Island. The City of Hilo is the largest population center on the island with the main offices of the county government, branch offices of federal and state agencies located there. The island’s major deep draft harbor and international airport are also located in Hilo. In addition to industrial, commercial and social service activities, the University of Hawaii at Hilo and Hawaii Community College and affiliated research programs play an important role in Hilo's economy.

Hilo and the rest of the east Hawaii communities are adjusting to the loss of the sugar industry in the mid 1990's. The continuation of agriculture in the district has required a major shift from large scale single commodity production to smaller scale, multi-commodity multi-market base. The shift to diversified agriculture is characterized by larger numbers of self-employed and smaller scale independent businesses. As this socio-economic transition continues, there is an increasing demand for smaller scale agricultural parcels.

**Potential Impacts**

The proposed State Land Use Boundary amendment from Conservation to Agriculture will help address a small portion of the demand for this use. This particular section of the South Hilo district is undergoing a socio-economic transition due to the recent loss of the sugar industry and the proposed project is directly addressing a portion of the demand being generated by this change.

### 2.2.2 Adjacent Land Uses

**Existing Setting**

The areas immediately west (mauka) of the subject property are situated in the State Land Use Agricultural district. The areas immediately north, south, and east of the property are designated Conservation. (Please see attached Figure 10 – State Land Use District Boundaries Map) The parcels immediately adjacent to the project area have the same general characteristics of the subject property. Of the five adjoining parcels, three are currently vacant and two have been developed with single family dwellings. An orchid nursery business has also been established on Parcel 48 along with a single family dwelling.

The adjoining communities of Hakalau and Honomu include a mixture of agriculture, residential and limited commercial uses. The majority of the residences in these communities are remnants of the former sugar plantation camps. A number of newer homes have been constructed on parcels formerly utilized for sugar production.

**Potential Impacts and Mitigation Measures**

The proposed State Land Use Boundary amendment from Conservation to Agriculture will be consistent with the character of the parcels within the immediate vicinity of the project area. The proposed boundary amendment will also be consistent with the character of the neighboring Hakalau and Honomu communities.
2.3 Public Facilities and Services

2.3.1 Roads

Existing Setting

Hawaii Belt Road (Highway 19) is a state highway providing the major route for cross-island transportation. The state highway is situated approximately 360 feet west of the subject property. A 30 foot wide access and utility easement provides access to all three of the subject parcels. The easement is currently improved with a 12-foot wide pavement from the state highway down to the edge of the former railroad right-of-way.

Potential Impacts and Mitigation Measures

The additional traffic generated by the proposed boundary amendment and consolidation and resubdivision action will be minimal. As such, no significant impact on traffic or the highway system is anticipated.

2.3.2 Water System

Existing Setting

Water is available from an existing waterline constructed within the access and utility easement.

Potential Impacts

The proposed project will not have a significant adverse impact on the existing Department of Water Supply system serving the subject location.

2.3.3 Protective Services

Existing Setting

The closest fire and police stations to the subject property are the district stations situated in the community of Laupahoehoe approximately 9 miles northwest of the project site. The project area, however, is situated within the service area of the main police and fire stations located approximately 19 miles away in Hilo.

Potential Impacts

The proposed project will not have a substantial impact on the existing service providers.

2.3.4 Schools

Existing Setting

The project area is served by Kalanianaole School and Hilo High School. Kalanianaole School is located approximately 9 miles southeast and Hilo High School is located approximately 19 miles south of the project site.

Potential Impacts
The proposed project will not have a significant impact on the existing public school system. The State Department of Education has commented that, “The DOE only asks for a fair-share contribution from projects with 50 or more units. Therefore, the DOE will not be asking for a fair-share school condition.” The comment letter from the Department of Education is included in Appendix A.

2.3.5 Power and Communication Systems

Setting

The project area is served by Hawaii Electric Light Company and Verizon Hawaii through underground utility lines installed for the proposed project.

Potential Impacts

The proposed action will not have any significant adverse impact on the power and communication systems serving the region.

2.3.6 Wastewater

Setting

The project area is not within the service limits of the County wastewater disposal system. All wastewater generated will be disposed of through individual wastewater systems approved by the State Department of Health.

Potential Impacts

The proposed project will utilize individual wastewater systems in accordance with the requirements of the State Department of Health. As such, the proposed project will not have any significant adverse impact with regard to wastewater disposal.

2.3.7 Solid Waste

Setting

There is no municipal collection system for solid waste in the County of Hawaii. The County provides a solid waste transfer station near Honomu, approximately 1 mile from the project site.

Potential Impacts

The proposed action will not have any significant adverse impact regarding solid waste.

2.4 Archaeology, Historic and Cultural Resources

Setting

An archaeological assessment of the project site was conducted by Rechtman Consulting, LLC in July, 2004. The project area was systematically and intensively examined and one site (SIHP Site 50-10-26-24212) was discovered which included two historic-period railroad features.
These features were identified as a possible railroad grade section and a railroad trestle abutment. In summarizing their findings, the archaeological consultant states the following:

“Systematic survey of three parcels (TMK 3-2-9-03: 13, 29 60) produced no evidence of traditional Hawaiian remains or evidence that the area was currently being accessed for the exercise of traditional and customary practices.

“One historic era site-SIH Site 24212, was recorded. The site contains two features associated with the Hamakua Division of Hilo Railroad-Hawaii Consolidated Railway which were recorded in the northwestern portion of the project area. One is a possible section of railroad grade and the other is a railroad trestle abutment. The features were in active use by the railroad from 1911 to 1946. Their primary function was to facilitate the transport of raw sugar from the many mills along the Hilo and Hamakua Coasts to the harbor at Hilo Bay. In later years, they also served the secondary function of facilitating tourism.”

The archaeological consultant provided the following significance evaluation and treatment recommendations:

“Site 24212 is considered significant under Criteria D for the information it has yielded regarding early twentieth century sugar cane transportation infrastructure. As the current inventory survey project recorded Site 24212 in detail, however, no further work is recommended.

“In the unlikely event that archaeological resources are encountered during future development activities at TMK: 3-2-9-03: 13, 29, and 60, work in the immediate area of the discovery should be halted and DLNR-SHPD contacted as outlined in Hawaii Administrative Rules 13§13-275-12.”

By letter dated December 22, 2004, the Historic Preservation Division of the Department of Land and Natural Resources accepted and agreed with the archaeological consultant’s recommended treatment of Site 24212 and noted that the consultant’s report was adequate to meet the requirements of HAR §13-276. The report was accepted as final.

Rechtman Consulting, LLC also conducted a cultural assessment for the proposed project. Archival and documentary information was reviewed, including Mahele Land Awards and Grants and historic maps. This research did not reveal any documentation of any previous or ongoing traditional or customary practices. The area was historically known as Hilo-pali-Ku (Hilo of the upright cliffs) and there are a few accounts that indicate this area, which encompasses the sheer cliffs stretching along the Hamakua Coast from the Wailuku River to Waipi’o and beyond, once supported a large pre-contact Hawaiian population that subsisted on crops such as taro, sweet potato, banana, and coconut. Other agricultural resources such as ‘awa, bamboo and sugarcane were also cultivated on the kula lands that stretched from South Hilo to Hamakua. In the second half of the nineteenth century, the transportation difficulties that had delayed the large-scale commercial exploitation of the kula lands were overcome and sugarcane plantations replaced the subsistence agriculture and grazing as the dominant land use.

In order to identify cultural resources and potential traditional cultural practices associated with the project site and this portion of the Wailea ahupua’a, the consultant contacted Ululani Sherlock of the Office of Hawaiian Affairs (OHA) and Kepa Maly of Kumu Pono Associates in
June, 2004. Neither had any specific information relative to the project area. However, OHA suggested contacting the Laupahoehoe Hawaiian Civic Club. Lucille Chung and Walter Victor were contacted, and they, in turn, referred the consultant to Jack or Waichi Ouye, Yukio Takeya and Lorraine Mendoza, who were contacted in June and July, 2004.

The interviewees recalled that the railway used to run across the property until the Kolekole Bridge was destroyed by the tsunami of 1946. On the adjacent property to the south, there used to be a pig farm that was used by camp residents and a trail that accessed the shore. This trail allowed the residents and local fisherman access to the shoreline below the pali that bounds the property to the east. This trail was not located on the subject property nor did it cross the subject property.

The consultant summarized its findings regarding cultural resources as follows:

“None of the organizations or individuals that were contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the Petition Area; nor did they provide any information indicating past or current use of the area for traditional and customary practices. It is unlikely that there are any traditional or customary practices occurring in the Petition Area as the lands were utilized for sugarcane cultivation and associated transportation for over 100 years. Any traditional Hawaiian features that may have been associated with former cultural practices that may have occurred in the Petition Area would have been destroyed by the sugarcane cultivation and related uses.”

A complete copy of the Archaeological Inventory Survey and Limited Cultural Assessment of TMKs: 3-2-9-03: 13, 29, and 60 is provided as an addendum to this environmental assessment as Appendix C. The comment letter from the State Historic Preservation Division dated December 22, 2004 and a supplemental letter from the consultant Rechtman Consulting, LLC dated January 24, 2005 are also included in Appendix C.

Potential Impacts

There were no cultural or historic properties, other than Site 24212, identified in the project area. There were also no traditional or customary cultural practices found to be associated with the project area. The proposed project is therefore anticipated to have “no effect” on significant historic sites or traditional and customary cultural practices.
3. SUMMARY OF POTENTIAL ADVERSE ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION MEASURES

3.1 Short Term Impacts

Construction Activity

Impacts: Short term impacts will result from any construction activity involved with utilizing the subject parcels including increased noise levels, dust and exhaust from machinery.

Mitigation: Given the temporary or intermittent nature of these activities, the potential impacts from any construction activity should be minimal.

3.2 Long Term Impacts

Drainage:

Impacts: County requirements stipulate that, all development generated runoff be disposed on site and cannot be directed toward any adjacent properties.

Mitigation: The owner(s) of the parcels will be required to obtain the necessary permits to comply with all drainage requirements.

Agricultural Activity:

Impacts: Ongoing agricultural activity may generate long term impacts of increased noise levels, dust and exhaust from machinery and vehicles.

Mitigation: Given the intermittent nature of these activities, the potential impacts from ongoing agricultural activity should be minimal.
4. ALTERNATIVES

4.1 Alternative Actions Considered

The no action alternative would keep the property within the State Land Use Conservation district. Agricultural activities and landscaping may be permitted with a departmental permit. Other uses such as aquaculture or a single family residence may be allowed with a board permit. However, the owners believe that the State Land Use Agricultural designation is more appropriate in light of the historical use of the subject property for sugar cane production that spanned nearly a hundred years before being terminated by the closure of the Hilo Coast Processing Company. Moreover, the project area is similar to other properties in the immediate vicinity which are utilized for a variety of diversified agricultural activities including the petitioner’s own certified orchid nursery as well as the propagation of foliage stock, cultivation of edible ginger and Chinese taro. As such, the other alternatives of a boundary amendment to the Urban or Rural district were also deemed to be less appropriate.
5. DETERMINATION, FINDINGS AND REASONS FOR SUPPORTING DETERMINATION

5.1 Significance Criteria

According to the Department of Health Rules (11-200-12), an applicant or agency must determine whether an action may have a significant impact on the environment, including all phases of the project, its expected consequences both primary and secondary, its cumulative impact with other projects, and its short and long-term effects. In making the determination, the Rules establish "Significance Criteria" to be used as a basis for identifying whether significant environmental impact on the environment if it meets anyone of the following thirteen criteria.

1. **Involves an irrevocable commitment to loss or destruction of any natural or cultural resources.**

   The owners plan to consolidate and resubdivide the three existing lots with the former railroad right-of-way and will seek to amend the district boundary classification from the Conservation district to the Agricultural district. The subject property was previously utilized for sugar cane production for approximately 100 years and as such, the property does not contain any existing natural or cultural resources that will be destroyed or irrevocably lost by the proposed action.

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

   The proposed boundary amendment from the Conservation district to the Agricultural district will allow the property to be utilized in a manner consistent with the historical use of the property for much of the previous 100 years. As such, the approval of a State Land Use boundary amendment from the Conservation district to the Agricultural district will not curtail the range of beneficial uses of the environment.

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.**

   The proposed action is consistent with the Environmental Policies established in Chapter 344, HRS, and the National Environmental Policy Act.

4. **Substantially affects the economic or social welfare of the community or state.**

   The proposed action will have a positive impact on the economic and social welfare of the community. Hilo and the rest of the east Hawaii communities are adjusting to the loss of the sugar industry in the mid 1990's. The continuation of agriculture in the district has required a major shift from large scale single commodity production to smaller scale, multi-commodity multi-market base. The shift to diversified agriculture is characterized by larger numbers of self-employed and smaller scale independent businesses. As this socio-economic transition continues, there is an increasing demand for smaller scale agricultural parcels. The proposed State Land Use Boundary amendment from the Conservation district to the Agricultural district will help address a small portion of the
demand for this use. This particular section of the South Hilo district is undergoing a socio-economic transition due to the recent loss of the sugar industry and the proposed project is directly addressing a portion of the demand being generated by this change.

5. **Substantially affects public health.**

The proposed action will not have any substantial impact on public health. Potential noise, air, water and drainage impacts will be minimal and will be addressed by complying with federal, state and County requirements.

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

The proposed action will not involve any increase in the number of existing lots and will not generate any substantial secondary impacts. Rather, the proposed action will support and sustain the socio-economic transition that is occurring in the region.

7. **Involves a substantial degradation of environmental quality.**

The proposed boundary amendment will not result in a substantial degradation of environmental quality. The proposed project will be consistent with the character of the adjoining parcels as well as the neighboring Hakalau and Honomu communities.

8. **Is individually limited but cumulatively has considerable effect on the environment, or involves a commitment for larger actions.**

The proposed action will not involve any increase in the number of existing lots and will not generate any substantial secondary impacts. As such, the approval of the proposed project does not involve a commitment for larger actions and will not induce other actions having a cumulative effect on the environment.

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

The project site has been extensively disturbed by earthmoving equipment and does not have any candidate, proposed, or listed threatened or endangered species on the property. As such, the proposed action will not have any substantial adverse effect on any rare~threatened or endangered species or its habitat.

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

Short term impacts will result from the proposed action including increased noise levels, dust and exhaust from machinery involved in any construction on the property. Ongoing agricultural activity may generate similar long term impacts of increased noise levels, dust and exhaust from machinery and vehicles. Given the temporary or intermittent nature of these activities, the potential impacts from any construction or agricultural activity should be minimal.

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, freshwater, or coastal waters.**
The project site is not situated in an environmentally sensitive area such as a flood plain, tsunami zone, beach, geologically hazardous land, estuary, freshwater, or coastal waters. Shoreline areas in Hawaii, particularly those on the northeast side exposed to the prevailing winds and heaviest wave attack, are subject to shoreline retreat. The rate of retreat in Hawaii has been estimated at an average rate of a couple of inches a year. (Macdonald and Abbott, 1977) Some locations may experience sudden and rapid retreat due to landslides which may be associated with sea cliff collapse. Additional building setbacks from the pali and the gulch may be considered to minimize the threat of shoreline retreat.

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

The open space and scenic resources in the vicinity of the project area will not be adversely affected by the proposed action. The project area is not visible from the Hawaii Belt Road and the project will have no impact on the natural beauty of Kolekole Gulch and Hakalau Bay/Gulch which are identified as examples of natural beauty in the Hawaii County General Plan.

13. **Requires substantial energy consumption.**

The proposed project will not require substantial energy consumption,

5.2 **Findings**

Based on the foregoing information presented, it is determined that the proposed consolidation/resubdivision and State Land Use Boundary amendment from the Conservation district to the Agricultural district will not have a significant effect. As such, a determination of a Finding of No Significant Impact for the proposed action is appropriate.

5.3 **Reasons Supporting Determination**

The nature and scale of the proposed action is such that no significant environmental effects are anticipated. Potential impacts, if any, can be mitigated through compliance with all governmental requirements including those of the State Department of Health and the County Department of Public Works.
REFERENCES


APPENDIX A – COMMENTS MADE DURING THE PRE-ASSESSMENT CONSULTATION PERIOD

7. State of Hawaii, Department of Land and Natural Resources, Office of Conservation and Coastal Lands, June 15, 2004
9. County of Hawaii, Department of Public Works, Engineering Division, June 18, 2004
11. County of Hawaii, Fire Department, May 25, 2004
Mr. Brian T. Nishimura
Planning Consultant
101 Aupuni St. Suite 217
Hilo, Hawaii 96720-4221

Dear Mr. Nishimura:

Subject: Pre-Environmental Assessment Consultation, Mr. And Mrs. James W. McCully, Consolidation and Resubdivision of Existing Parcels TMK (3) 2-9-3: 13 Wailea, South Hilo, Island of Hawaii.

We appreciate the opportunity to comment on your subject request. DOFAW does not have comments to offer on your proposal and we will not need further consultation on this project.

Sincerely yours,

Michael G. Buck
Administrator
May 26, 2004

Mr. Brian T. Nishimura
Planning Consultant
101 Aupuni Street, Suite 217
Hilo, HI 96720-4221

Subject: Pre-Environmental Assessment Consultation
Mr. and Mrs. James W. McCully
Consolidation and Resubdivision of Existing Parcels
Wailea, South Hilo, Island of Hawaii
Tax Map Key: (3) 2-9-3:13

The Health Department found no environmental health concerns with regulatory implications in the submittals.

Sincerely,

[Signature]

Aaron A. Ueno
District Environmental Health Program Chief
Hawaii District

WORD:EA-McCully.my
June 29, 2004

Mr. Brian T. Nishimura  
Planning Consultant  
101 Aupuni Street, Suite 217  
Hilo, Hawaii 96720-4221

Dear Mr. Nishimura:

Subject: Mr. & Mrs. James McCully Subdivision  
Pre-Environmental Assessment Consultation  
TMK: (3) 2-9-3: 13 Wailea, South Hilo, Island of Hawaii

Thank you for the advance notice of the subject proposed consolidation and resubdivision of the affected land in the conservation land use district. We have the following comments at this time:

1. Only one access to and from Hawaii Belt Road will be permitted.

2. We understand that the project being proposed by the applicant may involve a CDUA permit or a land use district/zoning change. Whichever action is taken, an environmental assessment must be prepared. The applicant should include in the environmental assessment an assessment of the traffic impacts attributable to the project and any required mitigation measures, and improvements required at the project’s access to our roadway.

3. The applicant will be required to submit plans for construction work on the property, including the access driveway and intersection, for our review and approval.

We appreciate the opportunity to provide our comments.

Very truly yours,

RODNEY K. HARAGA  
Director of Transportation

c: Christopher J. Yuen, Hawaii Department of Planning  
Land Division, Department of Land and Natural Resources
June 3, 2004

Mr. Brian T. Nishimura  
Planning Consultant  
101 Aupuni Street, Suite 217  
Hilo, Hawaii 96720-4221

Dear Mr. Nishimura:

Subject: Pre-Environmental Assessment Consultation  
Mr. and Mrs. James W. McCully  
Consolidation and Subdivision of Existing Parcels  
Tax Map Key (3) 2-9-03: 13 Wailea, S. Hilo, Hawaii

Based on the description in your letter of May 20, 2004, the Department of Hawaiian Home Lands has no comments, and has no need for further consultation on the proposed project.

Aloha and Mahalo,

[Signature]
Nicah A. Kane, Chairman  
Hawaiian Homes Commission
May 27, 2004

Brian T. Nishimura, Planning Consultant
101 Aupuni Street, Suite 217
Hilo, HI 96720-4221

Subject: Pre-Assessment Consultation, Mr. and Mrs. James W. McCully,
Consolidation and Resubdivision of Existing Parcels, Wailea, South Hilo,
HI, TMK: (3) 2-9-03: Parcel 13

Dear Mr. Nishimura:

Thank you for your letter dated May 20, 2004 regarding the pre-assessment consultation regarding Mr. and Mrs. James W. McCully's proposed consolidation and resubdivision of existing parcels located at Wailea, South Hilo, HI, TMK: (3) 2-9-03: Parcel 13. Your letter requests that the Office of Hawaiian Affairs (OHA) review and comment on the proposed project.

The consultation letter notes that the subject property (4.6 acres) is located "14.7 miles north of the City of Hilo and includes a segment of a former right-of-way as well as three existing lots of record." The pre-assessment consultation letter notes that a Draft Environmental Assessment (EA) will be prepared for the proposed project, and that "require the approval of a Conservation District Use Application (CDUA) from the Department of Land and Natural Resources or a State Land Use Amendment from the Land Use Commission to change the land use designation from Conservation to Agricultural or Rural."

OHA looks forward to your Draft EA for the proposed project, which should clarify the project scope and define the project footprint more clearly, in accordance with HRS 6E-42 and 43 and their protections for prehistoric and burial sites. The Draft EA should include an archaeological inventory survey. Additionally, pursuant to Chapter 343, Hawaii Revised Statutes (HRS) and HAR §11-200-10, Contents of an Environmental Assessment, "the proposing agency or approving agency shall prepare any draft or final environmental assessment of each proposed action and determine whether the anticipated..."
effects constitute a significant effect in the context of chapter 343, HRS, and §11-200-12", the project developers should consult with individuals with expertise on Hawaiian issues in the project area and Island of Hawai‘i in general.

A cultural impact statement (CIS), as required by Act 50, Session Laws of 2000 (amending Section 343-2, HRS) should be prepared for the Draft EA. It should identify and describe the cultural resources located within the potentially affected area; assess the impact on these practices; examine alternatives to the proposed action; and propose mitigation measures. As noted above, the CIS should also include consultations with Native Hawaiian practitioners by the developers.

If you have questions or concerns please contact Matthew Myers, Policy Advocate at 594-1545 or matthewm@oha.org.

'O wau iho nō,

Clyde W. Nāmu‘o
Administrator
June 14, 2004

Mr. Brian T. Nishimura, Planning Consultant
101 Aspun Street, Room 217
Hilo, Hawaii 96720-4221

Dear Mr. Nishimura:

Subject: Pre-Environmental Assessment Consultation for the McCully Consolidation and Re-sub-division of Lots 2-9-5-13

Wailea, South Hilo, Island of Hawaii TMK: 2-9-5-13

The Department of Education (DOE) has reviewed your request for consultation on the consolidation and reconfiguration of three different lots including a railroad right-of-way. The total area is 4.6 acres. The proposal is to reconfigure the three lots. The expected density is no more than one single-family house per lot.

The DOE only asks for a fair-share contribution from projects with 50 or more units. Therefore, the DOE will not be asking for a fair-share school contribution.

Should you have any questions, please call Rae M. Loui, Assistant Superintendents of the Office of Business Services, at 586-3444 or Heidi Meeker of the Facilities and Support Services Branch at 733-4862.

Very truly yours,

Patricia Hanamoto
Superintendent

PH:jmh

c: R. Loui, OBS
Brian Nishimura
101 Aupuni Street, Suite 217
Hilo, Hawaii 96720-4221

Dear Mr. Nishimura,

SUBJECT: Proposed Consolidation and Re-subdivision of Subject Parcel, Located at Hakalau, South Hilo, Island of Hawaii, Tax Map Key: (3) 2-9-003: Parcel 13 (1.018 acre), Parcel 29 (2.829 acres), and Parcel 60 (0.763 acres)

The Department is in receipt of your attachments and letter, dated May 20, 2004, regarding your request to consolidate and re-subdivide three (3) subject parcels (identified as Tax Map Key (TMK): (3) 2-9-003:013, 29, 60), which is located in the State Land Use Conservation District, Resource subzone.

According to your information, you note that your client, James McCully, is proposing to consolidate and re-subdivide three (3) lots into three (3) lots, within the Conservation District, situated along the shoreline in Hakalau, South Hilo, Island of Hawaii, of the Conservation District on the subject parcel.

You note that the proposed re-consolidation and subdivision plan will not increase the density of the lots within the Conservation District, but will improve lot configuration. You are seeking the Department’s concurrence that the proposed consolidation and re-subdivision of the subject parcel is allowed under the rules and regulations of the Conservation District.

Departmental notes information received from the Hawaii County Planning Department indicate that currently subject parcel TMK: (3) 2-9-003 - Parcel 13 (1.018 acres), Parcel 29 (2.829 acres), and Parcel 60 (0.763 acres) are three separate legal lots of record.

The Department notes consolidation and subdivision is an identified land use under Hawaii Administrative Rules (HAR), Chapter 13-6, Section 13-5-22, identified land uses in the Protective subzone, P-11, SUBDIVISION OR CONSOLIDATION OF PROPERTY: C-1 notes "consolidation and re-subdivision into an equal number of lots that does not result in increased density;" and C-2 notes, "consolidation of property into an lesser number of legal lots of record currently existing and approved, which furthers the objective of the subzone. Consolidation followed by re-subdivision shall constitute a
subdivision." This is a Departmental Permit. When submitting your CDUA, please also include information regarding the history of the three legal lots of record.

Should you have any questions regarding this letter please call Dawn Hegger of the Office of Conservation and Coastal Lands at 587-0380.

Aloha

Samuel J. Lemno, Administrator
Office of Conservation and Coastal Lands

cc: Hawaii Land Agent
    County of Hawaii
    Planning Department
June 24, 2004

Mr. Brian Nishimura
Planning Consultant
101 Aupuni Street, Suite 217
Hilo, Hawaii 96713

Dear Mr. Nishimura:

Subject: Pre-Environmental Assessment Consultation

Mr. and Mrs. James W. McCully
Consolidation and Resubdivision of Existing Parcels
TMK: (3) 2-9-3: 13
Wailea, South Hilo, Hawaii

Thank you for your letter dated May 26, 2004, requesting our comments on a proposal to consolidate and resubdivide three existing lots with a former railroad right-of-way within the State Conservation District.

It is our understanding that your client is contemplating a State land use boundary amendment to the Agricultural or Rural District.

The natural resources in the area should be documented as well as existing uses along the coast. The proposed use of the three resubdivided lots should also be disclosed to allow meaningful comments.

Should you have any questions, please call the Land Use Division at 587-2842.

Sincerely,

Mary Lou Kobayashi
Administrator
Office of Planning

c: Anthony Ching, LUC
Peter Young, DLNR
June 18, 2004

Brian T. Nishimura, Planning Consultant
101 Aupuni Street, Suite 217
Hilo, Hawaii 96720-4221

SUBJECT: PRE-ENVIRONMENTAL ASSESSMENT CONSULTATION
Owners: Mr. & Mrs. James W. McCully
Consolidation and Resubdivision of Existing Parcels
Location: Wailea, South Hilo, Hawaii
TMIK: 2-9-03: 013, 029, & 060

We have reviewed the subject assessment forwarded by your letter dated May 20, 2004 and have the following comments.

The subject parcels are in an area that is not mapped by the Federal Emergency Management Agency (FEMA) and is designated as "minimal tsunami inundation."

The proposed consolidation and resubdivision shall comply with Chapter 23 of the Hawaii County Code.

Further notification or consultation on the proposed project will not be necessary.

Questions may be referred to Mr. Kelly Gomes of the Engineering Division at 961-8327.

For GALEN M. KUBA, Division Chief
Engineering Division

KG

County of Hawaii is an Equal Opportunity Provider and Employer
County of Hawaii
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
25 Anuea Street, Room 210 • Hilo, Hawaii 96720-4252
(808) 961-8083 • Fax (808) 961-4261

June 22, 2004

Mr. Brian T. Nishimura
Planning Consultant
101 Anuea Street, Suite 217
Hilo, HI 96720-42213

Re: Pre-Environmental Assessment Consultation
Mr. and Mrs. James W. McCully
Consolidation and Resubdivision of Existing Parcels
TMK: 2-3-313 Wailea, South Hilo

We have reviewed your letter of May 20, 2004 and have no comments to offer.

Thank you for the opportunity to review the Pre-Environmental Assessment.

Barbara Bell
DIRECTOR

cc: SWD, WWD 5693
May 25, 2004

Mr. Brian T. Nishimura
Planning Consultant
101 Aupuni Street, Suite 217
Hilo, HI 96720-4221

Dear Mr. Nishimura:

RE: PRE-ENVIRONMENTAL ASSESSMENT CONSULTATION
MR. AND MRS. JAMES W. MC CULY
CONSOLIDATION AND RESUBDIVISION OF EXISTING PARCELS
TAX MAP KEY (3) 2-9-3: 13 WAILEA, SOUTH HILO, ISLAND OF HAWAII

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

"Fire Apparatus Access Roads"

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

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

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

2. When access roads cannot be installed due to topography, waterways, nonnegotiable grades or other similar conditions, the chief may require additional fire protection as specified in Section 10.301 (b).

3. When there are not more than two Group R, Division 3 or Group M occupancies, the requirements of this section may be modified, provided, in the opinion of the chief, fire-fighting or rescue operations would not be impaired.
"More than one fire apparatus road may be required when it is determined by the chief that access by a single road may be impaired by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

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

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

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

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

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

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

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

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

"(i) Bridges. When a bridge is required to be used as access under this section, it shall be constructed and maintained in accordance with the applicable sections of the Building Code and using designed live loading sufficient to carry the imposed loads of fire apparatus.

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

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

"(l) Signs. When required by the fire chief, approved signs or other approved notices shall be provided and maintained for fire apparatus access roads to identify such roads and prohibit the obstruction thereof or both."
Water supply shall be in accordance with UFC Section 10.301:

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

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

"The location, number and type of fire hydrants connected to a water supply capable of delivering the required fire flow shall be protected as set forth by the respective county water requirements. All hydrants shall be accessible to the fire department apparatus by roadways meeting the requirements of Section 10.207."

Sincerely,

[Signature]

DARIO OLIVEIRA
Fire Chief

NA/ik
June 14, 2004

Mr. Brian Nishimura
Planning Consultant
101 Aupuni Street, Suite 217
Hilo, HI 96720

Dear Mr. Nishimura:

SUBJECT: Pre-Environmental Assessment Consultation
Applicant: Mr. & Mrs. James W. McCully
Project: Consolidation and Resubdivision of Existing Parcels and the Railroad Right-of-Ways
Tax Map Keys: 2-9-3:13, 29 and 60

This is to acknowledge receipt of your May 20, 2004 letter requesting our comments on the consolidation and resubdivision of three existing lots with the former railroad right-of-ways. The proposed consolidation and resubdivision will not increase the density of the property and will improve lot configuration for future use.

Although your letter referenced only Parcel 13, tax map key numbers were assigned to two other lots which were determined to be pre-existing lots of record by our Department. Therefore, the tax map key number should be revised to include Parcels 29 and 60.

In reference to your request for comments, we have the following to offer:

1. The total area (parcel and the contiguous railroad right-of-way) consists of:
   a. Parcel 13 - 0.662 acre + 0.356 acre = 1.018 acres
   b. Parcel 29 - 2.192 acres + 0.637 acre = 2.829 acres
   c. Parcel 60 - 0.544 acre + 0.219 acre = 0.763 acre

Hawaii County is an equal opportunity provider and employer.
2. The General Plan Land Use Pattern Allocation Guide Map (LUPAG) designation for the subject area is Open.

3. According to Boundary Interpretation No. 92 48, the area mauka of the railroad right-of-ways is designated Agricultural. The railroad right-of-ways and area makai is designated Conservation.

4. County zoning for these areas is Agricultural (A-26a).

5. All three parcels and the railroad right-of-ways are located within the County’s Special Management Area (SMA). A Special Management Area Use Permit Assessment Application for the proposed consolidation and subdivision is required to be submitted for our review. For your information, however, Planning Commission Rule 9-4(10)(b)(xiii) states that “development” does not include “Subdivision of a parcel of land into four or fewer parcels when no associated construction activities are proposed, provided that any such land which is so subdivided shall not thereafter qualify for this exception with respect to any subsequent subdivision of any of the resulting parcels.”

Please provide a copy of the draft Environmental Assessment for our review and file.

If you have questions, please feel free to contact Esther Inamura or Larry Brown at 961-8238.

Sincerely,

[Signature]

CHRISTOPHER J. YUEN
Planning Director

ETI-pak
P:\WWW\III\ETI\Ed1\Pre-cons\PohinemakaMcCulley2000\01\20200010.doc
BOTANICAL SURVEY REPORT FOR THE MCCULLY PROJECT SITE
WAILEA, HAWAII

FOR
BRIAN T. NISHIMURA
NISHIMURA PLANNING
101 AUPUNI STREET, SUITE 217
HILO, HAWAII 96720

BY
EVANGELINE J. FUNK, PH.D.
BOTANICAL CONSULTANTS
HONOLULU, HAWAII 96815
TABLE OF CONTENTS

INTRODUCTIONS AND METHODS ........................................2
RESULTS ............................................................................2
CONCLUSIONS ...................................................................3
ENDANGERED SPECIES ......................................................3
BIBLIOGRAPHY .................................................................4
SPECIES LIST .....................................................................5
INTRODUCTION AND METHODS

The McCully Project Site is located on the eastern coast of the Island of Hawaii approximately seventeen miles north of the City of Hilo in the Waiakea, Hawaii. On June 10, 2004 a botanical survey of this four and one tenth acre site, was carried out by a two-person team. The walk through method of data collection was used and all parts of the site were surveyed. The results of the survey are presented below.

RESULTS

Two vegetation types are discernable on this property. By far the largest of which is Open Mowed Lawn. This broad rolling area is vegetated by a mix of introduced grasses such as Hilo grass (Faspatum conjugatum Bergius), California grass (Brachiaria mutica (Frosk.) Stapf, beach wiregrass (Eleusine indica (L.) Gaertn., yellow foxtail (Setaria gracilis Kuntth) and Digitaria sp. In the un-mowed fringe of the lawn area can be found two types of white Thunbergia (Thunbergia fragrans Roxb.) and Bengal trumpet (Thunbergia grandiflora Roxb.), wood rose vine (Merremia tuberosa (L.) Rendle), sugar cane (Saccharum officinarum L.), various sedges including Nut grass (Cyperus rotundus L.), Kili’o’pu (Kyllinga brevifolia Rothb.), and Kyllinga nemoralis (Daudy ex Hutchinson & Dalziel). There is also Honohono (Commelina diffusa N. L. Burm.), some vegetative ginger, Niruri (Phyllanthus debilis Klein & Willd.), and Polygona paniculata L.

The seaward or eastern edge of the Open Mowed Lawn area is marked by a scattered planting of green hala trees (Pandanus tectorius S. Parkinson ex Z) and a variety of hala trees with green and yellow striped leaves (P. veitchii Hort (Neal page 53). Beyond the hala trees are mostly introduced ironwood trees (Casuarina equisetifolia L.).
A variety of landscape plantings are also found in the Open Mowed Lawn area. These include several species of palm trees, some bamboos, some Kukui trees, golden pothos and banana type plantings.

The second vegetation type found on the site was Stream Bank Vegetation. Puhanui Stream forms the northern boundary of the McCully Project Site. The banks of Puhanui Stream are very steep and the predominate vegetation is large, introduced trees such as African tulip (Spathodea campanulata P. Beauv.), ironwood, coconut (Cocos nucifera L.), Hala trees, some banana trees, golden pothos (Epipremnum pinnatum (L.) Engl.), oak leaf fern (Dryopteris demissa (Forsk.) C. Chr.) and Sword fern (Nephrolepis exaltata (L.) Schott. are common.

CONCLUSIONS

Aside from the Kukui and hala trees, which may be early Polynesian introductions, the only native plants found on this site were some popolo berry bushes (Solanum americanum Mill). Otherwise, the vegetation of this site is all introduced plants and is found in many places in the Hawaiian Islands and will quickly regenerate if it is disturbed.

ENDANGERED SPECIES

No candidate, proposed, or listed threatened or endangered species as set forth in the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543) are known from this site and none were found during this survey.
BIBLIOGRAPHY


SPECIES LIST OF THE PLANTS FOUND ON THE PROPOSED MCCULLY PROJECT SITE, WAILEA, HAWAII

The plant list presented here is a combination of the results of our survey conducted in June, 2004 and an earlier survey conducted in 1993 by Bobby Camara.

The plant families in the species list have been alphabetically arranged within three groups, Ferns and Fern Allies, Monocotyledons, and Dicotyledons. The genera and species are arranged alphabetically within families. The taxonomy and nomenclature follow that of Wagner, Herbst, and Sohmer (1990). For each taxon the following information is provided:

1. An asterisk before the plant name indicates a plant introduced to the Hawaiian Islands since Cook or by the aborigines.
2. The scientific name of the plant.
3. The Hawaiian name or the most widely used common name of the plant.
4. Abundance ratings are for this site only and they have the following meanings:
   - Uncommon = a plant that was found less than five times.
   - Occasional = a plant that was found between five and ten times.
   - Common = a plant considered an important part of the vegetation.
   - Locally abundant = plants found in large numbers over a limited area. For example the plants found in grassy patches.

This species list presented here is the result of our survey conducted in June, 2004 and an earlier survey conducted in 1993 by Bobby Camara. It reflects the vegetative composition of the flora during a single season. Minor changes to the vegetation will occur due to introductions and losses and a slightly different species list would result from a survey conducted during a different growing season.
<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Abundance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POLYPODIACEAE</strong> - Common Fern Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Dryopteris dentata</em> (Vonk.) C. Chr.</td>
<td>Oak leaf fern</td>
<td>Uncommon</td>
</tr>
<tr>
<td><em>Nephrolepis exaltata</em> (L.) Schott.</td>
<td>Sword fern</td>
<td>Locally abundant</td>
</tr>
<tr>
<td><strong>MONOCOTyledons</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AGAVACEAE</strong> - Agave Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cordyline fruticosa (L.) A. Chev.</td>
<td>Ti</td>
<td>Occasional</td>
</tr>
<tr>
<td><strong>ARACEAE</strong> - Aroid Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Epigimnum pinnatum</em> (L.) Engle.</td>
<td>Golden pothos</td>
<td>Uncommon</td>
</tr>
<tr>
<td><em>Xanthosoma roseum</em> Schott.</td>
<td>Xanthosoma</td>
<td>Occasional</td>
</tr>
<tr>
<td><strong>ARECACEAE</strong> - Palm Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Archontophoenix alexandrae</em> H.A. Wendl. &amp; Drude</td>
<td>Coconut palm</td>
<td>Locally abundant</td>
</tr>
<tr>
<td><em>Cocos nucifera</em> L.</td>
<td>Phoenix palm</td>
<td>Locally abundant</td>
</tr>
<tr>
<td><em>Phoenix sp.</em></td>
<td>Fan palm</td>
<td>Locally abundant</td>
</tr>
<tr>
<td><em>Pritchardia sp.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>COMMELINACEAE</strong> - Spiderwort Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Commelina diffusa</em> N. L. Burm.</td>
<td>Honohono</td>
<td>Locally abundant</td>
</tr>
<tr>
<td><strong>CYPERACEAE</strong> - Sedge Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Cyperus rotundus</em> L.</td>
<td>Nut grass</td>
<td>Occasional</td>
</tr>
<tr>
<td><em>Kyllinga brevifolia</em> Rothb.</td>
<td>Kill’opu</td>
<td>Locally abundant</td>
</tr>
<tr>
<td><em>Kyllinga membranalis</em> Dandy ex Hutchinson &amp; dalziel</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MUSACEAE</strong> - Banana Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Musa x paradisiaca</em> L.</td>
<td>Banana</td>
<td>Common</td>
</tr>
<tr>
<td><strong>PANDANACEAE</strong> - Pandanus Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pandanus tectorius S. Parkinson ex Z</td>
<td>Hala</td>
<td>Common</td>
</tr>
</tbody>
</table>

---

6
<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Abundance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POACEAE - Grass Family</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Bambusa sp.</em></td>
<td>Dwarf bamboo</td>
<td>Locally abundant</td>
</tr>
<tr>
<td><em>Bambusa vulgaris var. aureo-varigata</em> Hort.</td>
<td>Golden bamboo</td>
<td>Locally abundant</td>
</tr>
<tr>
<td><em>Brachiaria mutica</em> (Forsk.) Stapf.</td>
<td>California grass</td>
<td>Common</td>
</tr>
<tr>
<td><em>Eleusine indica</em> (L.) Gaertn.</td>
<td>Wiregrass</td>
<td>Locally abundant</td>
</tr>
<tr>
<td><em>Digitaria ciliaris</em> (Retz.) Koeler</td>
<td>Henry's crabgrass</td>
<td>Common</td>
</tr>
<tr>
<td><em>Paspalum conjugatum</em> Bergius</td>
<td>Hilo grass</td>
<td>Locally abundant</td>
</tr>
<tr>
<td><em>Sacccharum officinarum</em> L.</td>
<td>Sugar</td>
<td>Occasional</td>
</tr>
<tr>
<td><strong>ZINGIBERACEAE - Ginger Family</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Hedychium flavescens</em> Ker-Gawl.</td>
<td>Yellow ginger</td>
<td>Occasional</td>
</tr>
<tr>
<td><strong>DICOTYLEDONES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ACANTHACEAE - Acanthus Family</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Hemigraphis alternata</em> (N. L.Burm.)</td>
<td>Metal-leaf</td>
<td>Occasional</td>
</tr>
<tr>
<td><em>Jussia betonica</em> L.</td>
<td>White shrimp plant</td>
<td>Occasional</td>
</tr>
<tr>
<td><em>Thunbergia fragrans</em> Roxb.</td>
<td>White thunbergia</td>
<td>Occasional</td>
</tr>
<tr>
<td><em>Thunbergia grandiflora</em> Roxb.</td>
<td>Bengal trumpet</td>
<td>Occasional</td>
</tr>
<tr>
<td><strong>APIACEAE - parsley Family</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Centella asiatica</em> (L.) Urb.</td>
<td>Fir-leaved celery</td>
<td>Locally abundant</td>
</tr>
<tr>
<td><strong>ARALIACEAE - Ginseng Family</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Schefflera actinophylla</em> (Endl.) Harms</td>
<td>Octopus tree</td>
<td>Uncommon</td>
</tr>
<tr>
<td><strong>ASTERACEAE - Sunflower Family</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Ageratum conyzoides</em> L.</td>
<td>Maile hohono</td>
<td>Occasional</td>
</tr>
<tr>
<td><em>Emilia fosbergii</em> Nicolson</td>
<td>Pualele</td>
<td>Occasional</td>
</tr>
<tr>
<td><em>Cynara cardunculus</em> (L.) Croiz.</td>
<td>Horseweed</td>
<td>Uncommon</td>
</tr>
<tr>
<td><em>Ptueoa symphytoides</em> (Mill.) Gillis</td>
<td>Sourbush</td>
<td>Uncommon</td>
</tr>
<tr>
<td><strong>BEGONIACEAE - Begonia Family</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Begonia sp.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Abundance</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>BIGNONIACEAE</strong> – Bignonia Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Spathodea campanulata</em> P. Beauv.</td>
<td>African tulip tree</td>
<td>Occasional</td>
</tr>
<tr>
<td><strong>CARICACEAE</strong> – Papaya Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Carica papaya</em> L.</td>
<td>Papaya</td>
<td>Occasional</td>
</tr>
<tr>
<td><strong>CASUARINACEAE</strong> – She-oak Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Casuarina equisetifolia</em> L.</td>
<td>Ironwood</td>
<td>Common</td>
</tr>
<tr>
<td><strong>CONVOLVULACEAE</strong> – Morning glory Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Ipomoea alba</em> L.</td>
<td>Moon flower</td>
<td>Occasional</td>
</tr>
<tr>
<td><em>Merremia tuberosa</em> (L.) Rendle</td>
<td>Wood rose</td>
<td>Uncommon</td>
</tr>
<tr>
<td><strong>EUPHORBIACEAE</strong> – Spurge Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Aleurites moluccana</em> (L.) Willd</td>
<td>Kukui</td>
<td>Locally abundant</td>
</tr>
<tr>
<td><em>Chamoezyce hirta</em> (L.) Millsp.</td>
<td>Hairy spurge</td>
<td>Occasional</td>
</tr>
<tr>
<td><em>Phyllanthus debilis</em> Klein ex Willd.</td>
<td>Niruri</td>
<td>Occasional</td>
</tr>
<tr>
<td><strong>FABACEAE</strong> – Bean Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Chamaecrista nicitans</em> (L.) Moench</td>
<td>Partridge pen</td>
<td>Occasional</td>
</tr>
<tr>
<td><em>Crotalaria incana</em> L.</td>
<td>Fuzzy rattlepod</td>
<td>Occasional</td>
</tr>
<tr>
<td><em>Crotalaria sp.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Desmodium triflorum</em> (L.) DC</td>
<td>Indigo</td>
<td>Occasional</td>
</tr>
<tr>
<td><em>Indigofera suffruticosa</em> Mill.</td>
<td>Sensitive plant</td>
<td>Occasional</td>
</tr>
<tr>
<td><em>Mimosa pudica</em> L.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GOODENIACE – Goodenia – Family</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Scaveola sericea</em> Vahl.</td>
<td>Naupaka kuhakai</td>
<td>Occasional</td>
</tr>
<tr>
<td><strong>LAURACEAE</strong> – Laurel Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Persea americana</em> Mill.</td>
<td>Avocado</td>
<td>Uncommon</td>
</tr>
<tr>
<td><strong>MALVACEAE</strong> – Mallow Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Malviviscus penduliflora</em> DC</td>
<td>Turk’s cap</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Abundance</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>MORACEAE – Fig Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Ficus microcarpa L. fl.</td>
<td>Chinese banyan</td>
<td>Occasional</td>
</tr>
<tr>
<td>MYRSINACEAE – Myrsine Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Ardisit crenata Sims</td>
<td>Hilo holly</td>
<td>Occasional</td>
</tr>
<tr>
<td>MYRTACEAE – Myrtle Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Eucalyptus robusta Sm.</td>
<td>Swamp mahogany</td>
<td>Occasional</td>
</tr>
<tr>
<td>*Psidium guajava L.</td>
<td>Common guava</td>
<td>Uncommon</td>
</tr>
<tr>
<td>OXALIDACEAE – Wood sorrel Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxalis corniculata L.</td>
<td>Yellow wood sorrel</td>
<td>Locally abundant Uncommon</td>
</tr>
<tr>
<td>*Oxalis corymbosa DC</td>
<td>Pink wood sorrel</td>
<td></td>
</tr>
<tr>
<td>PASSIFLORACEAE – Passion Flower Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Passiflora edulis Sims</td>
<td>Passion fruit</td>
<td>Uncommon</td>
</tr>
<tr>
<td>POLYGALACEAE – Milk-wort Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Polygala paniculata L.</td>
<td></td>
<td>Uncommon</td>
</tr>
<tr>
<td>ROSACEAE - Rose Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Prunus rosifolius Sm.</td>
<td>Thimbleberry</td>
<td>Occasional</td>
</tr>
<tr>
<td>RUBIACEAE – Coffee Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morinda citrifolia L.</td>
<td>Noni</td>
<td>Uncommon</td>
</tr>
<tr>
<td>SCROPHULARIACEAE – Fig-wort Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Lindernia crus-gena (L.) F.v. Muell.</td>
<td></td>
<td>Locally abundant</td>
</tr>
<tr>
<td>SOLANACEAE – Nightshade Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solanum americanum Mill.</td>
<td>pepolo</td>
<td>Occasional</td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Abundance</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------</td>
<td>-----------</td>
</tr>
<tr>
<td><strong>ULMACEAE – Elm Family</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Trema orientalis</em> (L.) Blume</td>
<td>Gunpowder tree</td>
<td>Occasional</td>
</tr>
<tr>
<td><strong>VERBENACEAE – Verbena Family</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Lantana camara</em> L.</td>
<td>Lantana</td>
<td>Occasional</td>
</tr>
</tbody>
</table>
Archaeological Inventory Survey and Limited Cultural Assessment of TMKs: 3-2-9-03:13, 29, and 60

Wailea Ahupua'a
South Hilo District
Island of Hawai'i

PREPARED BY:
Michael Desilets, M.A.
Amy Kasberg, B.A.
and
Robert B. Rechtman, Ph.D.

PREPARED FOR:
Miles Stewart
McCully Works, Inc.
40 Kamehanahe Ave.
Hilo, HI 96720

August 2004

RECHTMAN CONSULTING, LLC
HC 1 Box 8149 Ke'anae, Hawaii 96749
phone: (808) 986-7685 toll free: (800)406-2665
e-mail: info@rechtmanconsulting.com
ARCHAEOLOGICAL, CULTURAL, AND HISTORICAL STUDIES
Archaeological Inventory Survey and Limited Cultural Assessment of TMK: 3-2-9-03:13, 29, and 60

Wailea Ahupua‘a
South Hilo District
Island of Hawai‘i
EXECUTIVE SUMMARY

At the request of Mike Shewmaker, on behalf of McCullough Works, Inc., Rechtman Consulting, LLC conducted an archaeological inventory survey and limited cultural assessment of three land parcels (TMS 3-2-6-01; 13, 29, 60) in Wailea Alapua'a, South Hilo District, Island of Hawai‘i. The project area begins approximately 112 feet east (moku) of Hawaii Belt Road in Wailea and extend to the shoreline cliffs. The parcels incorporate a former railroad corridor along their western side. The project area is located squarely in what was traditionally known as Hilo-pali-Ki or ‘Hilo of the upright cliffs.’ The name is apt for such a treacherous coastline; sheer cliffs run from the Waikiku River to Waikii’o and beyond, broken only by a string of relatively narrow gulches pouring down from the slopes of Mauna Kea. Historic maps indicate that a railroad right-of-way once crossed the western portion of the project area.

A search of the records on file with DLNR-SHIP revealed that the project area had not been previously surveyed for archaeological sites. Amy Kasberg, B.A., Michael Desiletts, M.A., and Robert Rechtman, Ph.D. conducted fieldwork for the current project on May 17, 2004. Project area boundaries were clearly identifiable in the field, and the entire area was systematically and intensively examined using parallel north to south trending transects. Visibility was excellent across most of the project area. On site, SHIP Site 50-10-26-24217, was recorded during the field survey. This site includes two Historic Period railroad features: a railway grade section and a trestle abutment.

Site 24212 is considered significant under Criteria D for the information it has yielded regarding early twentieth century sugar cane transportation infrastructure; however, as the current inventory survey project recorded Site 24212 in detail, no further work is recommended.

The fieldwork produced no evidence of traditional Hawaiian artifacts or features. Also, there is no evidence that the area is currently being accessed for the exercise of traditional and customary practices associated with any traditional cultural properties or resources. As part of the current study, the Office of Hawaiian Affairs and other organizations and individuals were contacted in an effort to obtain information about any potential traditional cultural properties and associated practices that might be present or have occurred in this portion of Wailea Atapu'a. None of the organizations/individuals contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the current project area; nor did they provide any information indicating past or current use of the area for traditional and customary practices.
INTRODUCTION .................................................................................................................. 1
PROJECT AREA DESCRIPTION ...................................................................................... 4
BACKGROUND ............................................................................................................... 6
Hilo-pali-Kū ....................................................................................................................... 6
Railroads ......................................................................................................................... 9
Previous Archaeology ..................................................................................................... 12
Mu‘ohe ‘Land Awards and Grants .................................................................................. 12
PROJECT EXPECTATIONS ............................................................................................. 13
FIELDWORK RESULTS ................................................................................................. 13
Feature 1 ......................................................................................................................... 15
Feature 2 ......................................................................................................................... 15
Site 24212 Discussion ..................................................................................................... 18
CONSULTATION ............................................................................................................. 18
CONCLUSIONS .............................................................................................................. 18
SIGNIFICANCE EVALUATION AND TREATMENT RECOMMENDATIONS ................. 20
REFERENCES CITED .................................................................................................... 21

FIGURES

1. Project area location (portion of USGS 7.5 minute series Papaluoa and Papaikou
quadrangles, HI) ............................................................................................................... 2
2. Tax Map Key 3-2-9-03 showing study parcels 13, 29, and 60 .................................... 3
3. Central portion of project area, view to the south ......................................................... 5
4. Northern portion of project area, view to the east ....................................................... 5
5. Southern portion of project area, view to the east/southeast ....................................... 6
6. Project area showing camps near Hakalau. Adapted from a detail of the 1940 Hakalau
Plantation Company Domestic Water Supplies Map (Courtesy of James McCully) ........ 8
7. Hawaii Consolidated Railway map of rail system as of November 1923
(Annual Report 1926) .................................................................................................. 10
8. View of Kolekole Bridge after 1946 tsunami, center support washed out.
(Pacific Tsunami Museum Archives- Henrietta Carvalho Collection) ............................. 11
9. Detail of Tax Map Key 3-2-9-03 showing feature locations ....................................... 14
10. SIHP Site 24212 Feature 1, possible railroad grade, view to the south ....................... 15
11. Plan view of SIHP Site 24212 Feature 2 ..................................................................... 16
12. SIHP Site 24212 Feature 2, trestle abutment, view from above ................................. 16
13. SIHP Site 24212 Feature 2, trestle abutment, view to the west ................................. 17
14. SIHP Site 24212 Feature 2, trestle abutment, view to the east .................................... 17
15. Profile of Hilo Railroad-Hawaii Consolidated Railway’s Hanakua Division
showing locations and elevations of trestles and tunnels from Hilo to Pa‘auilo ............ 19
INTRODUCTION

At the request of Mike Shewmaker, on behalf of McCully Works, Inc., Rechtman Consulting, LLC conducted an archaeological inventory survey and limited cultural assessment of three land parcels (TMK 3-2-9-03: 13, 29, 66) in Waiea ahupua’a, South Hilo District, Island of Hawai’i (Figures 1 and 2). The purpose of this study is to document the presence of any historic properties (including traditional cultural properties and associated practices) that might exist within the 4.5-acre project area and assess the significance of any such resources. This report is intended to fulfill the requirements of the County of Hawai’i Planning Department and the Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD) with respect to permit approval for a proposed State land use boundary amendment.

In the Hawai’i Administrative Rules (HAR 131-13-275-2) that would govern the regulatory activities of the State Historic Preservation Division, a definition of historic property is provided.

“Historic property” means any building, structure, object, district, area, or site, including above and underground site, which is over 50 years old.

This definition should not be confused with the definition of Historic Property contained in the Federal legislation and its implementing regulation (Section 106 of the National Historic Preservation Act and 36 CFR 800, respectively), where Historic Property is defined as a resource “listed or eligible for listing in the National Register of Historic Places.” The difference being that in the state-used definition ALL buildings, structures, objects, districts, areas, or sites older than fifty years are historic properties and need to be assessed as such. In the Federally used definition, ONLY those buildings, structures, objects, districts, areas, or sites that are determined to be significant are considered Historic Properties.

The criteria for the evaluation of significance contained in the Hawai’i Administrative Rules generally follows that which is promulgated by the Federal government, with the addition of Significance Criterion E, which is not contained in the Federal evaluation criteria. To be significant the resource must possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following criteria:

A Be associated with events that have made an important contribution to the broad patterns of our history;
B Be associated with the lives of persons important in our past;
C Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;
D Have yielded, or is likely to yield, information important for research on prehistory or history;
E Have an important value to the native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group’s history and cultural identity.
Figure 1. Project area location (portion of USGS 7.5 minute series Papaako and Papakou quadrangles, HI).
Figure 2. Tax Map Key 3-2-0-03 showing study parcels 13, 29, and 66.
A working definition of "Traditional Cultural Property" is as follows:

"Traditional cultural property" means any historic property associated with the traditional practices and beliefs of an ethnic community or members of that community for more than fifty years. These traditions shall be found in an ethnic community's history and contribute to maintaining the ethnic community's cultural identity. Traditional associations are those demonstrating a continuity of practice or belief until present or those documented in historical source materials, or both.

The origin of the concept of "Traditional Cultural Property" is found in National Register Bulletin 38 published by the U.S. Department of Interior-National Park Service. "Traditional" as it is used, implies a time depth of at least 50 years, and a generalization mode of transmission of information from one generation to the next, either orally or by act. "Cultural" refers to the beliefs, practices, life-ways, and social institutions of a given community. The use of the term "Property" defines this category of resource as an identifiable place. Traditional Cultural Properties are not assignable, they must have some kind of boundary, and are subject to the same kind of evaluation as any other historic resource, with one very important exception. By definition, the significance of Traditional Cultural Properties should be determined by the community that values them.

PROJECT AREA DESCRIPTION

The project area consists of three adjoining parcels (TMK 3-2-9-03: 13, 29, and 69) that begin approximately 1/2 miles east (mahalo) of Hawaii Belt Road in Wailea and extend to the shoreline cliffs. The parcels incorporate a former railroad corridor along their western side (see Figure 2). The nearest major drainage is Kekaha Gulch, which is only a few hundred meters to the south. A smaller stream named Ke'ahakini is also nearby and ultimately feeds into Kekaha Gulch near its mouth. An even smaller, unnamed gulch is just north of Ke'ahakini and forms the northern boundary of the project area. Shoreline cliffs form the southern and eastern boundaries. Elevation within the project area ranges from 100 to 140 feet above sea level.

The project area is predominantly a mowed and highly maintained grass lawn with various landscaped vegetation along its perimeter (Figures 3, 4, and 5). Vegetation includes African tulip (Spathodea campanulata), Naupaka (Herrania multiflora), mākena (Adiantum radiatum), ironwood (Casuarina equisetifolia), guava (Psidium guajava), hala (Pandanus odoratissimus), aroha (Chusia roesii), banana (Musa spp.), papaya (Carica papaya L), liliko'i (Passiflora spp.), ti (Cordyline fruticosa (L.) A. Chev), and blue gum eucalyptus (Eucalyptus globulus)."are (Atisia macrorrhiza, Xanthosoma rohunum), bamboo (Bambusa vulgaris var. mako-vairagata Hart) and various types of ginger (Zingiberaceae), palms (Palmae) and grasses (Poaceae). The project area was sectioned off into thirds by two stands of vegetation that ran roughly east to west. The northern stand consists of bamboo and the southern of pāpao.

Terrain in the project area is smooth and slopes down to the sea. A terrace is present in places along the western portion, and appears to be associated with past (prior to the current land owner) landflling and slope altering activities. Soils within the project area are classified as "Hilo silty clay loam, 0 to 10 percent slopes" (Sato et al. 1973:17). This soil type falls within the Hilo Series, which is described as "well-drained silty clay loams."

These soils formed in a series of volcanic ash layers that give them a banding appearance. They are gently sloping to steep soils on uplands at an elevation ranging from near sea level to 150 feet. They receive from 120 to 180 inches of rainfall annually, and their mean annual soil temperature is between 72° and 74° F. The natural vegetation consists of hilo grass, calaminipani, guava, ohia, and tree fern (Sato et al. 1973:17)
Figure 3. Central portion of project area, view to the south.

Figure 4. Northern portion of project area, view to the east.
BACKGROUND

This section of the report presents several classes of background information relevant to the project area and its surrounding region. Current understanding of traditional Hawaiian land-use is outlined along with an explanation of Historic Period modifications and exploitation. A historical overview of the Hilo Railroad-Hawaiian Consolidated Railway is also presented. Prior archaeological studies conducted in and around the project area are then reviewed, followed by a discussion of relevant Land Commission Awards and Grants. The background information is then used in the following sections to develop a set of expectations for the current survey.

Hilo-pali-Kū

The project area is located squarely in what was traditionally known as Hilo-pali-Kū or ‘Hilo of the upright cliffs.’ The name is apt for such a treacherous coastline. Sheer cliffs run from the Wailuku River to Waipō‘o and beyond, broken only by a string of relatively narrow gullies pouring down from the slopes of Mauna Kea. Although travel along this coast was once difficult, the broad plateaus, or kula, between the gullies are very fertile as are the low bottom-lands of the larger gullies. These areas once supported a large pre-contact Hawaiian population subsisting on crops such as ʻaloa, sweet potato, banana, and coconut. Other crops such as ʻōwai, bamboo, and sugar cane were also cultivated on the kula lands. According to Hardy and Handy (1972:537), much of the kula land along the nearby and comparable Hamākua Coast was forested with ʻakai. This may have been the case for South Hilo as well. Early accounts provide some information on the South Hilo kula landscape in the early 1800s.
The light and fertile soil informed by decomposing lava, with a considerable portion of vegetable mould. The whole is covered with luxuriant vegetation, and the greater part of it formed into plantations, where plantains, bananas, sugar-cane, taro, potatoes and melons, come to the greatest perfection. Groves of cocoa-nut and bread-fruits trees are seen in every direction, loaded with fruit, or clothed with luxuriant foliage. (Ellis in Tandy and Handy 1972:539)

For North-Hilo, which contains an identical environment:

The face of the country by which we quitted, was fertile and beautiful, and the population throughout considerable. The numerous plantations on the tops or sides of the deep ravines, or valleys, by which they were frequently interspersed, with the meandering streams running down from the sea, presented altogether a most agreeable prospect (Ellis in Handy and Handy 1972:539)

Accounts of Hāmākua to the north also speak of organized agriculture and habitation in the kalo lands:

The land we passed in the forenoon rose in a steep bank from the water-side and from thence the country stretched back with an easy acclivity for about four or five miles, and was laid out into little fields, apparently well cultivated and interspersed with the habitations of the natives. Beyond this the country became rugged and woody, forming mountains of great elevations. (Moniz in Handy and Handy 1972:537)

The lowland portion of South Hilo was clearly a region thriving with traditional Hawaiian habitation and cultivation. Like most other parts of Hawai'i, introduced diseases and global economic forces would have a devastating impact on traditional life-ways in the early to mid-1800s. Due to its rugged coastline and many deep gulches, however, transportation difficulties were severe in South Hilo, North Hilo, and Hāmākua. The served to delay large-scale commercial exploitation of the kalo lands. In the second half of the nineteenth century these problems were overcome and sugar cane plantations replaced subsistence agriculture and grazing as the dominant land use.

Within a few years of the 1876 Treaty of Reciprocity a number of new plantations were in production. According to Bost (1978:123), the new plantations commonly extended some two to three miles inland from the coast. Elevations ranged from 250 feet above sea level along the shoreline bluffs to 2,800 feet above sea level at their western (mauka) limits. Coast frontage could range from two to six miles. Railroads, operating on steam and animal power were built on some plantations by 1887. Other plantations utilized flumes or cable railways to transport cane from the fields to the coastal mills. The redoubtable Claus Spéckles owned much of this acreage including both Hākalau and Wailea Plantations. By 1911, both these plantations were served by the newly built Hāmākua Division of the Hilo Railroad. Sugar production in the area weathered the partial obstruction of the Hākalau Mill by a tsunami in 1946 and operations continued into the late twentieth century.

Throughout their productive existence, the Waiale and Hākalau plantations employed large numbers of immigrants and their Hawai‘i-born offspring. This labor force was housed in camps situated at various elevations within the plantations. Two camps, known collectively as the Wailea Camps, were located to the south and west of the current project area (Figure 6). The camp to the south of the project area housed workers employed at the Wailea Mill and was known as Wailea Japanese Camp (Maly 1994:A-18). One marked gravestone is present there and is under the jurisdiction of the State of Hawaii.

To the west of the project area was Spanish Camp. This site is now occupied by a greenhouse and residential structure. Interestingly, Spanish Camp sits on the unnamed ridge that bounds the project area to the north. The region west (mauka) of Spanish Camp is reported to contain an area where Hawaiian families had graves (Maly 1994:A-18). Although most graves from the camps were probably disinterred (particularly the Japanese), interviews with former residents conducted by Kepa Maly suggest that some may still be present (Maly 1994:A18).
Figure 6. Project area showing camps near Hakalau. Adapted from a detail of the 1940 Hakalau Plantation Company Domestic Water Supplies Map (Courtesy of James McCully).
Railroads

Historic maps indicate that a railroad right-of-way once crossed the western portion of the project area, therefore, we briefly review the history of railroads in South Hilo, North Hilo, and Hāmākua Districts.

The story of railroads in Hawai'i is a study in the ebb and flow of economic forces and governmental policy. With the 1875 ratification of the Treaty of Reciprocity between the United States of America and the Hawaiian Kingdom, economic conditions were ripe for the development of many large-scale commercial enterprises in the islands. Among the products which could be exported to the United States free of tariff under the treaty were

unprocessed brown, and all other unspecified sugar, meaning thereby the grade of sugar heretofore commonly imported from the Hawaiian Islands, and now known in the markets of San Francisco and Portland a "Sandwich Island Sugar," syrup of sugar-cane, molasses, and molasses (Article I, Treaty Of Reciprocity between the United States and the Hawaiian Kingdom, 1875).

These words would prove to have a profound impact on the economy, landscape, and ethnic composition of the Hawaiian Islands. Until this time, sugar was produced on a relatively small scale using labor-intensive methods of cultivation, harvesting, and transportation (Conde 1971:11). Crops and product were still transported by beast and cart. Now that Hawaiian sugar had free access to the American market, the cane plantations were poised to expand and modernize their operations. Railroad construction was one of the most important elements of governmental and private sector planting in this regard.

On the island of Hawai'i, the first major line to be constructed was in North Kohala District. Operated as the Hawaiian Railroad Company, the narrow-gauge line ran some 20 miles connecting Māhāmāna Harbor with Honolua Landing, Kohala Landing, and six sugar cane plantations (Conde 1971). The Hawaiian Railroad Company was the twin child of one Samuel Gardner Wilder (1831-1888), already the owner of an inter-island steamship company and Minister of the Interior of the Hawaiian Islands. Wilder's railroad operated continuously, with occasional changes in ownership and name, until truck hauling took over transportation in 1945. The North Kohala line, however, was envisioned as only the first step toward a much larger system connecting the cane fields of Kohala, Hāmākua, and Hilo Districts with Hilo Harbor, the only protected deep-water port on the island. Although Wilder didn't live to see it happen, rail lines eventually connected Hilo with plantations as far north as Pa'auilo and with sugar, logging, and tourism operations in Puna District (Clark et al. 2001).

The Hilo Railroad Company

In 1898, Benjamin F. Dillingham planned a large sugar mill at 'Oha'a (now Kea'au) with its produce to be transported to Hilo via a railroad he would also construct—the Hilo Railroad. A 50 year charter for the Hilo Railroad Company was granted by the Republic of Hawaii in 1899. Under the charter, the Hilo Railroad Company was authorized to construct rail lines anywhere on the Island of Hawai'i. Furthermore, government land was offered free of charge for the purposes of right-of-way, yards, or station areas (Best 1978:125). Following construction trends in the United States, Dillingham was determined to build both his internal Ola Sugar Company tracks and the common carrier running to Hilo to standard gauge (4 ft 8½ in.). This was to be the first and only standard gauge railroad in Hawai'i.

Initial construction began in 1899 and by 1900 the grade had reached 'Oha'a. By 1901 the Ola Sugar Company tracks had been finished with production scheduled to begin in 1902. Other tracks were constructed in the following years as tourism to Kīlauea and harvesting of mahogany, koa, and 'ōhia above the valleys became viable enterprises (see Clark et al. 2001:5-10).

In 1908 Hilo Railroad's trunkline was expanded with construction of the Hamakua Division (Figure 7). The impetus for this new line was a stipulation in a Rivers and Harbors bill recently passed by the United States Congress. In exchange for construction of a breakwater in Hilo Bay, the Hilo Railroad was required to build a new wharf; a one-mile rail extension from Waialea, and a 50 mile rail extension north to Honokaa's Mill (the Hamakua Division). The extension to Honokaa would finally connect the sugar mills of South Hilo, North Hilo, and Hāmākua with Hilo's protected harbor.
The Hamakua Division

A detailed description of the construction and operation of the Hamakua Division can be found in Best (1978), from which much of the following is abstracted.

The first section of the Hamakua Division ran 12.7 miles from Hilo to Hakalau Mill, crossing many deep gulches and valleys along its route. Construction of the so-called Hakalau extension began in 1906 and was completed by 1911 at a cost of $800,000. Although the Hakalau extension went far over budget, the Hilo Railroad floated another $750,000 in authorized bonds and continued on to Pa'auilo. This 21-mile section proved even more difficult than the first, requiring the construction of 13 steel bridges, most of which were over 100 feet high (Best 1978:133). The highest bridge reached 193 feet and the longest spanned 1,006 feet. In all, fully 3,100 feet of tunnel was excavated, the longest single tunnel measuring 2,700 feet. By any measure of railroad aesthetics, the tunnels, turns, trestles, and rugged coastline of the Hamakua Division marked it as a breathtakingly beautiful railroad.

As might be expected, these engineering feats came at a cost. Following completion of the Pa’auilo section in 1913, the company reported a total cost of $3,500,000. This comes to a staggering $106,900 per mile. Indeed, expenditures by the Hilo Railroad Company during its 16-year existence totaled $6,056,105 for only 100 miles of line (Best 1978:139).

By 1915, Dillingham’s railroad was in dire financial straits. Unable to pay bondholder coupons, Hilo Railroad Company soon went into receivership. It was then upon purchased by the bondholders for $1,000,000 on March 1, 1916 and reorganized as the Hawaii Consolidated Railway. Additional engines and rolling stock were purchased over the next few years.
In 1920 the company attempted to capture a larger piece of the growing tourist business with its Scenic Express. It had long offered service to Glenwood for tourists visiting Kilauea, but motorbuses now dominated this route. The Hāmakua coast, by contrast, was not easily accessible by automobile. Hawaii Consolidated Railway was therefore able to run passenger coaches profitably along the Hāmakua Division with stops at scenic points.

The rise of the automobile, however, was a banebinger for the railroads. Passenger business declined precipitously in the early decades of the twentieth century. In 1920, 607,220 passengers were carried. In 1930 the number dropped to 77,894 and in 1936 to 16,681 (Best 1978:145-146). At this point, the remaining passenger cars were conveyed to other uses. The little passenger traffic which remained was hauled on custom-built railbuses. Passenger service saw a significant spike in the early 1940s due to war-time gas rationing and the presence of large numbers of servicemen. In 1943 passenger totals had rebounded to 103,633.

The automobile was also taking a toll on the railroad's industrial customers. As roads were improved and gasoline prices dropped, simple economics favored trucking over trains. The trend was clear at the time and is even more so from an historical perspective. Ironically, just as rail transportation was in the throes of decline, Hawaii Consolidated Railway was in 1945 almost out of debt for the first time since its inception. The great tsunami of 1946, however, would soon seal its fate.

End of the Railroad

On April 1, 1946 a tsunami triggered by an earthquake in the Aleutians slammed into Hawaii's north shore. The Hawaii Consolidated Railway had received a fatal blow. Track along the waterfront was entirely washed out and the Hilo Station was a wreck. An entire span of the Wailuku Bridge was torn out and washed upstream. In the north, the center span of the Kolekole Bridge was destroyed (Figure 8). Water in Kolekole and Hakalau Gulches reached 37 feet (Klein et al. 1985:10). In addition to the outright destruction, the tsunami also damaged the foundations, bracing members, and struts of bridges in its path (e.g. Hakalau Bridges, Klein et al. 1985:16). Needless to say, the Hāmakua Division was out of business and total cost for repairs were estimated at $500,000.

Hawaii Consolidated put the question of rebuilding to a vote. Shippers were asked to decide the matter and, with the exception of Theo H. Davies Ltd., they voted to ship by truck. The Hāmakua Division would not be repaired.

Figure 8. View of Kolekole Bridge after 1946 tsunami, center support washed out.
(Pacific Tsunami Museum Archives/Henrietta Carvalho Collection.)
With the Hamakua Division officially defunct, Hawaii Consolidated Railway offered its right-of-way, bridges, and tunnels to the territorial division of highways and Hawaii County supervisors. In a bold act of shortsightedness, both agencies refused. Un-panned, Hawaii Consolidated liquidated its assets on December 26, 1946. The entire railroad was sold to Gilmore Steel & Supply Co. of San Francisco for a mere $81,000. Most of the bridges were dismantled and the rails were pulled up along the length of the Hamakua Division. Together with the remaining rolling stock, they were shipped to California as scrap metal. In the midst of the disassembly, the Division of Highways belatedly decided that Route 19 needed to be relocated and improved. It purchased the remaining bridges, plus some that were awaiting shipment in Hilo, for $302,723.53. Steel from the dismantled railroad bridge was used to widen the standing bridges for their new roles as highways. Five of the former Hamakua Division bridges remain in use today.

In Hilo, the damaged docks and track were repaired and rail service was continued to O'ahu Sugar under lease from Gilmore Steel & Supply Co. Product was transported by train from O'ahu Sugar until December of 1948, at which time the line was permanently closed. All remaining assets were sold to The Independent Ironworks of Oakland for scrap.

Previous Archaeology

Among the earliest archaeological work to be done in East Hawai'i was that of the early twentieth century heiau researchers Thrush and Stokes (Thrush 1908, Stokes and Dye 1991). Neither investigator was able to identify heiau in the project area nor in the larger region between Honokōhau and Hakalau. In the early 1950s, A.E. Hudson, working under the auspices of the Bishop Museum, also conducted archaeological investigations in East Hawai'i (Hudson 1932). He found little in the region surrounding the project area, although he did note the presence of a 0.5 mile square area of tano terraces in the upper part of Hakalau Gulch (Hudson quoted in Malu 1994:4-15).

A search of archaeological reports filed with the SITP-SDLNR was conducted as part of the background research for this project. No archaeological reports within the project area or in the surrounding land parcels were registered. In fact, no archaeological research has been reported for TMK 3-2-9-003 or TMK 3-2-8-015. As part of an environmental assessment for seismic retrofitting of Kōkele Bridge, however, an archaeological survey was performed at the base of Kōkele Gulch (Hammatt and Colm 1998). The project area consisted of "the slopes of Kōkele Gulch and surrounding lands of Kōkele Bridge and approximately 100.0 feet of the slopes mānukau and mākai of the bridge" (Hammatt and Colm 1998:1). Square footings from the pre-1946 Kōkele Bridge were noted outside the project area and a cylindrical concrete footing was observed in the middle of Kōkele Stream. No other cultural remains were observed.

One archaeological project (Walker and Rosendahl 1994a, 1994b) was completed in TMK 3-2-9-002, 004. This project involved the survey of some 595 acres between Hālawa Valley Road and the 1,500 foot elevation mark. The parcel was located on the northern side of Hakalau Gulch. Low-level aerial (helicopter) survey was conducted on some elevated portions of the area. Other unexcavated areas were reported using "variable-intensity surveys" (Walker and Rosendahl 1994b: 2). Walker and Rosendahl report that the project area had been extensively modified in historic times for sugar cane cultivation. For this reason, "no archaeological sites or "significant cultural materials of any kind" were found (Walker and Rosendahl 1994b:2) (Walker and Rosendahl 1994b:2).

Māhele Land Awards and Grants

A review of historic documents associated with the project parcels indicates that no Land Commission Awards are present in or near the project area. However, the northern and central portions of the project area were originally granted to one Na'īlai in 1825 and 1835 (Grantees 833 and 1874 respectively). The southermost parcel within the project area was previously owned by Waikea Milling Company, Ltd. Historic maps also indicate that Hakalau Plantation Company and S. B. Hele'a donated portions of a former railroad right-of-way along the western project area boundary to Hilo Railroad Company in 1910.
PROJECT EXPECTATIONS

Based on the background information summarized above, a set of archaeological expectations for the project area can be formulated. Historical data indicate that the general area was part of the heavily exploited traditional Hawaiian 'Aina lands. For the last 100 years, however, the area has been utilized for sugar cane cultivation and associated transportation and employee housing infrastructure. It is likely that these historic era modifications have largely destroyed any traditional Hawaiian features once present in the project area. The extreme coastal exposure and the small gulch to the north may have been unaffected by these disturbances. The gulch, however, is very steep-sided and descends directly to a rocky streambed. It is a very unsuitable place for traditional Hawaiian cultivation or habitation.

Perhaps the most important disturbance to the project area was the construction of the Hamakua Division of the Hilo Railroad. This construction effort probably involved significant landscape modification to the western and central portions of the project area. Once the railroad was built, the project area was effectively cut off from the western (mauka) lands. The project area probably received little impact then until the railroad was scrapped in 1946. More recently, the current landowner claims to have significantly modified the project area landscape. This was accomplished primarily by filling in the western and central regions, but also included the planting of a variety of shrubs and trees.

It is expected that remains associated with historic sugar cane cultivation, transportation, and employee housing will be the most likely finds in the project area. These remains may be concentrated in the western and central portions of the area. Traditional Hawaiian agricultural and habitation features are unlikely to have survived historic disturbances. If present, they may include stone-constructed mounds, platforms, heiaus, or walls. These would likely be found in the lesser-impacted eastern portion of the project area.

FIELDWORK RESULTS

Amy Kasberg, B.A. and Michael Desilets, M.A. conducted fieldwork for this project on May 17, 2004, under the supervision of Robert Rickman, Ph.D. Project area boundaries were clearly identifiable in the field. The entire area was systematically and intensively examined using parallel north to south trending transects at 15 meter spacing. Visibility was very good across most of the project area, with dense vegetation present only along the eastern cliffline.

Systematic survey of the subject parcels produced one site—SIHP Site 50-10-26-24212. The site includes two Historic Period railroad features (Features 1 and 2). These include a possible railroad grade section and a railroad front abutment. They were both recorded in the northwestern part of the project area (Figure 9). These features are described in detail below.

The survey produced no evidence of traditional Hawaiian artifacts or features. Also, there is no evidence that the area is currently being accessed for the exercise of traditional and customary practices associated with any traditional cultural properties or resources.
Figure 9. Detail of Tax Map Key 3-2-9-03 showing feature locations.
SIHP Site 21212 Feature 1

Feature 1 is a possible remnant of the former Hilo Railroad-Hawai‘i Consolidated Railway railroad grade (Figure 10). It is located in the northern portion of the project area (see Figure 9). The section measures 10.0 to 15.0 meters in length (north-south) and approximately 4.0 meters in width. Feature 1 is in an area that has been extensively landscaped and filled in modern times, so it is doubtful whether this possible railroad grade is in its original state. Tax Map Keys and U.S. Geologic Survey maps, however, do show the rail corridor as being in this location. No surface remains were observed on Feature 1 or in the surrounding area.

Figure 10. SIHP Site 21212 Feature 1, possible railroad grade, view to the south.

SIHP Site 24212 Feature 2

Feature 2 is a stone and concrete railroad abutment (Figures 11, 12, 13, and 14). This feature is located at the northern boundary of the project area (see Figure 9). It is situated near the bottom of a deep, un-named gulch that leads to the ocean. The main body of the abutment is semi-circular in cross-section and runs east to west, parallel with the gulch. It is composed of cemented pāhoehoe cobbles and boulders and measures 16.6 meters long (east-west) by 1.9 meters wide (north-south) and stands 180 centimeters high. At its western extremity, the feature exhibits a raised section measuring 2.5 meters long (north-south) by 0.6 meters wide (east-west) and stands 170 centimeters high (see Figure 13). The raised portion is composed of stacked and faced, medium-sized, square-cut pāhoehoe cobbles. Concrete is present between the stones. The top of this segment slopes to the east at an approximately 45° angle.

A tire and two pieces of unidentified rusted metal were recorded to the immediate south of Feature 1, nestled between the feature and the southern gulch slope.
Figure 11. Plan view of SIHP Site 24212 Feature 2.

Figure 12. SIHP Site 24212 Feature 2, trestle abutment, view from above.
Figure 13. SHIP Site 24212 Feature 2, trestle abutment, view to the west.

Figure 14. SHIP Site 24212 Feature 2, trestle abutment, view to the east.
SIHP Site 24212 Discussion

From the background research, we know that the Hāmākua Division of the Hilo Railroad-Hawai‘i Consolidated Railway ran through the western portion of the project area, entering from a parcel to the south and exiting across a minor gulch to the north. A terrace (Feature 1) on the western slope of the project area is situated in the approximate location of the railroad grade. It is therefore very likely that this terrace is a remnant of the historic Hāmākua Division. Alternatively, it is possible that past land use associated with sugarcane cultivation by prior owners may have resulted in modified portions of the property in this vicinity. At present, it is not clear whether those earlier actions have entirely obscured the original Hāmākua Division grade.

Another railroad-related feature was identified in the gulch that bounds the project area to the north. Feature 2 is in the approximate position at which the railroad crosses this small, unnamed gulch. It is interpreted as a possible trestle abutment. The original trestle, due to its elevation, likely survived the tsunami of 1946. Flood levels at Kolekole Gulch to the south and Hakalau Gulch to the north reached 17 feet above sea level (Klein et al. 1985:10). Given that this gulch is smaller and narrower, the water level likely reached an even higher elevation. Even if the surge water reached as high as the abutment, however, its force at this point would be greatly reduced. In this regard, it is important to note that the two trestles (Wallaka and Kolekole) along the Hāmākua Division that sustained the greatest damage from the tsunami were based at or very near sea level (Figure 15). It seems unlikely that the tsunami of 1946 destroyed the subject trestle, as it is situated some 50 feet or more above sea level.

A more likely scenario is that the trestle was removed either during initial deconstruction of the line by Gilmore Steel & Supply Co., or else later by the Division of Highways. The tire and metal remains may have been thrown over the bank from above or transported down the gulch any time in the last 100 years. It is even possible that they are discarded materials from Spanish Camp, which was located only a few hundred feet upstream. In any case, they retain little integrity and have no clear association with the former railroad or camp.

CONSULTATION

As part of the current study, the Office of Hawaiian Affairs (Ua‘ala‘i Sherlock) and Kepa Maly (Kamalii Pono Associates) were contacted in an effort to obtain information about any potential traditional cultural properties and associated practices that might be present or have occurred in this portion of Waikea Ahupua‘a. Neither had any specific information relative to this project area; however, the Office of Hawaiian Affairs suggested we contact the Laupahoehoe Hawaiian Civic Club. To that end, we contacted Lucille Chang and Walter Victor, who in turn recommended that we contact Jack or Waichi Oney, Yukio Takayu, or Lorraine Menezes. Lorraine in turn suggested contacting Kiyoshi Fuako and Masauhei Chen. Interviewees remembered that the railway ran across the property until the 1946 tsunami destroyed the Kolekole Bridge. On the adjacent property to the Hilo side of the study area there was a pig farm in the gulch used by camp residents and a trail that accessed the shore. Fisherman used this trail and there was good fishing immediately shoreward of the study area.

None of the organizations/individuals contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the current project area; nor did they provide any information indicating past or current use of the area for traditional and customary practices.

CONCLUSIONS

Systematic survey of three parcels (TMK 3-2-9:00: 13, 29, 60) produced no evidence of traditional Hawaiian remains or evidence that the area was currently being accessed for the exercise of traditional and customary practices.

One historic era site—SIHP Site 24212, was recorded. The site contains two features associated with the Hāmākua Division of Hilo Railroad-Hawai‘i Consolidated Railway and were recorded in the northeastern portion of the project area. One is a possible section of railroad grade and the other is a railroad trestle abutment. The features were in active use by the railroad from 1911 to 1946. Their primary function was to facilitate the transport of raw sugarcane from the mills along the Hilo and Hāmākua Coasts to the harbor at Hilo Bay. In later years, they also served the secondary function of facilitating tourism.
Figure 15. Profile of Hilo Railroad-Hawaii Consolidated Railway's Hamakua Division showing locations and elevations of trestles and tunnels from Hilo to Pa'auilo.
SIGNIFICANCE EVALUATION AND TREATMENT RECOMMENDATIONS

The above-described archaeological site is assessed for its significance based on criteria established and promoted by DLNR-SHPD and contained in the Hawai’i Administrative Rules 13§13-284A. This significance evaluation should be considered provisional until DLNR-SHPD provides concurrence. For a resource to be considered significant it must possess integrity of location, design, setting, materials, workmanship, setting, and association and meet one or more of the following criteria:

A. Be associated with events that have made an important contribution to the broad patterns of our history;

B. Be associated with the lives of persons important in our past;

C. Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;

D. Have yielded, or is likely to yield, information important for research on prehistory or history;

E. Have an important traditional cultural value to the native Hawaiian people or to another ethnic group of the state due to associations with traditional cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group’s history and cultural identity.

Site 24212 is considered significant under Criteria D for the information it has yielded regarding early twentieth century sugar cane transportation infrastructure. As the current inventory survey project recorded Site 24212 in detail, however, no further work is recommended.

In the unlikely event that archaeological resources are encountered during future development activities at TMK 3-2-9-03, 13, 29, and 60, work in the immediate area of the discovery should be halted and DLNR-SHPD contacted as outlined in Hawaii Administrative Rules 13§13-275-12.
REFERENCES CITED

Annual Report

Best, G.

Clark, M., R. Rudolph, and R. Rechman

Conde, J.

Ellis, W.

Hammatt, H. and B. Colin

Handy, E., and E. Handy

Hudson, A.

Klein, G., M. Koob, and D. Lee

Maly, K.

Menzies, A.


21
Stokes, J.F.G., and T. Dye

Thrum, T.G.

Walker, A., and P. Rozendaal


Wolfe, E., and J. Morris
December 22, 2004

Robert Rechtman, Ph.D.
Rechtman Consulting Inc.
HC 1 Box 4149
Kea’au, Hawaii 96749

LOG NO: 2004.3657
DOC NO: 0412MM09

Dear Dr. Rechtman:

SUBJECT: chapter 6E-42 Historic Preservation Review, Replacement Pages for:
"Archaeological Inventory Survey and Limited Cultural Assessment of TMK 3-2-6-03-13, 29, 60" (RC 0247)
Ahupua’a of Waiales, South Hilo, Hawaii Island

Thank you for submitting the above mentioned revised report for our review, which we received on September 3, 2004. The report was originally submitted as an Archaeological and Cultural Assessment, however, since a historic property was identified during the survey (Site No. 50-10-26-237-3), the report needed to be submitted as an Inventory Survey, subject to review under Hawaii Administrative Rules (HAR) §13-276.

Site 24212 consists of portions of a possible railroad grade section and trestle abutment, and is assessed as significant under Criterion D for the information it has yielded regarding early twentieth century sugar cane transportation. No further work is recommended for the 4.5-acre project area.

We agree with your assessment and recommended treatment. We consider the report to be adequate to meet the requirements of HAR §13-278 and accept it as final. If you have any questions about this review, please contact MaryAnne Maigret in our Hawaii Island office at (808) 327-3800 or Dr. Sara Collins at (808) 692-8026

Aloha,

Mellanie A. Chinen, Administrator
State Historic Preservation Division

cc: Christopher J. Yuen, Director, Hawaii PING, 101 Paauhi St, Ste 3, Hilo, HI 96720-3043
January 24, 2005

Brian T. Nishimura
Planning Consultant
101 Aupuni Street, Ste. 217
Hilo, Hawaii 96720

Dear Mr. Nishimura:

Subject: James McCully
Petition for District Boundary Amendment
TMK: (3) 2-9-003: 013, 029 & 060
Waiakea, South Hilo District, Island of Hawaii

This letter serves to advise you of the approval status of the Archaeological Inventory Survey and Limited Cultural Assessment of TMKs: 3-2-9-03:13, 29, and 60, Waiakea Aupuni'a, South Hilo District, Island of Hawaii, and also to provide you with additional information concerning the cultural assessment aspect of the study.

Background

The report was initially submitted to the State Department of Land and Natural Resources - Historic Preservation Division ("DLNR-SHPD") on July 16, 2004 under the title Archaeological and Limited Cultural Assessment of TMK: 3-2-9-03:13, 29, and 60; Waiakea Aupuni'a, South Hilo District, Island of Hawaii. It was acknowledged by letter dated August 27, 2004.

This letter states that the information presented, which was intended to satisfy the requirements of the County of Hawaii Planning Department and DLNR-SHPD with respect to permit approval for a proposed State land use district boundary amendment, "is generally adequate for predicting the kinds of historic properties that might be found during the survey" and that the "background information and previous archaeological research is likewise sufficient." The letter also states that "[a]dditionally, the presence of traditional Hawaiian remains or evidence that the area was currently being accessed for the exercise of traditional and customary practices was found to be negative."

Due to the presence of one historical site (SHP Site 50-10-26-24212, a possible railroad grade station and a railroad trestle abutment), the report had to be revised and resubmitted as an Archaeological Inventory Survey (and not an Assessment).

The report was revised to reflect the requested changes and resubmitted to DLNR-SHPD on September 3, 2004. It was acknowledged by letter dated December 22, 2004. The letter states that DLNR-SHPD considers "the report to be adequate to meet the requirements of HAR §13-276 and accept it as final".
Cultural Assessment

In relation to the archival and documentary research that was conducted for the Archaeological Inventory Survey, archival and documentary information was reviewed for the preparation of the Cultural Assessment as well. This research did not reveal any documentation of any previous or ongoing traditional and customary practices. The area was historically known as Hilo-pali-Kū (Hilo of the upright cliffs) and there are a few accounts that indicate that this area, which encompasses the sheer cliffs stretching along the Hamākua Coast from the Waikuku River to Waipio and beyond, once supported a large Precontact Hawaiian population that subsisted on crops such as taro, sweet potato, banana, and coconut. Other agricultural resources such as ʻawa, bamboo, and sugarcane were also cultivated on the kalo lands that stretched from South Hilo to Hamākua. In the second half of the nineteenth century, the transportation difficulties that had delayed the large-scale commercial exploitation of the kalo lands were overcome and sugarcane plantations replaced subsistence agriculture and grazing as the dominant land use.

In an effort to identify cultural resources associated with the Petition Area, contact was made with Ululani Sherlock of the Office of Hawaiian Affairs (OHA) and Kepā Maly of Kumu Pono Associates in June of 2004. They were contacted in an effort to obtain information about any potential traditional cultural properties and associated practices that might be present or have occurred in this portion of the Waiakea Ahupu'a. Neither contact had any specific information regarding this Petition Area. However, OHA suggested that the Laupāhoehoe Hawaiian Civic Club be contacted as they might have additional information. Lucille Chung and Walter Victor were contacted and they, in turn, suggested that Jack or Wash Ouye, Yukio Takaya and Lorraine Mendoza be contacted. Lorraine Mendoza recommended that Kyoichi Kabo and Masaichi Chinen be contacted. All calls were made between June and July, 2004.

Interviewees recalled that the railway used to run across the property until the Kolekole Bridge was destroyed by the tsunami of 1946. On the adjacent property to the south (Hilo-side), there used to be a pig farm that was used by camp residents and a trail that accessed the shore. This trail allowed the residents and local fishermen to access the shoreline below the pali that bounds the property to the east. This trail was not located on the subject property nor did it cross the subject property.

None of the organizations or individuals that were contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the Petition Area; nor did they provide any information indicating past or current use of the area for traditional and customary practices. It is unlikely that there are any traditional and customary practices occurring in the Petition Area as the lands were utilized for sugarcane cultivation and associated transportation for over 100 years. Any traditional Hawaiian features that may have been associated with former cultural practices that may have occurred in the Petition Area would have been destroyed by the sugarcane cultivation and related uses.

Please do not hesitate to contact me should you have any additional questions.

Sincerely,

[Signature]
Robert Rechtman, Ph.D.
Principal Archaeologist
APPENDIX D – COMMENTS AND RESPONSES PROVIDED DURING THE 30-DAY PUBLIC COMMENT PERIOD

1. State of Hawaii, Department of Transportation, Director of Transportation, April 18, 2005 and April 22, 2005.  

2. County of Hawaii, Department of Water Supply, Manager, April 12, 2005.  
Mr. Christopher J. Yuan
Director
Planning Department
County of Hawaii
101 Paauilo Street, Suite 3
Hilo, Hawaii 96720-3043

Dear Mr. Yuan:

Subject: James W. and Francine M. McCully
State Land Use District Boundary Amendment, SLU 02-002
LUC Docket No. A05-757
TMK: (3) 2-9-03: 13, 29 & 60

Only one access to and from Hawaii Belt Road (Route 19) will be permitted and the petitioner
will need to comply with the requirements and conditions as determined by our Highways
Division regarding the submittal of plans for the development of the affected property, including
the access driveway and connection. It is recommended that the petitioner consult with our
Hawaii District Office of our Highways Division regarding on-site conditions and the
construction plans submittal requirements.

We appreciate the opportunity to provide our comments.

Very truly yours,

RODNEY K. HARAGA
Director of Transportation

c: Laura Thilen, Office of Planning, DBEDT
TO: THE HONORABLE LAURA THIELIN, DIRECTOR
OFFICE OF PLANNING
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT AND
TOURISM

FROM: RODNEY K. HARAGA
DIRECTOR OF TRANSPORTATION

SUBJECT: JAMES W. AND FRANCINE M. MCCULLY
STATE LAND USE DISTRICT BOUNDARY AMENDMENT, SLU 05-002
LUC DOCKET NO. A05-757
TMK: (3) 2-9-01: 13, 29 & 60

in response to your request for our review of the subject petition, we are providing the following comments:

Only one access to and from Hawaii Belt Road (Route 19) will be permitted and the petitioner will need to comply with the requirements and conditions as determined by our Highways Division regarding the submittal of plans for the development of the affected property, including the access driveway and connection. It is recommended that the petitioner consult with our Hawaii District Office of our Highways Division regarding on-site conditions and the construction plans submittal requirements.

We appreciate the opportunity to provide our comments.

cc: Christopher J. Yuen, Hawaii Department of Planning

069780
May 13, 2005

Mr. Rodney K. Haraga, Director
State of Hawai‘i
Department of Transportation
869 Punchbowl Street
Honolulu, Hawai‘i 96813-3097

Subject: James W. and Francine M. McCully
         State Land Use District Boundary Amendment, SLU 05-002
         LUC Docket No. A05-757
         TMC: (3) 2-9-05; 13, 29 & 60

Dear Mr. Haraga:

This is in response to your comments to Mr. Christopher J. Yuen, Hawaii County Planning Director and Ms. Laura Thieles, Director, Department of Business, Economic Development and Tourism, regarding the subject petition. Please be advised that the subject petition will not require a new access from the Hawaii Belt Road (Route 19). The existing access has been in use for many years and will not be altered by the proposed project.

Thank you for taking the time to comment on the proposed project.

Sincerely,

[Brian T. Nishimura, Planning Consultant]

c: Christopher J. Yuen, Director, Hawaii County Planning Dept. and Laura Thieles, Director State Office of Planning
TO: Mr. Christopher J. Yuen, Planning Director
Planning Department

FROM: Milton D. Pavao, Manager

SUBJECT: STATE LAND USE BOUNDARY AMENDMENT APPLICATION (SLU 05-002)
REQUEST: CONSERVATION TO URBAN
APPLICANT – JAMES W. AND FRANCINE M. MCCULLY
TAX MAP KEYS 2-5-003:013, 029, AND 060

April 12, 2005

We have reviewed the subject application for the proposed State Land Use Boundary Amendment and have the following comments.

The Department’s nearest waterline is a 6-inch waterline along Old Mamalahoa Highway, on the opposite side of Hawai’i Belt Road. Please be informed that service laterals for each of the three aforementioned parcels has been installed so each parcel may have a 5/8-inch meter servicing it. Each service is limited to a daily maximum of 600 gallons.

Should there be any questions, please call Ms. Shari Komata of our Water Resources and Planning Branch at 961-8070, extension 1.

Sincerely yours,

Milton D. Pavao, P.E.
Manager

SHK:aco

copy: Mr. R. Iken Tsukazaki, Esq., and Mr. Michael W. Moore, Esq., Tsukazaki Yeh & Moore

...Water brings progress...
April 12, 2005

Ms. Mary Lou Kobayashi, Administrator
State of Hawai‘i
Department of Business, Economic Development & Tourism
Office of Planning
P.O. Box 2359
Honolulu, HI 96804

PETITION FOR AMENDMENT TO THE STATE LAND USE DISTRICT BOUNDARIES
PETITION: A05-7577/JAMES AND FRANCINE MCCULLY
REQUEST: CONSERVATION TO AGRICULTURAL DISTRICT
TAX MAP KEY 2-9-003-013, 029, AND 060

We have reviewed the subject Petition for Amendment to the State Land Use District Boundaries.

The Department’s nearest waterline is a 6-inch waterline along Old Mamalahoa Highway, on the opposite side of Hawai‘i Belt Road. Please be informed that service laterals for each of the three aforesaid parcels has been installed so each parcel may have a 5/8-inch meter servicing it. Each service is limited to a daily maximum of 600 gallons.

Should there be any questions, please contact Ms. Shari Komata of our Water Resources and Planning Branch at 961-8070, extension 252.

Sincerely yours,

[Signature]
Ma‘ron D. Pavao, P.E.
Manager

SHK,sc0

copy -r Mr. R. Ben Tsukazaki, Esq., and Mr. Michael W. Moore, Esq., Tsukazaki Yeh & Moore
May 13, 2005

Mr. Milton D. Pavao, Manager
County of Hawaii
Department of Water Supply
345 Kekuanaoa Street, Suite 20
Hilo, Hawaii 96720

Subject: James W. and Francine M. McCully
         State Land Use District Boundary Amendment, SLU 05-002
         LUC Docket No. A05-757
         TMK: (3) 2-9-03: 13,29 & 60

Dear Mr. Pavao:

This is in response to your comments to Mr. Christopher J. Yuen, Hawaii County Planning Director and Ms. Mary Lou Kobayashi, Administrator, Office of Planning, regarding the subject petition. Thank you for verifying that service laterals for each of the three parcels have been installed and may utilize a 5/8 inch meter to service them. The applicant understands that each service is limited to a daily maximum of 600 gallons.

Thank you for taking the time to comment on the proposed project.

Sincerely,

Brian T. Nishimura, Planning Consultant

c. Christopher J. Yuen, Director, Hawaii County Planning Department and Mary Lou Kobayashi, Administrator, State Office of Planning
To: Scott Glenn, Director
   Office of Environmental Quality Control

From: Suzanne D. Case, Chairperson
   Department of Land and Natural Resources

Subject: Final Environmental Assessment (FEA) for Conservation District Use Application (CDUA) HA-3767 for the Church Single Family Residence (SFR), located at Wailea, South Hilo, Hawai‘i

Tax Map Keys (TMK): (3) 2-9-003: 060 and portions of 013 and 029

The Department of Land and Natural Resources has reviewed the FEA for the subject project and has determined a Finding of No Significant Impact (FONSI). Please be advised, however, that this finding does not constitute approval of the proposal.

The Draft EA was published in the April 23, 2016 edition of The Environmental Notice. Comments on the Draft EA were sought from relevant agencies and the public, and were included in the Final EA. The FEA has been prepared pursuant to Chapter 343, Hawai‘i Revised Statutes and Chapter 11-200, Hawai‘i Administrative Rules. Please public this notice in OEQC’s upcoming July 8, 2016 edition of The Environmental Notice.

We have enclosed one (1) hard copy of the DEA and OEQC publication form, as well as one (1) CD with a pdf file of the Final EA/FONSI. A separate e-mail shall be sent with the OEQC publication form in word document format for publication purposes.

Please contact Lauren Yasaka of the Office of Conservation and Coastal Lands staff at 581-3386 should you have any questions.

Attachments: FEA, OEQC Pub Form, 1 CD
**APPLICANT PUBLICATION FORM**

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Church Single Family Residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Short Name:</td>
<td>same</td>
</tr>
<tr>
<td>HRS §343-5 Trigger(s):</td>
<td>HAR 343-5 (2) Propose any use within any land classified as conservation district by the state land use commission under chapter 205;</td>
</tr>
<tr>
<td>Island(s):</td>
<td>Hawai‘i</td>
</tr>
<tr>
<td>Judicial District(s):</td>
<td>Wailea, South Hilo District, Island of Hawai‘i</td>
</tr>
<tr>
<td>TMK(s):</td>
<td>TMK’s: (3) 2-9-003: 060, 029, 013</td>
</tr>
</tbody>
</table>

**Permit(s)/Approval(s):**
- Federal: None
- State of Hawai‘i:
  - Department of Land and Natural Resources – Conservation District Use Permit
  - Department of Health - Approval of individual Waste-water system; and Building Permit
- County of Hawai‘i:
  - Planning Department – Special Management Area (SMA) Assessment Application
  - Building Permit
  - Electrical permit
  - Plumbing permit
  - Occupancy permit

**Approving Agency:**
Department of Land and Natural Resources

**Contact Name, Email, Telephone, Address**
Lauren Yasaka; lauren.e.yasaka@hawaii.gov; (808) 587-0386; 151 Punchbowl Street, Room 131 Honolulu, HI 96813

**Applicant:**
Ken Church

**Consultant:**
N/A

**Status (select one)**

__DEA-AFNSI__
Submit 1) the approving agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the DEA, and 4) a searchable PDF of the DEA; a 30-day comment period follows from the date of publication in the Notice.

__X FEA-FONSI__
Submit 1) the approving agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEA, and 4) a searchable PDF of the FEA; no comment period follows from publication in the Notice.

__FEA-EISPN__
Submit 1) the approving agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEA, and 4) a searchable PDF of the FEA; a 30-day comment period follows from the date of publication in the Notice.

__Act 172-12 EISPN (“Direct to EIS”)__
Submit 1) the approving agency notice of determination letter on agency letterhead and 2) this completed OEQC publication form as a Word file; no EA is required and a 30-day comment period follows from the date of publication in the Notice.

__DEIS__
Submit 1) a transmittal letter to the OEQC and to the approving agency, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the DEIS, 4) a searchable PDF of the DEIS, and 5) a searchable PDF of the distribution list; a 45-day comment period follows from the date of publication in the Notice.

__FEIS__
Submit 1) a transmittal letter to the OEQC and to the approving agency, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEIS, 4) a searchable PDF of the FEIS, and 5) a
searchable PDF of the distribution list; no comment period follows from publication in the Notice.

---

**FEIS Acceptance Determination**
The approving agency simultaneously transmits to both the OEQC and the applicant a letter of its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS; no comment period ensues upon publication in the Notice.

---

**FEIS Statutory Acceptance**
The approving agency simultaneously transmits to both the OEQC and the applicant a notice that it did not make a timely determination on the acceptance or nonacceptance of the applicant’s FEIS under Section 343-5(c), HRS, and therefore the applicant’s FEIS is deemed accepted as a matter of law.

---

**Supplemental EIS Determination**
The approving agency simultaneously transmits its notice to both the applicant and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is or is not required; no EA is required and no comment period ensues upon publication in the Notice.

---

**Withdrawal**
Identify the specific document(s) to withdraw and explain in the project summary section.

---

**Other**
Contact the OEQC if your action is not one of the above items.

---

**Project Summary**
Provide a description of the proposed action and purpose and need in 200 words or less.

**The applicant is applying to:**
- Construct a single family ‘*single family residence*’, carport, bale, swimming pool, hot tub and outdoor cooking structure on Lot 060, the North Lot

  For reference the term ‘*bale*’ found herein is described as a ‘gazebo like open air’ structure under a roof supported by columns often with seating and in this case also a hot tub.

- Site leveling

- Repair of an existing access road up to the applied for residence site and a 900 sq. ft. outside car parking area. The repaired road and other vehicle areas will have a crushed rock surface generally 4-6” deep. The open sided garage adjoining the residence will have a concrete pad there under. The existing access road will lead from lot 029, the middle lot to the planned residence location on lot 060, the North lot.

- Septic system for the ‘*single family residence*’

- Solar panel array on the roof top of the planned single-family ‘*single family residence*’

- Restoring former grass cover and/or allowed non-conforming agricultural plantings to unused disturbed soil areas resulting from the Project

- A utility corridor in which a water line and a possible telephone line under the repaired road leading across lot 029 to the planned residence site on lot 060
Final Environmental Assessment

Church New Single-Family Residence in the Conservation District at South Hilo, Hawaii

June 2016

TMK’s: (3) 2-9-003: 060 (herein also referred to as the North lot) and contiguous TMK’s 029 (herein also referred to as the Middle lot) and (also related TMK # 013 also referred to as the South lot)

Applicant
Name / Agency: Ken Church herein after referred to as ‘the Applicant’
Street Address: 400 Hualani St.
Hilo, Hawaii

(note as the Applicant is currently ‘off island’ it is requested by the Applicant that all hard copies of correspondence be held at source, on behalf of the Applicant, and rather copies of documents be emailed to the Applicant until further notice). The Applicant will subsequently make arrangements for the forwarding of hard copies of such correspondence if required).

Note: No consultant was utilized in the preparation of this EA and CDUA HA 3767. It was prepared by the Applicant.

Contact Person & Title: same as above
Phone: 
Fax: 
Email: dockline3@yahoo.ca
Interest in Property: owner

Approving Agency:
State of Hawaii
Department of Land and Natural Resources
Office of Conservation and Coastal Lands
1151 Punchbowl Street, Room 131
Honolulu, Hawaii 96813

Note to reader:
1. The index page to the Final Environmental Assessment is located on the last pages of this document.
2. The index to the Exhibits is found around page 76.
3. Permits and Approvals that are believed to be required is located at the back of this document.
The Applicant does not have a residence in Hawaii nor a land based mailing address. The Applicant resides on a boat which is located in various locations. Please address all correspondence to the Applicant’s email address at

dockline3@yahoo.ca

In the event that hard copies and the like are mailed the Applicant will provide a suitable time-dependant hard copy mailing address if requested to the above email address.

Brief project description:
The applicant is applying to:

• Construct a single family ‘single family residence’, carport, bale, swimming pool, hot tub and outdoor cooking structure on Lot 060, the North Lot

For reference the term ‘bale’ found herein is described as a ‘gazebo like open air’ structure under a roof supported by columns often with seating and in this case also a hot tub.

• Site leveling

• Repair of an existing access road up to the applied for residence site and a 900 sq. ft. outside car parking area which will also serve as a car turn-around area adjacent to the existing road and planned residence. The repaired road and other vehicle areas will have a crushed rock surface generally 4-6” deep. The open sided garage adjoining the residence will have a concrete pad there under. The existing access road will lead from lot 029, the middle lot to the planned residence location on lot 060, the North lot.

• Septic system for the ‘single family residence’

• Solar panel array on the roof top of the planned single-family ‘single family residence’

• Restoring former grass cover and/or allowed non-conforming agricultural plantings to unused disturbed soil areas resulting from the Project

• A utility corridor in which a water line and a possible telephone line under the repaired road leading across lot 029 to the planned residence site on lot 060

Background and History:
The Applicant does not have a residence in Hawaii. As such the Applicant has not met with the various authorities and agencies which will consider this Final Environmental Assessment and their early comments are not included in this application. However the Applicant will demonstrate that all of these agencies were already invited to comment on the very similar 2008
McCully(s) FONSI for a residence on lot 029, the Property, and their comments were addressed in that FONSI and similarly are reflected in this Final Environmental Assessment.

- The applicant has applied to build a single family residence on the North lot 060.

- The subject 3 contiguous ocean-side lots, the Property, were Historically (for over 100 years) used for intensive agricultural production and a field road at the time the property was zoned Conservation in the 1960’s ref. exhibits 7, 8, 9. There currently exists legal non-conforming agricultural uses in various areas on all 3 of the subject lots and a field road continues to be the primary access route leading across Lot 029 to the planned residence site on lot 060. Lot 029 currently has an access eased paved driveway and utilities easement (including an existing County water line) to it leading from the Coastal Highway. Generally 3.2 acres of the 4.6 acre total area of the 3 lots qualify for ‘non-conforming agricultural use’ according to HAR 13-5-7 & 22 as the property was Historically utilized for intensive agricultural purposes for over 100 years up to 1992, ref. Brewer field maps exhibit 7and 8 and John Cross letter exhibit 9.

- Such agricultural use is being conducted by the Applicant on the Property as allowed ‘non-conforming use’ according to HAR 13-5-7 & 22; the areas of all 3 lots (generally 3.2 acres in total) have been extensively planted to various fruit trees and agricultural plantings ref. exhibits 7, 8 & 9..

- The applied for single family residence and related structures and uses applied for herein (the areas of intended soil disturbance resulting from the applied for land uses) are to be located on a portion of Lot 060 historically used for intense agricultural production. It is noteworthy therefore that the area of the planned residence location on Lot 060 currently qualifies to be cultivated for crop production (an allowed non-conforming agricultural use of the lot according to HAR 13-5-7 & 22) suggesting therefore that soil disturbance need not be a primary concern of the reviewer(s) of this CDUA/EA. The land was Historically cultivated and cropped for over 100 years. Lot 60 currently has extensive agricultural plantings (currently bananas, fruit and nut trees and a pineapple growing area interspersed with mowed lawn) on it generally located on most of the grassed areas of the lot. The current agricultural uses exceed approx. 1 acre of Lot 60.

There are no agricultural plantings other than grass on the hill top however where the residence is planned and on the roadway leading to the planned residence site. The intended access road including a utility corridor is located on both lots 029 and 060 and is located on a former roadway (a former railroad road bed which subsequently became a field road around 1952 and continued until around 1992) ref. exhibit 7, the area of the field road on the former two TMK parcels 029 and 060 (former railroad right of way lots) occupied an area of .856 acres of the two former parcels which in total (former parcels 029 & 060) occupied approx. 3.4 acres.
a turn around and parking area located adjacent to the applied for residence will be mostly on an area that is currently maintained in grass that was Historically the lot comprising the referenced field road on lot 60 ref. exhibit 7. All areas of planned soil disturbance for the applied for uses herein are currently maintained in grass including the former road way that has grass growing above it presently.

- The applied for single family residence is similar in size and scope to a 2008 CDUP HA 3445, submitted by the McCully(s), for the construction of a residence on the Property which included a FONSI which found ‘no significant impact’ ref. exhibit 6. The planned site of that residence was approx. 200 ft. to the South of the applied for Church residence ref. exhibits 12 & 2. That residence was never built and in 2014 the McCully(s) sold the Property to the Applicant.

Regarding the 2008 McCully(s) FONSI. As the requirement for an EA was a discretionary requirement of either the Chair of the BLNR or the BLNR it was requested by the Applicant in submitted CDUA HA 3764 in Jan. of 2016 that the CDUA for a residence be considered/allowed as ‘EA exempt’ without another EA/FONSI as the existing 2008 McCully(s) FONSI, exhibit 6, was believed by The Applicant to sufficiently equally apply to this application for the following reasons………..

In 2008 the previous property owners, the McCully(s), applied for and received CDUP HA-3445 (now expired) to allow the construction of a residence on Tax Map Key (“TMK”) No.: (3) 2-9-003: 029 (the middle of the 3 lots), Wailea, South Hilo District, Island, County and State of Hawai’i. In support of that permit the McCully(s) submitted a 2004 Botanical and Archaeological study, ref. exhibit 6 (therein appendix D’ botanical starting around page 121 there in’ and appendix F ‘archaeological starting around page 134 there in’), of the Property and a 2008 EA/FONSI, ref. exhibit 6. The 2008 FONSI and earlier conducted archaeological and botanical studies considered all 3 lots of the Property. Several, if not all, of the FONSI’s findings applied to all 3 of the TMK lots and the McCully(s) planned residence on Lot 029, which Property is presently owned by the Applicant and not just lot 029.

As the McCully(s) prior planned use was for a residence on the same 3 lots which is what is applied for in this application and is similar in size and scope to this current application the McCully(s) FONSI is also submitted hereto in support of this CDUA/EA for background information. The Applicant updated the 2004 Botanical Study in 2014 ref. exhibit 1. The presently applied for ‘single family residence’ is located approx. 200 ft directly to the North of the previously approved McCully(s) residence and on the contiguous lot 060 and on land formerly partially also in the former land area of Lot 029 which was the planned location of the McCully(s) residence………

it is to be noted that the McCully(s) planned ‘residence’ was located on Lot 029. Since that time a portion of Lot 029 has been incorporated into Lot 060, ref. CDUP 3725 dated April 30, 2015 ‘combine and subdivision of lots’. The combining and subdivision of lots has been accepted by the County and is currently in its final stages of documentation completion. The location of the presently proposed Church ‘single family residence’ is partially on the
land area of the former Lot 029 with the remainder of the proposed 'single family residence' on the former lot 060.

The proposed Church 'single family residence' is similar in size and general characteristics to the McCully(s) former planned residence, ref. exhibit 2, overlay Church res. vs McCully(s) res and exhibits 16 and 17 (topographical survey documents). Exhibit 2 to this CDUA/EA utilizes a survey document which was part of the 2008 referenced McCully(s)’s CDUP HA 3445 (now expired) issued by the BLNR and was also part of the McCully(s) SMA exemption requested/determination (also now expired) issued by the County evidenced as an exhibit to the 2008 McCully(s) CDUP HA 3445 on page 16.

The Applicant has sketched on to exhibit 2, for location comparison purposes, the planned location of this applied for 'single family residence' herein vs. the formerly planned McCully(s) residence. Exhibits 16 is a current survey document that specifically shows the planned location of the applied for Church 'single family residence' and the new property lines. Exhibit 17 is similar to exhibit 16 generally showing the former property lines for reference purposes.

The existing McCully(s) 2008 FONSI referred to herein is 'on file' as a government document. The Applicant has included a link to it as part of this CDUA/EA exhibit 6. By reference herein it is intended that the 2008 McCully(s) FONSI be linked and become a fundamental part of this CDUA/EA. The Applicant particularly draws to the attention of the reviewer(s) of the Applicant’s CDUA/EA - the 'FINDINGS' section of the 2008 McCully(s) FONSI which supported the McCully(s) CDUA/P for a 'single family residence' on lot 029.

This is the link to the electronic version of the McCully(s) FONSI (Final EA)………………

While the Applicant will submit a few pictures herein in support of this Application the Applicant also refers the reviewer(s) of this Application to

exhibit 6, 2008 McCully(s) FONSI and

exhibit 1, and updated botanical study of the property in 2014 before the Applicant began extensive allowed non-conforming agricultural use of the Property,

which documents have numerous pictures therein. The FONSI, also exists in an on-line government file and which was intended to be located on the same Property. The Applicant therefore directs the reviewer(s) of this application to that document also for general and specific reference and supporting information and pictures that are also submitted in support of this application and is intended to be a fundamental part of this CDUA and EA. The index section therein include a regional, location and site maps and topographical maps. Specific site topographical maps are included with this application as exhibits 16 and 17.

OWNERSHIP HISTORY
From 1992 to 2014 the McCully(s) owned all three of these contiguous TMK parcels, “the Property”, that are presently owned by the Applicant. In July of 2014 the McCully(s) sold these three (3) TMK parcels to
the Applicant.

PRIOR APPLICATIONS

Note: As electronic versions of the following files (permits etc.) are 'on file' as government documents the Applicant is referencing them herein by their respective identifying numbers. None-the-less by reference to these documents herein it is intended that they be linked and become part of this CDUA and EA as supporting evidence hereto where applicable.

SPA: HA 15-04 dated Aug 28, 2014, Site Plan Approval for Planting of Fruit Trees and Blueberry Bushes


SPA: HA 15-19 a 2,000 sq. ft. garden area approved in 2014

Note: the Applicant has recently substantially expanded agricultural uses of the Property without seeking further permits from the OCCL/BLNR. In 2015 the Applicant was directed by the OCCL to evidence such prior Non-Conforming Agricultural use of the Property. On Sept. 17, 2015 the Applicant submitted that evidence, by letter, to the OCCL ref. exhibits 7, 8 & 9. It is now a matter of record that the Historic use of the identified 3.2 acres of the Property was for intensive agricultural use.

CDUP 3725 dated April 30, 2015

Combine and subdivision of lots 013, 029, 060, including.....

conducting borings (soil sampling) on lots 029 and 060 to identify the area of the former rail road road bed/field road and.....

the posting of ‘no trespassing’ signs.

The combining and re-subdividing of the 3 TMK parcels effectively eliminated the 3 former railroad right of way lots on the 3 TMK parcels, the Property, and reconfigured the lot borders and areas of the 3 lots to a more suitable configuration. Another effect of the combine and re-subdivide was that the 3 TMK parcels which were comprised of 2 lots each became 3 TMK lots. Particularly Lot 60 (the site of the current applied for Church residence) was enlarged substantially and now encompasses a substantial portion of lot 029 (the former planned site of the McCully(s) residence) effectively placing the Church residence on both a former portion of lot 029 and on a portion of the former lot 060 (now entirely on lot 060 as the combine and subdivide is in the final stages of proper registration).

SPA: HA 16-4 Dated Sept 16, 2015 Structure Accessory to Agricultural use of Lot 029 was requested by the Applicant in order to support existing agricultural uses of the Property (including permitted conforming and unpermitted non-conforming agricultural uses according to HAR 13-5). The SPA was allowed by the BLNR to be supported by the 2008 McCully(s) FONSI, wherein it is stated.........
On August 28, 2015, the Board of Land and Natural Resources (Board) determined that the Office of Conservation and Coastal Lands (OCCL) shall process and approve a Site Plan Approval (SPA) for a 750 square foot accessory structure located on the subject TMK. In addition, the Final Environmental Assessment (FEA) and Finding of No Significant Impacts (FONSI) prepared in January 2008 for a single family residence on the same subject property has been found to be applicable for the current project and thus The Project is in conformance with Chapter 343, Hawai‘i’ Revised Statutes (HRS), as amended, and Hawai‘i’ Administrative Rules (HAR) 11-200, Environmental Impact Statement Rules. The FEA/FONSI was published in the February 8, 2008 edition of The Environmental Notice.

- This Project is similar in size and scope to the 2008 McCully(s) planned residence which was located on Lot 029 and approved by the BLNR in CDUP HA 3445.

The Project area is composed of 3 TMK lots (3) 2-9-003: 013, 029, 060 however the applied for ‘single family residence’ is on lot 060 and the access road and utilities corridor are located on both lots 029 and 060.

TaxMapKey parcel 013 = 1.291 acres, the South Lot  
TaxMapKey parcel 029 = 1.116 acre, the middle lot  
TaxMapKey parcel 060: 2.252 acres, the North lot  
Total = 4.659 acres  
Herein referred to variously as ‘The Subject lots and/or The Property’

The Subject lots were Historically intensively cultivated for agricultural use at the time of their inclusion into the Conservation District on or around 1964 which continued until around 1992. Today there exists legal non-conforming agricultural uses on substantial portions of The Property. Generally 3.2 acres of the 4.6 acre total area of the 3 TMK lots qualify for ‘non-conforming agricultural use’ according to HAR 13-5-7&22 as The Property was utilized for intensive agriculture for over 100 years up to 1992, ref. field maps exhibit 7, 8 and John Cross letter exhibit 9. Interspersed in the agricultural plantings today are areas of maintained grass. A small portion of North lot (060) is a portion of a wooded gulch. The center of the stream in the gulch is the Northern boundary of Lot 060. There remains a narrow area, varying in width, of undeveloped generally wooded land along the Pali on the Eastern, Oceanside, boundary of the 3 Lots above the ocean. The cliff descending from the bluff down to the ocean is very steep (generally 100 ft.high) and is owned by the state.

The proposed ‘single family residence’ will be located on lot 060 on a Historically cultivated area used for intensive agricultural production that is currently maintained as lawn interspersed with allowed non-conforming agricultural plantings. All of the property is in the Conservation/Resource zone, ref. boundary determination 92 48 exhibit 6, page 16. See also......
a regional location map, TMK map, and various other supporting documents can also be
found in the 2008 McCully(s) FONSI ref. exhibit 6 hereto. For reference the Applicant
points the reviewer(s) of this CDUA/EA to the index of exhibit 6 for ease of accessing
various exhibits therein. Exhibited hereto also is a site plan ‘single family residence’ location
map, ref. exhibits 2 and 16, 17, and a photo showing the planned ‘single family residence’
site, exhibit 12 and exhibit 5, pictures, of the planned improved (repaired) road leading to it
and an approximate line showing the area of the intended cut and fill.

**Land Use Designations**

The House Site and the rest of the combined Property are situated within the State Land Use
Conservation District **Resource** zone, ref. exhibit 6 pp 16. The County General Plan Land Use
Pattern Allocation Guide Map (“LUPAG”), ref Exhibit 6, page 15 thereof. Designation for the
Combined Property is Open. The Northeast Hawaii Community Development Plan
recommendation for the area is Open.

The County zoning designation for the property is Agricultural (“A-20-a”). The Project Area is
entirely situated within the County’s Special Management Area (“SMA”). Pursuant to Chapter
205A, HRS, and Planning Commission Rule 9, an SMAA relating to the 2008 McCully(s) Project
was submitted to the County Planning Department for processing. By letter dated June 19, 2007, the
Planning Director found that the proposed Project was exempt from the definition of “development”,
as contained in both Chapter 205A-22, HRS, and Planning Commission Rule 9. The Planning
Director’s determination also waved the requirement for a shoreline certification survey in light of
the 70-foot setback from the top of the pali.

The Applicant for this CDUA/EA has similarly submitted this CDUA/EA to the Planning Director
requesting an SMA exempt status for the applied for ‘single family residence and related land uses’.
The Applicant believes that this application to build similarly on the property will also be approved
by the Planning Director. Upon such SMA exempt approval being received it will be submitted to
the regulating authorities. It is not presently available as the County has informed the Applicant that
the SMAA will not be processed until a FONSI for this project is filed.

The Northeast Hawaii Community Development Plan and the County General Plan LUPAG Map
‘Open’ designations, ref. exhibit 6, approx. page 17, figure 5, relate to the State Land Use
Conservation District designation for The Project Area. As stated earlier the ‘Open’ designation,
which appears to be the reasoning for why the Property was subsequently taken into the
Conservation District over 50 years ago, appears to have a purpose that has effectively been lost in
time and record. This is unlike similar ocean-side agricultural properties immediately to the North
of the Quadrangle in which the Property is found. For reference ocean-side agricultural properties in
the Papaaloa Quadrangle remained in agricultural zoning with only the pali being zoned
Conservation.
In 2004-5 the McCully(s) petitioned that the Property be zoned out of the Conservation District and into the Agricultural District. During the McCully(s) LUC A05-757 petition hearings to rezone the property to Agriculture it was evidenced by testimony that there ‘may have been a plan at County level to develop a ‘guided path/corridor along the former railroad from Hilo to Hamakua’. This plan appears, if in fact it ever existed, to have been subsequently abandoned as the County supported the McCully(s) LUC Petition A05-757 to re-zone the Property to Agriculture from Conservation.

It was further discussed in the McCully(s) 2008 FONSI supporting CDUA HA 3445 exhibit 6, page 13 thereof that the ‘open’ designation appears to reflect the County of Hawai‘i’s policy advocating that open space between the Hawaii Belt Road and the shoreline should be preserved ‘in order to provide scenic views of the ocean from the road’. In the case of the subject Property however there are no views of the Property or the ocean from the Hawai‘i Belt Road because the road is cut deeply below grade along an embankment mauka of the Property resulting in no views to the East and the Ocean (the direction to the subject property) what-so-ever from the Belt Road. Therefore, such policy is not anticipated to be adversely affected by the applied for CDUA/EA.

The Resource designation of the Property requires that the Property encompasses one of the following areas………

HAR §13-5-13 Resource (R) subzone. (a) The objective of this subzone is to ensure, with proper management, the sustainable use of the natural resources of those areas. (b) The (R) subzone shall encompass:
(1) Lands necessary for providing future parkland and lands presently used for national, state, county, or private parks;

The Applicant notes that the Property is privately owned and completely surrounded by private lands with no public access whatsoever. The Applicant has pointed to the McCully(s) LUC petition wherein the County supported their request to re-zone the Property from Conservation to Agriculture. As such the County has indicated no interest in the use of the land for public use. It was further evidenced in the McCully(s) LUC petition that there exists no plan at any level to use the Property for parkland or public use.

(2) Lands suitable for growing and harvesting of commercial timber or other forest products;

The soils are designated ‘prime agricultural lands’ which are not the sort of lands particularly suitable for timber or forest product production

(3) Lands suitable for outdoor recreational uses such as hunting, fishing, hiking, camping, and picnicking;

The Applicant notes that the Property is completely surrounded by private lands with no public access whatsoever.

(4) Offshore islands of the State of Hawaii, unless placed in a (P) or (L) subzone;

This is not relevant to the Property

(5) Lands and state marine waters seaward of the shoreline to the extent of the State's jurisdiction, unless placed in a (P) or (L) subzone. This is not relevant to the Property
The natural slope of the Property is relatively modest and comparable to similar agricultural properties in the area that are not similarly zoned Conservation. The potential for erosion is minimal.

There appears to be no specific record of why the property was taken into the Conservation District other than because it was zoned ‘other’ by the County at the time that the Conservation district lands were identified, seemingly without recorded reasoning, approx. 50 years ago. More specifically, as demonstrated above, none of the characteristics of the Property appear to be identified in HAR 13-5-13. There exists no public views of the ocean from the coastal highway as the highway is cut deeply through a hillside along the subdivision in which the Property is located.

It seems that its current use for agriculture and a residence thereon is more appropriate to its physical characteristics and Historical agricultural use. Also LUC guidelines emphatically state “agricultural land shall remain agricultural” and “shall means must”! The Historic use of the Property was for intensive cultivation for commercial agricultural crops. A ‘single family residence’, as applied for herein, is believed by the Applicant to be an appropriate land use today both in support of the existing allowed agricultural activities on the Property and/or as provided for in HAR 13-5 as an allowable Conservation District land use.

The Applicant has struggled throughout the CDUA application to properly identify and qualify the proposed land use for a residence thereon within its designated Resource subzone and particularly in the “Evaluation Criteria” section of the CDUA as The Property does not appear to have the above mentioned criteria of lands described for the (R) subzone to encompass. The section regarding Evaluation Criteria states…………..

The Department or Board will evaluate the merits of a proposed land use based upon the following eight criteria (ref 13-5-30 (c)): wherein the question is asked “How is the proposed use consistent with the objectives of the subzone of the land on which the land use will occur? (ref 13-5-11 through 13-5-15)

None-the-less the Applicant describes the Applied for residential use on The Property as follows……

The following land uses are specifically being applied for……

(1) Construct a single-family residence according to HAR 13-5-23 L-3 (and subsequently 13-5-24)

- Construct a single-family, two bedroom, 2½ bath ‘single family residence’ on TMK No.: (3) 2-9-003:060. Ref. exhibits 5, 14, 15(a)(b), 16, 17 including lanai areas and a bale (with hot tub) and carport all under one roof. An area of 4’X4’ under the bale and hot tub area will serve as a general mechanical room with electrical, plumbing and the like in support of the residence, pool and bale/hot tub. The 16 sq. ft. has been added to the MDA calculation for the Project ref. exhibit 14 for the floor spaces and total calculation of MDA. The
mechanical room will not be below ground as the hillside drops off away from the residence in this location. The floor of the bale will be approx. 6 ft. above the hillside at this location (yet level with the lanai at this location) yielding a 16 sq. ft. area below it suitable for the mechanical room (as the ground is sloping in this area only a limited amount of the space below the bale will be suitable in height for this room). The balance of the area below the bale does not have sufficient head room clearance to be utilized for any other use (the area slopes upward steeply and the hot tub above projects downward into this space also) so the additional enclosed area under the bale is not calculated into the MDA of the project. 

*Exhibit 15 (a) (b)* shows 2 outside walls enclosing the area under the bale.

A 50 ft. X 10 ft. wide swimming pool (outside dimensions including concrete) will be located along the South side of the residence. It is not yet clear whether the County will require the swimming pool to be fenced. In the event that a fence is required the pool area will be fenced along its Western and Southern edges with a fence *ref. exhibit 14* and this CDUA is intended to also apply for such a fence if required. Further fencing will also be provided on the remaining 2 sides of the pool if required with suitable gating therein. The Southern side of the pool will be above ground level at varying grades as the natural slope of the hillside is variable at this location. The actual grade profile will be shown in the final architectural plans submitted to and to be approved by the Chair of the BLNR proposed herein as a condition of the CDUP.

There will be no patio/paving of the area surrounding the swimming pool but rather small pebble-like rounded river stones will surround the swimming pool at a depth of several inches with landscape fabric there-under to prevent weed growth *ref. exhibit 14 wherein the stone area is identified on the North and East sides of the pool*. There will be two stairways leading from the residence lanai and bale areas down to the edge of the swimming pool *ref. exhibit 14*.. The areas of the stairways is included in the MDA calculation.

- An outdoor cooking structure of approx. 40 sq. ft. is also applied for which will be separated by distance from the dwelling (*ref. exhibits 14 & 16*). The outdoor cooking structure will comprise a mortared stone construction with an appearance similar to an indoor fireplace and chimney with the open face of the fireplace facing West toward the applied for residence and away from the ocean. The chimney will be in the order of 12 ft. tall (maximum extent above the grade) and be approx. 3 ft. sq in order to provide sufficient updraft for the proper function of vertical smoke movement in the fire place. The fireplace will be approx. 3.5 ft. X 6 ft. deep and wide X approx. 6 ft. in height with the chimney portion there above. The chimney top will have a spark arrester screen thereon. When in use the open face of the fire place will also have a portable spark arrester screen placed in its open front portion facing the fire. Inside the fire-box appropriate hanging hooks and a rod will be provided suitable for the suspension of cooking pots and the like above the fire. In order for fire safety a crushed rock area will be maintained in the front of and surrounding the entire structure.
Immediately on the South side of the fireplace and continuing with the mortared stone construction a 4 ft. square X 3-4 ft. high additional cooking area with a metal grill covered top and a spark arrester screen there under is applied for. With the exception of a small vent and ash removal port at its base this unit will have 4 enclosed sides, a concrete bottom and a grilled open top. This portion of the stone mortared structure will provide for a wood fire within it and support grilling food and the support of cooking related pots and the like on the upper grill.

The entire structure, fireplace and grill area, will be located on a concrete pad on grade of a dimension of approx. 4 ft. X 10 ft. (40 sq. ft. ‘developed area’). A 4” deep crushed rock area surrounding the concrete pad in dimension 8 ft. X 10 ft. will be provided in order to provide a non-combustible border surrounding the outdoor cooking structure. There will be no roof area associated with the outdoor cooking structure.

The outdoor cooking structure is removed from the ‘single family residence’ as a safety feature and may be considered a structure accessory to a use OR part of the ‘single family residence’. The outdoor cooking structure will be located approx. 20 ft. to the East of the North East corner of the ‘single family residence’. It is believed by the Applicant that an outdoor cooking structure is a “structure accessory to a use” according to HAR 13-5-22 P9 and its area is not necessarily part of the MDA calculation. None-the-less whether the cooking structure is exempt from the MDA calculation as a ‘structure accessory to a use’ or included in the MDA calculation the Applicant has included the 40 sq. ft. area of the outdoor cooking structure in the total MDA of the applied for land use calculated to be 4,649 sq. ft. ref. exhibit 14. No patio is contemplated in the area in front of the outdoor cooking structure and no roof will be provided over the structure. This structure will not require site leveling and is located 101 ft. from the bluff/pali to the East ref. exhibit 16.

The combined area of the structure(s) proposed herein utilize a combined MDA of 4,649 sq. ft. (excluding the area under the 42” eaves on the dwelling structure which do not have floor area there under with the exception of 2 stair areas noted earlier that lead down to the swimming pool whose areas are calculated into the MDA). While the MDA may imply a large ‘single family residence’ the Applicant points that a substantial portion is covered lanai, bale, swimming pool, covered walkway from the car port and mechanical room. The actual enclosed residence will occupy approx. 2,500 sq. ft. The covered lanai area will provide shade protection from heat gain into the ‘single family residence’ on hot sunny days and an outdoor living space and further add to the general Hawaiian design character of the home.

The ‘single family residence’ is planned to have glass doors comprising a substantial portion of the outside wall areas of the ‘single family residence’ and roof-top venting such to encourage air flow in order to keep the ‘single family residence’ naturally cool during the day. The glass areas being deeply recessed under the roof will thus provide low reflectivity to the residence’s outward appearance. For reference the roof top ventilation area on the roof is shown in exhibits 15 A and B as a pointed extension area of the roof. The planned maximum height of the roof including the roof
vent is estimated to be 22 ft. 3 in. (subject to final architectural drawings but in any event the roof will be under 25 ft. in height).

The area above the ‘living space’ noted in exhibit 14 is intended to be an open ceiling design to promote air flow into the home and out through the roof. As an environmental consideration the ceiling areas above the rest of the home’s inner space will have closed ceilings around 8 – 10 ft. above the floor. This closed space is intended to serve as a solar heated space suitable for drawing hot air on sunny days for utilization in the mechanical clothes dryer for the drying of clothes and the like negating the need for gas heating of the air for clothes drying.

Particular design elements such as deep, shaded lanai’s and roof-top ventilation of the living space have been incorporated into the home’s design to eliminate the need for any mechanical air-conditioning of the residence. The ‘single family residence’ is up-slope from the prevailing trade winds off of the ocean which are generally cooler than land temperatures year around. The effect of the trade winds has the additional benefit of virtually eliminating biting insects on the property as the Property and its air space is regularly cleansed of their presence by the trade winds.

- The repaired existing access road leading to the car port, outdoor parking and turn around area will have a crushed rock topping applied thereon.

Grading of the hill top location planned for the residence is described later herein.

- Access to the Property from the coastal highway is via an existing access easement with a paved roadway and utility corridor across lot 048 to the West of the Property that locates on to the Western side of Lot 029 which is contiguous to the Project site on Lot 060 to the North ref exhibit 12, photo of subdivision. Utility lines, including water transmission lines already exist under the existing access easement from Lot 048. Extensions of those lines will be necessary in order to bring utility service to the proposed ‘single family residence’ from Lot 048. The described access road across Lot 048 exits on to the Coastal Highway.

Single Family Residence construction is an allowable use according to HAR 13-5-24 L-3 with a Board permit. TMK No.: (3) 2-9-003:060 is 2.252 acres in size and qualifies for an MDA up to 5,000 sq. ft. according to HAR 13-5-24. The applied for single family residence will have a MDA of 4649 sq. ft. See exhibit 16 showing the intended location of the ‘single family residence’ as described above and the ‘structure accessory to agricultural use’ ref. SPA HA 16-4 on the adjacent lot 029 that was permitted in 2015 by the OCCL and the connecting road and parking/turn around area which road is also shown on exhibits 7 & 8.

The planned ‘single family residence’ location is such that it cannot be seen from the other residences in the subdivision or surrounding area. The closest other residence is on TMK No.: (3) 2-9-003:048 immediately to the West of the planned ‘single family residence’. This lot has a residence and a large orchid nursery greenhouse on it. The view of the planned ‘single family residence’ is blocked from the residence and greenhouse on Lot 48 by several large trees.
The two structures will be separated by an approx. distance of 200 ft. The only other residence in the sub-division is on TMK No.: (3) 2-9-003: 051 which is South-West of TMK No.: (3) 2-9-003:013. The distance between the planned ‘single family residence’ and this existing residence on Lot 051 is approx. 1000 ft. The view plane between them is blocked by numerous trees.

Aerial photo of subdivision lots 013, 029, 060, 048, 049, 050, 051

The above picture is also shown as exhibit 12 herein.
The setbacks for single-Family Residential Standards for lots over one acre, as contained in Chapter 13-5, Hawaii Administrative Rules are 25 feet from the front, and 25 ft. on the sides and rear of the property line. The setbacks for the proposed single-family ‘single family residence’ conform to the standard. They are……………

Sides: (West) 26 feet, East: over 125 ft. feet (thereafter bluff and pali) and 189 ft from the estimated high water mark of the ocean below. Rear: North: 70 feet; Front: South over 100 feet (thereafter lot 029 also owned by The Applicant).

All outdoor lighting will be located such as not to be seen from the ocean (East). All permanent outdoor lighting will be shielded in strict conformance with the Hawai’i County Outdoor Lighting Ordinance (Hawai’i County Code Chapter 14, Article 9), which requires shielding of exterior lights so as to lower the ambient glare caused by unshielded lights further described herein. For a discussion regarding waste-water and septic systems see page 20 herein.

The proposed ‘single family residence’ is planned to be located with a 125 foot set-back from the high sea pali that form the Eastern boundary of lot 060 and estimated to be 189 ft. from the high water mark. The outdoor cooking structure will be located approx. 101 ft. from the property’s Eastern border, bluff and pali and is estimated to be, in total, 189 ft. from the high water mark of the ocean below.

There is a history of set back considerations regarding a potential residence on the property.

1. **In 2005** the McCully(s) filed a Petition with the LUC A05-757 to have the property re-zoned Agricultural from Conservation (ref. A05-757 LUC Petition/not appended hereto). As part of that petition in Jan. of 2006 the Administrator of the OCCL, Sam Lemmo, did a site inspection of the subject property including lot 060. During the hearings for that LUC A05-757 petition hearing in Hilo on May 4th, 2006 the Administrator of the OCCL, Sam Lemmo, testified that the OCCL had agreed that an 80 ft. pali/bluff set-back was sufficient on the Property for any planned residence on any of the 3 lots. Any reduction from that would have to be supported by a shoreline erosion study. Ref. exhibit 3, portion of LUC A05-757 2005-6 McCully(s) hearings/Sam Lemmo testimony regarding McCully(s) LUC petition to have the subject Property re-zoned to Agriculture from Conservation.

2. **In 2008** the set back requirement was further considered by James Kwong, PhD, PE of Yogi Kwong Engineers, LLC ref exhibit 4, letter, on behalf of the McCully(s) regarding a subsequent 2008 CDUA 3445 for the McCully(s) residence. CDUP 3445 was granted for the construction of a residence for the McCully(s) on lot 029 a contiguous lot to lot 060 with a 70 ft. pali setback agreed to. Subsequent to that the McCully(s) CDUA-P application-permit was withdrawn and no residence was built. As a part of that CDUA/EA evaluation the noted professional was consulted regarding erosion and set-back requirements. Dr. Kwong concluded that the 70-foot setback was adequate based on a helicopter and site reconnaissance, review of various historical aerial and topographic photos and maps and the height of the sea pali.
In the case of the present CDUA/EA the residence is planned to be located 125 ft. inland of the Oceanside property line which is inland of the bluff, pali and high water mark. This location is (125 ft. vs. 70 ft.) than what was already approved for the previous property owner McCully(s) planned residence ref. exhibit 16. In the 2008 McCully(s) FONSI, ref. exhibit 6, it is also stated..........

All of the lots are situate such that there is no view of the lots and the proposed residence site from the Hawaii belt road as the highway cuts deeply through a hillside to the West of the lots adjacent to Lots 013, 029, 060. There exists no public access or views from public lands. The only existing public views would be from the air or from passing boats/ships to the East. As the pali is already heavily treed views from the ocean are substantially screened by the trees lining the bluff and pali. Thus even passing boats/ships would not get much of a view of the proposed residence.

County water is currently supplied to the Western boundary of lot 029. It is proposed that this water will be supplied along the repaired access road across Lot 029 to the proposed ‘single family residence’ on lot 060. It is the intention of the Applicant to use solar electrical and solar hot water and solar hot air supply as the primary source of energy supply for the proposed ‘single family residence’ (see section (5) herein). The Applicant has lived off grid for the past 8 years and is quite familiar with solar as a sole source of energy. LPG will be used for the stove, oven, and supplemental clothes dryer and supplemental water heating if required.

It is further proposed that the ‘single family residence’ will have exterior finishes such as to minimize their appearance. The ‘single family residence’ will also be of similar appearance to the 2 existing residences in the 7 lot subdivision on lots 048 and 051 immediately to the West of the subject Lots ref. exhibit 12.

The dwelling is sited in a manner that is sensitive to the existing conditions of the planned residence site, and the design has taken into consideration such items as..........

views to and from neighboring residences, maintenance of existing scenic views, wind exposure, salt exposure, rainfall, drainage, sun exposure, locating in an area requiring the least amount of ground disturbance, among others.

The design objectives will be to identify and utilize those materials which will weather well over time, require only moderate maintenance and blend into the subject and surrounding lands.

The Applicant believes that the proposed residential use is appropriate in light of the present residential and agricultural uses on much of the surrounding lands. Moreover, single-family residential use is allowed in Agriculturally-zoned areas in order that the land owner can support his agricultural activities. The historical use of the Property was for intensive commercial cultivation of agricultural crops that spanned nearly a hundred years before being terminated by the closure of the Hilo Coast Processing Company. Such historical use has virtually destroyed substantial natural resources that may have previously existed on the property.
A detailed analysis of the site for foundation requirements for The Property was considered by Wedig Engineering, *ref. exhibit 6, starting on page 85*. The foundation recommendations in that study will be incorporated into the Applicant’s floor/foundation design. Drainage improvements are anticipated in order to mitigate any additional runoff that may be generated by development of the Project and will comply with County standards.

- **Site Leveling (cut and fill) for the ‘single family residence’** Like the 2008 McCully(s) CDUP HA 3445 the Applicant chooses to use a concrete slab foundation for the proposed structure. Alternatively a post and pier structure would present the planned ‘*single family residence*’ at a higher elevation making its appearance more apparent to the neighboring residences. In effect the structure will present a 3 ft. lower roof top appearance.

In order to minimize cut and fill of soil on the hill top to accommodate the proposed ‘*single family residence*’ the South and Eastern lanai and bale areas will generally be located on pier supported concrete posts above the former sloping hill side. A portion of the cut soil from the hill top comprising under the inside area of the residence will fill the formerly sloped areas of the hill side under the lanai areas East and South but will not support the lanai above as that area of the lanai and bale will be supported on post and piers above the fill. The inside floor area of the residence is intended to rest on cut-flattened cut areas of the hill top. This identified fill area under the lanai will be protected from rain fall erosion by the roof area above the lanai and will drop steeply in that area to join the natural slope of the hill leading down-slope from the identified lanai area. The total volume of cut soil will be in the order of 650 cubic yards. The cut soil will be placed as per the denoted areas shown *on exhibit 2 and 5*. The bale that projects S.E. from this corner will extend outward over the sloping topography of the hill side (unfilled) yielding a small 4’X4’ utility room area there under that is described herein as a mechanical room *ref. exhibits 14, 15& 16*.

The proposed ‘*single family residence*’ will be situated on a previously cultivated, relatively flat hill top at the North-Western boundary of lot 060 which is presently maintained generally as mowed lawn. It will be located beginning 26 ft. to the East of the Western boundary of lot 060. As such the only soil disturbance will be to soil that has previously been cultivated/disturbed during agricultural crop production on the property and the Property’s former railroad/field road uses described herein.

Generally the cut soil will be placed along the Eastern side of the Northern end of the access road and along/under the Eastern and Southern lanai sides of the applied for single family residence *ref. exhibit 5*. No land alteration activities, including cut or placement of fill material, will be conducted within 100 ft. of the top of the pali. All fill material will be re-planted quickly with native and/or endemic grasses and or allowed non-conforming agricultural plantings in order to minimize the potential of erosion of the disturbed soil. Suitable temporary erosion control structures will be placed seaward of all disturbed soil areas until they are regressed or have a structure placed upon them.
It is noteworthy that generally the existing allowed non-conforming agricultural uses of the property described herein already allow disturbed soil areas (cultivation) on all of the areas of the proposed Project. As such it is believed by the Applicant that cut and fill and bare soil areas of the Project site will have minimal effect on the ‘existing allowed conditions’ of the site. Having stated that the Applicant has no intention of leaving undisturbed soil areas without suitable ground cover and/or crop cover that may be subject to erosion in rainfall events. The Applicant intends to be a good steward of the Property and use reasonable effort to mitigate erosion possibilities resulting from both his agricultural operations and the proposed Project. Please refer to the “Best Management Practices” section near the end of this application for specific practices that will be undertaken during construction and implementation of the proposed land use.

Before any site work/cut and fill a county grading permit will be obtained.

It is noted by the Applicant that considerable loose field stone exists on the property below the maintained grassy surface. It is proposed that such field stone, when encountered both during the Project and subsequently during ongoing agricultural operations, will be generally placed at various suitable locations on the Property where field stone from the allowable agricultural uses of the Property may also be reasonably allowed to be placed.

- **REPAIR OF AN ACCESS ROAD and establishment of a utilities corridor there-along on TMK (3) 2-9-003: 029 and 060**

The proposed ‘single family residence’ will be situated on a hill top at the North-Western boundary of lot 060. It is the only suitable relatively flat area on the lot located sufficiently distant from the bluff to be suitable for a residence. The location selection for the residence is most suitable for topographical reasons and is at a reasonable distance from the ocean-side property line, bluff and pali. The hill top location will require the least amount of soil disturbance and leveling of any other site that may reasonably be contemplated on lot 60.

The Western 50 ft. wide boundary area of lot 060 was Historically a railway road bed that crossed the 3 lots from South to North (see attached document titled ‘survey doc field F 31 B 3.2 ACRES’ ref. exhibit 7. The field map ‘F 31 survey document’ shows the former railway road bed being utilized as a field road which continued from after the time that the iron and supports were removed leaving a road bed before 1964. During the period leading to 1992 the previous ‘allowed’ Historical relatively intensive agricultural use of The Property paused between 1992 and 2015. The road has since become overgrown with grass and has been maintained as mowed grass. The proposed improved access road will be approx. 300 ft. long leading from the existing paved entrance on lot 029 to the proposed residence on lot 060 above the former field road.
Regarding the ‘Non-Conforming land use “road” according to HAR 13-5……..

"Nonconforming use" means the lawful use of any building, premises, or land for any trade, industry, residence, or other purposes which is the same as and no greater than that established prior to October 1, 1964, or prior to the inclusion of the building, premises, or land within the conservation district.

§13-5-7 Nonconforming uses and structures. (a) This chapter shall not prohibit the continuance, or repair and maintenance, of nonconforming land uses and structures as defined in this chapter.

(d) If a nonconforming structure is damaged or destroyed by any means (including voluntary demolition) to an extent of more than fifty per cent of its replacement cost at the time of destruction, it shall not be reconstructed except in conformity with the provisions of this chapter, except as provided under section 13-5-22(P-8).

P-8 STRUCTURES AND LAND USES, EXISTING
(A-1) Minor repair, maintenance, and operation to an existing structure, facility, use, land, and equipment, whether it is nonconforming or permitted, that involves mostly cosmetic work or like-to-like replacement of component parts, and that results in negligible change to or impact to land, or a natural and cultural resource. Any repair, strengthening, reinforcement, and maintenance of a fishpond shall be in accordance with section 183-44 and 183B-2, HRS.

From HAR 13-5-2 ……..
"Repair, maintenance, operation" means land uses and activities necessary and incidental for the continued conduct of a use, whether nonconforming or permitted, including repairs not exceeding fifty per cent of the replacement value of the structure or use.

"Minor repair" means routine work done to an existing structure, facility, use, land, and equipment, that involves mostly cosmetic work or like-to-like replacement of component parts, and that results in negligible change to or impact to land, or a natural and cultural resource.

The planned addition of crushed rock topping, repair of the road, will not exceed fifty per cent of the replacement value of the existing road.

The Applicant conducted borings ref CDUP 3725 dated April 30, 2015 along the existing road and discovered that the grass had generally overgrown above the former road. Therefore according to section (d) cited above there was no destruction of the road. Therefore it is submitted by the Applicant that the proposed addition of crushed rock overlay represents a 'minor repair' to the existing road according to HAR 13-5.

The Applicant is conducting allowed ‘non-conforming agricultural uses of the property’. The 'single family residence' will be utilized by the Applicant as the primary residence on the property. The crushed rock overlay repair to the existing road will lead up to the Western side of the planned 'single family residence' where a car port attached to the 'single family residence' is proposed. Also a car turn-around area will be provided in this area generally shown in exhibit 16 comprising an additional area of 700 sq. ft. (excluding areas on the former field road) wherein crushed rock will also be applied over the existing grass and fill areas.

As there currently exists county water supplied to the property at the driveway provided on to Lot 029 pipe conduit(s) are applied for which will be located under the crushed rock along the driveway to the proposed ‘single family residence’ in order to provide utility services to the ‘single family residence’. A more detailed description of the road is found in Exhibit 30.

- **Septic system**

The planned sanitary waste disposal system is similar to the previously approved, 2008 CDUP HA 3445 McCully(s) planned system. In the case of this CDUA/EA, however this proposed septic system is located considerably further inland than the McCully(s) septic system (approx. 206 ft. inland from the bluff/pali). All sanitary uses will have dispossals in conformance with State and County requirements to be specified during the review process and will be located in an area below the planned ‘single family residence’ to the South in order to maximize the distance from the Ocean. Construction of a self-contained waste water system (lines, a septic tank and leeching bed) which will process all waste water in a below ground tank and convert it into water suitable for disposal in a leeching bed is proposed. The entire septic system from the ‘single family residence’ all the way through the septic system will be a gravity fed system, without the need for electric pumping of waste water, as the natural slope of the land will easily accommodate such use. All
proposed septic and reclamation systems will be coordinated/permitted with/by the State Department of health and the appropriate County agency.

*Ref. exhibit 16 for planned location of septic tank and leeching bed.* Note...the septic system will be located in excess of 200 ft. inland (West) of the pali and approx. 40’ to the North of the Southern most boundary of lot 60.

After installation of the self-contained septic system, the contours of the property will be returned to their pre-existing state and are planned at present to be re-planted to grass (note the area is presently allowed according to HAR 13-5 to be legally used also for ‘non-conforming’ agricultural uses). Any remaining excavated soil will be placed in the designated fill areas described in (2) above. The estimated additional volume created is under 6 cubic yards of fill.

- **Landscaping** in an area under 2,000 sq. ft. around the proposed ‘single family residence’ was earlier proposed in the original Jan. 2016 CDUA submission to the OCCL. The applicant has since amended the previous Jan. 2016 CDUA and now simply plans to re-plant allowable botanical and/or agricultural plant species on all unused disturbed soil areas. More specifically stated the disturbed soil areas surrounding the residence were most recently grass and Historically intensively used for allowed ‘non-conforming agricultural uses’ according to HAR 13-5. As replanting to grass and/or non conforming agricultural plantings is believed by the applicant to be allowable according to HAR 13-5-22 P-8 A-1 and generally HAR 13-5 as allowed ‘non-conforming’ agricultural uses no landscaping permit is being applied for the re-planting of the disturbed soil areas. The Applicant therefore proposes to re-plant disturbed soil areas to previous existing grasses and/or allowed non-conforming agricultural crops/plantings.

**It is noteworthy** that generally the existing allowed non-conforming agricultural uses of the property described herein already allow disturbed soil areas (cultivation) on all of the areas of the proposed Project area. As such it is believed by the Applicant that cut and fill and bare soil areas of the Project site will have minimal effect on the ‘existing allowed conditions’ of the site. Having stated that the Applicant has no intention of leaving undisturbed soil areas without suitable ground cover and/or crop cover that may be subject to erosion in rainfall events. The Applicant intends to be a good steward of the Property and use reasonable effort to mitigate erosion possibilities resulting from both his agricultural operations and the proposed Project.

- **Solar electric and water heating panels.** It is proposed that the ‘single family residence’ will be off-grid and rely on solar energy, batteries and a stand-by generator for solar supplemental electricity. The solar energy panels will be provided on the East, South and West sides of the roof of the ‘single family residence’ in order to capture morning, afternoon and early evening solar power. No more than a maximum of 30 solar panels will be utilized in the Project. The panel dimensions will be approx. 36-42” X 65-76” long.
• A utility corridor in which a water line and a possible telephone line under the repaired road leading across lot 029 to the planned residence site on lot 060
EXISTING CONDITIONS
Please describe existing conditions on the parcel (geology, ecology, cultural and recreational resources, historic resources, structures, landscaping, etc). Attach maps, site plans, topo maps, biological or archaeological surveys as appropriate.

[NOTE: Also find for reference to existing conditions Exhibit 6 (2008 McCully FONSI) and to its appendices for archaeological and biological reports and exhibit 1 (an updated 2014 biological report)]

There are no structures currently on Lot 060 other than a field road which is an Allowed Non-Conforming structure/use.

The Property is bounded on its Eastern border by a bluff-high pali-and ocean below. There exists no beach areas Oceanside. The area is inaccessible and the waterline is comprised of occasional large boulders interspersed along a coastline of steep-near-vertical cliffs. No beach areas exist and there is no public access due to the steep terrain interspersed with partially emerged and submerged rocks and boulders and the general rugged cliff-side ocean terrain and aquatic presentation of the coast line.

For further descriptions of existing conditions, maps, site plans, topographical maps ref. exhibits 2, 12, 14, 15, 16 and various supporting evidence in exhibit 6, McCully(s) FONSI and exhibits 7, 8 and 9.

Finally the Applicant is conducting extensive allowed ‘non-conforming’ agricultural use on 3.2 acres of the Property as noted herein and particularly defined within the areas shown within the area shown as topographical lines in exhibit 16 and further described in exhibits 7, 8 and 9. Such uses include the present plantings of various fruit trees, nut trees, pineapple plantings and the like and is likely to include further agricultural crops and uses within the allowed general open field ‘non-conforming’ use areas described in exhibits 7, 8 and 9.

Geology........
The Property is located on the lower eastern slopes of Mauna Kea and consists of the Hāmākua volcanic series. These lava flows are chiefly basaltic with layers of Pahala ash. (Stems and Macdonald, 1946.)

The Island of Hawai‘i is susceptible to four main types of natural hazards including tsunami, volcanism, seismic activity and hurricanes. Volcanic hazard, as assessed by the United States Geological Survey, is "8" on a scale of ascending risk 9 to 1. The zone "8" designation includes the lower slopes of Mauna Kea, most of which have not been affected by lava flows for the past 10,000 years. (Heliker, 1990.)

The Island of Hawai‘i is one of the most seismically active areas in the world and has experienced more than twenty large earthquakes (magnitude 6 or larger) over the past 166 years, the most recent occurring in October of 2006. (Wyss and Koyanagi, 1992.) Magnitude 6 earthquakes can be expected to cause structural damage to non-reinforced buildings. The Building Code rating for the entire Island of Hawai‘i is seismic Zone 4, which has the highest risk for seismic activity.

Three significant hurricanes have affected the Island of Hawai‘i over the past 50 years. Damage from hurricanes results from coastal waves/surge and high winds. The Project site is not within a
coastal hazard area for hurricanes or tsunami inundation. The hazards from hurricane winds are far more extensive and unpredictable than the water hazard. Winds may blow from variable directions and may be amplified by topographic conditions. (County of Hawaiʻi, 2003.) Shoreline areas in Hawaiʻi, particularly those on the northeast side exposed to the prevailing winds and heaviest wave attack, are subject to shoreline retreat. The rate of retreat in Hawaii has been estimated at an average rate of a couple of inches a year. (Macdonald and Abbott, 1977.) Some locations may experience sudden and rapid retreat due to land slides which may be associated with sea cliff collapse.

Helicopter and physical site reconnaissance was conducted by Yogi Kwong Engineers(“YKE”) in November of 2005. Based on the reconnaissance, a review of various historical and topographic photos and maps and the height of the pali, YKE has concluded that a 70-foot setback from the top of the pali appears sufficient to protect the proposed improvements from potential coastal hazards caused by intensive or storm wave action, tsunami, and related coastal flooding, ref. exhibit 4, letter.

Soils

*Environmental Setting*

The soils of The Project area are classified as Hilo silty clay loam with 0 to 10 percent slopes (“HoC”) by the U.S. Department of Agriculture Soil Conservation Service (“SCS”) Soil Survey. (U.S. Soil Conservation Service, 1973.)

Under the Agricultural Lands of Importance to the State of Hawaii (“ALISH”) classification system, there are four categories: prime, unique, other important agricultural lands and unrated. The Property is designated prime agricultural lands under the ALISH system, as are other similar properties along the Hilo - Hāmākua Coast that were Historically utilized for intensive cultivation of agricultural crops ref. exhibit 6, Figure 6 – Agricultural Lands of Importance to the State of Hawaiʻi, ALISH Map around page 18.

In 1965, the Land Study Bureau assigned land in the State into one of five master productivity ratings: A – Very good; B – Good; C – Fair; D – Poor; and E – Very poor. The Land Study Bureau’s overall master productivity rating of the Property for agricultural use is class C or Fair. (Land Study Bureau, 1965.) ref. exhibit 6, Figure 7, around page 24 – Detailed Land Classification Island of Hawaiʻi, Map No. 605.)

*It is noteworthy* that generally the existing allowed non-conforming agricultural uses of the property, which is a **Historical Use** dating back over 100 years, described herein already allow disturbed soil areas (cultivation) of all of the areas of the proposed soil disturbance in the proposed Project area. As such it is believed by the Applicant that cut and fill and bare soil areas of the Project site will have minimal effect on the *existing allowed conditions* of the site during the construction phase of the project as they will be temporary and the Applicant will provide erosion barriers and the like during the construction phase. Having stated that the Applicant has no intention of leaving undisturbed soil areas without suitable ground cover and/or crop cover that
may be subject to erosion in rainfall events. As a direct result of this CDUA being approved the Applicant intends to provide a full time residence on the Property which will enable the Applicant to be a good steward of the Property and use reasonable effort to mitigate erosion possibilities, maintain the efficient agricultural uses of the Property and to maintain the natural scenic views of the Property resulting from the agricultural operations and the proposed Project.

Short term impacts may result from construction activity relating to the proposed single-family residence respecting the Soils will occur during the construction phase of the project. Given the temporary or intermittent nature of these activities, the potential impacts should be minimal and will dissipate after the residence has been completed. The resulting minor potential impacts resulting from the proposed single-family residential use are expected to be minimal.

A geotechnical study of the Property was conducted in April of 2007 by Paul C. Weidig, P.E., of Weidig Geoanalysts, ref exhibit 6, Appendix C for the Geotechnical Report. The study included a field reconnaissance of the area and mapping of the locations of five test borings which were drilled and sampled to a maximum depth of approximately 15 feet below the existing ground surface. Samples of earth materials drawn from selected vertical intervals in each boring were logged, classified and recovered by a field engineer. The samples were then tested and further classified at Weidig's laboratory. The principal conclusions and recommendations of the study are as follows:

- The borings indicate that the property is underlain by soft, weathered ash and semi-compact, pumiceous cinders to a maximum depth of about 14 feet, below which is very dense, weathered basalt lava. The ash deposits can shrink irreversibly as they dry, but are not indicated to be expansive with moisture increases. The soils can be compacted satisfactorily, provided that the minimum 20 degree of compaction is lowered and moisture conditioning is elevated, as recommended in the report.

Climate

Environmental Setting

Hawai‘i's climate is generally characterized as mild with uniform temperatures, moderate humidity, and two identifiable seasons. The "summer" season, between May and October, is generally warmer and drier. The "winter" season, between October and April, is cooler and wetter. The Property is situated along the "windward" side of the Island of Hawai‘i, which is exposed to northeasterly trade winds that cause relatively high rainfall (approximately 150 inches annually). The average monthly minimum temperature in this area of the Hilo - Hāmākua Coast ranges from the low to high 60s (degrees Fahrenheit) while the average monthly maximum temperature ranges from the high 70s to the high 80s. (University of Hawai‘i Press, 1983.)

Potential Impacts and Mitigation Measures

The proposed Project will not have any impact on the climatic conditions of The Project.
Hydrology and Drainage

Environmental Setting
The Island of Hawai`i is generally characterized as having basal groundwater floating on salt water. The aquifer system underlying The Project area has a sustainable yield of approximately 150 million gallons per day. (County of Hawai`i Department of Water Supply, 1991.)

According to the Flood Insurance Rate Map (“FIRM”) prepared by the Federal Emergency Management Agency dated September 16, 1988, the Project Area is situated within Flood Zone "X" (areas determined to be outside the 500 year flood plain). The center of Puahanui Stream serves as the northern boundary of the Property and is encumbered with a watercourse easement.

Potential Impacts and Mitigation Measures
The proposed Residence is not anticipated to have any significant adverse impact on hydrology and drainage. However, due to the necessity of a certain amount of grading in order to prepare the house pad, the existing contour of the land will be altered somewhat. This alteration will undoubtedly have some effect on the drainage patterns of the Property.

The geotechnical study (see Appendix C in the 2008 McCully(s) EA and FONSI for the Geotechnical Report) prepared for the McCully(s), ref. exhibit 6, starting on or around page 85.

The report included the following recommendation in regard to surface drainage:

• Discharge from the building roof systems as well as runoff from the pavement and exterior flatwork areas should be directed away from the building lines. The new roof systems should be provided with flashing, gutters and downspouts to collect and divert runoff away from the foundations. The roof drains must remain independent of any retaining wall drains or subdrains. All drainage systems should be maintained on a routine basis. Runoff onto areas where soils remain exposed should be dispersed to avoid points of concentrated flow and subsequent erosion.

The Applicant intends to incorporate the consultant’s recommendations into the planned ‘single family residence’. Note there are no paved areas applied for in the Project area.

In addition to the recommendations of the geotechnical study, any potential impacts may be mitigated by complying with State and County regulations which mandate that any increase in runoff due to development of the Project site must be disposed of on-site and may not be directed toward adjacent properties.

It is noteworthy that generally the existing allowed non-conforming agricultural uses of the property described herein already allow disturbed soil areas (cultivation) on identified areas of the proposed Project site. As such it is believed by the Applicant that cut and fill and bare soil areas of the Project site during the construction phase of the project will have minimal effect on the ‘existing allowed conditions’ of the hydrology and drainage site. Having stated that the Applicant has no intention of leaving undisturbed soil areas without suitable ground cover and/or crop cover.
that may be subject to erosion in rainfall events. The Applicant intends to be a good steward of the Property and use reasonable effort to mitigate erosion possibilities resulting from both his agricultural operations and the proposed Project.

No additional site drainage, other than what presently exists, in the direction of the Puahanui Stream to the North of the Project site, will occur as a result of the project. In particular the Applicant will provide a suitable erosion and rain water run-off barrier described in the “Best Management Practices” section on page 78 of the Project site particularly to avoid any run off to the North and into the gulch and stream below during construction activities. The barrier will be removed after completion of the Project. No rainwater from roof drainage from the proposed residence will be directed to the North of the planned residence.

Water Quality

Environmental Setting
The center of Puahanui Stream serves as the Northern boundary of TMK No.: (3) 2-9-003:060. The Pacific Ocean lies immediately below the high pali, which serves as the Eastern boundary of the Property. Puahanui Stream appears to be an unnamed intermittent stream on U.S. Geological Survey Maps and was not included in the Hawai`i Stream Assessment conducted from 1988-1990, which inventoried and assessed available information on Hawai`i’s streams in four resource categories: aquatic resources, riparian resources, cultural resources and recreational resources. The coastal waters fronting the subject property are classified “A” by the State of Hawai`i. These waters are to be protected for recreational purposes and aesthetic enjoyment.

Potential Impacts and Mitigation Measures

The proposed Project is not expected to have any direct impact on Puahanui Stream or marine waters in-as-much as any additional runoff generated will be disposed of on site in compliance with State and County regulations. No development is planned in the vicinity of Puahanui Stream associated with it.

No additional site drainage, other than what presently exists, in the direction of the Puahanui Stream to the North of the Project site, will occur as a result of the project. In particular the Applicant will provide a suitable erosion and rain water run-off barrier described in the “Best Management Practices” section on page 78 of the Project site particularly to avoid any run off to the North and into the gulch and stream below during construction activities. The barrier will be removed after completion of the Project. No rainwater from roof drainage from the proposed residence will be directed to the North of the planned residence.

The proposed single-family use will be serviced by an individual wastewater system approved by the Department of Health, which will limit the potential for the discharge of any wastewater into near-shore marine waters. Finally the residence will be occupied by a retired couple of 2 persons. As such wastewater from the residence will be minimal.
Less than 40 gallons per day of effluent from the septic system of the applied for residence is anticipated to be disposed of in a shallow leeching field. The Applicant intends to place the leeching field directly adjacent to a large stand of bamboo on the Property and re-grass the area above the leeching field. The site was selected as bamboo and grass are particularly effective in water and nutrient uptake. This location is approx. 226 ft. from the bluff at the top of the pali which is heavily vegetated with large trees and grasses. The pali slopes downward to the ocean below, a distance of approx. another 72 ft. which is also heavily vegetated with various plant species.

The Island of Hawai`i is generally characterized as having basal groundwater floating on salt water. The aquifer system underlying The Project area has a sustainable yield of approximately 150 million gallons per day. (County of Hawai`i Department of Water Supply, 1991.) ref. exhibit 6

In effect the Applicant believes that the existing plant species(s) located above and between the septic leeching field and the ocean will virtually eliminate nutrients from the septic system from reaching the ocean.

It is noteworthy that generally the existing allowed non-conforming agricultural uses of the Property described herein already allow disturbed soil areas (cultivation) on all of the areas of the proposed Project. As such it is believed by the Applicant that cut and fill and bare soil areas of the Project site will have minimal effect on the ‘existing water quality’ of the site during the construction phase of the Project as the construction phase is temporary. Having stated that the Applicant will erect suitable erosion barriers (described herein) during the construction phase. The Applicant has no intention of leaving undisturbed soil areas without suitable ground cover and/or crop cover that may be subject to erosion in rainfall events. The Applicant intends to be a good steward of the Property and the water quality of the surrounding area and will use reasonable effort to mitigate effects to the water quality that may result from both his agricultural operations and the proposed Project both during and after the construction phase.

Flora and Fauna

Environmental Setting

The entire Property, with the exception of the steep gulch leading to Puahanui Stream, has been extensively utilized for intensive cultivation of agricultural crops for a period of approximately 100 years. This property has remained substantially fallow since 1992 when the last intensively farmed crop was harvested and has since been maintained substantially as a grassed lawn with numerous agricultural plantings. It has been noted, and reported to OCCL by the Applicant that since 1992 certain non-conforming agricultural crops continued to be grown on smaller areas of the Property. Finally, as noted herein, the Applicant has recently extensively planted the Property to various agricultural plantings.
A botanical survey of the Project area was conducted in June of 2004, by Evangeline J. Funk, Ph.D. Botanical Consultants. It is enclosed as a component of the 2008 McCully(s) EA and FONSI for their planned residence on Lot 029. The botanical survey identified two vegetation types on the Property. The open, occasionally mowed grassed area included a mix of introduced grasses. The seaward edge of the grassed area includes scattered planting of green hala trees and a variety of hala with green and yellow striped leaves. The areas along the slopes of the pali were predominantly introduced ironwood trees. A variety of landscape plantings also found in the grassed area include several species of palm trees, some bamboo varieties, kukui trees, golden pothos and banana-type plantings. The stream bank vegetation included large introduced trees such as African tulip, ironwood, coconut, and hala as well as banana, oak leaf fern and sword fern.

In conclusion, the botanical survey report states the following:

“Aside from the Kuku and hala trees, which may be early Polynesian introductions, the only native plants found on this site were some popolo berry bushes (Solanum 26 americanum Mill). Otherwise, the vegetation of this site is all introduced plants and is found in many places in the Hawaiian Islands and will quickly regenerate if it is disturbed.”

“No candidate, proposed, or listed threatened or endangered species as set forth in the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543) are known from this site and none were found during this survey.”

The complete botanical survey report for the Project site is included as an addendum to the 2008 McCully(s) EA and FONSI, ref. exhibit 6, Appendix D. Although a faunal survey was not conducted in 2004, it is highly unlikely that any candidate, proposed, or listed threatened or endangered species would be found on the Property. This is due to the past extensive cultivation of the soils for intensive agricultural crop production on the Project site for approximately 100 years and now the presently maintained lawn areas interspersed with agricultural plantings that predominate the Property.

In effect, with the exception of the recently planted fruit and nut trees throughout the Property, the gulch to the extreme North of the Project site and the bluff at the top of the pali there exists very few large trees as the general area of the Property is substantially open (mowed lawn) bordered by a few palm and bamboo providing little cover for any faunal species. There also presently exists a recently planted area of pineapples on Lot 60.

The referenced botanical survey of the Property that was conducted in June of 2004, by Evangeline J. Funk, Ph.D. Botanical Consultants has recently been updated, ref. exhibit 1 herein “General Botanical Survey and Vertebrate Fauna Assessment, TMKs (3rd.) 2-9-003:013, 029 & 060 Wailea, South Hilo District, Island of Hawaii” authored by Ron Terry, Ph.D. And Patrick J. Hart, Ph.D. Geometrician Associates, LLC, November 2014” which describes No Significant Findings and predated the substantial more recent planting by the Applicant of agricultural plantings (legal non-conforming agricultural plantings).
The proposed ‘single family residence’ will be located on a regularly maintained grassy area that was Historically used for intensive cultivated agricultural production and a portion of the former Historical field road.

Potential Impacts and Mitigation Measures
The proposed Project will have very little impact on the Project area. Exhibit 1 is a 2014 updated biological assessment update to the original biological assessment in Exhibit 6 conducted on behalf of the McCully(s). Therein it is recommended…………..

We offer the following recommendations in order to avoid impacts to endangered but Widespread native birds and the Hawaiian hoary bat:
• To minimize impacts to the endangered Hawaiian hoary bat, we recommend that trees taller than 15 feet should not be removed or trimmed during the bat birthing and pup rearing season (June 1 through September 15), to the extent practical.
• To minimize impacts to Hawaiian Hawks, we recommend avoiding earthmoving within 100 meters of tall trees or tree cutting during the breeding season for Hawaiian Hawks (March through the end of September). If this time period cannot be avoided, arrange for a hawk nest search to be conducted by a UH Hilo biologist or other qualified biologist. If hawk nests are present in or near the project site, all land clearing activity should cease until the expiration of the breeding season.

The applicant has no specific plans for tree removal. None-the-less the Applicant will specifically refrain from any tree removal or trimming between June 1 through September 15 during the years of the Project.

The construction period is anticipated to extend for a period greater than a year. Therefore a hawk nest search will be conducted by a UH Hilo biologist or other qualified biologist in March of the first year during when land clearing is (as recommended by the biologist in Exhibit 1) conducted for the project applied for. As recommended if hawk nest(s) are present near the project site, all land clearing activity will cease until the expiration of the breeding season.

It is noteworthy that generally the existing allowed non-conforming agricultural uses of the property described herein already allow disturbed soil areas (cultivation) on all of the areas of the proposed Project. As such it is believed by the Applicant that cut and fill and bare soil areas of the Project site during the construction phase of the Project and the resulting proposed residence will have minimal effect on the ‘existing allowed flora and fauna conditions’ of the site other than temporary disturbed soil areas already identified. Having stated that the Applicant has no intention of leaving undisturbed soil areas without suitable ground cover and/or crop cover that may be subject to erosion in rainfall events. The Applicant intends to be a good steward of the Property and use reasonable effort to mitigate erosion possibilities resulting from the construction phase of both his agricultural operations and the proposed Project and to protect natural flora and fauna undisturbed that may exist on the Property. Suitable erosion barriers as identified herein will mitigate erosion of soils.

Air Quality
Environmental Setting

The Project area and surrounding area is affected by pollutants derived from the volcanic emissions from the ongoing Kilauea eruption. Other sources of air pollutants to a limited degree include vehicle exhaust emissions along the Hawai`i Belt Road. In general, however, the ambient air quality of the Project Area meets all Federal and State standards as evidenced by its designation as an "attainment" area by the State Department of Health, Clean Air Branch.

Potential Impacts and Mitigation Measures

Short term impacts may result from construction activity relating to the proposed single-family residence, including dust and exhaust from machinery and vehicles. Given the temporary or intermittent nature of these activities, the potential impacts should be minimal and will dissipate after the residence has been completed. The resulting minor potential impacts resulting from the proposed single-family residential use are expected to be minimal.

The proposed outdoor cooking structure is in character of typical traditional Hawaiian lifestyle. The use of the outdoor cooking facilities will only be intermittent and will only have a very temporary minor effect on the air quality of the area. Suitable spark arrestor devices will be incorporated into the design, as described herein, in order to provide an additional element of fire safety when the structure is in use.

As such, the proposed residential use will not have a significant impact on the air quality of the surrounding area.

Noise

Environmental Setting

Ambient noise levels at The Project site are low to moderate and are typical for a rural agricultural area near the ocean. The primary noise generators in the area are the wind, ocean waves, vehicles on the Hawai`i Belt Road and vehicles entering the Property.

Potential Impacts and Mitigation Measures

Temporary noise impacts will occur from construction activity relating to the proposed single-family residence and are unavoidable. Construction noise will comply with Department of Health rules for “Community Noise Control”. Mitigation of construction noise to inaudible levels will not be practical due to the anticipated intensity of noise sources as well as the exterior nature of the work (excavation, grading, trenching, concrete pouring, hammering, etc.).

The resulting potential impacts resulting from the construction of the proposed residence are expected to be minimal. These activities will likely result in marginal increase in noise levels and will not have a significant impact on the ambient noise levels in the area. Construction activities will be conducted during daylight hours generally between 8:00 a.m. and 6:00 p.m. Monday to Saturday.
**Scenic Resources**

*Environmental Setting*

The predominant scenic views in the vicinity of the Project site are of the Pacific Ocean, the high, near vertical pali and the shoreline area. There are no views of the Property and the Project site from the Hawai‘i Belt Road because the road is cut deeply below grade along an embankment mauka of the Property.

The Property is situated between two sites listed as examples of natural beauty in the Hawai‘i County General Plan: Kolekole Gulch and Hakalau Bay/Gulch. Hakalau Bay/Gulch is situated approximately 5,000 feet north of the Property and Kolekole Gulch is situated approximately 1,200 feet south of the Property.

*Potential Impacts and Mitigation Measures*

The open space and scenic resources in the vicinity of the Project will not be impacted significantly by the Project. The existing residence and greenhouse operation to the West are screened by large trees from views of the Project site. The only other residence in the vicinity is over 1,000 ft. to the South of the Project site and screened by trees from view. *Ref exhibits 12 and 18.*

The Applicant’s proposed residence is being designed to blend into the subject and surrounding lands as much as reasonable, which is the primary reason for the Applicant’s plan to build on a slab foundation, as opposed to post and pier. It is not presently clear whether a residence constructed on a post and pier foundation would be visible from the Hawaii Belt Road or Kolekole Gulch. Certainly post and pier construction would present the roof top at a higher elevation increasing the likelihood of being visible to the surrounding area. A limited amount of post and pier construction is intended particularly under the lanai Eastern and Southern locations in order to support the lanai above filled areas and in order to reduce the overall cut and fill leveling of the planned residence site.

Considering the vegetation that is present along the top of the pali, which includes ironwood trees and hala clusters among other species, as well as the 125 foot structural setback from the top of the pali that is proposed, it is highly unlikely that any of the proposed improvements would be visible from the Kolekole Gulch. There are no views from the coastal highway of the Property. It is also highly unlikely that any of the improvements proposed would be visible from Hakalau Bay/Gulch due to its significant distance from the Property. However, the dwelling will be visible from surrounding properties in the 7 lot, private, gated subdivision but the views from the residences thereon is blocked by trees *ref. exhibits 12, 18.* Limited views from the ocean may also exist through the heavily treed pali however considerable high screening exists in the seaward area of the planned ‘*single family residence*’.

Other alternatives such as post and pier foundation, which would include less cut overall, would result in a dwelling that is more physically imposing on the land, causing greater visual impact to the surrounding area. The proposed dwelling has been designed and sited in such a way that it will
meld into the existing conditions. As such, the dwelling is not expected to have any adverse impact on the sites listed as examples of natural beauty in the Hawaii County General Plan.

Finally the term ‘Scenic’ implies that the Project area can be seen by the General Public which is demonstrated herein to not be the case as there exists no public views of the Property. Also aside from the general public the residence site selection was particularly selected such that it cannot be easily seen from either of the 2 other residences in the sub-division. Both of those residences were constructed in full knowledge that residences may be subsequently constructed on their adjacent vacant lots including the subject Property.

**It is noteworthy** that the scenic areas of the Project area already qualify for ‘non-conforming agricultural activities thereon. Generally the existing allowed non-conforming agricultural uses of the property described herein already allow disturbed soil areas (cultivation) on all of the areas of the proposed Project and agricultural crops generally thereon in substantial qualifying areas. As such it is believed by the Applicant that cut and fill and bare soil areas of the Project site will have minimal effect on the ‘existing allowed scenic conditions’ of the site during the construction phase of the project. As stated earlier the site is screened by trees from views from the adjacent 2 residences ref. exhibits 12 & 18. Also having stated that the Applicant has no intention of leaving undisturbed soil areas without suitable ground cover and/or crop cover that may be subject to erosion in rainfall events. The Applicant intends to be a good steward of the Property and use reasonable effort to mitigate erosion possibilities and the applicant intends to promote his uses of the Property in concert with his allowed agricultural uses in order to maintain the natural scenic appearance of the Property.

Given the temporary or intermittent nature of the construction activities, the potential impacts to the scenic resources of the site should be minimal and will dissipate after the residence has been completed. The resulting minor potential impacts resulting from the proposed single-family residential use are expected to be minimal.

**Social, Cultural and Economic Setting**

**Socio-Economic Characteristics**

**Setting**

Hawai`i County's population increased by more than 56,000 persons between 1980 and 2000. Between 1980 and 1990, Hawai`i Island's population increased by 30.7 percent, and increased by 23.6 percent between 1990 and 2000. The April 1, 2000 population figure for Hawai`i County was 148,677 according to census figures compiled by the County of Hawai`i, Department of Research and Development.

The South Hilo district had a population of 47,386 in 2000 which represented approximately 32 percent of the total population for Hawai`i Island. The City of Hilo is the largest population center on the island with the main offices of the County government, branch offices of Federal and State agencies located there. The island’s major deep draft harbor and international airport are also
located in Hilo. In addition to industrial, commercial and social service activities, the University of Hawai`i Hilo and Hawai`i Community College and affiliated research programs play an important role in Hilo's economy.

Hilo and the rest of the East Hawai`i communities are adjusting to the loss of the sugar industry in the mid 1990's. The continuation of agriculture in the district has required a major shift from large-scale single-commodity production to smaller scale, multi-commodity 29 multi-market base. The shift to diversified agriculture is characterized by larger numbers of self-employed and smaller scale independent businesses.

Potential Impacts and Mitigation Measures
Other properties in the immediate vicinity of the Project site are utilized for a variety of diversified agricultural activities including a certified orchid nursery, the propagation of foliage stock and the cultivation of edible ginger and Chinese taro as well as residential uses. The Project will not have any significant effect on the socio-economic characteristics of the area other than the residence will be used in support of the Applicant’s stewardship of the Property and agricultural uses thereon which will contribute very modestly but none-the-less positively to the economy in general. It is noteworthy that generally the existing allowed non-conforming agricultural uses of the property described herein already allow disturbed soil areas (cultivation) on all of the areas of the proposed Project and general agriculture on a substantial area of the Property. It has been evidenced herein as an ‘Historic use dating back over 100 years’. Construction activities will contribute to the local economy and the residence will allow the Applicant to be a good steward of his agricultural uses of the Property. The proposed single family residence on the Project site will be utilized in support of the agricultural uses of the Property and is in keeping with the above noted shift to diversified agriculture in the region as characterized by larger numbers of self-employed and smaller scale independent businesses and the Historic agricultural uses of the Property.

2.2.2 Adjacent Land Uses
Existing Setting
The areas immediately West (mauka) of the Property are situated in the State Land Use Agricultural district. The areas immediately North, South, and East are designated Conservation. (See State Land Use District Boundary Map on page 16 of the 2008 McCully(s) residence EA and FONSI.) ref. exhibit 6. The parcels immediately adjacent to The Project Area have the same general characteristics of the subject property. Of the five adjoining parcels in the subdivision, three are currently vacant and two have been developed with single-family dwellings. An orchid nursery business has also been established on TMK No.: (3) 2-9-003: 048 along with a single-family dwelling.

The adjoining communities of Hakalau and Honomu include a mixture of agriculture, residential and limited commercial uses. The majority of the residences in these communities are remnants of the former sugar plantation camps. A number of newer homes have been constructed on parcels Historically utilized for sugar production.
Potential Impacts and Mitigation Measures

The Project is consistent with the character of the parcels within the immediate vicinity of The Project site. It is also consistent with the character of the neighboring Hakalau and Honomu communities.

Other properties in the immediate vicinity of the Project site are utilized for a variety of diversified agricultural activities including a certified orchid nursery, the propagation of foliage stock and the cultivation of edible ginger and Chinese taro as well as residential uses. The Project will not have any significant effect on the adjacent land uses.

The proposed single family residence on the Project site in support of the agricultural uses of the Property is in keeping with the above noted shift to diversified agriculture in the region as characterized by larger numbers of self-employed and smaller scale independent businesses. As such the Project will have minimal effect on the ‘existing allowed conditions’ of the site and will generally be the same as the existing surrounding agricultural land uses.

Public Facilities and Services

Roads

Existing Setting

Hawai`i Belt Road (Highway 19) is a State highway providing the major route for cross-island transportation. The State highway is situated approximately 360 feet west of the subject Property. A 30-foot wide access and utility easement provides access to all three of the subject Property lots. The easement is currently improved with a 12-foot wide pavement from the State highway down to the edge of the Property, which is the middle lot #29.

Potential Impacts and Mitigation Measures

No significant impact on traffic or the highway system is anticipated. The additional traffic generated by the proposed single-family residential use will be minimal. As such, no significant impact on traffic or the highway system is anticipated.

2.3.2 Water System

Existing Setting

The County’s Department of Water Supply has confirmed, by letter dated April 4, 2005, that water is available to the Project via an existing six-inch waterline along the Old Mamalahoa Highway, on the opposite side of the Hawai`i Belt Road ref exhibit 6. The previous property owners, McCully(s) installed the necessary service laterals to serve the Property, and a waterline has been constructed within the access and utility easement leading to Lot 29.

Potential Impacts and Mitigation Measures

The Project will not have any adverse impact on the existing Department of Water Supply system.

2.3.3 Protective Services
Existing Setting

The closest fire and police stations to the House Site are the district stations situated in the community of Laupahoehoe approximately 9 miles to the Northwest. The Property is also situated within the service area of the main police and fire stations that are approximately 19 miles away in Hilo.

Potential Impacts and Mitigation Measures

The Project will not have an impact on the existing service providers.

2.3.4 Schools

Existing Setting

The Project Lands are served by Kalanianaole School and Hilo High School. Kalanianaole School is located approximately 9 miles southeast and Hilo High School is located approximately 19 miles south of the Property.

Potential Impacts and Mitigation Measures

The Project will not have an impact on the existing public school system.

2.3.5 Power and Communication Systems

Setting

The Project Lots are served by Hawaii Electric Light Company and Hawaiian Telecom through underground utility lines that have been installed for the proposed Project in a road and utilities easement on adjacent property to the West.

Potential Impacts and Mitigation Measures

The Project will not have any significant adverse impact on the power and communication systems serving the region. The proposed ‘single family residence’ will be off-grid electrically with power supplied by solar.

2.3.6 Wastewater

Setting

The Project is not within the service limits of the County waste-water disposal system.

Potential Impacts and Mitigation Measures

The Residence will dispose of septic water on site and will comply with County waste water septic permitting and requirements.
2.3.7 Solid Waste

Setting

There is no municipal collection system for solid waste in the County of Hawai`i. The County provides a solid waste transfer station near Honomu, approximately 1 mile from the Project site.

Potential Impacts and Mitigation Measures

The Project will not have any adverse impact regarding solid waste. The Applicant intends to use the solid waste transfer station near Honomu in support of the proposed residence.

Applicant acknowledges that construction waste is not allowed to be disposed of at a transfer station. All construction debris, waste and spoils intended to be disposed of off-site shall be inspected for the presence of pests (specifically Argentine ants) prior to removal from the site. Waste determined to be infested by unwanted pests shall be treated and cleared of such pests before removal from the Project site. Such construction waste will be transferred to a properly registered waste disposal business.

Archaeology, Historic and Cultural Resources

Setting

An archaeological assessment of the property was conducted by Rechtman Consulting, LLC, in July of 2004. The Property was systematically and intensively examined, and one site (SIHP Site 50-10-26-24212) (two historic-period railroad features) were discovered. These features were identified as a possible railroad grade section and a railroad trestle abutment. A copy of the consultant’s report can be found in the 2008 McCully(s) EA and FONSI document ref. exhibit 6. In summarizing its findings, the archaeological consultant states the following:

“Systematic survey of three parcels (TMK 3-2-9-03: 13, 29 60) produced no evidence of traditional Hawaiian remains or evidence that the area was currently being accessed for the exercise of traditional and customary practices.”

“One historic era site-SIHP Site 24212, was recorded. The site contains two features associated with the Hamakua Division of Hilo Railroad-Hawaii Consolidated Railway which were recorded in the northwestern portion of The Project area. One is a possible section of railroad grade and the other is a railroad trestle abutment. The features were in active use by the railroad from 1911 to 1946. Their primary function was to facilitate the transport of raw sugar from the many mills along the Hilo and Hamakua Coasts to the harbor at Hilo Bay. In later years, they also served the secondary function of facilitating tourism.”

The archaeological consultant provided the following significance evaluation and treatment recommendations:
“Site 24212 is considered significant under Criteria D for the information it has yielded regarding early twentieth century agriculture (sugar cane production), transportation infrastructure. As the current inventory survey project recorded Site 24212 in detail, however, no further work is recommended.”

“In the unlikely event that archaeological resources are encountered during future development activities at TMK: 3-2-9-03: 13, 29, and 60, work in the immediate area of the discovery should be halted and DLNR-SHPD contacted as outlined in Hawaii Administrative Rules 13§13-275-12.”

By letter dated December 22, 2004, DLNR-SHPD accepted and agreed with the archaeological consultant’s recommended treatment of Site 24212 and noted that the consultant’s report was adequate to meet the requirements of Section 13-276, HAR. The report was accepted as final. Rechtman Consulting, LLC, also conducted a cultural assessment for the Property. Archival and documentary information was reviewed, including Mahele Land Awards and Grants and historic maps.

This research did not reveal any documentation of any previous or ongoing traditional or customary practices. The area was historically known as Hilo-pali-Ku (Hilo of the upright cliffs) and there are a few accounts that indicate this area, which encompasses the sheer cliffs stretching along the Hāmākua Coast from the Wailuku River to Waipi‘o and beyond, once supported a large pre-contact Hawaiian population that subsisted on crops such as taro, sweet potato, banana, and coconut. Other agricultural resources such as ‘awa, bamboo and sugarcane were also cultivated on the kula lands that stretched from South Hilo to Hāmākua. In the second half of the nineteenth century, the transportation difficulties that had delayed the large-scale commercial exploitation of the kula lands were overcome and sugarcane plantations replaced the subsistence agriculture and grazing as the dominant land use.

In order to identify cultural resources and potential traditional cultural practices associated with the Project site and this portion of the Wailea ahupua‘a, the consultant contacted Ululan Sherlock of the Office of Hawaiian Affairs (OHA) and Kepa Maly of Kumu Pono Associates in June of 2004. Neither had any specific information relative to the Property. However, OHA suggested contacting the Laupahoehoe Hawaiian Civic Club. Lucille Chung and Walter Victor were contacted, and they, in turn, referred the consultant to Jack or Waich Ouye, Yukio Takeya and Lorraine Mendoza, who were contacted in June and July of 2004.

The interviewees recalled that the railway used to run across the property until the Kolekole Bridge was destroyed by the tsunami of 1946. On the adjacent property to the south of the 7 lot subdivision, there used to be a pig farm that was used by camp residents and a trail that accessed the shore. This trail allowed the residents and local fisherman access to the shoreline below the pali that bounds the property to the East. This trail was not located on the Property nor did it cross such Property.

The consultant summarized its findings regarding cultural resources relating to the Combined Property (using the referenced “Petition Area”) as follows: “None of the organizations or
individuals that were contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the Petition Area; nor did they provide any information indicating past or current use of the area for traditional and customary practices. It is unlikely that there are any traditional or customary practices occurring in the Petition Area as the lands were utilized for sugarcane cultivation and associated transportation for over 100 years. Any traditional Hawaiian features that may have been associated with former cultural practices that may have occurred in the Petition Area would have been destroyed by the sugarcane cultivation and related uses.’’

The Applicant interviewed the field manager of the agricultural farming business which occupied the Property up to 1992. The field manager stated that this particular Property and the surrounding 7 lot subdivision was maintained as a ‘seed farm’ for their agricultural business for over 40 years and all public access from all directions was strictly prohibited in order to not contaminate the seed production on the Property. Thus there exists no recent history of public access to the Property or the subdivision to its West after the closure of the railroad around 1950.

A complete copy of the Archaeological Inventory Survey and Limited Cultural Assessment of TMKs: (3) 2-9-003: 013, 029, and 060 is provided as an addendum of the 2008 McCully(s) environmental assessment/FONSI ref exhibit 6. The comment letter from the State Historic Preservation Division dated December 22, 2004 and a supplemental letter from the consultant Rechtman Consulting, LLC, dated January 24, 2005 are also included therein.

Potential Impacts

There were no cultural or historic properties, other than Site 24212, identified in the Combined Property Area. There were also no traditional or customary cultural practices found to be associated with such property. The Project is therefore anticipated to have “no effect” on significant historic sites or traditional and customary cultural practices. The Historic use of the Property was for Agriculture. The proposed Residence will assist the Applicant in the stewardship of the continuing agricultural use of the Property (the Historic use).

SUMMARY OF POTENTIAL ADVERSE ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION MEASURES

Short Term Impacts

The Project will comply with standard county mitigation requirements including an erosion barrier mounted between the construction site and the ocean, identified daytime construction activities, noise mitigation and the like.

Specific Best Management Practices will be utilized by the applicant.

• Sediment wattles and/or compost-filled biosocks will be installed to capture sediment along the perimeter of the site work.
• Impermeable lined sediment basins will be utilized to capture concrete wash down
water from concrete trucks
• Construction activities with the potential to produce polluted runoff will not be allowed during unusually heavy rains or storm conditions that might generate storm water runoff.

In addition, no significant impact of floral or faunal resources is anticipated. No rare, threatened or endangered species as listed by the U.S. Fish and Wildlife Service appear to be present on the parcel, nor are there unique of valuable wildlife habitats. No existing or proposed federally designated critical habitat is present within the Petition Area. The only native plant species that was discovered by the Botanical Surveys was the popolo berry.

The proposed Project will have very little impact on the Project area. Exhibit 1 is a 2014 updated biological assessment update to the original biological assessment in Exhibit 6 conducted on behalf of the McCully(s). Therein it is recommended…………..

We offer the following recommendations in order to avoid impacts to endangered but widespread native birds and the Hawaiian hoary bat:
• To minimize impacts to the endangered Hawaiian hoary bat, we recommend that trees taller than 15 feet should not be removed or trimmed during the bat birthing and pup rearing season (June 1 through September 15), to the extent practical.
• To minimize impacts to Hawaiian Hawks, we recommend avoiding earthmoving within 100 meters of tall trees or tree cutting during the breeding season for Hawaiian Hawks (March through the end of September). If this time period cannot be avoided, arrange for a hawk nest search to be conducted by a UH Hilo biologist or other qualified biologist. If hawk nests are present in or near the project site, all land clearing activity should cease until the expiration of the breeding season.

The applicant has no specific plans for tree removal. None-the-less the Applicant will avoid impacts to Hawaiian hoary bats, there will be no clearing of woody vegetation taller than 15 feet during the bat pupping season, which runs from June 1 through September 15 each year.

The construction period is anticipated to extend for a period greater than a year. The Project area where specific site work is anticipated is maintained as lawn. However the only land clearing (cut and fill activities) will be done during the first year of the Project. Therefore a hawk nest search will be conducted by a UH Hilo biologist or other qualified biologist in March of the year during which cut and fill of soil is conducted (as recommended by the biologist in Exhibit 1) for the project applied for. As recommended if hawk nests are present in or near the project site, all land clearing activity will cease until the expiration of the breeding and nesting season.

All construction activity will take precautions to prevent fire ignition during construction of the improvements. No construction vehicles will be allowed to park in areas vegetated with ignitable material, such as dry grass or shrubs; instead, the Applicant will identify areas for parking.

In order to minimize the potential for the unintentional introduction/spread of invasive plants and animals (most crucially but not limited to fire ants, Argentine ants, black widow spiders, to/from the MKRA, the Applicant shall:

1. Ensure that all heavy equipment and construction equipment/material delivery
vehicles transported to/from the Project are clean and free of soil, organic material and pests prior to entering or leaving the Project area. Equipment/vehicles failing inspection shall be properly cleaned/treated and re-inspected until cleared for transport.

2. All crushed rock, for use in repairing the roadway, transported to the Project site for use on this project shall be crushed/prepared as soon as practicable prior to transport so as to minimize the potential for infestation by pests. Material stockpiled longer than 10 consecutive calendar days prior to transport shall not be used on this project. The swimming pool area of the project will have rounded river stone surrounding it. This material will be purchased off site and inspected for pests before being transported to the Property.

3. All construction debris, waste and spoils intended to be disposed of off-site shall be inspected for the presence of pests (specifically Argentine ants) prior to removal from the site. Waste determined to be infested by unwanted pests shall be treated and cleared of such pests before removal from the Project site.

Also refer to the Best Management Practices section of this CDUA/EA on page 78 for further description of the adverse environmental impacts and the proposed mitigation measures.

A positive short term impact will be the construction activities will result in a small but none-the-less positive impact on the economy of the local area.

**Long Term Impacts**

The Project will not result in significant negative Long Term Impacts. A positive impact will be that a ‘single family residence’ will be located on lot 060 that will provide for good stewardship of the Property’s present on-going agricultural uses of the Property as opposed to its present situation without the stewardship that normally results from an owner/resident on the Property.

**ALTERNATIVES**

**Alternative Actions Considered**

Under the no action alternative, The Applicant would not submit the CDUA for the proposed Project. The Applicant does not own a residence in Hawaii. The Applicant is conducting agricultural uses of the Project area and requires a ‘single family residence’ particularly in order that the Applicant can provide good stewardship of the upkeep of the property and the Historical Agricultural uses of the Property. The Applicant believes that not having a ‘single family residence’ on the property is neither financially viable nor would it allow the best use of the Property. A residence will assist in the management of the naturally open and scenic nature of the Property. The site selection and design of the residence is believed by the Applicant to require the least soil disturbance, place the residence at a maximum distance from the ocean and preserve the scenic views from the two other residences in the subdivision.
EVALUATION CRITERIA

The following criteria are provided with this Final Environmental Assessment as further background information that was submitted with the Applicant’s CDUA and SMAA………………

The Department or Board will evaluate the merits of a proposed land use based upon the following eight criteria (ref §13-5-30 (c)):

1. **The purpose of the Conservation District** is to conserve, protect, and preserve the important natural and cultural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare. (ref §13-5-1) How is the proposed land use consistent with the purpose of the conservation district?

The proposed project is an allowed use according to HAR §13-5-24, L 3. Also a similar project was evaluated and received a CDUP 3445 in 2008 (the McCully(s) residence). The EA and FONSI and resulting CDUP 3445 referenced herein found No Significant Impact ref exhibit 6, page 39 therein. The Project applied for herein is sufficiently similar that it will be reasonable to find that no significant impact also applies to this CDUA and EA.

**It is noteworthy** that generally the existing permitted non-conforming agricultural uses of the property described herein already allow agriculture on a substantial area of the Property. Erosion control on such an ocean-side site requires dynamic regular management during and after rainfall events. The Applicant intends to be a good steward of the Property and use reasonable effort to mitigate erosion possibilities resulting from both his agricultural operations and the proposed Project. The residence on-site will provide for such dynamic management of the Property which will include monitoring and control of insect pests and weeds (including invasive species control), control of erosion potential and scenic view management through regular debris removal of fallen trees and the like.

The allowed non-conforming agricultural use of the Property is in keeping with the shift to diversified agriculture in the region as characterized by larger numbers of self-employed and smaller scale independent businesses. As such the Project will have minimal negative effect on the ‘existing allowed conditions’ and generally more positive effect on the Property and the land use will generally be the same as the existing surrounding agricultural land uses which include residences thereon.

Having a residence on the Property will allow the Applicant to appropriately provide good stewardship of the Property and maintain the long-term sustainability of its natural resources and the public health, safety, and welfare of the region and site.

Therefore the proposed Project is consistent with the purpose of the Conservation District in that a single-family dwelling is an identified use in the R Subzone and the Applicant is reasonably committed to preserve the limited resources of the site which will be conserved, protected, and preserved during and after the construction phase of the Project. The residence will therefore have a strong positive effect on the Property and the community.
2. **How is the proposed use consistent** with the objectives of the subzone of the land on which the land use will occur? *(ref §13-5-11 through §13-5-15)*

- The proposed project is an allowed use according to HAR 13-5-7 & 22. Also a similar project was evaluated in 2008 (the McCully(s) residence. The EA and FONSI and resulting CDUP HA 3445 referenced herein found No Significant Impact. The Project applied for herein is sufficiently similar that it will be reasonable to find that no significant impact also applies to this CDUA. The applied for land uses are only on former field and road areas. As such the natural areas of the Property area will not be affected by the Project.

**DLNR established** the following five Subzones within the Conservation District: Protective, Limited, Resource, General and Special. The Property is situated entirely within the Conservation District, Resource (“R”) Subzone. Pursuant to Section 13-5-3, HAR, the objective of the R Subzone is “to develop, with proper management, areas to ensure sustained use of the natural resources of those areas.”

Although the Property is designated within the R Subzone, it has a Historic history of intensive agricultural use for approximately 100 years before such use was effectively suspended by the closure of the Hilo Coast Processing Company. Various consultants were retained to survey the floral, archaeological and cultural resources of the Property. The findings and conclusions of the consultants’ reports are that the previous agricultural use appears to have destroyed any significant archaeological, biological and cultural resources that may have previously existed on the Property.

In addition, the Property is not visible from the Hawai‘i’ Belt Road, which is cut through an embankment that blocks any makai view of the Property, the coastline or the ocean from such road. There is no shoreline access from the Property as it is bounded on the makai side by a steep sea pali that ranges in height from 100 feet above mean sea level and the North and South sides by private land with similar no public access.

Finally the Applicant interviewed the field manager of the agricultural farming business which occupied the Property up to 1992. The field manager identified that this particular Property and the entire area of the 7 lot subdivision was maintained as a ‘seed farm’ for their agricultural business for over 40 years and all public access from all directions was strictly prohibited in order to not contaminate the seed production on the Property.

The Project is not expected to affect the air quality of the Property or that of the surrounding Conservation District lands beyond potential short-term impacts resulting from construction activity. Temporary noise impacts will also result from construction activity. No impacts are anticipated upon geology, coastal hazards or soils.

Provided the BLNR approves the subject application and issues a CDUP, identified land uses within the R Subzone, as described under Section 13-5-24, HAR, include the following:

A single-family residence that conforms to the design standards as outlined in Section 13-5-24, HAR; and

As demonstrated by the foregoing, the proposed Project is consistent with the R Subzone. Section 13-5-24, HAR, limits the developable area for single-family dwellings in the Conservation District to a maximum of 5,000 sq. ft. (including any decks, garages, swimming pools, or other structures). The proposed residence is consistent with the Conservation District Rules, as demonstrated by the attached preliminary architectural drawings *exhibits 14 and 15*
(a) & (b) and 16. Relative to the existing vacant state of the site, a dwelling will allow the Applicant to maintain careful monitoring of site conditions, in effect providing stewardship of the natural resources of the site and the allowed agricultural uses of the Property.

It is noteworthy……..
• The Resource designation of the Property appears to designate that the Property encompasses one of the following areas………..

HAR §13-5-13 Resource (R) subzone. (a) The objective of this subzone is to ensure, with proper management, the sustainable use of the natural resources of those areas.
(b) The (R) subzone shall encompass:
(1) Lands necessary for providing future parkland and lands presently used for national, state, county, or private parks;
   The Applicant notes that the Property is privately owned and completely surrounded by private lands with no public access whatsoever.
(2) Lands suitable for growing and harvesting of commercial timber or other forest products;
   The soils are designated ‘prime agricultural lands’ which are not the sort of lands particularly suitable for timber or forest product production
(3) Lands suitable for outdoor recreational uses such as hunting, fishing, hiking, camping, and picnicking;
   The Applicant notes that the Property is privately owned and completely surrounded by private lands with no public access whatsoever.
(4) Offshore islands of the State of Hawaii, unless placed in a (P) or (L) subzone;
   This is not relevant to the Property
(5) Lands and state marine waters seaward of the shoreline to the extent of the State's jurisdiction, unless placed in a (P) or (L) subzone.
   This is not relevant to the Property

• The natural slope of the Property is relatively modest and comparable to similar former agricultural properties in the area that are not similarly zoned Conservation. The potential for erosion is minimal.

There appears to be no specific record of why the property was ‘taken by inverse condemnation’ into the Conservation District other than because it was zoned ‘other’ by the County at the time that the Conservation district lands were identified, seemingly without recorded reasoning, approx. 50 years ago. More specifically, as demonstrated above, none of the characteristics of the Property appear to be identified in HAR 13-5-13. There exists no public views of the ocean from the coastal highway as the highway is cut deeply through a hillside along the subdivision in which the Property is located.

It seems that its current use for agriculture and a residence thereon is more appropriate to its physical characteristics and Historical agricultural use. Also LUC guidelines emphatically state ‘agricultural land shall remain agricultural’ and ‘shall means must’! The Historic use of the Property was for intensive cultivation for commercial agricultural crops. A ‘single family residence’, as applied for herein, is believed by the Applicant to be an appropriate land use today
both in support of the existing allowed agricultural activities on the Property and/or as provided for in HAR 13-5 as an allowable Conservation District land use.

The Applicant has struggled throughout this Application to properly identify and qualify the Proposed land use for a residence thereon within its designated Resource subzone and particularly in the “Evaluation Criteria” section of this Application as the Property does not appear to have the above mentioned criteria of lands described for the (R) subzone to encompass. The section regarding Evaluation Criteria states…………..

The Department or Board will evaluate the merits of a proposed land use based upon the following eight criteria (ref 13-5-30 (c)): wherein the question is asked…

“How is the proposed use consistent with the objectives of the subzone of the land on which the land use will occur? (ref 13-5-11 through 13-5-15)

The Property appears to not be an example of the sort of property the “(R) subzone shall encompass” as the existing physical conditions of the Property do not appear in the listed elements of Resource zoned property. This has resulted in difficulty for the Applicant in the preparation of this CDUA/EA. While the law requires that the Applicant propose his land use in compliance with HAR 13-5 the Property appears to have been improperly designated as a Resource zoned property. None-the-less the Applicant has developed this CDUA/EA to design the land use to be compatible with the allowed agricultural use and the natural resources of the Property.

3. Describe how the proposed land use complies with the provisions and guidelines contained in chapter 205A, HRS, entitled “Coastal Zone Management” (see 205A objectives on p. 8).

The objectives and policies of the Hawai‘i’ Coastal Zone Management (“CZM”) Program, as set forth in Chapter 205 A, Hawai‘i’ Revised Statutes (HRS”), include the protection and maintenance of the State’s coastal resources. Accordingly, the Special Management Area (“SMA”) Map and the Flood Insurance Rate Map (“FIRM”) are utilized to protect coastal resources. Below is a statement of the CZM Program’s objectives and policies, as contained in Section 205-2, HRS, and a brief discussion of the Project’s compliance with such objectives and policies.

Note: While the applicant generally defines the Project as being 125’ from the bluff/pali in this application the Applicant clarifies that while the majority of the Project which is the single family residence is located 125’ inland from the bluff/pali the outdoor cooking structure, 40 sq. ft. ref. exhibits 14 & 16 (40 sq. ft.), is located 100 ft. from the bluff/pali. No other use that is being applied for herein is closer than 100 ft. from the bluff/pali.

1. Recreational Resources

Objective: Provide coastal recreation opportunities accessible to the public.

Policies:

(A) Improve coordination and funding of coastal recreational planning and management; and

(B) Provide adequate, accessible and diverse recreational opportunities in the coastal zone
management area by:

- Protecting coastal resources uniquely suited for recreational opportunities that cannot be provided in other areas;
- Require replacement of coastal resources having significant recreational value, including, but not limited to, surfing sites, fishponds and sand beaches, when such resources would be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;
- Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
- Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;
- Ensuring public recreational uses of county, state and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;
- Adopting water quality standards and regulating point and nonpoint sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;
- Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and
- Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land natural resources, and county authorities; and crediting such dedication against the requirements of section 46-6.

**Discussion:** The objective is stated to provide coastal recreation opportunities accessible to the public. The Property is located in a private gated community. There is no public access to the Property nor to the shoreline below the Property as the area is bounded by high steep cliffs. There exists no beach at the waterline.

The Applicant interviewed the field manager of the agricultural farming business which occupied the Property up to 1992. The field manager stated that this particular Property and the surrounding 7 lot subdivision was maintained as a ‘seed farm’ for their agricultural business for over 40 years and all public access from all directions was strictly prohibited in order to not contaminate the seed production on the Property. Thus there exists no recent history of public access to the Property or the subdivision to its West after the closure of the railroad around 1950.

The Conservation District Use Application (“CDUA/EA” and SMA) process will allow DLNR and County to review, assess and regulate the Project in detail. The Project will have no effect on coastal recreational opportunities. There is no shoreline access available from the Property. It will also have no effect on public access to Kolekole Beach Park, located approximately 1,200 feet to the south of the Property.

2. **Historic Resources**
Objective:

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

Policies:

- Identify and analyze significant archaeological resources;
- Maximize information retention through preservation of remains and artifacts or salvage operations; and
- Support state goals for protection, restoration, interpretation, and display of historic resources.

Discussion:

The Conservation District Use Application (“CDUA/EA and SMA”) process will allow DLNR and County to review, assess and regulate the Project in detail. The Property was systematically surveyed for archaeological resources and one site was discovered. The Property included one historic-period railroad feature. An additional historic-era railroad feature was located on TMK: (3) 2-9-003: 060. Due to the Property’s previous agricultural use, it is highly unlikely that any additional subsurface archaeological resources exist there.

An archaeological assessment of the property was conducted by Rechtman Consulting, LLC, in July of 2004. Such Property was systematically and intensively examined, and one site (SIHP Site 50-10-26-24212) (two historic-period railroad features) were discovered. These features were identified as a possible railroad grade section and a railroad trestle abutment. A copy of the consultant’s report can be found in the 2008 McCully(s) EA and FONSI document ref. exhibit 6.

In summarizing its findings, the archaeological consultant states the following: “Systematic survey of three parcels (TMK 3-2-9-03: 13, 29 60) produced no evidence of traditional Hawaiian remains or evidence that the area was currently being accessed for the exercise of traditional and customary practices.”

“One historic era site-SIHP Site 24212, was recorded. The site contains two features associated with the Hamakua Division of Hilo Railroad-Hawaii Consolidated Railway which were recorded in the northwestern portion of The Project area. One is a possible section of railroad grade and the other is a railroad trestle abutment. The features were in active use by the railroad from 1911 to 1946. Their primary function was to facilitate the transport of raw sugar from the many mills along the Hilo and Hamakua Coasts to the harbor at Hilo Bay.”

The archaeological consultant provided the following significance evaluation and treatment recommendations:
“Site 24212 is considered significant under Criteria D for the information it has yielded regarding early twentieth century agriculture (sugar cane production), transportation infrastructure. As the current inventory survey project recorded Site 24212 in detail, however, no further work is recommended.”

“In the unlikely event that archaeological resources are encountered during future development activities at TMK: 3-2-9-03: 13, 29, and 60, work in the immediate area of the discovery should be halted and DLNR-SHPD contacted as outlined in Hawaii Administrative Rules 13§13-275-12.”

By letter dated December 22, 2004, DLNR-SHPD accepted and agreed with the archaeological consultant’s recommended treatment of Site 24212 and noted that the consultant’s report was adequate to meet the requirements of Section 13-276, HAR. The report was accepted as final.

Rechtman Consulting, LLC, also conducted a cultural assessment for the Property. Archival and documentary information was reviewed, including Mahele Land Awards and Grants and historic maps.

This research did not reveal any documentation of any previous or ongoing traditional or customary practices. The area was historically known as Hilo-pali-Ku (Hilo of the upright cliffs) and there are a few accounts that indicate this area, which encompasses the sheer cliffs stretching along the Hāmākua Coast from the Wailuku River to Waipi‘o and beyond, once supported a large pre-contact Hawaiian population that subsisted on crops such as taro, sweet potato, banana, and coconut. Other agricultural resources such as ‘awa, bamboo and sugarcane were also cultivated on the kula lands that stretched from South Hilo to Hāmākua. In the second half of the nineteenth century, the transportation difficulties that had delayed the large-scale commercial exploitation of the kula lands were overcome and sugarcane plantations replaced the subsistence agriculture and grazing as the dominant land use.

In order to identify cultural resources and potential traditional cultural practices associated with The Project site and this portion of the Wailea ahupua‘a, the consultant contacted Ululan Sherlock of the Office of Hawaiian Affairs (OHA) and Kepa Maly of Kumu Pono Associates in June of 2004. Neither had any specific information relative to the Property. However, OHA suggested contacting the Laupahoehoe Hawaiian Civic Club. Lucille Chung and Walter Victor were contacted, and they, in turn, referred the consultant to Jack or Waich Ouye, Yukio Takeya and Lorraine Mendoza, who were contacted in June and July of 2004.
The interviewees recalled that the railway used to run across the property until the Kolekole Bridge was destroyed by the tsunami of 1946. On the adjacent property to the south, there used to be a pig farm that was used by camp residents and a trail that accessed the shore. This trail allowed the residents and local fisherman access to the shoreline below the pali that bounds the Property to the East. This trail was not located on the Property nor did it cross the Property.

The consultant summarized its findings regarding cultural resources relating to the Combined Property (using the referenced “Petition Area”) as follows: “None of the organizations or individuals that were contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the Petition Area; nor did they provide any information indicating past or current use of the area for traditional and customary practices. It is unlikely that there are any traditional or customary practices occurring in the Petition Area as the lands were utilized for sugarcane cultivation and associated transportation for over 100 years. Any traditional Hawaiian features that may have been associated with former cultural practices that may have occurred in the Petition Area would have been destroyed by the sugarcane cultivation and related uses.”

A complete copy of the Archaeological Inventory Survey and Limited Cultural Assessment of TMKs: (3) 2-9-003: 013, 029, and 060 is provided as an addendum of the 2008 McCully(s) environmental assessment ref. exhibit 6. The comment letter from the State Historic Preservation Division dated December 22, 2004 and a supplemental letter from the consultant Rechtman Consulting, LLC, dated January 24, 2005 are also included therein.

**Potential Impacts**

There were no cultural or historic properties, other than Site 24212, identified in the Combined Property Area. There were also no traditional or customary cultural practices found to be associated with such property.

Finally the Applicant interviewed the field manager of the agricultural farming business which occupied the Property up to 1992. The field manager stated that this particular Property was maintained as a ‘seed farm’ for their agricultural business for over 40 years and all public access from all directions was strictly prohibited in order to not contaminate the seed production on the Property.

**It is noteworthy** that generally the existing allowed “Historic” non-conforming agricultural uses of the property described herein already allow agriculture on a substantial area of the Property. **These reflect the “Historic” use of the Property as described throughout this application.** The Applicant intends to be a good steward of the Property and use reasonable effort to mitigate negative effects to the Historic resources on/of the Property from both the allowed non-conforming agricultural operations and the proposed Project. The proposed single
family residence on the Project site in support of the agricultural uses of the Property is in keeping with the shift to diversified agriculture in the region as characterized by larger numbers of self-employed and smaller scale independent businesses. As such the Project will have positive effects on the ‘existing allowed conditions’ of the site and will generally be the same as the existing surrounding agricultural land uses.

Having a residence on the Property will allow the Applicant to appropriately preserve and protect the Historic agricultural use of the Property and to provide good stewardship of the Property and maintain the long-term sustainability and the public health, safety, and welfare of the near term Historic uses of the site.

Therefore the proposed Project is consistent with the purpose of the Conservation District in that a single-family dwelling is an identified use in the R Subzone and that the limited resources of the site will be conserved, protected, and preserved during and after the construction phase of the Project and the Residence will provide the ‘on site’ dynamic management of the Property’s allowed Historic resources.

The Project is therefore anticipated to have “a positive effect” on the Historic resources of the Property as the residence will provide on-site dynamic management of the Property.

(3) Scenic & Open Space Resources

Objective:
Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:
- Identify valued scenic resources in the coastal zone management area;
- Ensure that new development are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;
- Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and
- Encourage those developments that are not coastal dependent to locate in inland areas.

Discussion:
The Conservation District Use Application (“CDUA/EA and SMA”) process will allow DLNR and County to review, assess and regulate the Project in detail. The Project is not expected to have any significant impact on scenic and open space resources. The predominant scenic views in the vicinity of The Project site are of the Pacific Ocean, the high, near vertical pali and the shoreline area. There are no public views of the Project site from the Hawai’i Belt Road because the road is cut below a high grade along an embankment mauka of the Property.
The Property is situated between two sites listed as examples of natural beauty in the Hawai`i County General Plan: Kolekole Gulch and Hakalau Bay/Gulch. Hakalau Bay/Gulch is situated approximately 5,000 feet north of the Property and Kolekole Gulch is situated approximately 1,200 feet south of the Property.

Potential Impacts and Mitigation Measures

The Project will not impact significantly on open space and scenic resources in the vicinity of the site. The existing residence and greenhouse operation to the West are screened by large trees from views of the Project site. The only other residence in the vicinity is over 1,000 ft. to the South of the Project site and screened by trees from view. Ref. exhibits 12 and 18. There are no views of the proposed residence site from the North of lot 60 as it is bordered by a heavily treed gulch at this location ref. exhibit 12.

The Applicant’s proposed dwelling is being designed to blend into the subject and surrounding lands as much as reasonable, which is the primary reason for the Applicant’s plan to build on a slab foundation, as opposed to post and pier. It is not presently clear whether a dwelling constructed on a post and pier foundation would be visible from the Hawaii Belt Road or Kolekole Gulch. Certainly post and pier construction would present the roof top at a higher elevation increasing the likelihood of being visible to the surrounding area.

Considering the vegetation that is present along the top of the pali, which includes ironwood trees and hala clusters among other species, as well as the 125 foot structural setback from the top of the pali that is proposed, it is highly unlikely that any of the proposed improvements would be visible from the Hawaii Belt Road or Kolekole Gulch. It is also highly unlikely that any of the improvements proposed would be visible from Hakalau Bay/Gulch due to its significant distance from the Property. Also, the dwelling will not be visible from surrounding properties ref. exhibits 12 and 18. Limited views from the ocean may also exist through the heavily treed pali however considerable high screening exists in the seaward area of the Project site.

Other alternatives such as post and pier foundation, which would include less cut overall, would result in a residence that is more physically imposing on the land, causing greater visual impact to the surrounding area. The proposed residence has been designed and sited in such a way that it will meld into the existing conditions. As such, the dwelling is not expected to have any adverse impact on the sites listed as examples of natural beauty in the Hawaii County General Plan nor the scenic views of the 2 neighboring residences ref exhibit 12.

A similar project was evaluated in 2008 (the McCully(s) residence). The EA and FONSI and resulting CDUP 3445 and County SMA Determination found No Significant Impact. The Project applied for herein is sufficiently similar that it will be reasonable to find that no significant impact also applies to this CDUA and SMA. The Project “single family
“residence” in this CDUA is further from the pali, requires less cut and fill, is similar in size and appearance to the former 2008 McCully(s) approved residence.

The Applicant has no residence in Hawaii. The applied for land use will provide the Applicant with an opportunity to provide “on site” dynamic management of the scenic and open spaces on the Property.

(4). Coastal Ecosystems

Objective:

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

Policies:

- Exercise an overall conservation ethic, and practice stewardship in the protection, use and development of marine and coastal resources;
- Improve the technical basis for natural resource management;
- Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;
- Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversion, channelization and similar land and water uses, recognizing competing water needs; and
- Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.

Discussion:

The Conservation District Use Application (“CDUA/EA and SMA”) process will allow DLNR and County to review, assess and regulate the Project in detail. The Project is not expected to have an adverse effect on coastal ecosystems. The Property is bounded by a sea pali that is 100 to 140 feet above sea level.

The proposed ‘single family residence’ will be located at a maximum distance from the ocean on the subject lot (at around 125 ft. from the pali). It will be located beginning at 26 ft. from the boundary with adjacent lot to the West.
A county D.O.H. approved septic system will be applied for prior to construction. The septic system will be located down-slope to the South of the applied for ‘single family residence’ and will also be over 226 ft. from the pali. As such there is limited potential for discharge into near-shore waters.

The ‘single family residence’ applied for is located substantially further from the pali than the former 2008 McCully(s) planned residence (125 ft. rather than 70 ft.) which was declared SMA exempt by the county.

The proposed Project is not expected to have any direct impact on Puahanui Stream or marine waters in-as-much as any additional runoff generated will be disposed of on site in compliance with State and County regulations. No development is planned in the immediate vicinity of Puahanui Stream.

It is noteworthy that generally the existing allowed non-conforming agricultural uses of the property described herein already allow agriculture on a substantial area of the Property. The Applicant intends to be a good steward of the Property and use reasonable effort to mitigate erosion possibilities resulting from both his agricultural operations and the proposed Project on Coastal ecosystems.

The objective is to protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

The proposed single family residence will provide dynamic ‘on site’ management of the on-going allowed agricultural uses of the Property and the Property in general. Particularly on-site management is desirable during heavy rainfall events in order to monitor and mitigate soil erosion. The Project will therefore add to the protection of the valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

Therefore the proposed Project is consistent with the purpose of the Conservation District in that a single-family dwelling is an identified use in the R Subzone and that the limited resources of the site will be conserved, protected, and preserved during and after the construction phase of the Project.

(5) Economic Uses

Objective:
Provide public or private facilities and improvements important to the State’s economy in suitable locations.

Policies:

- Concentrate coastal dependent development in appropriate areas;
o Ensure that coastal development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and

o Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:

  o Use of presently designated locations is not feasible;
  o Adverse environmental effects are minimized; and
  o The development is important to the State’s economy.

Discussion:

The Conservation District Use Application (“CDUA/EA and SMA”) process will allow DLNR and County to review, assess and regulate the Project in detail. The Property is entirely suited for the proposed use. Surrounding land uses are agricultural and residential in nature. The County zoning is Agricultural, which also allows single-family residential use.

Hawai‘i County's population increased by more than 56,000 persons between 1980 and 2000. Between 1980 and 1990, Hawai‘i Island's population increased by 30.7 percent, and increased by 23.6 percent between 1990 and 2000. The April 1, 2000 population figure for Hawai‘i County was 148,677 according to census figures compiled by the County of Hawai‘i, Department of Research and Development.

The South Hilo district had a population of 47,386 in 2000 which represented approximately 32 percent of the total population for Hawai‘i Island. The City of Hilo is the largest population center on the island with the main offices of the County government, branch offices of Federal and State agencies located there. The island’s major deep draft harbor and international airport are also located in Hilo. In addition to industrial, commercial and social service activities, the University of Hawai‘i Hilo and Hawai‘i Community College and affiliated research programs play an important role in Hilo's economy.

Hilo and the rest of the East Hawai‘i communities are adjusting to the loss of the sugar industry in the mid 1990's. The continuation of agriculture in the district has required a major shift from large-scale single-commodity production to smaller scale, multi-commodity 29 multi-market base. The shift to diversified agriculture is characterized by larger numbers of self-employed and smaller scale
Potential Impacts and Mitigation Measures independent businesses.

Other properties in the immediate vicinity of The Project site are utilized for a variety of diversified agricultural activities including a certified orchid nursery, the propagation of foliage stock and the cultivation of edible ginger and Chinese taro as well as residential uses.

The Applicant currently utilizes the property for agricultural uses. The construction of a single family residence will allow the Applicant to better manage the agricultural uses of the Property and provide better stewardship of the Property in general. The agricultural operations on the Property will add to improvements important to the State’s economy.

The Project will thus have a positive effect on the socio-economic characteristics of the area. The Objective of the Conservation District is to “Provide public or private facilities and improvements important to the State’s economy in suitable locations”. The Property has allowed agricultural use on it. The Property is “suitable” for Agriculture. Agriculture is identified by the State as important to the State’s economy. The applied for residence will be in support of the agricultural uses of the Property.

(6) Coastal Hazards

Objective:
Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.

Policies:

- Develop and communicate adequate information about storm wave, tsunami, flood erosion, subsidence, and point and nonpoint source pollution hazards
- Ensure that development comply with requirements of the Federal Flood Insurance Program; and
- Prevent coastal flooding from inland projects.

Discussion:

The Conservation District Use Application (“CDUA/EA and SMA”) process will allow DLNR and County to review, assess and regulate the Project in detail. The Property is outside of the tsunami inundation zone and is not located in a known coastal hazard area for hurricanes. The Property is bounded on the makai side by a high sea pali ranging between 100 and 140 feet above sea level, and, as such, seems reasonably free from tsunami and storm waves/surge risk. Erosion and subsidence may pose potential risks. However, as an additional precaution, the Applicant’s proposed dwelling is intended to be approximately
125 feet mauka of the edge of the sea pali. *Ref* exhibit 4 Dr. Kwong shoreline set-back letter wherein 70 ft. min. set-back is recommended.

In 2008 the set back requirement was considered by James Kwong, PhD, PE of Yogi Kwong Engineers, LLC on behalf of the McCully(s) regarding a subsequent 2008 CDUA HA 3445 for the McCully(s) residence. CDUP HA 3445 was granted for the construction of a residence for the McCully(s) on lot 029 a contiguous lot to lot 060. Subsequent to that the McCully(s) application was withdrawn and no residence was built. As a part of that CDUA evaluation the noted professional was consulted regarding erosion and set-back requirements. Dr. Kwong concluded that the 70-foot setback was adequate based on a helicopter and site reconnaissance, review of various historical aerial and topographic photos and maps and the height of the sea pali. *Ref exhibit 4 and Sam Lemmo testimony exhibit 3 which stated an 80 ft. setback was sufficient.*

In the case of the present CDUA the shoreline set back is substantially greater (125ft. vs. 70 ft.) than what was already approved for the previous property owner McCully(s) planned residence.

**The objective is to** reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.

The proposed single family residence will allow the Applicant to provide dynamic ‘on site’ management of the on-going allowed agricultural uses of the Property and the Property in general. Particularly on-site management is desirable during heavy rainfall events in order to monitor and mitigate soil erosion. The Project will therefore add to the protection of the valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

(7) **Managing Development**

**Objective:**

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

**Policies:**

- Use, implement and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;

- Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and

- Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms
understandable to the public to facilitate public participation in the planning and review process.

**Discussion:**

The Conservation District Use Application ("CDUA/EA and SMA") process will allow DLNR and County to review, assess and regulate the Project in detail. In addition, due to the Property being situated within the SMA, an SMA Assessment has been prepared and submitted to the County Planning Director for processing. The SMA Assessment process offers additional opportunity for governmental oversight.

(8) **Public Participation**

**Objective:**

Stimulate public awareness, education, and participation in coastal management.

**Policies:**

- Use, implement and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;
- Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and
- Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

**Discussion:**

The CDUA/EA and SMA process allows opportunities for public participation, including the requirement for compliance with Chapter 343, Hawai‘i Revised Statutes. The Environmental Assessment process includes a public comment period during which members of the public may submit comments on the Project. In addition, the SMA Assessment process will allow the County Planning Director to assess the Project in detail.

(9) **Beach Protection**

**Objective:**
Protect beaches for public use and recreation.

**Policies:**

- Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;

- Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and

- Minimize the construction of public erosion-protection structures seaward of the shoreline.

**Discussion:**

The Conservation District Use Application (“CDUA/EA and SMA”) process will allow DLNR and County to review, assess and regulate the Project in detail. The Project will not interfere with natural beach processes. There is a risk of erosion, but that risk will not be increased due to the Project. The applied for Project will be located 125 ft. inland of the pali.

The objective is to protect beaches for public use and recreation. There are no beaches adjacent to the property however there is Kolekole park approx. 1500 ft. to the South of the Property and another park approx. 5,000 ft. to the North of the Property. Also there is no public access to the Property nor the shoreline below the property. The Property is in a private gated community and is surrounded by private lands.

The proposed Project will have a positive effect on the area as the residence will provide for dynamic on-site management of the Property particularly as it respects possible erosion issues that may occur as the result of large rainfall events.

(10) Marine Resources

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

**Policies:**

- Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial.
- Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency.
- Assert and articulate the interests of the state as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone.
- Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and
- Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.

**Discussion:**

The Conservation District Use Application (“CDUA/EA and SMA”) process will allow DLNR and County to review, assess and regulate the Project in detail. The Project is not expected to impact marine resources due to its distance from the water’s edge. Additionally, the Project will be served by an individual wastewater system approved by DOH.

The objective is to promote the protection, use, and development of marine and coastal resources to assure their sustainability. There are no beaches adjacent to the property however there is Kolekole park approx. 1500 ft. to the South of the Property and another park approx. 5,000 ft. to the North of the Property. Also there is no public access to the Property nor the shoreline below the property. The Property is in a private gated community and is surrounded by private lands and inaccessible high steep cliffs ocean-side.
The proposed single family residence will allow the Applicant to provide dynamic ‘on site’ management of the on-going allowed agricultural uses of the Property and the Property in general. Particularly on-site management is desirable during heavy rainfall events in order to monitor and mitigate soil erosion. The Project will therefore add to the protection of the marine resources, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

4. **Describe how** the proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region.

The proposed Project is an allowed use according to HAR 13-5-7 & 22. Also a similar project was evaluated in 2008 (the McCully(s) residence. The EA and FONSI and resulting CDUP HA 3445 referenced herein found **No Significant Impact**. The Project applied for herein is sufficiently similar that it will be reasonable to find that no significant impact also applies to this CDUA/EA.

The Applicant’s single family residence will not cause substantial adverse impacts to existing natural resources within the surrounding area, community, or region. The design and construction of the residence will be sensitive to the site, with measures taken to minimize environmental impacts. Due to the Property’s previous Historic agricultural use, the Applicant does not anticipate the need for extensive grading or significant changes to the existing contours of the Property other than to the area surrounding the planned dwelling, parking pad and related structures.

The proposed ‘single family residence’ will be situated on a previously cultivated, relatively flat hill top at the North-Western boundary of lot 060 which is presently maintained as mowed lawn. It will be located beginning 26 ft. to the East of the Western boundary of lot 060. As such the only soil disturbance will be to soil that has previously been cultivated/disturbed during agricultural uses on the property.

Generally cut soil will be placed along the Eastern side of and at the Northern end of the access road and along the Eastern and Southern sides (and under) of the applied for ‘single family residence’. No land alteration activities, including cut or placement of fill material, will be conducted within 100 ft. of the top of the bluff/pali. All fill material will be re-planted quickly in order to minimize the potential of erosion of the disturbed soil. A suitable erosion barrier, constructed according to County standards, will be located down-slope (seaward) of the Project site and will remain in place until remaining disturbed soil areas have been replanted to grass.

Mitigative measures will be implemented to ensure that no impacts to the surrounding existing natural resources occurs both during the construction phase and subsequently during residency.

Specific Best Management Practices will be utilized by the applicant.

- Sediment wattles and/or compost-filled biosocks will be installed to capture sediment along the perimeter of the site work.
- Impermeable lined sediment basins will be utilized to capture concrete wash down water from concrete trucks
• Construction activities with the potential to produce polluted runoff will not be allowed during unusually heavy rains or storm conditions that might generate storm water runoff.

In addition, no significant impact of floral or faunal resources is anticipated. No rare, threatened or endangered species as listed by the U.S. Fish and Wildlife Service appear to be present on the parcel, nor are there unique of valuable wildlife habitats. No existing or proposed federally designated critical habitat is present within the Petition Area. The only native plant species that was discovered by the Botanical Surveys was the popolo berry.

The proposed Project will have very little impact on the Project area. Exhibit 1 is a 2014 updated biological assessment update to the original biological assessment in Exhibit 6 conducted on behalf of the McCully(s). Therein it is recommended..............

We offer the following recommendations in order to avoid impacts to endangered but widespread native birds and the Hawaiian hoary bat:
• To minimize impacts to the endangered Hawaiian hoary bat, we recommend that trees taller than 15 feet should not be removed or trimmed during the bat birthing and pup rearing season (June 1 through September 15), to the extent practical.
• To minimize impacts to Hawaiian Hawks, we recommend avoiding earthmoving within 100 meters of tall trees or tree cutting during the breeding season for Hawaiian Hawks (March through the end of September). If this time period cannot be avoided, arrange for a hawk nest search to be conducted by a UH Hilo biologist or other qualified biologist. If hawk nests are present in or near the project site, all land clearing activity should cease until the expiration of the breeding season.

The applicant has no specific plans for tree removal. None-the-less the Applicant will avoid impacts to Hawaiian hoary bats, there will be no clearing of woody vegetation taller than 15 feet during the bat pupping season, which runs from June 1 through September 15 each year.

The construction period is anticipated to extend for a period greater than a year. The Project area where specific site work is anticipated is maintained as lawn. However the only land clearing (cut and fill activities) will be done during the first year of the Project. Therefore a hawk nest search will be conducted by a UH Hilo biologist or other qualified biologist in March of the year during which cut and fill of soil is conducted (as recommended by the biologist in Exhibit 1) for the project applied for. As recommended if hawk nests are present in or near the project site, all land clearing activity will cease until the expiration of the breeding season.

All construction activity will take precautions to prevent fire ignition during construction of the improvements. No construction vehicles will be allowed to park in areas vegetated with ignitable material, such as dry grass or shrubs; instead, the Applicant will identify areas for parking.

In order to minimize the potential for the unintentional introduction/spread of invasive plants and animals (most crucially but not limited to fire ants, Argentine ants, black widow spiders, etc.), the Applicant shall:

1. Ensure that all heavy equipment and construction equipment/material delivery vehicles transported to/from the Project are clean and free of soil, organic material
and pests prior to entering or leaving the Project area. Equipment/vehicles failing inspection shall be properly cleaned/treated and re-inspected until cleared for transport.

2. All crushed rock, fill, soil and plant materials transported to the Project site for use on this project shall be crushed/prepared as soon as practicable prior to transport so as to minimize the potential for infestation by pests. Material stockpiled longer than 10 consecutive calendar days prior to transport shall not be used on this project.

3. All construction debris, waste and spoils intended to be disposed of off-site shall be inspected for the presence of pests (specifically Argentine ants) prior to removal from the site. Waste determined to be infested by unwanted pests shall be treated and cleared of such pests before removal from the Project site.

5. **Describe how** the proposed land use, including buildings, structures and facilities, is compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.

The proposed project is an allowed use according to HAR 13-5. Also a similar project was evaluated in 2008 (the McCully(s) residence). The EA and FONSI and resulting CDUP HA 3445 referenced herein found No Significant Impact. The Project applied for herein is sufficiently similar that it will be reasonable to find that no significant impact also applies to this CDUA.

The locality and surrounding lots in the 7 lot subdivision have 2 residences on them. One of the residences supports a large commercial greenhouse operation on it (an agricultural activity). Thus the proposed land use, including buildings, structures and facilities, is compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.

6. Describe how the existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon.

The proposed project is an allowed use according to HAR 13-5. Also a similar project was evaluated in 2008 (the McCully(s) residence). The EA and FONSI and resulting CDUP HA 3445 referenced herein found No Significant Impact. The Project applied for herein is sufficiently similar that it will be reasonable to find that no significant impact also applies to this CDUA.

The majority of the surrounding area is utilized for agricultural and residential purposes. The County zoning for the surrounding area is largely Agricultural. Aside from limited Urban District designations to the North at Hakalau, mauka across the Hawai‘i’ Belt Road and to the South at Honomu, the State land use designations of the surrounding area are Agricultural and Conservation.

The Property is entirely suitable for the proposed Project. The Property and surrounding lands were historically used for agricultural purposes. However, the surrounding lands are now used mainly for agricultural and residential purposes. The proposed single family residence will be designed to be compatible with the land and surrounding areas as much as possible.

It is notable that there is no public view of the Property, the coastline or the ocean from the Hawai‘i’ Belt Road as the road has been cut deeply through and along an embankment in the
vicinity of the Project Site.

The natural beauty of the South Hilo district is dominated by Mauna Kea and Mauna Loa. From various locations in the area there are magnificent views of the mountains. Hakalau Bay/Gulch and Kolekole Gulch are listed in the Hawai‘i County General Plan for Natural Beauty Sites. Kolekole Gulch is located approximately 1,200 feet to the South of the Property and Hakalau Bay/Gulch is located approximately 5,000 feet to the North.

The proposed Project will have no effect on either site. There is no shoreline access from the Property due to the cliffs that form the makai boundary of the Property.

Finally the Applicant interviewed the field manager of the agricultural farming business which occupied the Property up to 1992. The field manager stated that this particular Property was maintained as a ‘seed farm’ for their agricultural business for over 40 years and all public access from all directions was strictly prohibited in order to not contaminate the seed production on the Property.

No significant impacts to floral or faunal resources are anticipated. Historically the entire property has been extensively utilized for intensive agriculture for a period approximately 100 years. The Property has remained substantially fallow since 1992 when the last sugar crop was harvested and has since been maintained as a grassed lawn and more recently has been planted to various agricultural plantings. In effect restoring the Property to its Historic use dating over 100 past years. No rare, threatened or endangered species as listed by the U.S. Fish and Wildlife Service appear to be present on the lot, nor are there unique or valuable wildlife habitats. No existing or proposed federally designated critical habitat is present on the Property.

It is noteworthy that generally the existing allowed non-conforming agricultural uses of the property described herein already allow agriculture on a substantial area of the Property. The Applicant intends to be a good steward of the Property and use reasonable stewardship of the Property and its allowed uses to ensure its natural ‘open scenic’ spaces are reasonably maintained. The proposed single family residence on the Project site in support of the agricultural uses of the Property is in keeping with the shift to diversified agriculture in the region as characterized by larger numbers of self-employed and smaller scale independent businesses. The Applicant selected the site for the applied for residence in a highly screened area away from existing views from the two adjacent residences ref. exhibit 12 in order to preserve the existing scenic views yet still allowing a residence thereon. As such the Project will have minimal effect on the ‘existing allowed conditions’ of the site and will generally be the same as the existing surrounding agricultural land uses.

7. If applicable, describe how subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District.

No subdivision of land is being applied for.

8. Describe how the proposed land use will not be materially detrimental to the public health, safety and welfare.
The proposed project is an allowed use according to HAR 13-5. Also a similar project was evaluated in 2008 (the McCully(s) residence. The EA and FONSI and resulting CDUP HA 3445 referenced herein found No Significant Impact. The Project applied for herein is sufficiently similar that it will be reasonable to find that no significant impact also applies to this CDUA.

The Project will not be materially detrimental to the public health, safety and welfare as all phases of design and construction will comply with all appropriate governmental requirements with regard to environmental and public health concerns. Subsequent portions of the 2008 McCully(s) FONSI and Environmental Assessment identify all potential impacts and discuss appropriate mitigative measures to ensure that no significant detrimental effects on public health, safety, or welfare result from the construction of the proposed Project.
CULTURAL IMPACTS

Articles IX and XII of the State Constitution, other state laws, and the courts of the State require government agencies to promote and preserve cultural beliefs, practices, and resources of Native Hawaiians and other ethnic groups

Please provide the identity and scope of cultural, historical and natural resources in which traditional and customary native Hawaiian rights are exercised in the area.

The proposed project is an allowed use according to HAR 13-5. Also a similar project was evaluated in 2008 (the McCully(s) residence. The EA and FONSI and resulting CDUP HA 3445 referenced herein found No Significant Impact. The Project applied for herein is sufficiently similar that it will be reasonable to find that no significant impact also applies to this CDUA. No traditional and customary native Hawaiian rights were found to be exercised in the area.

An Archaeological Inventory Survey and Limited Cultural Assessment of the Project Site was conducted by Rechtman Consulting, LLC, in July of 2004. The Property, including the two adjacent contiguous lots 029 and 013 to the South of the planned dwelling were systematically and intensively examined and one historic site, SIHP Site 5—10-26-2412 (“Site 2412”), was discovered which included two historic-period railroad features which were identified as a possible railroad grade section and a railroad trestle abutment.

One feature (Feature 1) is located crossing all 3 lots and the other feature (Feature 2) is located on lot 060 which is where the planned single family residence is intended to be constructed. This survey produced no evidence of traditional Hawaiian remains or evidence that the property was currently being used for the exercise of traditional and customary native Hawaiian religious or cultural practices. The DLNR’s State History Preservation Division (“SHPD”) accepted and agreed with the Archaeological Inventory Survey’s recommendation that no further work was necessary at the site.

The Property was historically known as the Hilo-pali-Ku area, which encompasses the sheer cliffs stretching along the Hamakua Coast from the Wailuku River to Waipio and beyond, once supported a large pre-contact Hawaiian population that subsisted on crops such as taro, sweet potato, banana and coconut. Other agricultural resources such as ‘awa, bamboo and sugarcane were also cultivated on the kula lands that stretched from South Hilo to Hamakua.

In the second half of the nineteenth century, the transportation difficulties that had delayed the large-scale commercial exploitation of the kula lands were overcome and sugarcane plantations replaced the subsistence agriculture and grazing as the dominant land use.

In order to identify cultural resources and potential traditional cultural practices associated with the Project and this portion of the Wailea ahupua’a, Reichman Consulting, LLC, ref exhibit 6 appendix F, contacted Ululani Sherlock of the Office of Hawaiian Affairs (“OHA”) and Kepa Maly of Kumu Pono Associates in June of 2004. Neither of them had any specific information relative to the Property. In addition, Lucille Chung and Walter Victor of the Laupahoehoe Hawaiian Civic Club were contacted, who then referred the consultant to Janck and Waichi Ouye, Yukio Takeya and Lorraine Mendoza.

The interviewees recalled that the railway used to run across the Property until the Kolekole Bridge was destroyed in the 1946 tsunami. None of the organizations or individuals
contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the Property; nor did they provide any information indicating past or current use of the area for traditional and customary practices. It is unlikely that there are any traditional or customary practices occurring on the Property as the lands were utilized for agricultural crop production and associated transportation for over 100 years. The Project is therefore anticipated to have ‘no effect’ on significant historic sites or traditional and customary cultural and/or religious native Hawaiian practices.

Finally the Applicant interviewed the field manager of the agricultural farming business which occupied the Property up to 1992. The field manager stated that this particular Property and more generally all of the area of the 7 lot subdivision was maintained as a ‘seed farm’ for their agricultural business for over 40 years and all public access from all directions was strictly prohibited in order to not contaminate the seed production on the Property.

**Identify** the extent to which those resources, including traditional and customary Native Hawaiian rights, will be affected or impaired by the proposed action.

No traditional and customary native Hawaiian rights were found to be exercised in the area. The Project is not anticipated to have any effect on any significant historic or pre-historic archaeological resources. As discussed above, SHPD concurred with the Archaeological Inventory Survey’s recommendation of no further work relating to the two historic-period railroad features of Site 24212. The Project is not anticipated to have any effect on cultural resources, including traditional and customary native Hawaiian rights. No Hawaiian cultural practices are known to take place on site and there are no trails that cross the Property. Also, there is no public access to the shoreline from the Property due to the high sea pali that forms the makai boundary. Therefore, traditional and customary native Hawaiian rights will not be affected or impaired by the proposed action.

Finally the Applicant interviewed the field manager of the agricultural farming business which occupied the Property up to 1992. The field manager stated that this particular Property was maintained as a ‘seed farm’ for their agricultural business for over 40 years and all public access from all directions was strictly prohibited in order to not contaminate the seed production on the Property.

**What feasible action**, if any, could be taken by the BLNR in regards to your application to reasonably protect native Hawaiian rights?

As discussed above, there are no known cultural resources on the property and native Hawaiian rights are not expected to be impacted in any way. Individuals contacted upon suggestion by the local branch of OHA could not provide any information regarding cultural resources practices on this site. In addition, there are no known trails for shoreline access. Therefore, no action by the BLNR is necessary to reasonably protect native Hawaiian rights.

Finally the Applicant interviewed the field manager of the agricultural farming business which occupied the Property up to 1992. The field manager stated that this particular Property was maintained as a ‘seed farm’ for their agricultural business for over 40 years and all public access from all directions was strictly prohibited in order to not contaminate the seed production on the Property.
As such the Applicant cannot identify any steps that could be taken by the BLNR in regards to this Application to reasonably protect native Hawaiian rights.
**OTHER IMPACTS**

**Does the** proposed land use have an effect (positive/negative) on public access to and along the shoreline or along any public trail?

The proposed land use will not have any effect on public access to and along the shoreline or along any public trail as no public access exists on the site and there is no beach area below the cliff. Also a similar project was evaluated in 2008 (the McCully(s) residence). The EA and FONSI and resulting CDUP HA 3445 referenced herein found No Significant Impact. The Project applied for herein is sufficiently similar that it will be reasonable to find that no significant impact also applies to this CDUA. The project is located within a ‘private gated community’. The shoreline in the area does not have any beach. There is only a steep cliff leading down from the property into the ocean. Therefore the Project will have no effect on public access to and along the shoreline.

**Does the** proposed use have an effect (positive/negative) on beach processes?

The proposed project is not expected to have adverse impacts on beach processes. The Property is bounded by the edge of a high sea pali (ranging between 100 and 140 feet above mean sea level) on the makai side. There is no beach ocean-side of the Property. A similar project was evaluated in 2008 (the McCully(s) residence). The EA and FONSI and resulting CDUP HA 3445 referenced herein found No Significant Impact on beach processes. The Project applied for herein is sufficiently similar that it will be reasonable to find that no significant impact also applies to this CDUA.

**Will the** proposed use cause increased runoff or sedimentation?

A similar project was evaluated in 2008 (the McCully(s) residence). The EA and FONSI and resulting CDUP HA 3445 referenced herein found No Significant Impact. The Project applied for herein is sufficiently similar that it will be reasonable to find that no significant impact also applies to this CDUA.

The proposed ‘single family residence’ will be located at a maximum distance from the ocean on the subject lot (over 125 ft. from the pali). It will be located beginning at 26 ft. from the boundary with adjacent lot to the West. A county D.O.H. approved septic system will be applied for prior to construction. The septic system will be located down-slope to the South of the applied for ‘single family residence’ and will also be located 226 ft. from the pali located to the East.

The ‘single family residence’ applied for is located much further from the bluff/pali than the former 2008 McCully(s) planned ‘single family residence’ (125 ft. rather than 70 ft.) which was declared SMA exempt by the county.

The proposed use is not expected to cause increased runoff or sedimentation. All phases of the Project, including design and construction, will comply with all appropriate governmental requirements with regard to environmental and public health concerns. The County presently mandates that all runoff be contained on-site. An individual wastewater system approved by the DOH will be installed to serve the single-family dwelling. As such, there is limited potential for discharge into near-shore waters.
The proposed Project is not expected to have any direct impact on Puahanui Stream or marine waters in-as-much as any additional runoff generated will be disposed of on site and to the South and East of the planned single family residence in compliance with State and County regulations. No development is planned in the vicinity of Puahanui Stream.

During the construction period
• Sediment wattles and/or compost-filled biosocks will be installed to capture sediment along the perimeter of the site work.
• Impermeable lined sediment basins will be utilized to capture concrete wash down water from concrete trucks
• Construction activities with the potential to produce polluted runoff will not be allowed during unusually heavy rains or storm conditions that might generate storm water runoff.

Will the proposed use cause any visual impact on any individual or community?
A similar project was evaluated in 2008 (the McCully(s) residence. The EA and FONSI and resulting CDUP HA 3445 referenced herein found No Significant Impact. The Project applied for herein is sufficiently similar that it will be reasonable to find that no significant impact also applies to this CDUA. The adjacent 2 residences are screened by trees and distance from view of the proposed ‘single family residence’ site. Ref. exhibits 12 and 18. The 2 residences also have view plane easements on the 3 lots that protect, ref. exhibit 16 survey map, the areas of the existing views that have been deemed important to the lot owners in the 7 lot subdivision. The proposed ‘single family residence’ is not in any such protected view plane. Otherwise no other community can see the proposed ‘single family residence’ site. The area is heavily screened by trees ref. exhibits 12 & 18.

Please describe any sustainable design elements that will be incorporated into the proposed land use (such as the use of efficient ventilation and cooling systems; renewable energy generation; sustainable building materials; permeable paving materials; efficient energy and water systems; efficient waste management systems; et al.).

1. The proposed ‘single family residence’ will be naturally ventilated
2. The proposed ‘single family residence’ will utilize solar electric power
3. The proposed ‘single family residence’ will utilize solar heating of water and solar heating for use in drying of clothes and the like
4. The building materials will be of neutral low impact colors
5. The paving materials will be crushed rock
6. The septic system will be a gravity flow design through the tank and leeching field.
7. The water system will be comparable to similar residential use
8. Extensive use of covered outdoor lanai’s (typical Hawaiian construction) are utilized as
an outdoor living space incorporated into the single family residence reducing the need for artificial climate control.

If the Project involves landscaping, please describe how the landscaping is appropriate to Conservation District (e.g. use of indigenous and endemic species; xeriscaping in dry areas; minimizing ground disturbance; maintenance or restoration of the canopy; removal of invasive species; habitat preservation and restoration; et al.).

The area for the planned ‘single family residence’ is presently mowed lawn comprised of native and non-native grasses. The proposed ‘single family residence’ construction will result in the disturbance of soil within 20 ft. of its perimeter and will require re-planting. The disturbed and fill areas will be replanted to grass and maintained as lawn and agricultural plantings. The areas use was most recently (during the last 20 years) a (1) mowed lawn and (2) a field road. There exist 3 albesia (a type of eucalyptus tree) adjacent to the building site. As these trees have a reputation of weak wood and failure it is planned that they may be removed and replaced with palm trees.

Please describe the Best Management Practices that will be used during construction and implementation of the proposed land use.

The proposed Project will have very little impact on The Project area. Exhibit 1 is a 2014 updated biological assessment update to the original biological assessment in Exhibit 6 conducted on behalf of the McCully(s). Therein it is recommended…………..

We offer the following recommendations in order to avoid impacts to endangered but Widespread native birds and the Hawaiian hoary bat:
• To minimize impacts to the endangered Hawaiian hoary bat, we recommend that trees taller than 15 feet should not be removed or trimmed during the bat birthing and pup rearing season (June 1 through September 15), to the extent practical.
• To minimize impacts to Hawaiian Hawks, we recommend avoiding earthmoving within 100 meters of tall trees or tree cutting during the breeding season for Hawaiian Hawks (March through the end of September). If this time period cannot be avoided, arrange for a hawk nest search to be conducted by a UH Hilo biologist or other qualified biologist. If hawk nests are present in or near the project site, all land clearing activity should cease until the expiration of the breeding season.

Other than stated the applicant has no specific plans for tree removal. None-the-less the Applicant will avoid impacts to Hawaiian hoary bats, there will be no clearing of woody vegetation taller than 15 feet during the bat pupping season, which runs from June 1 through September 15 each year.

The construction period is anticipated to extend for a period greater than a year. The Project area where specific site work is anticipated is maintained as lawn. However the only land clearing (cut and fill activities) will be done during the first year of the Project. Therefore a hawk nest search will be conducted by a UH Hilo biologist or other qualified biologist in March of the year during which cut and fill of soil is conducted (as recommended by the biologist in Exhibit 1) for the
project applied for. As recommended if hawk nests are present in or near the project site, all land clearing activity will cease until the expiration of the breeding season.

Construction activities will only be conducted between 8:00 a.m. and 6:00 p.m. Monday to Saturday. Noise and dust will be managed such as not to be inordinate.

All construction activity will take precautions to prevent fire ignition during construction of the improvements. No construction vehicles will be allowed to park in areas vegetated with ignitable material, such as dry grass or shrubs; instead, the Applicant will identify areas for parking.

In order to minimize the potential for the unintentional introduction/spread of invasive plants and animals (most crucially but not limited to fire ants, Argentine ants, black widow spiders, to/from the Project, the Applicant shall:

1. Ensure that all heavy equipment and construction equipment/material delivery vehicles transported to/from the Project are clean and free of soil, organic material and pests prior to entering or leaving the Project area. Equipment/vehicles failing inspection shall be properly cleaned/treated and re-inspected until cleared for transport.

2. All crushed rock, fill, soil and plant materials transported to the Project site for use on this project shall be crushed/prepared as soon as practicable prior to transport so as to minimize the potential for infestation by pests. Material stockpiled longer than 10 consecutive calendar days prior to transport shall not be used on this project.

3. All construction debris, waste and spoils intended to be disposed of off-site shall be inspected for the presence of pests (specifically Argentine ants) prior to removal from the site. Waste determined to be infested by unwanted pests shall be treated and cleared of such pests before removal from the Project site.

Disturbed soil areas that are not utilized for the MDA areas will be replanted to native and endemic grasses and continue to be maintained as lawn areas as they are presently.

When/where/if applicable the Applicant shall insure that all earthwork and grading will be in conformance with:
(a) “Storm Drainage Standards,” County of Hawai‘i, October, 1970, and as revised.
(b) Applicable standards and regulations of Chapter 27, “Flood Control,” of the Hawai‘i County Code.
(d) Applicable standards and regulations of Chapter 10, “Erosion and Sedimentation Control,” of the Hawai‘i County Code.
(e) Conditions of an NPDES permit, if required, and any additional best management practices required by the Board of Land and Natural Resources.

Please describe the measures that will be taken to mitigate the proposed land use’s environmental and cultural impacts. The proposed project will not significantly impact the environment or culture of the area. The proposed project is an allowed use according to HAR 13-5. Also a similar project was evaluated in 2008 (the McCully(s) residence). The EA and FONSI and resulting CDUP HA
The result of the project will be that the Property will have a residence on it that will be occupied by the owner of the property. This will enable dynamic daily on-going stewardship/management of the Property eg. daily inspections of the property, property maintenance, pest control, fire hazard management, and management of the on-going agricultural activities on the property which will mitigate the proposed land use’s environmental and cultural impacts.

DETERMINATION, FINDINGS AND REASONS FOR SUPPORTING DETERMINATION

Significance Criteria
According to the Department of Health Rules (11-200-12, HAR), an applicant or agency must determine whether an action may have a significant impact on the environment, including all phases of the project, its expected consequences both primary and secondary, its cumulative impact with other projects, and its short and long-term effects. The Rules establish “Significance Criteria” to be used as a basis for identifying whether a proposed action will have a significant environmental impact on the environment.

1. Involves an irrevocable commitment to loss or destruction of any natural or cultural resources.
Neither natural or cultural resources appear to be defined in the definition section of HAR 11-200. Applicant proposes to construct a single-family residence within the Conservation District. The subject property was previously utilized for sugar cane production (agricultural use) for approximately 100 years. The specific area on the property proposed for the construction of the single family residence was formerly cultivated for this agricultural use. Also the proposed access road was formerly first a railroad road bed and subsequent field road. It is unlikely that the potential disturbed soil areas resulting from the proposed land use contain any particular existing natural or cultural resources that will be destroyed or irrevocably lost by the proposed dwelling and road construction.

However, having said that the project areas are presently mowed grasses, ‘a planted crop of introduced species’. While Natural Resources” in HAR 13-5 is defined as including “plants” and grass is a plant there will undoubtedly be some destruction of an existing ‘natural resource’ as the grass in the developed area will now be removed and supplanted by a residence. Again HAR 11-200 does not define the term ‘natural resource’ so the destruction of a modest amount of grass will not have a significant effect on the environment of the project site as contemplated in HAR 11-200.

Grass is technically a field crop, in the case of the subject property, which is an allowed ‘non conforming agricultural use’ of the property. Since cultivation of the area is also a continuing allowed non-conforming use of the property it is reasonable to find that the residence will not result in the destruction of a natural resource (grass) that is not already allowed to be destructed in an agricultural use of the property through the allowed cultivation of the land.

Finally similar projects are routinely supported by FONSI(s). As ‘natural resources’ are not defined in HAR 11-200 the destruction of the grass is proposed to be minimal in scope and thus this land use is proposed to not have a significant environmental impact. Similarly ‘Cultural Resources’ are not defined in HAR 11-200 nor does it appear to be defined in HAR 13-5. A study
was conducted by a professional respecting ‘cultural resources’ on the property and the report is contained in the McCully FONSI which is included in this Final EA. In that study no cultural resources were found on the property and thus the project will not impact the cultural resources on the project site. In summary, therefore, the project does not involve an irrevocable commitment to the loss or destruction of any natural or cultural resources that are contemplated by HAR 11-200.

2. Curtails the range of beneficial uses of the environment.
Applicant’s proposed action will not curtail the range of beneficial uses of the environment. As the Property is presently within the Conservation District, the allowable uses are generally restricted and regulated by DLNR. The approval of the Project will not curtail the range of beneficial uses of the environment, rather, the approval of the Project will allow the Applicant to commence an allowable use within the Conservation District, R Subzone. The proposed project is on private land in a gated community with restricted access. There is no access from the ocean side which is the only public side of the property as there exists a high, near vertical cliff above the ocean below, on the Eastern side of the property. There exists no public views of the property from the other sides. Therefore there exists no significant range of beneficial uses of the environment intended in HAR 11-200 that are curtailed but rather benefits enjoyed by the owner of this property contemplated as a result of this project.

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.
The proposed action is consistent with the Environmental Policies and Guidelines established in Chapter 344, HRS, and the National Environmental Policy Act. Therefore the proposed project is not in conflict with such policies or goals.

4. Substantially affects the economic or social welfare of the community or state.
The proposed action will have little impact on the economic and social welfare of the community. Other properties in the immediate vicinity are utilized for both residential and agricultural purposes. The construction of a single-family residence on TMK No.: (3) 2-9-003: 060 and the repair of the access road crossing lot 029 will not have any significant effect on the socio-economic characteristics of the area.

5. Substantially affects public health.
The proposed action will not have any substantial impact on public health. Potential noise, air, water and drainage impacts associated with the construction of the proposed residence and the subsequent single-family residential use will be minimal and will be addressed by complying with Federal, State and County requirements.

6. Involves substantial secondary impacts, such as population changes or effects on public facilities.
The proposed action will not involve any increase in the number of existing lots and will not generate any substantial secondary impacts. The proposed action is consistent with the socio-economic transition that is occurring in the region and therefore substantial secondary impacts, contemplated in HAR 11-200, will not be impacted by the planned project.

7. Involves a substantial degradation of environmental quality.
The proposed dwelling and residential use will not result in a substantial degradation of environmental quality. Any significant environmental resources that might have previously existed on the Property were likely destroyed during the cultivation of sugar cane that spanned nearly one hundred years. The proposed residential use will be generally consistent with the character of the adjoining parcels as well as the neighboring Hakalau and Honomu communities. The Project will not add any new lots or increase the density of the Property. Therefore the planned project will not involve a substantial degradation of environmental quality.

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

The proposed action will not involve any increase in the number of existing lots and will not generate any substantial secondary impacts. No additional land uses that are regulated/restricted by HAR 13-5 are contemplated by the applicant thus there is unlikely to be a cumulative effect of additional regulated land uses on the environment. The residence will allow the Applicant to better manage his existing agricultural use of his property. The applicant has already planted substantial areas of the 3 TMK parcels to agricultural crops. This agricultural use of the lots is an allowed use (an allowed non-conforming land use) according to HAR 13-5. The property was utilized for agriculture at the time that it was taken into the Conservation District. As such, the approval of the proposed action does not involve a commitment for larger actions and will not induce other regulated actions having a cumulative effect on the environment. The applicant will be better able to manage his existing agricultural use of his property by having a residence on his property. The agricultural use is already a formerly allowed, and now an ‘existing, larger action’ and the addition of a residence now does not represent a new commitment for larger actions beyond the planned project nor does it represent a commitment for larger actions.

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

The project site has been extensively disturbed by earthmoving equipment due to the former agricultural and railway/roadway use and does not have any candidate, proposed, or listed threatened or endangered species on the Property. As such, the proposed action will not have any substantial adverse effect on any rare, threatened or endangered species or its habitat.

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

Short term impacts will result from the proposed residential use including increased noise levels, dust and exhaust from machinery involved in the construction phase. Given the temporary or intermittent nature of these activities, the potential impacts from any construction should be minimal. Potential water quality impacts will be mitigated by strict adherence to State and County rules and regulations, which mandate that all runoff be disposed of on site. Thus the planned project will not detrimentally affect air or water quality or ambient noise levels contemplated in HAR 11-200.

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, freshwater, or coastal waters.

Despite a past assertion by a representative of the OCCL in correspondence to the applicant that “all conservation lands are sensitive by their very nature” the Applicant’s subject property is not particularly identified on government maps and the like as being in an environmentally sensitive
area such as a flood plain, tsunami zone, beach, geologically hazardous land, estuary, freshwater. However the property is adjacent to coastal waters. The applicant notes that similar projects in apparent more “sensitive” areas within the Conservation District are routinely approved for the use as single family residences.

Shoreline areas in Hawai`i, particularly those on the northeast side exposed to the prevailing winds and heaviest wave attack, are subject to shoreline retreat. The rate of retreat in Hawai`i has been estimated at an average rate of a couple of inches a year. (Macdonald and Abbott, 1977.) Some locations may experience sudden and rapid retreat due to landslides which may be associated with sea cliff collapse. A 125-foot structural setback from the bluff/pali has been implemented in order to minimize the effects of potential shoreline retreat. In addition, a geotechnical study was conducted which found that the existing slope is grossly stable and can be expected to remain so under reasonably foreseeable conditions. Therefore the project will not result in a negative impact on a particularly sensitive environment as contemplated in HAR 11-200.

12. Substantially affects scenic vistas and view planes identified in county or state plans or studies.
The open space and scenic resources in the vicinity of the House Site will not be adversely affected by the proposed action. No County or State plans or studies have been identified by the applicant which identifies the project area as a scenic vista or view plane. The House Site is not visible from the Hawai`i Belt Road and the Project will have no impact on the natural beauty of Kolekole Gulch and Hakalau Bay/Gulch, which are identified as examples of natural beauty in the Hawai`i County General Plan. Therefore the planned project will not substantially affect scenic vistas and view planes identified in county or state plans or studies.

13. Requires substantial energy consumption.
The proposed residential use will not require substantial energy consumption. Applicant intends to utilize solar energy and LP Gas in support of the single-family dwelling. The use of large shaded lanai areas which will limit solar heat gain into the residence and the use of roof top ventilation of heat trapped inside as well as large sliding glass doors facing Eastward into the trade winds will minimize energy consumption. The residence is intended to be ‘off the grid’ and not rely on the supply of electrical energy from a public source. Therefore the residence on the property will not require substantial energy consumption as contemplated in HAR 11-200.

Findings
Based on the foregoing information presented, it is determined that the construction of a single-family residence in the Conservation District on the subject property will not have a significant effect. As such, a determination of a Finding of No Significant Impact for the proposed action is appropriate.

Reasons Supporting Determination
The nature and scale of the proposed action is such that no significant environmental effects are anticipated. Potential impacts, if any, can be mitigated through compliance with all governmental requirements including those of the State Department of Health and the County Dept. of public works.
List of exhibits

Exhibit 1 - 2014 Biology report, 13 pages
Exhibit 2 - overlay Church res. vs. McCully res, 1 page
Exhibit 3 - Sam Lemmo testimony McCully LUC hearing (shoreline set back), 3 pages
Exhibit 4 - Dr. Kwong letter – shoreline set back, 1 page
Exhibit 5 - cut and fill for driveway and house site, 1 page
Exhibit 6 - 2008-02-08-HA-FEA-McCullyEA is not supplied herein as it is a large document of over 100 pages. It can be found at….
Exhibit 7 - Brewer F31 field map, 1 page
Exhibit 8 - Brewer field map, 1 page
Exhibit 9 - John Cross letter Sept. 16, 2015, 1 page
Exhibit 12 - aerial photo of subdivision and notes, 1 page
Exhibit 14 – Floor plan of residence and floor plan (MDA) calculation
Exhibit 15 (a) & (b) - elevation views of residence
Exhibit 16 – Topographical view of lots 013, 029, 060 showing setbacks from pali of residence, fire place and septic field. Also showing new (2015) property lines and view plane easements on the lots. Also showing set back for residence from lot 048 to the West of lot 060
Exhibit 17 – Topographical view of lots 013, 029, 060 showing residence, driveway, outdoor cooking area, septic tank and field, structure accessory to agricultural use on lot 029 (750 sq. ft. washroom, storage and processing bldg.)
Exhibit 18 – house view to West lot 048, 1 page
Exhibit 20 - Response to Mr. Church RE CDUA HA-3764, 3 pages

Exhibit 21 – Undated (rec’d March 31, 2016) DLNR letter of acceptance for processing CDUA 3767 for ‘Church single family residence’, 3 pages

Exhibit 22 – DLNR/OCCL letter dated May 31 ‘end of comment period for Draft EA’ including copies of end of comment periods letters……18 pages

- April 21 letter – DLNR Land Division letter, agricultural use of Private Lands
- May 20 OEQC comment letter to Draft EA
- April 26 letter Department of Health comment letter
- April 27 County of Hawaii letter
- May 2 Citizen letter Robin Rudolph
- May 31 DLNR/OCCL end of comment period letter
- Undated letter Department of land and Natural Resources Engineering Division To: Land Division, Russell Y. Tsuji

Exhibit 23 Applicant’s response to DLNR/OCCL letter of acceptance (March 31) and end of comment period letter dated May 31, 4 pages
Exhibit 24 Applicant’s letter to DLNR Land Division dated April 13, 4 pages

Exhibit 25 Applicant’s letter responding to May 20 OEQC comment letter, 9 pages

Exhibit 26 Applicant’s letter responding to April 26 Department of Health comment letter, 3 pages

Exhibit 27 Applicant’s letter responding to April 27 County letter, 1 page

Exhibit 28 Applicant’s letter responding to May 2 citizen, Robin Rudolph, letter, 4 pages

Exhibit 29 Applicant’s response to DLNR Engineering Division, 1 page

Exhibit 30 Road, 1 page
EXHIBIT 1

*General Botanical Survey and Vertebrate Fauna Assessment, TMKs (3rd.) 2-9-003:013, 029 & 060*

*Wailea, South Hilo District, Island of Hawai‘i*

By Ron Terry, Ph.D. and Patrick J. Hart, Ph.D.
Geometrician Associates, LLC

November 2014
Introduction

This biological survey was prepared for Ken Church and Joan Hildal, landowners of a roughly 4.6-acre property that includes TMKs (3rd) 2-9-003:013, 029 & 060 (“the property”). The survey was prepared accessory to an application for a Conservation District Use Permit for consolidation/resubdivision and subsequent development of up to three single-family homes on the property. As shown in Figures 2 and 3, which are aerial and ground photos of the property, most of the property is covered with lawn and crop plantings, including bamboo, coconuts and squash, associated with long-standing agricultural use. It is our understanding that development will be limited to these already heavily disturbed areas and their fringes. All land not maintained in this manner is located on or adjacent to a sea cliff that is 100 to 140 feet in height or in the Puahanui Stream gulch, the center of which is the north boundary of the property. These steep areas are forested with trees, shrubs and understory plants. The sea cliff itself and the seashore below the cliffs are State property makai of the land owned by Mr. Church and Ms. Hildal.

The objectives of the botanical survey component of this survey were to 1) describe the vegetation; 2) list all species encountered; and 3) determine the likelihood of the presence of rare, threatened or endangered plant species, and to identify the locations of any individuals found. The area was surveyed by Ron Terry and Patrick Hart in November 2014. Plant species were identified in the field and, as necessary, collected and keyed out in the laboratory. Special attention was given to the possible presence of any federally (USFWS 2014) listed threatened or endangered plant species, although the habitat did not indicate a strong potential for their presence.

The survey also included a limited faunal survey restricted to a list of birds and introduced mammals, reptiles, or amphibians observed during the botanical survey. Also considered in this report is the general value of the habitat for native birds and the Hawaiian hoary bat. Not included in the survey were invertebrates or aquatic species or habitat.

Vegetation Type and Influences

The geology of the property consists of Hamakua Volcanics from Mauna Kea that are 70,000 to 250,000 years in age and covered with weathered Pahala Ash (Wolfe and Morris 1996). The natural slope perpendicular to the sea on the interfluve on the property between stream gulches is on the order of 5 to 7 percent. Steep slopes over 100 percent (i.e., 45 degrees) are present on Puahanui Stream and on the sea cliffs makai of the
property. The area receives an average annual rainfall of about 140 inches (Giambelluca et al. 2014). The natural vegetation of this part of the Hamakua Coast was most likely lowland rain forest dominated by ‘ohi’a (*Metrosideros polymorpha*), uluhe (*Dicranopteris linearis*) and hala (*Pandanus tectorius*) (Gagne and Cuddihy 1990). However, the general landscape of the Hamakua Coast has been radically altered by centuries of agriculture and settlement, and little to no native vegetation remains in most locations. Gulches and sea cliffs continue to have remnant spots with at least some native elements, although even these are generally dominated by non-natives.

This property is currently in agriculture and open space but has a history of sugar cane cultivation (Tsukazaki Yeh & Moore 2008). After the cessation of sugar cane cultivation in (presumably) the mid-1980s, the area lay fallow until 1992, after which it was maintained in grass with scattered landscape plantings of crop plants such as bamboo and squash. A 2004 survey of a portion of the property by botanist Evangeline Funk conducted as part of a previous application for a Conservation District Use Permit (Tsukazaki Yeh & Moore 2008) found a number of weedy species, only two native species (hala and popolo – *Solanum americanum*) and no threatened or endangered plant species.

**Results: Vegetation**

The vegetation consists of basically three types, as shown in Figures 2a-c:

1. Open, mown grass with scattered maintained plantings of landscape and agricultural species, including non-native grasses, sedges, herbs, vines, shrubs and trees;
2. Gulch vegetation with some hala but primarily non-native trees and shrubs with an understory of herbs, heavily covered by lianas; and
3. Sea cliff fringe vegetation of various non-native trees along with the native hala, with a fairly spare understory of non-native shrubs and herbs with the occasional native vine nanea (*Vigna marina*) and native shrub naupaka (*Scaevola sericea*).

In some areas, the hala is dense enough that it represents native vegetation that is similar, if not as rich in native species, to what might have been here prior to human settlement and alteration. We did not observe any ‘ohi’a or other native trees aside from hala that might be expected to be present if the vegetation were pristine.

**Flora**

All plant species found on the property during the survey are listed in Table 1. Of the 94+ species detected, four were indigenous (native to the Hawaiian Islands and elsewhere) and none were endemic (found only in the Hawaiian Islands). No rare or unusual plant species were present. Many of the species detected were specifically planted rather than naturally occurring.
Threatened and Endangered Plant Species and Critical Habitat

No threatened or endangered plant species as listed by the U.S. Fish and Wildlife Service appear to be present on the property, nor are there uniquely valuable habitats. No existing or proposed federally designated critical habitat is present on the property.

Botanical Impacts and Recommended Mitigation Measures

The history of continuous disturbance coupled with the lowland context has resulted in a flora and vegetation on the part of the property planned for development that has little value in terms of conserving native vegetation or threatened or endangered plant species. We understand that the hala patches near the sea cliff and within the gulch will not be disturbed and that the semi-native vegetation here will remain intact. As such, no adverse botanical impacts are expected as a result of the proposed development and continuing uses.

Fauna

A total of ten bird species were observed during the survey, all of them common non-natives (see Table 2). We would expect the migratory resident Golden Plover (*Pluvialis fulva*) to be at least occasionally present, as it frequently rests and forages on mowed lawns throughout the State of Hawai‘i during its residence here from August to April.

The area is also undoubtedly utilized by the endemic Hawaiian Hawk (*Buteo solitarius*). The endangered Hawaiian Hawk is widespread, hunting throughout forested, agricultural and even residential areas of the island of Hawai‘i. It nests in large trees and can be vulnerable during the summer nesting season. Aside from the hawk, it is unlikely that native forest birds would make much use of the property because of its relatively low elevation and lack of native plants.

Additionally, it is possible that small numbers of the endangered endemic Hawaiian Petrel (*Pterodroma sandwichensis*) and the threatened Newell’s Shearwater (*Puffinus auricularis newelli*) over-fly the property between the months of May and November. The Hawaiian Petrel was formerly common on the Island of Hawai‘i. This pelagic seabird reportedly nested in large numbers on the slopes of Mauna Loa and in the saddle area between Mauna Loa and Mauna Kea, as well as at the mid-to-high elevations of Hualālai. It has within recent historic times been reduced to relict breeding colonies located at high elevations on Mauna Loa and, possibly, Hualālai. Hawaiian Petrels were first listed as an endangered species by the USFWS in 1967 and by the State of Hawai‘i in 1973. Newell’s Shearwaters were also once common on the Island of Hawai‘i. This species breeds on Kaua‘i, Hawai‘i, and Moloka‘i. Newell’s Shearwater populations have dropped precipitously since the 1880s (Banko 1980, Day et al., 2003). This pelagic species nests high in the mountains in burrows excavated under thick vegetation, especially *uluhe* (*Dicranopteris linearis*) fern. Newell’s Shearwater was listed as a threatened species by the USFWS in 1975 and by the State of Hawai‘i in 1973.

The primary cause of mortality in both Hawaiian Petrels and Newell’s Shearwaters in Hawai‘i is thought to be predation by alien mammalian species at the nesting colonies.
Collision with man-made structures is considered another significant cause. Nocturnally flying seabirds, especially fledglings on their way to sea in the summer and fall, can become disoriented by exterior lighting. When disoriented, seabirds often collide with manmade structures, and if they are not killed outright, the dazed or injured birds are easy targets of opportunity for feral mammals. There is no suitable nesting habitat within or close to the property for either species.

Various mammals would be expected on the property, including small Indian mongoose (*Herpestes a. auropunctatus*), mice (*Mus* spp.), rats (*Rattus* spp.), cats (*Felis catus*) and domestic dogs (*Canis f. familiaris*). None of these alien mammals have conservation value and all are deleterious to native flora and fauna. During the survey, only the mongoose was observed.

Although not detected in the survey, which took place in daylight, the only native Hawaiian land mammal, the Hawaiian Hoary Bat (*Lasiurus cinereus semotus*), may also be present in the general area, as it is present in many areas on the island of Hawai‘i. They may forage for flying insects the property on a seasonal basis and may also roost in trees and large shrubs.

There are no native terrestrial reptiles or amphibians in Hawai‘i. The only reptile observed was an unidentified species of skink (Family: Scincidae). No other reptiles and amphibians were detected during the survey, but we understand that coqui frogs (*Eleutherodactylus coqui*) are also present. It is likely that the bufo toad (*Bufo marinus*) and several species of gecko and anole lizards are also present.

No invertebrate survey was undertaken as part of the survey, but rare native invertebrates tend to be associated with native vegetation and are very unlikely to be present. Although no lava tube openings were observed, if caves are present, native invertebrates including spiders and insects could be present, especially if the roots of native trees extend into the caves.

**Impacts and Mitigation Measures for Fauna**

We offer the following recommendations in order to avoid impacts to endangered but widespread native birds and the Hawaiian hoary bat:

- To minimize impacts to the endangered Hawaiian hoary bat, we recommend that trees taller than 15 feet should not be removed or trimmed during the bat birthing and pup rearing season (June 1 through September 15), to the extent practical.
- To minimize impacts to Hawaiian Hawks, we recommend avoiding earthmoving within 100 meters of tall trees or tree cutting during the breeding season for Hawaiian Hawks (March through the end of September). If this time period cannot be avoided, arrange for a hawk nest search to be conducted by a UH Hilo biologist or other qualified biologist. If hawk nests are present in or near the project site, all land clearing activity should cease until the expiration of the breeding season.
• If any of the homes or other activities incorporate outdoor lighting, they may attract endangered Hawaiian Petrels and Newell’s Shearwaters, which may become disoriented by the lighting, resulting in birds being downed. To avoid the potential downing of Hawaiian Petrels and Newell’s Shearwaters by their interaction with outdoor lighting, we recommend no construction or unshielded equipment maintenance lighting after dark between the months of April and October. All permanent lighting should be shielded in strict conformance with the Hawai‘i County Outdoor Lighting Ordinance (Hawai‘i County Code Chapter 9, Article 14), which requires shielding of exterior lights so as to lower the ambient glare caused by unshielded lighting.

Report Limitations

No biological survey of a large area can claim to have detected every species present. Some plant species are cryptic in juvenile or even mature stages of their life cycle. Dry conditions can render almost undetectable plants that extended rainfall may later invigorate and make obvious. Thick brush can obscure even large, healthy specimens. Birds utilize different patches of habitat during different times of the day and seasons, and only long-term study can determine the exact species composition. The findings of this survey must therefore be interpreted with proper caution; in particular, there is no warranty as to the absence of any particular species.
Literature Cited


Figure 1. Property TMK Map
Figure 2a. Aerial Image
Figure 3. Property Vegetation Photos

3a. Maintained vegetation over most of property ▲  
3b. Gulch vegetation ▼
Figure 3. Property Vegetation Photos

3c. Sea cliff vegetation ▲ ▼ 3d. Gulch flows to sea as waterfall (off property)
<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Family</th>
<th>Common Name</th>
<th>Life Form</th>
<th>Status*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adiantum hispidulum</td>
<td>Pteridaceae</td>
<td>Rough maidenhair fern</td>
<td>Fern</td>
<td>A</td>
</tr>
<tr>
<td>Ageratum conyzoides</td>
<td>Asteraceae</td>
<td>Ageratum</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Aleurites moluccana</td>
<td>Euphorbiaceae</td>
<td>Kukui</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Alocasia macrorrhizos</td>
<td>Araceae</td>
<td>Ape</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Archontophoenix alexandrae</td>
<td>Arecaceae</td>
<td>Alexander palm</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Ardisia elliptica</td>
<td>Myrsinaceae</td>
<td>Shoebutton ardisia</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Asystasia gangetica</td>
<td>Acanthaceae</td>
<td>Chinese violet</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Bambusa vulgaris</td>
<td>Poaceae</td>
<td>Yellow clumping bamboo</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Begonia sp.</td>
<td>Begoniaceae</td>
<td>Begonia</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Canavalia cathartica</td>
<td>Fabaceae</td>
<td>Maunaloa</td>
<td>Vine</td>
<td>A</td>
</tr>
<tr>
<td>Carica papaya</td>
<td>Caricaceae</td>
<td>Papaya</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Casuarina equisetifolia</td>
<td>Casuarinaceae</td>
<td>Ironwood</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Cecropia obtusifolia</td>
<td>Cecropiaceae</td>
<td>Cecropia</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Centella asiatica</td>
<td>Apiaceae</td>
<td>Gotu kola</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Chamaecrista nictitans</td>
<td>Fabaceae</td>
<td>Partridge pea</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Chamaesyce hirta</td>
<td>Euphorbiaceae</td>
<td>Hairy spurge</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Chamaesyce hypericifolia</td>
<td>Euphorbiaceae</td>
<td>Graceful spurge</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Citharexylum sp.</td>
<td>Verbenaceae</td>
<td>Fiddlewood</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Citrus maxima</td>
<td>Rutaceae</td>
<td>Pomelo</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Citrus reticulata</td>
<td>Rutaceae</td>
<td>Tangerine</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Clusia rosea</td>
<td>Clusiaceae</td>
<td>Autograph tree</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Cocos nucifera</td>
<td>Areaceae</td>
<td>Coconut</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Coffea arabica</td>
<td>Rubiaceae</td>
<td>Coffee</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Coix lachryma-jobi</td>
<td>Poaceae</td>
<td>Job’s tears</td>
<td>Grass</td>
<td>A</td>
</tr>
<tr>
<td>Colocasia esculenta</td>
<td>Araceae</td>
<td>Taro</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Commelina diffusa</td>
<td>Commelinae</td>
<td>Honohono</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Cordyline fruticosa</td>
<td>Agavaceae</td>
<td>Ti</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Crassocephalum crepidioides</td>
<td>Asteraceae</td>
<td>Crassocephalum</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Crepis capillaris</td>
<td>Asteraceae</td>
<td>Hawk’s beard</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Commelina diffusa</td>
<td>Commelinae</td>
<td>Honohono</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Crotalaria sp.</td>
<td>Fabaceae</td>
<td>Crotalaria</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Cucurbita pepo</td>
<td>Cucurbitaceae</td>
<td>Squash, pumpkin</td>
<td>Vine</td>
<td>A</td>
</tr>
<tr>
<td>Cyperus involucratus</td>
<td>Cyperaceae</td>
<td>Umbrella sedge</td>
<td>Sedge</td>
<td>A</td>
</tr>
<tr>
<td>Cyperus polystachyos</td>
<td>Cyperaceae</td>
<td>Cyperus</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Cyperus rotundus</td>
<td>Cyperaceae</td>
<td>Purple nut sedge</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Cyrtomium falcatum</td>
<td>Dryopteridaceae</td>
<td>Holly fern</td>
<td>Fern</td>
<td>A</td>
</tr>
<tr>
<td>Desmodium triflorum</td>
<td>Fabaceae</td>
<td>Desmodium</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Diplazium esculentum</td>
<td>Athyriaceae</td>
<td>Warabi</td>
<td>Fern</td>
<td>A</td>
</tr>
<tr>
<td>Eleusine indica</td>
<td>Poaceae</td>
<td>Wiregrass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Emilia sonchifolia</td>
<td>Asteraceae</td>
<td>Puaele</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Epipremnum pinnatum</td>
<td>Araceae</td>
<td>Pothos vine</td>
<td>Vine</td>
<td>A</td>
</tr>
<tr>
<td>Eucalyptus robusta</td>
<td>Myrtaceae</td>
<td>Eucalyptus</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Ficus microcarpa</td>
<td>Moraceae</td>
<td>Chinese banyan</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Garcinia sp.</td>
<td>Clusiaceae</td>
<td>Mangosteen</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Hedychium sp.</td>
<td>Zingiberaceae</td>
<td>Ginger</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Ipomoea triloba</td>
<td>Convolvulaceae</td>
<td>Little bell</td>
<td>Vine</td>
<td>A</td>
</tr>
</tbody>
</table>

*Table 1. Plant Species Observed on Property*
<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Family</th>
<th>Common Name</th>
<th>Size</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kyllinga brevifolia</td>
<td>Cyperaceae</td>
<td>Kili‘o’opu</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Kyllinga nemoralis</td>
<td>Cyperaceae</td>
<td>Kili‘o’opu</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Lantana camara</td>
<td>Verbenaceae</td>
<td>Lantana</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Litchi chinensis</td>
<td>Sapindaceae</td>
<td>Lychee</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Macaranga tanarius</td>
<td>Euphorbiaceae</td>
<td>Bingabing</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Malavaviscus penduliflorus</td>
<td>Malvaceae</td>
<td>Turk’s cap</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Mangifera indica</td>
<td>Anacardiaceae</td>
<td>Mango</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Megathyrsus maximus</td>
<td>Poaceae</td>
<td>Guinea grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Melinis repens</td>
<td>Poaceae</td>
<td>Red top grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Melochia umbellata</td>
<td>Sterculiaceae</td>
<td>Melochia</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Merremia tuberosa</td>
<td>Convolvulaceae</td>
<td>Wood rose</td>
<td>Vine</td>
<td>A</td>
</tr>
<tr>
<td>Mimosa pudica</td>
<td>Fabaceae</td>
<td>Sleeping grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Morinda citrifolia</td>
<td>Rubiaceae</td>
<td>Noni</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Musa x paradisiaca</td>
<td>Musaceae</td>
<td>Banana</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Nephelelion lappaceum</td>
<td>Sapindaceae</td>
<td>Rambutan</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Neprolepis multiflora</td>
<td>Nephrolepidaceae</td>
<td>Sword Fern</td>
<td>Fern</td>
<td>A</td>
</tr>
<tr>
<td>Odontonema cuspidatum</td>
<td>Acanthaceae</td>
<td>Odontonema</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Oplismenus sp.</td>
<td>Poaceae</td>
<td>Basket grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Oxalis corniculata</td>
<td>Oxalidaceae</td>
<td>Creeping wood sorrel</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Oxalis debilis var. corymbosa</td>
<td>Oxalidaceae</td>
<td>Pink wood sorrel</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Paederia foetida</td>
<td>Rubiaceae</td>
<td>Maile pilau</td>
<td>Vine</td>
<td>A</td>
</tr>
<tr>
<td>Pandanus tectorius</td>
<td>Pandanaceae</td>
<td>Hala</td>
<td>Tree</td>
<td>I</td>
</tr>
<tr>
<td>Panicum repens</td>
<td>Poaceae</td>
<td>Torpedo grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Paspalum conjugatum</td>
<td>Poaceae</td>
<td>Hilo grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Pennisetum purpureum</td>
<td>Poaceae</td>
<td>Napier grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Persea americana</td>
<td>Lauraceae</td>
<td>Avocado</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Philodendron sp.</td>
<td>Araceae</td>
<td>Philodendron</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Phlebodium aureum</td>
<td>Polypodiaceae</td>
<td>Phlebodium</td>
<td>Fern</td>
<td>A</td>
</tr>
<tr>
<td>Phyllanthus sp.</td>
<td>Euphorbiaceae</td>
<td>Phyllanthus</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Phymatosorus grossus</td>
<td>Polypodiaceae</td>
<td>Maile-scented fern</td>
<td>Fern</td>
<td>A</td>
</tr>
<tr>
<td>Pinus spp.</td>
<td>Pinaceae</td>
<td>Pine</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Pluchea symphytifolia</td>
<td>Asteraceae</td>
<td>Sourbush</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Polygala paniculata</td>
<td>Polygalaceae</td>
<td>Bubble-gum plant</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Psidium cattleianum</td>
<td>Myrtaceae</td>
<td>Strawberry guava</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Psidium guajava</td>
<td>Myrtaceae</td>
<td>Guava</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Saccharum officinarum</td>
<td>Poaceae</td>
<td>Sugar cane</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Scaevola sericea</td>
<td>Goodeniaceae</td>
<td>Naupaka</td>
<td>Shrub</td>
<td>I</td>
</tr>
<tr>
<td>Schefflera actinaphylla</td>
<td>Araliaceae</td>
<td>Octopus tree</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Solanum americanum</td>
<td>Solanaceae</td>
<td>Popolo</td>
<td>Shrub</td>
<td>I</td>
</tr>
<tr>
<td>Spathodea campanulata</td>
<td>Bignoniaceae</td>
<td>African tulip</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Sphagneticola trilobata</td>
<td>Asteraceae</td>
<td>Wedelia</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Syzygium jambos</td>
<td>Myrtaceae</td>
<td>Rose apple</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Thunbergia fragrans</td>
<td>Acanthaceae</td>
<td>White thunbergia</td>
<td>Vine</td>
<td>A</td>
</tr>
<tr>
<td>Thunbergia grandifolia</td>
<td>Acanthaceae</td>
<td>White thunbergia</td>
<td>Vine</td>
<td>A</td>
</tr>
<tr>
<td>Trema orientalis</td>
<td>Ulmaceae</td>
<td>Trema</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Urochloa mutica</td>
<td>Poaceae</td>
<td>California grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Vigna marina</td>
<td>Fabaceae</td>
<td>Nanea, Beach pea</td>
<td>Vine</td>
<td>I</td>
</tr>
</tbody>
</table>

A=Alien    E=Endemic   I=Indigenous   END=Federal and State Listed Endangered
### Table 2. Bird Species Observed on Property

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Common name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Acridotheres tristis</em></td>
<td>Common Myna</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Cardinalis cardinalis</em></td>
<td>Northern Cardinal</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Carpodacus mexicanus</em></td>
<td>House Finch</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Geopelia striata</em></td>
<td>Zebra Dove</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Leiothrix lutea</em></td>
<td>Red-billed Leiothrix</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Lonchura punctulata</em></td>
<td>Nutmeg Mannikin</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Serinus mozambicus</em></td>
<td>Yellow-Fronted Canary</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Sicalis flaveola</em></td>
<td>Saffron Finch</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Streptopelia chinensis</em></td>
<td>Spotted Dove</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Zosterops japonicus</em></td>
<td>Japanese White-eye</td>
<td>Alien Resident</td>
</tr>
</tbody>
</table>
EXHIBIT 2

Overlay Church residence 2016

Vs.

McCully residence 2008
EXHIBIT 3

Sam Lemmo

Administrator OCCL
Testimony at

LUC hearing

Regarding set back considerations
State’s Witness

1. Sam Lemmo

Mr. Lemmo discussed the two CDUPs, which have been approved and noted that one permit was still in progress and referenced the GIS map area.

Mr. Tsukazaki noted that Petitioner had no questions.

Mr. Hayashi raised a few questions on the 80-foot setback.

Mr. Lemmo stated that they arrived at the 80-foot setback through a recommendation from Dr. Fletcher on a pending CDUA project with a similar environment, such as high bluffs, similar types of weathering soils, ocean conditions, and similar vegetation.

Vice Chair Judge posed questions on the two approved and one pending CDUPs and asked if any permits have gone through the process and been denied in the past.

Mr. Lemmo stated that he could not find any applications that have been denied. He added that they prepare a report and make recommendations to the Land Board for approval. Mr. Lemmo commented that for this pending application, they are recommending approval since the applicant has cooperated with their suggestions and the applicant has done a good job of mitigating potential impacts.

Commissioner Kanuha asked if this petitioner had come in for a conservation district permit would the OCCL conduct an analysis similar to the pending application that Mr. Lemmo has referenced.

Mr. Lemmo replied in the affirmative and added that they would do exactly what they did for the (pending) Johnson case and would apply the same practices.

Commissioner Kanuha asked if it was still Mr. Lemmo’s position that this petition not be converted from the conservation to the agricultural districts.

Mr. Lemmo replied in the affirmative.
Commissioner Kanuha commented that being familiar with the site, the two CDUP approvals were primarily in agricultural use sometime before the conservation district was overlaid on them and asked Mr. Lemmo if this was correct.

Mr. Lemmo replied that he believed that was correct and added that they were in agricultural use and believed that the conservation zoning occurred in 1964.

Mr. Yee asked if a person builds a house on conservation district, does there need to be some agricultural activities on the parcel.

Mr. Lemmo replied that there is no requirement to farm land as a condition of approval.

Commissioner Im posed questions on the type of farm activities allowed in the conservation district and the amount of agricultural lands in the area where agricultural activities can be performed along the coastline.

Mr. Lemmo stated that the agricultural activities that would be allowed depends on what is being proposed. Some activities can be harmful to the land (piggeries, chicken farms, etc.) however, the OCCL typically supports applications for agricultural use subject to a management plan. Mr. Lemmo added that they had just approved such an application last year. A big landowner was allowed to grow ornamental plants in the conservation area.

Chair Sakumoto posed questions relative to the analysis done by Dr. Fletcher and the formula for the 80-foot setback.

Mr. Lemmo clarified that the 80-foot setback was not based on a formula, but was estimated in lieu of doing a formal analysis. Without having a coastal geologist looking at the property you would want to put it back further than the minimum county requirement of 40-feet. Mr. Lemmo added that he would explain to the Land Board and they would either agree or not agree if this distance was an acceptable finding. The 80-feet threshold had been used in a similar project. Typically, erosion becomes a reality. This 80-feet setback will still give the petitioner the ability to build a residence and believed that it is a reasonable setback.

Commissioner Kanuha asked what types of agricultural uses are permitted within the conservation district and if the OCCL would still recommend an 80-foot
setback even if the petitioner has previously cleared and landscaped the land for farm related activities.

Mr. Lemmo stated that they have allowed typical farming activities and do not have too many requests for agricultural uses. Generally, they believe that agriculture could become a reasonable use if appropriate mitigation measures are established. Mr. Lemmo added that the OCCL would still look at that as a reasonable condition of development, whether it is structural, or not involving a structure. If the request was to conduct agricultural activities, irrigations lines, etc. and everything is discretionary and up to a certain point you would want to maintain a nice buffer that could have some agricultural use.
EXHIBIT 4

Dr. Kwong letter

Shoreline set back considerations
Based on your request and Yogi Kwong Engineers, LLC's (YKE) preliminary geotechnical evaluation in support of a development project, we present our preliminary geotechnical opinions in support of the planning study. Our services are performed based on our earlier proposal to Mr. James McCully.

We understand the proposed McCully single-family dwellings and related improvements to be constructed on TMK: 2-9-003: 029 will be sited no less than 70 feet inland from the bluff edge. During our site reconnaissance in November 2005, the property was maintained as a grassed area with scattered landscape plantings which did not show observable sign of recent mass wasting above the edge of the sea cliff. Review of 2007 aerial photographs of site observed similar surface conditions.

Based on a review of various historical aerial and topographic photos and maps, as well as the site of the proposed single-family dwellings less than 70 feet inland of the top of the bluff at the time of design and construction, I feel that the proposed setback appears prudent based on the height of the existing bluff (approximately 100 to 120 feet high) and a 75-year design flood event that may cause significant wave action, tsunami, and related coastal flooding. The proposed 70-foot setback from the top of the bluff appears reasonable considering the height of the bluff.

We understand that Mr. McCully will retain a qualified geotechnical engineer to perform site and project specific geotechnical investigations and associated structures and related earthworks and hillside stability pertaining to the development. These services are beyond the scope of YKE's study.

Please feel free to contact us if you have any questions concerning this letter report.

Yours truly,

Yoji Kwong, P.E.
Principal

Yogi Kwong Engineers, LLC
915 Pāia Street
Hilo, HI 96720
EXHIBIT 5

Cut and fill for

Driveway and

Planned Church family residence
EXHIBIT 6

2008-02-08-HA-FEA-McCully FONSI

http://oeqc.doh.hawaii.gov/Shared%20Documents/EA_and_EIS_Online_Library/
Hawaii/2000s/2008-02-08-HA-FEA-McCully(s)-Residence.pdf

This document is approx. 160 pages long. It is submitted hereto as a separate pdf file or can be found on line at the above address
EXHIBIT 7

Brewer F 31
Field Map
There appears the erased term "washout" in this area. It apparently refers to a former structure that crossed the puananui stream here. This is further supported by a survey document titled 'Brewer field map' also found in the County file. In 2015 Ken Church interviewed the former field manager from approx. 1980 to 1992 who stated that the washout occurred probably sometime after 1965.

In 2015 this field map was found by Ken Church in the County file for TMK lots 013, 029, 060 at the County Planning Department in Hilo. The bold type denoting 'former railway', and discussion about field sizes and 'washout' discussion boxes and arrows have been overlayed by Ken Church on to this copy of that document.
EXHIBIT 8

Brewer Field Map
EXHIBIT 9

John Cross letter

Re: Ag use of Subject Property

For agricultural/Horticultural use
Sept. 16, 2015

Subject: Tax Map Keys (TMK’s): (3) 2-9-003: 029, 030, 028, South Hilo, Hawaii

To whom it may concern,

My name is John C. Cross. I am a resident of Hakalau, Hawaii and was born and raised in Hilo. I am very familiar with the subject property listed above. I was in the employ of Mauna Kea Agribusiness and C. Brewer & Company, Ltd. from 1984 to 2005. During those years I was the crop control superintendent for the sugar company until the closure of cane operations in 1994, after that I became Land Manager then Vice President of Real Estate for C. Brewer & Co. Ltd. On or around 1992 the company sold the subject property to James McCully.

Leading up to that time the subject property’s continuous land use was agricultural production. I have maps in the C. Brewer archives know owned by the Olson Trust that show the sugar companies had used the land for agricultural production for over 100 years. I was the custodian of records for C. Brewer & Co. Ltd. and continue in that capacity under the Trust from 2005 to present.

Specifically the 3 subject TMK parcels had a cultivated area of 3.2 acres that were used for agriculture. Specifically, this area was part of my “seed field” under my management. The balance of their area was a gulch on the Northern end of the field and a narrow uncultivated area along the ocean pali. Ref. attached survey document of BLOCK F31B and aerial photo. The area of the cultivated field is outlined with a bold black line.

Should you need to contact me please e-mail me at john@olsontrust.com or call me at (808) 987-4229.

Sincerely,

John C. Cross
EXHIBIT 12

Aerial photo of

Subdivision and notes
Aerial photo of subdivision lots 013, 029, 060, 048, 049, 050, 051
EXHIBIT 14

Floor plan of residence and

Maximum Developable Area

Calculation
NOTE: ROOM AREAS EXCLUDES WALL THICKNESS. TOTAL FLOOR AREA OF 4,649 SQ FT INCLUDES EXTERNAL WALL THICKNESS WHERE APPLICABLE.
EXHIBIT 15 (a) & (b)

Elevation views of

Planned Church residence
EXHIBIT 16

Topographical survey and view

Of

Planned residence showing....
  Residence,
  Setbacks
  Fire place
  Septic field

And

Property lines and view plane easements
  On the lots.
EXHIBIT 17

Topographical survey document

Showing

Lots 013, 029, 060

Showing

Residence
Driveway
Outdoor cooking area
Septic tank and field
Structure accessory to agricultural use on lot 029
EXHIBIT 18

Picture showing trees blocking the view from the residence
To the West of the planned residence
EXHIBIT 20

OCCL letter responding to earlier version of CDUA for residence
Mr. Ken Church
Sent Via E-mail: dockline3@yahoo.ca

SUBJECT: Conservation District Use Application HA-3764 for a Single Family Residence located at 29-3800 Mamalahoa Highway, Wailea, South Hilo, Hawai‘i
Tax Map Key (TMK): (3) 2-9-003:013, 029, 060

Dear Mr. Church,

The Department of Land and Natural Resources (DLNR) and the Office of Conservation and Coastal Lands (OCCL) is in receipt of your CDUA for a proposed Single Family Residence (SFR) to be located at 29-3800 Mamalahoa Highway in Wailea, South Hilo, Hawai‘i and is further identified as Tax Map Key (TMK) (3) 2-9-003:060. The project area is located in the Resource Subzone of the State Land Use Conservation District.

Included as a part of your application was a request to exempt the proposed SFR from the preparation of an Environmental Assessment (EA) based on the fact that there is an existing EA/Finding of No Significant Impact (FONSI) that was prepared in 2008 as a part of the previous landowner’s (the McCullys) CDUA for a SFR to be constructed on Lot 29. After review of the facts that you have presented, as well as review of the 2008 McCully EA/FONSI, the Department has determined that your proposed project is substantially different, in both design and location, than that of the SFR that was presented in the McCully EA/FONSI and, therefore, a separate EA for your proposed project will need to be prepared prior to the processing of your CDUA.

While we understand that you feel that your project is similar in size and scope to the SFR that was being proposed by the McCullys and appears to require less ground disturbance, the McCully SFR was proposed on a different site as clearly shown on Exhibit 12 of your CDUA. The McCully SFR is located on Parcel 29, while your current proposal places your SFR mostly within Parcel 60 (in reference to the “old” property lines. As your current proposal is for an SFR on a different site/parcel and is of a different design than that of the McCullys, the Department has determined that preparation of an EA is necessary. Therefore, at this time, your application is incomplete and the OCCL is unable to accept the application for processing.
In addition, OCCL offers the following comments regarding your application:

- You have identified your proposed use as a “farm dwelling.” However, based on the description that you have provided, it appears that you are proposing to construct an SFR. Our rules identify an SFR as an identified use. Our rules do not identify a “farm dwelling” as an identified land use. Therefore, we suggest that you identify your proposed use as an SFR in your application.

- We understand that you are proposing to construct a SFR with two bedrooms and two and a half baths, pool, carport, bali with hot tub and outdoor cooking structure. Additional improvements include repair of an existing access road, installation of a septic system for the SFR, installation of solar panels on the roof of the proposed SFR, and landscaping around the SFR. Please provide a description of your proposed “bali” as we are unfamiliar with this term. Please also provide a description and/or rendering of your outdoor cooking structure as it is unclear what this structure looks like (i.e. is it an open or covered area?) and show its location on the site plan.

- Please double check and clearly label your floor plan (Exhibit 14). It is unclear what the difference is between the dashed lines and the solid lines. You may wish to include a legend so that it is easy for the general public to understand. It is also unclear if the area labeled “swi” is the proposed swimming pool. If it is not the pool then you will need to clearly show it on the site plan (Exhibit 13). Also, in your project description, you stated that there are two and a half baths. Based on the floor plan, there appears to be only 2 baths. The floor plan also notes that the pond equipment, battery bank/generator backup is below seating lanai. Please clarify this statement as we are not sure if that means that the equipment will be below ground.

- On page 15, you state that “The setbacks for Single-family Residential Standards for lots over one acre, as contained in Chapter 13-5, Hawai‘i Administrative Rules are 25 feet from the front, and 15 ft. on the sides and rear of the property line.” Please correct this statement as HAR Chapter 13-5, Exhibit 4 Single Family Residential Standards, states that the minimum setbacks for lots over one acre are 25 feet from the front, 25 feet from the sides, and 25 feet from the back.

- On page 16, you state that “All outdoor lighting will be located such as not to be seen from the ocean (east).” OCCL has concerns regarding the design of your outdoor lighting as they may attract endangered Hawaiian Petrels and Newell’s Shearwaters which may become disoriented by the lighting, resulting in birds being down. According to the updated biological survey, the biologist recommends that all permanent lighting should be shielded in strict conformance with the Hawai‘i County Outdoor Lighting Ordinance (Hawai‘i County Code Chapter 14, Article 9), which requires shielding of exterior lights so as to lower the ambient glare caused by unshielded lights.

- You have proposed landscaping in an area under 2,000 square feet. A landscaping plan is required to be submitted along with your application. In addition, all plantings shall be appropriate to the site location and shall give preference to plant materials that are endemic or indigenous to Hawai‘i. The introduction of invasive plant species is prohibited.

- Please update your Flora and Fauna section to reflect the findings of the updated biological survey. You state that “the proposed project will have very little impact on the project
area,” however, this is contrary to the updated survey which indicates there may be potential impacts to endangered species and recommends mitigation measures that should be taken into consideration.

Should you wish to retain your copies of your CDUA, you may pick up the documents at our Office located at 1151 Punchbowl St., Room 131 or please make arrangements to have a courier service pick up and deliver the documents to you within 30 days. Should no action take place within 30 days, we shall recycle the documents. Should you have any questions regarding this matter, you may contact Mr. Sam Lemmo at (808) 587-0377.

Sincerely,

SUZANNE D. CASE, Chairperson
Board of Land and Natural Resources

c: Hawai‘i Board Member
   HDLO
   County of Hawai‘i, Planning Dept.
EXHIBIT 21

Undated OCCL letter

“notice of acceptance for processing”

CDUA HA 3767

Church residence
Dear Mr. Church:

NOTICE OF ACCEPTANCE AND PRELIMINARY ENVIRONMENTAL DETERMINATION

Conservation District use Application (CDUA) HA-3767
(Board Permit)

This acknowledges the receipt and acceptance for the processing of your CDUA for a Single Family Residence (SFR) located in Wailea, South Hilo, on the island of Hawai‘i and further identified as Tax Map Key (TMK) (3) 2-9-003:060. The approximately 2.252 acre lot lies within the State Land Use Conservation District, Resource Subzone. In addition, other related improvements, including the SFR access road/utilities corridor and the planting of agricultural crops will take parcels 013 and 029 (1.291 acres and 1.116 acres, respectively).

According to Hawai‘i Administrative Rules (HAR) Chapter 13-5, Exhibit 4, Single Family Residential Standard, for lots larger than one (1) acre, the maximum developable area is 5,000 square feet. In addition, SFRs are an identified land use in the Resource subzone of the Conservation District, pursuant to §13-5-24, Hawaii Administrative Rules (HAR), R-7, SINGLE FAMILY RESIDENCE, (D-1) A single family residence that conforms to design standards as outlined in this chapter.

According to the information provided, you are proposing to construct a 4,649 square foot SFR on an existing, vacant lot. Currently, the area is grassed over. The property is bounded on its eastern border by a pali which is inaccessible by the public due the steep terrain of the area.

The proposed SFR is slab on grade construction and consists of two bedrooms, two and a half baths, a laundry room, a living room, and a covered deck area. There will also be a bale/Hot Tub area with an associated mechanical room, a swimming pool, a carport, and a detached outdoor cooking structure.

The remaining open space on all three (3) of your properties is being proposed for general landscaping and continued agricultural use.

Access to the site is provided via a 30 foot wide paved road and utility easement off of Mamalahoa Highway that leads to parcel 029. From parcel 029 to parcel 060, you are proposing to restore an section that was once a part of the former historic railroad that ran through the parcel, which was also historically used as a field.
road. The road is currently overgrown with grass and has been maintained as a mowed lawn. The proposed access road will be approximately 300 feet long leading from the existing paved entrance on Lot 029 to the proposed SFR. In addition, you are proposing to construct a car turn-around area near the proposed car port area. The access road and car port will be laid with crush rock.

Water is supplied via a pipeline located under the existing easement to Parcel 29. This will be extended below the proposed access road to service the SFR. Electricity to the SFR will be provided by roof top mounted solar panels. No more than a maximum of 30 solar panels will be installed. Electricity will also be provided by batteries and a stand-by generator as back-up systems to the solar panels. Sewage will be handled by the installation of a gravity fed septic system (septic tank and leeching bed).

After reviewing the application, OCCL finds that:

1. The proposed project is an identified land use within the Conservation District, pursuant to Hawai‘i Administrative Rules (HAR) §13-5-24, Identified land uses in the resource subzone, R-7 SINGLE FAMILY RESIDENCE (D-1) A single family residence that conforms to the design standards as outlined in this chapter. The proposed use requires a Board Permit.

2. Pursuant to HAR §13-5-40 HEARINGS, a Public Hearing will not be required.

3. In conformance with Chapter 343, Hawai‘i Revised Statutes (HRS), as amended, and HAR, Title 11, Department of Health, Chapter 200, Environmental Impact Statement Rules, an Environmental Assessment (EA) for the project has been prepared and a Finding of No Significant Impacts (FONSI) is anticipated for the proposed project;

4. The subject area is within the Special Management Area (SMA). The applicant’s responsibility includes complying with the provisions of Hawai‘i’s Coastal Zone Management law (Chapter 205A, HRS) that pertain to the Special Management Area (SMA) requirements administered by the various counties. Negative action on this application can be expected should you fail to obtain and provide us, at least forty-five (45) days prior to the 180-day expiration date, one of the following:
   - An official determination that the proposal is exempt from the provisions of the county rules relating to the SMA;
   - An official determination that the proposed development is outside the SMA; or
   - An SMA Use Permit for the proposed development.

Further, the OCCL offers the following comments on the Draft EA and CUDA:

- In the final EA, please include a section discussing alternatives to the proposed project, such as the no build alternative;
- In the final EA, please include a list of the applicable permits and approvals that will be needed for the proposed project;
- Please provide the individual dimensions of the solar panels that are proposed; and
- Please clarify the width of the access road as well as whether the “repair” of the access road and creation of the turn-around area will involve clearing of the existing grass prior to laying down of the crushed rock;
In regard to your statement of your continued use of cultivating agriculture crops on all three (3) properties, prior to proceeding, a management plan, in conformance with HAR § 13-5, Exhibit 3 Management Plan Requirements, must be prepared and submitted for the Department’s review and approval.

Upon completion of the application review process, the subject CDUA will be reviewed by the Board of Land and Natural Resources for consideration. Should you have any questions, please contact Lauren Yasaka at the Office of Conservation and Coastal Lands at (808) 587-0386.

Sincerely,

SUZANNE D. CASE, Chairperson
Board of Land and Natural Resources

c: Hawai‘i Board Member
    DOFAW/ENG/HDLO/HP
    DOH/OHA/OEQC
    CoH, Planning Dept.
    Hilo Public Library
EXHIBIT 22

DLNR/OCCL letter May 31, 2016

“end of comment period”

Notice and Instructions

With copies of comment letter received
Mr. Ken Church
637 N. Victoria Park Road
Ft. Lauderdale, FL 33304

Dear Mr. Church:

Subject: Agricultural Use of Private Lands Designated as TMKs: (3) 2-9-003: 013, 029, and 060

We are in receipt of your letter dated April 13, 2016 regarding the above-referenced matter. Please note the Department of Land and Natural Resources, Land Division, does not regulate the use of private lands. If you have not already done so, we suggest you contact the Hamakua Water and Soil Conservation District through the Natural Resources Conservation Service at:

NRCS Hilo Service Center – Federal Building
154 Waianuenue Avenue, Suite 322
Hilo, HI 96720

Phone: (808) 933-8350

Sincerely,

Russell Y. Tsuji
Administrator
MEMORANDUM:

To:  
  ✓ DLNR, Division of Aquatic Resources  
  ✓ DLNR, Division of Conservation and Resource Enforcement  
  ✓ DLNR, Division of Forestry and Wildlife  
  ✓ DLNR, Historic Preservation Division

FROM: Samuel J. Lemo, Administrator  
Office of Conservation and Coastal Lands

SUBJECT: REQUEST FOR COMMENTS

Draft Environmental Assessment (DEA) and Conservation District Use Application (CDUA) HA-3767 for the Church Single Family Residence

APPLICANT: Kenneth Church

LOCATION:  
Wailea, South Hilo, Hawai‘i, Tax Map Keys: (3) 2-9-003:013, 029, and 060

Please find enclosed, a CD with an electronic copy of the subject DEA, CDUA HA-3767, and our notice to the applicant. We would appreciate your agency’s review and comment on this application. If no response is received by the suspense date, we will assume there are no comments. The suspense date starts from the date stamp. Please contact Lauren Yasaka at (808) 587-0386, should you have any questions on this matter.

( ) Comments Attached
✓ No Comments

Attachment
Enclosure
MEMORANDUM:

FROM: Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands

TO: DLNR, Division of Aquatic Resources
DLNR, Division of Conservation and Resource Enforcement
DLNR, Division of Forestry and Wildlife
DLNR, Historic Preservation Division

SUBJECT: REQUEST FOR COMMENTS

Draft Environmental Assessment (DEA) and Conservation District Use Application (CDUA) HA-3767 for the Church Single Family Residence

APPLICANT: Kenneth Church

LOCATION: Wailea, South Hilo, Hawaii, Tax Map Keys: (3) 2-9-003:013, 029, and 060

Please find enclosed, a CD with an electronic copy of the subject DEA, CDUA HA-3767, and our notice to the applicant. We would appreciate your agency’s review and comment on this application. If no response is received by the suspense date, we will assume there are no comments. The suspense date starts from the date stamp. Please contact Lauren Yasaka at (808) 587-0386, should you have any questions on this matter.

☐ Comments Attached
☐ No Comments

Attachment
Enclosure

CDUA HA-3767

Acceptance Date: March 29, 2016
180 Day Expiration Date: September 25, 2016
SUSPENSE DATE: 21 Days from stamped date
To: Land Division/ Russell Y. Tsuji
Ref: Draft Environmental Assessment (DEA) and Conservation District Use Application (CDUA) HA-3767 for the Church Single Family Residence

COMMENTS

The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a designated Flood Hazard.

The owner or the project property and/or their representative is responsible to research the Flood Hazard Zone designation for the project. Flood Hazard Zone designations can be found using the Flood Insurance Rate Map (FIRM), which can be accessed through the Flood Hazard Assessment Tool (FHAT) (http://gis.hawaiinfip.org/FHAT).

National Flood Insurance Program establishes the rules and regulations of the NFIP - Title 44 of the Code of Federal Regulations (44CFR). The NFIP Zone X is a designation where there is no perceived flood impact. Therefore, the NFIP does not regulate any development within a Zone X designation.

Be advised that 44CFR reflects the minimum standards as set forth by the NFIP. Local community flood ordinance may take precedence over the NFIP standards as local designations prove to be more restrictive. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

- Oahu: City and County of Honolulu, Department of Planning and Permitting (808) 768-8098.
- Hawaii Island: County of Hawaii, Department of Public Works (808) 961-8327.
- Maui/Molokai/Lanai: County of Maui, Department of Planning (808) 270-7253.
- Kauai: County of Kauai, Department of Public Works (808) 241-4846.

Signed: CARTY S. CHANG, CHIEF ENGINEER
Date: 4/1/98
ref:OCCL:LY

MEMORANDUM:

To:

DLNR, Division of Aquatic Resources
DLNR, Division of Conservation and Resource Enforcement
DLNR, Division of Forestry and Wildlife
DLNR, Historic Preservation Division

FROM: Samuel J. Lemno, Administrator
Office of Conservation and Coastal Lands

SUBJECT: REQUEST FOR COMMENTS

Draft Environmental Assessment (DEA) and Conservation District Use Application (CDUA) HA-3767 for the Church Single Family Residence

APPLICANT: Kenneth Church

LOCATION: Wailea, South Hilo, Hawaii, Tax Map Keys: (3) 2-9-003:013, 029, and 060

Please find enclosed, a CD with an electronic copy of the subject DEA, CDUA HA-3767, and our notice to the applicant. We would appreciate your agency's review and comment on this application. If no response is received by the suspense date, we will assume there are no comments. The suspense date starts from the date stamp. Please contact Lauren Yasaka at (808) 587-0386, should you have any questions on this matter.

( ) Comments Attached
( ) No Comments

Attachment
Enclosure

CDUA HA-3767
Acceptance Date: March 29, 2016
180 Day Expiration Date: September 25, 2016
SUSPENSE DATE: 21 Days from stamped date

APR 12 2016

David G. Smith
Forestry & Wildlife Administrator
May 20, 2016

Lauren Yasaka  
Office of Conservation and Coastal Lands  
Department of Land and Natural Resources  
1151 Punchbowl St, Room 131  
Honolulu, Hawai‘i 96813

Dear Ms. Yasaka,

SUBJECT: Draft Environmental Assessment (EA) for Church Single Family Residence, Wailea, South Hilo, Hawai‘i

The Office of Environmental Quality Control (OEQC) reviewed the Draft EA prepared for the proposed action and offers the following comments for your consideration.

We understand this Draft EA was prepared by the landowner/applicant who appears to have little experience preparing documents such as this; accordingly, the information is not always presented in the most readable or typical fashion. Nonetheless, we were able to discern most of the required content elements for EAs, codified in Section 10 of Chapter 11-200, Hawai‘i Administrative Rules (HAR), i.e., the environmental impact statement rules.

However, missing from the Draft EA is the Significance analysis, as described in HAR Section 11-200-12. Corresponding to elements (8) & (9) of the EA content requirements, a narrative discussion of each of the 13 listed significance criteria must be included in the Final EA, along with a statement of the anticipated agency determination (either a Finding of No Significant Impact or, theoretically, an Environmental Impact Statement Preparation Notice). While the individual significance criterion may seem repetitious with other aspects of the EA, such as the embedded discussion (beginning on page 44) of Evaluation Criteria pertaining the Conservation District rules (Chapter 13-5, HAR), the Significance analysis is a critical and necessary element of the environmental review process.

Thank you for your participation in the environmental review process and the opportunity to comment on the Draft EA. OEQC looks forward to the response that also will be included within the project’s Final EA. If you have questions about these comments, please consult myself or Tom Eisen in our office via email at oeqchawaii@doh.hawaii.gov or telephone at (808) 586-4185.

Sincerely,

[Signature]

Scott Glenn, Director

Cc: Ken Church
Ms. Lauren Yasaka  
Department of Land and Natural Resources  
Office of Conservation and Coastal Lands  
1151 Punchbowl Street, Room 131  
Honolulu, Hawaii  96813  
Email: Lauren.e.yasaka@hawaii.gov

Dear Ms. Yasaka:

SUBJECT: Draft Environmental Assessment (DEA) for the Church Single Family Residence  
Wailea, Hawaii  
TMK: (3) 2-9-003: 013, 029, and 060

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your DEA to our office via the OEQC link: http://oeqc.doh.hawaii.gov/Shared%20Documents/EA_and_EIS_Online_Library/Hawaii2010s/2016-04-23-HA-5E-DEA-Church-Single-Family-Residence.pdf

EPO strongly recommends that you review the standard comments and available strategies to support sustainable and healthy design provided at: http://health.hawaii.gov/eo/landuse. Projects are required to adhere to all applicable standard comments. EPO has recently updated the environmental Geographic Information System (GIS) website page. It now compiles various maps and viewers from our environmental health programs. The eGIS website page will be continually updated so please visit it regularly at: http://health.hawaii.gov/eo/egis.

EPO also encourages you to examine and utilize the Hawaii Environmental Health Portal at: https://eha-cloud.doh.hawaii.gov. This site provides links to our e-Permitting Portal, Environmental Health Warehouse, Groundwater Contamination Viewer, Hawaii Emergency Response Exchange, Hawaii State and Local Emission Inventory System, Water Pollution Control Viewer, Water Quality Data, Warnings, Advisories and Postings.

We advise that, if appropriate, the Hazard Evaluation and Emergency Response (HEER) Office’s Site Discovery and Response (SDAR) Section be contacted. The SDAR section protects human health and the environment by identifying, investigating, andremediating sites contaminated with hazardous substances (non-emergency site investigations and cleanup). The HEER Office’s SDAR Section can be contacted at: (808) 586-4249. For historical maps on lands where sugarcane was grown see: http://health.hawaii.gov/eo/egis/sugarcane

In order to better protect public health and the environment, the U.S. Environmental Protection Agency (EPA) has developed a new environmental justice (EJ) mapping and screening tool called EJSCREEN. It is based on nationally consistent data and combines environmental and demographic indicators in maps and reports. EPO encourages you
Ms. Lauren Yasaka  
Page 2  
April 26, 2016  

To explore, launch and utilize this powerful tool in planning your project. The EPA EJSCREEN tool is available at: http://www.epa.gov/eiscreen.

We request that you utilize all of this information on your proposed project to increase sustainable, innovative, inspirational, transparent and healthy design. Thank you for the opportunity to comment.

Mahalo nui loa,

[Signature]

Laura Leialoha Phillips McIntyre, AICP  
Program Manager, Environmental Planning Office

LM:nn

Attachment 1: EPO Draft Environmental Health Management Map – Hawaii County  
Attachment 2: Clean Water Branch: Water Quality Standards Map – Hawaii County  
Attachment 3: Wastewater Branch: Recycled Water Use Map of Project Area  
Attachment 4: Historic Sugarcane Map of Project Area  
Attachment 5: U.S. EPA EJSCREEN Report for Project Area

c: Ken Church, applicant {via email: Dockline3@yahoo.ca}  
DOH: DHO HI, HEER {via email only}

**LEGEND**
- Air Quality Monitoring Sites
- Active Landfills
- Water Quality Monitoring Sites
- Perennial Streams
- Non-Perennial Streams
- 3-Mile Nautical Boundary
- A Class Water Quality
- AA Class Water Quality
- House Districts
- Senate Districts
- Agricultural
- Conservation
- Rural
- Urban

**ENVIRONMENTAL HEALTH MANAGEMENT ON HAWAI'I**

Map intended for illustrative purposes only. Site locations are approximate.
The report includes environmental, demographic, and EJ indicator values. Each environmental and demographic variable is placed in the context of the estimated concentration of people in the area, and is also compared with percentages to show how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 25th percentile nationwide, this means that only 25 percent of the U.S. population has a lower indicator value than the average person in the location being analyzed. The report provides the data set, index, and methods used, as well as a discussion of important caveats and uncertainties related to the analysis of this data. It is essential to understand these considerations as they may affect the interpretation of the results presented.
<table>
<thead>
<tr>
<th>Selected Variables</th>
<th>Raw data</th>
<th>State Average</th>
<th>%ile in State</th>
<th>EPA Region Average</th>
<th>%ile in EPA Region</th>
<th>USA Average</th>
<th>%ile in USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental indicators</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Particulate Matter (PM 2.5 μg/m³)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>0.905</td>
<td>N/A</td>
<td>0.78</td>
<td>N/A</td>
</tr>
<tr>
<td>Ozone (ppm)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>49.7</td>
<td>N/A</td>
<td>45.1</td>
<td>N/A</td>
</tr>
<tr>
<td>NATA Diesel PM (ug/m³)*</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NATA Air Toxics Cancer Risk (per 1000)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NATA Respiratory Hazard Index*</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NATA Neurological Hazard Index*</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Traffic Proximity and Volume (daily work)</td>
<td>28</td>
<td>239</td>
<td>28</td>
<td>100</td>
<td>27</td>
<td>110</td>
<td>44</td>
</tr>
<tr>
<td>Lead Paint Indicator (percentile housing)</td>
<td>0.51</td>
<td>0.17</td>
<td>91</td>
<td>0.25</td>
<td>76</td>
<td>0.5</td>
<td>75</td>
</tr>
<tr>
<td>NPL Proximity (site county distance)</td>
<td>0.0027</td>
<td>0.332</td>
<td>7</td>
<td>0.11</td>
<td>0</td>
<td>0.006</td>
<td>3</td>
</tr>
<tr>
<td>NPL Proximity (city county distance)</td>
<td>0.06</td>
<td>0.12</td>
<td>13</td>
<td>0.41</td>
<td>7</td>
<td>0.31</td>
<td>13</td>
</tr>
<tr>
<td>TDF Proximity (city county distance)</td>
<td>0.0026</td>
<td>0.392</td>
<td>7</td>
<td>0.12</td>
<td>0</td>
<td>0.034</td>
<td>2</td>
</tr>
<tr>
<td>Water Discharge Proximity (distance)</td>
<td>0.0035</td>
<td>0.83</td>
<td>13</td>
<td>0.10</td>
<td>0.15</td>
<td>0.25</td>
<td>13</td>
</tr>
</tbody>
</table>

Environmental indicators are Particulate Matter (PM 2.5 μg/m³), Ozone (ppm), NATA Diesel PM (ug/m³), NATA Air Toxics Cancer Risk (per 1000), NATA Respiratory Hazard Index, NATA Neurological Hazard Index, Traffic Proximity and Volume (daily work), Lead Paint Indicator (percentile housing), NPL Proximity (site county distance), NPL Proximity (city county distance), TDF Proximity (city county distance), and Water Discharge Proximity (distance).

Demographic indicators include Demographic index, Minority Population, Low Income Population, Linguistically Isolated Population, Population with Less Than High School Education, Population under Age 5, and Population over Age 64.

For additional information, see: [www.epa.gov/environmentaljustice](http://www.epa.gov/environmentaljustice)
April 27, 2016

Ms. Lauren Yasaka
Department of Land and Natural Resources
Office of Conservation and Coastal Lands
P. O. Box 621
Honolulu, HI 96809

Dear Ms. Yasaka:

SUBJECT: Request for Comments: CDUA HA-3767
Construction of a Single-Family Residence
TMK: 2-9-003:013, 029 and 060, Wailea, South Hilo, Hawai‘i

This is in response to your April 12, 2016, request for comments on the proposed construction of a single-family dwelling on Parcel 060 with access and related improvements crossing Parcels 013 and 029.

We note the following:

1. We concur with the State Land Use designation of Conservation and the County General Plan Land Use Pattern Allocation Guide Map (LUPAG) designation of Open. However, although County zoning is Agricultural (A-20a), the Conservation districts are governed by the Department of Land and Natural Resources.

2. It is in the Special Management Area. On April 21, 2016, a Special Management Area Use Permit Assessment Application (SAA 16-001389) was submitted for the construction of the 4,690 square foot single-family dwelling and related improvements.

3. As the project location is over 100 feet from the top of the coastal pali, no improvements are proposed in the “shoreline area” as defined by Section 205A-41, Hawai‘i Revised Statutes (HRS).
4. In 1.5.3 Listing of Permits and Approvals, please note that Plan Approval for the proposed project is not required. Also, although listed twice, building permits and grading permits are only issued by the Department of Public Works.

Thank you for the opportunity to provide comments on the subject application. Should you have any questions, please contact Esther Imamura at (808) 961-8139.

Sincerely,

[Signature]

DUANE KANUHA
Planning Director
Dear Ms. Yasaka,

my name is Robin Rudolph, I am a student at the University of Hawaii at Hilo and I was reviewing the DEA of the proposed Church residence. I was looking at the 'environmental setting' of the existing flora and fauna and noticed that there was only one native plant present, the "popolo berry bushes". The extensive agriculture from the late 1800's until 1992 has changed the original environment into one primarily dominated by introduced plants. I was curious if there might be any efforts to plant native species and/or remove invasive ones? I feel that the different impacts and mitigation to resources addressed in the "Environmental Setting" are sufficient in maintaining or improving the proposed location. What was the predominant crop of agriculture during the 1900's and what legacies might that have left?

Thank you for your consideration,

-Robin
Mr. Ken Church
Sent Via E-mail: docline3@yahoo.ca

Dear Mr. Church:

SUBJECT: End of Comment Period

Conservation District Use Application (CDUA) HA-3767
Church Single Family Residence
Wailea, S. Hilo, Hawai‘i
Tax Map Key (TMK): (3) 2-9-0036:013, 029, and 060

This letter is regarding the processing of CDUA HA-3767. The public and agency comment period on your application and Draft Environmental Assessment (EA) has closed (May 24, 2016). Attached to this letter are copies of the comments received by the Office of Conservation and Coastal Lands (OCCL) regarding your CDUA and Draft EA.

Please send copies of your responses to the questions and comments raised in these letters directly to the authoring agency as well as to the OCCL. Responses to comments received directly should also be forwarded to the OCCL. The Final Environmental Assessment (EA) must include a copy of the comment letters received as well as your responses to those letters and may be attached as appendices to the Final EA. Questions, comments and concerns must also be addressed within the body of the Final EA itself for the Department to make a determination in regards to declaring a Finding of No Significant Impact (FONSI).

Please send 2 hard copies and 2 CDs in pdf format of your Final EA to the OCCL. In addition, please send an electronic copy of the Office of Environmental Quality Control (OEQC) Publication Form to OCCL staff at laurene.yasaka@hawaii.gov. If the project summary has changed, include a new summary. Please include a hard copy of the submitted publication form with the Final EA copies.

Should the Department decide to issue a FONSI, the Final EA and publication form shall be forwarded on to the OEQC for publication in The Environmental Notice. Should you have any questions, please contact Lauren Yasaka of our Office at 587-0386.

Sincerely,

Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands
EXHIBIT 23

Applicant’s response to DLNR/OCCL letter of acceptance
June 8, 2016

State of Hawaii
Department of Land and Natural Resources
Office of Conservation and Coastal Lands
P.O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Yasaka,

Subject: Undated acceptance letter for CDUA HA 3767 (rec’d March 31) and your letter dated May 31, 2016 Subject: End of Comment Period

I noted at the bottom of page 2 of your letter you list 4 comments therein pointing to requested inclusions and specific definitions to be submitted in the final EA.

Particularly you state………..

• *In the final EA, please include a list of the applicable permits and approvals that will be needed for the proposed project;*

This section is now included at the back of the Final EA………..

**Listing of Permits and Approvals.**

• Federal......................... None
• State of Hawaii........
  Department of Land and Natural Resources.......approval of CDUA
  Department of Health-Approval of individual Waste-water system; and Building Permit
  Department of Quality Control................FONSI
• County of Hawaii
  Planning Department.......Approval of SMA Assessment Application
  Building Permit
  Electrical permit
  Plumbing permit
  Occupancy permit

• *Please provide the individual dimensions of the solar panels that are proposed;*
Please find this at Page 21 of the Final EA

- Solar electric and water heating panels. It is proposed that the ‘single family residence’ will be off-grid and rely on solar energy, batteries and a stand-by generator for solar supplemental electricity. The solar energy panels will be provided on the East, South and West sides of the roof of the ‘single family residence’ in order to capture morning, afternoon and early evening solar power. No more than a maximum of 30 solar panels will be utilized in the Project. The panel dimensions will be approx. 36-42” X 65-76” long.

It is difficult at this point to describe the exact size of the panels as they have yet to be purchased. The size ranges specified in the Soal panel description in the EA are generally the sizes currently available in the wattage per panel that I intend to purchase.

- In the final EA, please include a section discussing alternatives to the proposed project, such as the no build alternative;

This is included at page 41 of the Final EA

Alternative Actions Considered

Under the no action alternative, The Applicant would not submit the CDUA for the proposed Project. The Applicant does not own a residence in Hawaii. The Applicant is conducting agricultural uses of the Project area and requires a ‘single family residence’ particularly in order that the Applicant can provide good stewardship of the upkeep of the property and the Historical Agricultural uses of the Property. The Applicant believes that not having a ‘single family residence’ on the property is neither financially viable nor would it allow the best use of the Property. A residence will assist in the management of the naturally open and scenic nature of the Property. The site selection and design of the residence is believed by the Applicant to require the least soil disturbance, place the residence at a maximum distance from the ocean and preserve the scenic views from the two other residences in the subdivision.

- Please clarify the width of the access road as well as whether the “repair” of the access road and creation of the turn-around area will involve clearing of the existing grass prior to laying down of the crushed rock;

This is included on Page 18 and exhibit 30 in the Final EA

In order to minimize the short term impacts of the project the Applicant intends to use Best Management Practices by minimizing fill and ensuring the useful recycling of organic materials harvested as a result of the cutting of sod/grass in project areas. Ref. Exhibit 21 wherein it is described that a portion, 70 cubic yards of the 650 cubic yards (leaving 580 cubic yards of soil for fill cut from the Residence and parking/turndown area), and an additional 50 yards from the roadway repair) will be sod and will be composted and utilized in placement around the various agricultural use areas of the Property instead of in the fill areas. Such compost placed around the trees and the like that may have soil intermixed will either be suitably mulched or grassed to prevent soil erosion during heavy rainfall events.
And

Exhibit 30 which states……….

**ROAD REPAIR**

The grass along the road path and car parking and turn around area adjacent to the residence will first be sprayed to and kill the grass with Roundup and subsequently cutting the grass/sod layer 12 – 14 ft. wide to a depth of approx 2-4” depth resulting in a volume of approx. 25-50 cubic yards of cut soil/sod. This material is substantially composed of organic material mixed with a modest amount of soil. The organic material has value as a composting material useful in support of the Applicant's farming operations on the Property (specifically fruit, nut and bean trees that have already been planted on the Property). The sod pieces will therefore be placed in areas (dead grass layer facing up) surrounding these agricultural use, planted trees, so that the gradual composting of the sod will benefit the nutrient support of the trees. The areas will be subsequently mulched to control plant growth below the trees and prevent erosion of any soil that becomes exposed during the composting/rotting of the grass mat over time.

The placement of the sod around each tree will be variable depending on the slope of the land surrounding the tree. Generally a circle placement of the sod will be in the order of a 4’-8’ dia. around each tree however smaller trees may have a smaller circle of sod placed around them and larger trees may have larger circles of sod. Also down-slope areas within each circle of sod may be layered 2 or 3 levels deep with sod effectively leveling the area under each tree.

It is believed that there currently exist sufficient agricultural use trees to use all of the cut sod resulting from both the roadway and the residence site in this way. In the event that there exists left over sod it will be placed in the same fashion as the fruit trees described herein surrounding the substantial bamboo line planting which is along the Southern boundary of lot 060 and a planned garden area on Lot 029.

After the sod removal the roadway will then be roto-tilled to a depth of about 6” resulting in the mixing of any remaining soil into the road bed of the former railroad bed/field road. 4” of crushed rock will be applied to the described roadway and car turn around area adjacent to the planned residence and again roto-tilled into the previously roto-tilled area mixing the added crushed rock into the road base. In areas where it is determined that the road base requires further enhancement a fabric layer typically used for roadway construction will be applied over the mixed base materials of the road.

Thereafter an additional layer of 4-6” of crushed rock will be applied as a final topping to the roadway and parking area.

Finally

You asked in your letter to describe the width of the repaired road. The road is planned to range between 12 and 14 ft. wide.

I trust that you find these clarifications sufficient to your comments on page 2 of the undated letter of acceptance for CDUA HA 3767.
Turning to your letter dated May 31, Subject End of Comment Period wherein you advise to update the Final EA document with relevant concerns that were raised during the comment period I have updated the document generally and included a new section “Significance criteria 13 points” and “Findings” requested by the Office of Quality Control.

Thank you in advance for your assistance.

Respectfully Submitted by,

Ken Church
EXHIBIT 24

Applicant’s response to DLNR land division
June 5, 2016

State of Hawaii
Department of Land and Natural Resources
Land Division
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Tsuji (Administrator)

Subject: Your letter to me regarding “Agricultural Use of Private Lands Designated as TMKs: (3) 2-9-003: 013, 029, 060” dated April 21, 2016

I am in receipt of your letter dated April 21, 0016 regarding the above-referenced matter. Thank you so much for the guidance/referral that you have offered. Since I purchased these properties (3 TMK parcels) I have sought guidance from the OCCL in regards to my proper use, according to law, of my property as allowed non-conforming agricultural uses according to HAR 13-5. As the TMK parcels are zoned within the Conservation Resource District I wanted to insure that my agricultural uses of the referenced 3 TMK parcels would not be in contravention of any state laws, particularly HAR 13-5, as the penalties for unpermitted land uses within the Conservation district are quite severe.

I have used every reasonable effort to communicate with the OCCL (many letters over the last 18 months and particularly more specific letters beginning in Sept. of 2015) seeking guidance whether the evidence that I submitted to the OCCL of past use of these parcels for agriculture, which seemed to me to grandfather (allow) my present use. The guidance, if any, that I received from the OCCL was not sufficiently complete to meet the standard of acceptance/comfort that I anticipated from the OCCL.

Now after I identified that I have already extensively planted substantial portions of the parcels to various agricultural plantings and identified that in CDUA HA 3767 to the OCCL in April I did finally receive guidance/a request that I submit a
“management plan” according to the requirements of HAR 13-5 in an undated letter which I received around the end of April 2016 titled ………

“NOTICE OF ACCEPTANCE AND PRELIMINARY ENVIRONMENTAL DETERMINATION” Conservation District use Application (CDUA) HA-3767”.

The guidance stated in the late April letter of acceptance for processing from the OCCL for CDUA HA 3767…………

“In regard to your statement of your continued use of cultivating agriculture crops on all three (3) properties, prior to proceeding, a management plan, in conformance with HAR § 13-5, Exhibit 3 Management Plan Requirements, must be prepared and submitted for the Department’s review and approval.”

I already had identified to the OCCL in my CDUA HA 3767 that I had proceeded with my non conforming agricultural land uses as I never received the requested guidance from the OCCL during the 180 day period (according to HAR 13-5 beginning last Sept. wherein I requested of the OCCL a “determination” as to what type of permit, if any, would be required by the OCCL for “allowed non-conforming agricultural use” on my parcels. Ref. ……………

§13-5-30 Permits, generally. ……….. If there is any question regarding the type of permit required for a land use, an applicant may write to the department to seek a determination on the type of permit needed for a particular action.

Now subsequent to the undated letter of acceptance for processing of CDUA HA 3767 wherein a management plan has been requested I have not prepared or submitted such a plan. While I have found “Exhibit 3 Management Plan” in HAR 13-5 it appears to me that the submission, for approval by the OCCL, of such a plan for “allowed non conforming agricultural use according to HAR 13-5” is not a requirement of HAR 13-5. I am left perplexed that the OCCL is requiring/requesting it now without citing a referenced authority for such a requirement? If the use is an allowed use without any reference to submission of the prescribed management plan according to HAR 13-5 I am reluctant to submit
a management plan to the OCCL as their process of approval is very rigid, tedious, expensive and time consuming and the legislated schedule of fines is an enormous burden of fines possibly levied against property owners found in violation of HAR 13-5. Agriculture by its very nature is a dynamic land use. In my opinion the OCCL processes of approvals are not conducive to agricultural uses of my property.

By example before I was aware that non-conforming agricultural use of my property was allowed according to HAR 13-5 as a non conforming use without the requirement of a Site Plan Approval by the OCCL I submitted a modest SPA along with the $50 filing fee to the OCCL described ……….

To plant 12 small potted fruit trees on the property, my application suffered a delay as I had not identified what I was going to do with the shovel full of dirt that I removed from each of the planting holes. Once I corrected that deficiency in my application to plant the 12 trees the permit was issued without further delay. The planting area was a mowed grass area which was formerly used for sugar cane farming. There already existed a 2004 Environmental study which included a Botanical and Archaeological study for the parcels. I was very fortunate that I did not encounter any large stones as my subsequent placement of them on my property (“solid object placed on the property”) may be viewed by the OCCL as a violation of HAR 13-5….. I have read numerous enforcement matters brought before the BLNR by the OCCL and I am quite wary of doing anything that may be brought before the BLNR as an enforcement recommendation as I am rather suspect that my file already carries considerable “RED FLAGS” within the OCCL department.

In parallel to my efforts to insure that my agricultural uses of my parcels were not in violation of any other HAR or HRS statutes resulted in my inquiry of your department on April 13, 2016 which you referenced in your letter of response dated April 21, 2016. I do sincerely appreciate the suggestion that you made in your letter that I contact the Hamakua Water and Soil Conservation District for guidance.
During this past week I telephoned the NRCS Hilo Service Center, ph # 808 933 8350 that you advised that I inquire of further in this matter. The switchboard referred me to the proper authorized person “Kanoe” with whom I discussed the matter at some length. It was her advice that her office offered a voluntary program wherein they would co-ordinate an ‘on site’ review of the parcels, if requested by me, which would include professionals from the University, free of charge. I would be encouraged to identify my planned agricultural land uses and they would give advice appropriate that may assist me to be a good steward of the agricultural use of my property.

As I am not presently on the islands and I do not have a planned date of return I advised Kanoe that I would contact her office following my return to the islands which is presumed presently to be this fall. Their assurances that my use of my property for agriculture (particularly identified by me to her as horticultural use) was generally allowed within the scope of the authority of her office and that I need not be particularly concerned that I was breaking any laws.

Again thank you for your letter of April 21. Your guidance and referral is very much appreciated.

Sincerely,

Ken Church
EXHIBIT 25

Applicant’s response to Office of Quality Control
June 6, 2016

State of Hawaii
Office of Environmental Quality Control
235 South Beretania St. Suite 702
Honolulu, Hawaii 96813

Attn: Scott Glenn, Director

Dear Mr. Glenn,

Subject: Draft Environmental Assessment (Draft EA) for Church Single Family Residence, Wailea, South Hilo, Hawaii

I am in receipt of your letter dated May 20, 2016 to Lauren Yasaka of the OCCL/DLNR which was copied to me.

I have reviewed your letter. I am responding accordingly herein. I will copy your comments from that letter followed by my response in italics on a paragraph by paragraph basis herein….

Paragraph 2.

We understand this Draft EA was prepared by the landowner/applicant who appears to have little experience preparing documents such as this; accordingly, the information is not always presented in the most readable or typical fashion. Nonetheless, we were able to discern most of the required content elements for EAs, codified in Section 10 of Chapter 11-200, Hawai‘i Administrative Rules (HAR), i.e., the environmental impact statement rules.

While it is true that I do have little experience preparing documents such as this the law does provide that I may submit my own documents and I used every reasonable effort to comply with HAR 11-200 rules and your office’s published guidebook describing, in more readable terms, the correct format and process for the submission of a Draft EA. Frankly I submit herein that HAR 11-200 and the Guidebook supplied by your dept. is “not always presented in the most readable or typical fashion”! Specifically I reviewed the…

(1) guidelines document that I found on your website to assist in the preparation of a Draft EA
(2) HAR 11-200.

And

(3) HAR 13-5

When preparing my Draft EA I used every reasonable effort to gain assistance from the agencies involved.

Not everyone contemplating building a home in Hawaii can afford the high cost of professionals which is not excessive in light of the detail required and the tedium of presentation in the ‘most readable or typical fashion’ as you have stated in your letter. While I represent that such professional fees are not excessively high in light of the detail required they are high none-the-less and a substantial additional burden placed upon potential homeowners as they wind through the onerous legislated process prescribed in law. In particular the law is not an easy read regarding the submission of information for the Draft EA and inquiries that I made to the OCCL (the lead agency in my case) directed that I must file the Draft EA with their office for their review. The OCCL directed me to HAR 11-200 in regards to the content and format requirements of submission of my Draft EA to their office. I used every reasonable effort to sort through this copious document. Frankly a standard blank form would go a long way in assisting applicants but that is not provided.

In my opinion there is an obligation to Government and its appointed agencies, in Law, to make laws that citizens can read and reasonably understand and conduct themselves in a lawful manner. A citizen ought not to have to always consult/hire an expert/professional, as you implied that I ought to have, in order to conduct the use of his property in a lawful way. Furthermore public servants ought to suffer the obligation to assist applicants in every way reasonably possible, to ease this process, and not unreasonably be critical of the efforts of the unprofessional land owner which is my case.

You did say in your letter “accordingly, the information is not always presented in the most readable or typical fashion. Nonetheless, we were able to discern most of the required content elements”

Frankly it would appear that you confirm that the information was there. The law does not appear to me to prescribe the order of presentation specifically. In this particular case the lack of clarity in the law and a lack of adequate support of the
In my opinion the responsibility ought to fall first to the regulators to speak clearly in the law and supporting guides and the administrators of the law ought to have been more helpful ‘in the early stages of my planned use/development of my property’ as the law provides. The responsibility for such clarity, which you have indicated that you expect, in my application ought not to be so readily transferred to me and my submitted information referred to as ‘unclear or deficient’ because you recognized my lack of professional presentation.

“We understand this Draft EA was prepared by the landowner/applicant who appears to have little experience preparing documents such as this”

Again I used every reasonable effort to get the assistance and guidance of the regulators, including your office, in the preparation of my Draft EA which was obviously deficient. I would have thought that a compliment rather than such a negative comment ought to have been included in your letter celebrating that an ‘ordinary citizen’ can actually draft such a document.

Finally I will point out that official documents such as this have a ‘living history’ long after acceptance for processing or filing that may serve more purpose than what was evident to you, the reviewer and filing agency. For clarity, as an explanation, it was my intention to properly describe what may have been misinterpreted in comments made in your letter of review as generally formed from a ‘lack of experience on my part’ a somewhat comprehensive (but in no way close to a full disclosure) description of my planned land use and explanations of the history leading up to the submission of the Draft EA.

Notwithstanding the deficiency in the presentation of information noted in your letter (the 13 point significance analysis) which has now been corrected I stand by the content and order of presentation of information in the Draft EA as accurate and revealing and relevant to my submission.

Formally unnecessarily criticizing my ‘lack of experience’ in your letter (a public document) is frankly, insulting! This was a huge work for an ordinary citizen to undertake without reasonable assistance from the regulating agencies
and I believe that my efforts in formulating my Draft EA ought not to be identified in the negative way that your letter states/implies. Your letter back to Ms. Yasaka in regards to this particular comment seems to me to serve little purpose as both of you already are knowledgeable of the fact that I am an ordinary citizen and it need not have been referred to in such a formal document as it seems to me to serve no purpose relevant to the Draft EA.

Paragraph 3

However, missing from the Draft EA is the Significance analysis, as described in HAR Section 11-200-12. Corresponding to elements (8) & (9) of the EA content requirements, a narrative discussion of each of the 13 listed significance criteria must be included in the Final EA, along with a statement of the anticipated agency determination (either a Finding of No Significant Impact or, theoretically, an Environmental Impact Statement Preparation Notice). While the individual significance criterion may seem repetitive with other aspects of the EA, such as the embedded discussion (beginning on page 44) of Evaluation Criteria pertaining the Conservation District rules (Chapter 13-5, HAR), the Significance analysis is a critical and necessary element of the environmental review process.

I appreciate that your letter was directed to the ‘lead agency’, the OCCL, and perhaps the criticism was not particularly directed at me. However you did c.c. me the letter as well and the OCCL has required that I correct the deficiency and it is a public document. I have noted that HAR 13-5 requires that I submit a Draft EA to them with my application without definition of what a Draft EA is within HAR 13-5.

A ‘common sense’ read of the law and your department’s guide appeared to me to indicate that the reviewing agency (presumably the lead agency) is required to be the author of this section of a Draft EA and not the applicant of a CDUA and submitter of a Draft EA. After all it is described in law as an “Analysis” and not a “self Analysis of my own presentation”. I feel that the burden ought not to fall on me to apologize for the seeming ambiguity in the law and correct this deficiency in my Draft EA.


This Guidebook is a revision of the “Guidebook for the Hawaii State Environmental Review Process” published in 2004 by the Office of Environmental Quality Control (OEQC), and is intended to provide a clear and comprehensive explanation of Hawaii Environmental Policy Act (HEPA), its practice, and its implementation……

I encourage you to review your guidebook and HAR 11-200 as I have. I felt, and continue to feel, that I had gone more than the required distance in meeting the
requirements of the law even though identifying, in law, where the burden of preparing such a document rests is clearly not with me.

While I have suffered temptation to challenge the process of submission according to HAR 11-200, as I feel the burden of presentation was unfairly placed on me, I have determined to press on and simply provide the requested information. I therefore request that my protest, which I register herein, not be used in any way to add further delay to my realization of my dream to have a home on my property in Hawaii. The process of transforming the purchase of my property some two years ago into a home on my property so I can enjoy such a basic human right is still in the planning stages while I wind through the regulation process. I still have a considerable series of regulated hurdles to go through despite my using every reasonable effort in the timely submission of documents to the various regulating bodies.

None-the-less, after discussing this further with Tom Eisen, of your office on the telephone, I now will be including with my Final EA submission the following corrections to the identified deficiencies in my Draft EA and now I am proposing it for review as my final EA which, in my opinion, meets the criteria sufficient for a FONSI by the lead reviewing agency for filing with your office.

DETERMINATION, FINDINGS AND REASONS FOR SUPPORTING DETERMINATION

Significance Criteria
According to the Department of Health Rules (11-200-12, HAR), an applicant or agency must determine whether an action may have a significant impact on the environment, including all phases of the project, its expected consequences both primary and secondary, its cumulative impact with other projects, and its short and long-term effects. The Rules establish “Significance Criteria” to be used as a basis for identifying whether a proposed action will have a significant environmental impact on the environment.

1. Involves an irrevocable commitment to loss or destruction of any natural or cultural resources.
Neither natural or cultural resources appear to be defined in the definition section of HAR 11-200. Applicant proposes to construct a single-family residence within the Conservation District. The subject property was previously utilized for sugar cane production (agricultural use) for approximately 100 years. The specific area on the property proposed for the construction of the single family residence was formerly cultivated for this agricultural use as well the proposed access road was formerly first a railroad road bed and subsequent field road and thus to potential disturbed soil areas resulting from the proposed land use does not contain any particular existing natural or cultural resources that will be destroyed or irrevocably lost by the proposed dwelling and road construction.
However, having said that, the MDA (maximum developable area according to HAR 13-5) site area and former field road areas are presently mowed ‘a planted crop of introduced’ grasses. While Natural Resources’ in HAR 13-5 is identified as including ‘plants’ and grass is a plant there will undoubtedly be some destruction of an existing ‘natural resource’ as the grass (a plant which is a natural resource by definition in HAR 13-5) in the developed area will now be removed and supplanted by a residence. Again HAR 11-200 does not define the term ‘natural resource’ so the destruction of a modest amount of grass will not have a significant effect on the environment of the project site.

Grass is technically a field crop, in the case of my property, which is an allowed ‘non conforming agricultural use’ of the property. Since cultivation of the area is also a continuing allowed non-conforming use of the property it is reasonable to find that the residence will not result in the destruction of a natural resource (grass) that is not already allowed to be destructed in an agricultural use of the property through the allowed cultivation of the land.

Finally similar projects are routinely supported by FONSI(s). As ‘natural resources’ are not defined in HAR 11-200 the destruction of the grass is proposed to be minimal in scope and thus this land use is proposed to not have a significant environmental impact. Similarly ‘Cultural Resources’ are not defined in HAR 11-200 nor does it appear to be defined in HAR 13-5. A study was conducted respecting ‘cultural resources’ on the property and none were found and thus the project will not impact the cultural resources on the project site. In summary, therefore, the project does not involve an irrevocable commitment to the loss or destruction of any natural or cultural resources that are contemplated by HAR 11-200.

2. Curtails the range of beneficial uses of the environment.
Applicant’s proposed action will not curtail the range of beneficial uses of the environment. As the Property is presently within the Conservation District, the allowable uses are generally restricted and regulated by DLNR. The approval of the Project will not curtail the range of beneficial uses of the environment, rather, the approval of the Project will allow the Applicant to commence an allowable use within the Conservation District, R Subzone. The proposed project is on private land in a gated community with restricted access. There is no access from the ocean side which is the only public side of the property as there exists a high, near vertical cliff above the ocean below, on the Eastern side of the property. There exists no public views of the property from the other sides. Therefore there exists no significant range of beneficial uses of the environment intended in HAR 11-200 that are curtailed but rather benefits enjoyed by the owner of this property contemplated as a result of this project.

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.
The proposed action is consistent with the Environmental Policies and Guidelines established in Chapter 344, HRS, and the National Environmental Policy Act. Therefore the proposed project is not in conflict with such policies or goals.
4. **Substantially affects the economic or social welfare of the community or state.**
The proposed action will have little impact on the economic and social welfare of the community. Other properties in the immediate vicinity are utilized for both residential and agricultural purposes. The construction of a single-family residence on TMK No.: (3) 2-9-003: 060 and the repair of the access road crossing lot 029 will not have any significant effect on the socio-economic characteristics of the area.

5. **Substantially affects public health.**
The proposed action will not have any substantial impact on public health. Potential noise, air, water and drainage impacts associated with the construction of the proposed residence and the subsequent single-family residential use will be minimal and will be addressed by complying with Federal, State and County requirements.

6. **Involves substantial secondary impacts, such as population changes or effects on public facilities.**
The proposed action will not involve any increase in the number of existing lots and will not generate any substantial secondary impacts. The proposed action is consistent with the socio-economic transition that is occurring in the region and therefore substantial secondary impacts, contemplated in HAR 11-200, will not be impacted by the planned project.

7. **Involves a substantial degradation of environmental quality.**
The proposed dwelling and residential use will not result in a substantial degradation of environmental quality. Any significant environmental resources that might have previously existed on the Property were likely destroyed during the cultivation of sugar cane that spanned nearly one hundred years. The proposed residential use will be generally consistent with the character of the adjoining parcels as well as the neighboring Hakalau and Honomu communities. The Project will not add any new lots or increase the density of the Property. Therefore the planned project will not involve a substantial degradation of environmental quality.

8. **Is individually limited but cumulatively has considerable effect on the environment, or involves a commitment for larger actions.**
The proposed action will not involve any increase in the number of existing lots and will not generate any substantial secondary impacts. No additional land uses that are regulated/restricted by HAR 13-5 are contemplated by the applicant thus there is unlikely to be a cumulative effect of additional regulated land uses on the environment. The residence will allow the Applicant to better manage his existing agricultural use of his property. The applicant has already planted substantial areas of the 3 TMK parcels to agricultural crops. This agricultural use of the lots is an allowed use (an allowed non-conforming land use) according to HAR 13-5. The property was utilized for agriculture at the time that it was taken into the Conservation District. As such, the approval of the proposed action does not involve a commitment for larger actions and will not induce other regulated actions having a cumulative effect on the environment. The applicant will be better able to manage his existing agricultural use of his property by having a residence on his property. The agricultural use is already a formerly allowed, and now an ‘existing,
larger action’ and does not represent a new commitment for larger actions. Thus the planned project will not have a cumulative nor considerable effect on the environment nor is it a commitment for larger actions.

9. Substantially affects a rare, threatened or endangered species or its habitat. The project site has been extensively disturbed by earthmoving equipment due to the former agricultural and railway/roadway use and does not have any candidate, proposed, or listed threatened or endangered species on the Property. As such, the proposed action will not have any substantial adverse effect on any rare, threatened or endangered species or its habitat.

10. Detrimentally affects air or water quality or ambient noise levels. Short term impacts will result from the proposed residential use including increased noise levels, dust and exhaust from machinery involved in the construction phase. Given the temporary or intermittent nature of these activities, the potential impacts from any construction should be minimal. Potential water quality impacts will be mitigated by strict adherence to State and County rules and regulations, which mandate that all runoff be disposed of on site. Thus the planned project will not detrimentally affect air or water quality or ambient noise levels contemplated in HAR 11-200.

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, freshwater, or coastal waters. Despite a past assertion by a representative of the OCCL in correspondence to the applicant that “all conservation lands are sensitive by their very nature” the Applicant’s subject property is not particularly identified on government maps and the like as being in an environmentally sensitive area such as a flood plain, tsunami zone, beach, geologically hazardous land, estuary, freshwater. However the property is adjacent to coastal waters. The applicant notes that similar projects in apparent more “sensitive” areas within the Conservation District are routinely approved for the use as single family residences.

Shoreline areas in Hawai`i, particularly those on the northeast side exposed to the prevailing winds and heaviest wave attack, are subject to shoreline retreat. The rate of retreat in Hawai`i has been estimated at an average rate of a couple of inches a year. (Macdonald and Abbott, 1977.) Some locations may experience sudden and rapid retreat due to landslides which may be associated with sea cliff collapse. A 125-foot structural setback from the bluff/pali has been implemented in order to minimize the effects of potential shoreline retreat. In addition, a geotechnical study was conducted which found that the existing slope is grossly stable and can be expected to remain so under reasonably foreseeable conditions. Therefore the project will not result in a negative impact on a particularly sensitive environment as contemplated in HAR 11-200.

12. Substantially affects scenic vistas and view planes identified in county or state plans or studies. The open space and scenic resources in the vicinity of the House Site will not be adversely affected by the proposed action. No County or State plans or studies have been identified by the
applicant which identifies the project area as a scenic vista or view plane. The House Site is not visible from the Hawai`i Belt Road and the Project will have no impact on the natural beauty of Kolekole Gulch and Hakalau Bay/Gulch, which are identified as examples of natural beauty in the Hawai`i County General Plan. Therefore the planned project will not substantially affect scenic vistas and view planes identified in county or state plans or studies.

13. Requires substantial energy consumption.
The proposed residential use will not require substantial energy consumption. Applicant intends to utilize solar energy and LP Gas in support of the single-family dwelling. The use of large shaded lanai areas which will limit solar heat gain into the residence and the use of roof top ventilation of heat trapped inside as well as large sliding glass doors facing Eastward into the trade winds will minimize energy consumption. The residence is intended to be ‘off the grid’ and not rely on the supply of electrical energy from a public source. Therefore the residence on the property will not require substantial energy consumption as contemplated in HAR 11-200.

Findings
Based on the foregoing information presented, it is determined that the construction of a single-family residence in the Conservation District on the subject property will not have a significant effect. As such, a determination of a Finding of No Significant Impact for the proposed action is appropriate.

Reasons Supporting Determination
The nature and scale of the proposed action is such that no significant environmental effects are anticipated. Potential impacts, if any, can be mitigated through compliance with all governmental requirements including those of the State Department of Health and the County Dept. of public works

I anticipate that this ‘self analysis and finding’ sufficiently finds acceptance by the ‘Reviewing Agency’ of this EA and a FONSI will result.

Respectfully submitted by,

Ken Church
EXHIBIT 26

Applicant’s response to Department of Health
June 6, 2016

State of Hawaii
Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801-3378

Dear Laura Leialoha Phillips Mcintyre, Program Manager, Environmental Planning Office

Subject: Your file EPO 16-141, Draft Environmental Assessment (DEA) for the Church Single Family Residence.

Thank you for your April 26, 2016 letter which was sent to Lauren Yasaka at the DLNR and which she subsequently forwarded to me for comment. I will respond herein to the various comments/requests which you raised in that letter. My response will be in italics following a copy of the various advice given.

Paragraph 2

EPO strongly recommends that you review the standard comments and available strategies to support sustainable and healthy design provided at: http://health.hawaii.gov/epo/landuse. Projects are required to adhere to all applicable standard comments. EPO has recently updated the environmental Geographic Information System (GIS) website page. It now compiles various maps and viewers from our environmental health programs. The eGIS website page will be continually updated so please visit it regularly at: http://health.hawaii.gov/epo/eqis.

I have reviewed the standard comments and available strategies to support sustainable and healthy design provided at the web sites provided. I will incorporate reasonable required strategies in my applied for land use.

Paragraph 3

EPO also encourages you to examine and utilize the Hawaii Environmental Health Portal at: https://eha.cloud.doh.hawaii.cjov. This site provides links to our e-Permitting Portal, Environmental Health Warehouse, Groundwater Contamination Viewer, Hawaii Emergency Response Exchange, Hawaii State and Local Emission inventory System, Water Pollution Control Viewer, Water Quality Data, Warnings, Advisories and Postings.
Thank you for the encouragement offered and the web address to advice regarding e-filing etc. I will submit appropriate permit applications as advised/required.

Paragraph 4
We advise that, if appropriate, the Hazard Evaluation and Emergency Response (HEER) Office’s Site Discovery and Response (SDAR) Section be contacted. The SDAR section protects human health and the environment by identifying, investigating, and remediating sites contaminated with hazardous substances (non-emergency site investigations and cleanup). The HEER Office’s SDAR Section can be contacted at: (808) 586-4249. For historical maps on lands where sugarcane was grown see: http://health.hawaii.gov/epo/equis/sucarcane

I did contact Joslynne, joslynne.camlin@doh.hawaii.gov following your advice. I followed that up with an email (copy of text below). To date I have not received a response. Generally it is my impression, after speaking with Joslynne it is unlikely that there exists an arsenic hazard on my property. Thank you for the contact telephone # to the HEER Office’s SDAR Section and the link to historical maps.

Text copy of email sent May 20th is below. As of June 6th no response was received by myself to that email.

May 20, 2016

Dear Joslynne, joslynne.camlin@doh.hawaii.gov

We spoke earlier by telephone. I am a property owner of the Big Island of Hawaii, TMK’s (3) 2-9-003: 013, 029, 060. The property is located in the Conservation District Resource zone. I have applied for a CDUP to build a single family residence on lot 029. Lot 029 was formerly used for sugar cane farming for some 100 years. During our telephone conversation I identified that I received a letter from the State of Hawaii, DLNR. They forwarded to me a letter that they received from the Dept. of Health (attached hereto) wherein it was stated……………..

We advise that, if appropriate, the Hazard Evaluation and Emergency Response (HEER) Office’s Site Discovery and Response (SDAR) Section be contacted. The SDAR section protects human health and the environment by identifying, investigating, and remediating sites contaminated with hazardous substances (non-emergency site investigations and cleanup). The HEER Office’s SDAR Section can be contacted at: (808) 586-4249. For historical maps on lands where sugarcane was grown see: http://health.hawaii.gov/epo/equis/sucarcane

After discussing this with you today I am a little confused. The letter
obviously directs me to inquire of your office before proceeding with building my residence so that is what I did. While I am aware that sugar cane was farmed on the property I am not aware that any residual amounts of arsenic exist on the property today. I am not particularly interested in conducting soil tests before proceeding unless that is a requirement in law.

Please advise??

Regards,

Ken Church

Paragraph 5, page 1 & 2

In order to better protect public health and the environment, the U.S. Environmental Protection Agency (EPA) has developed a new environmental justice (EJ) mapping and screening tool called EJSCREEN. It is based on nationally consistent data and combines environmental and demographic indicators in maps and reports. EPO encourages you to explore, launch and utilize this powerful tool in planning your project. The EPA EJSCREEN tool is available at: http://www.epa.cjov/eiscreen.

Thank you for the link to the EPA EJSCREEN tool and the encouragement to explore, launch and utilize this powerful tool in planning my project. I will do as you have encouraged me to do.

Paragraph 6, page 2

We request that you utilize all of this information on your proposed project to increase sustainable, innovative, inspirational, transparent and healthy design. Thank you for the opportunity to comment.

Your request has been noted.

Sincerely,

Ken Church
EXHIBIT 27

Applicant’s response to County of Hawaii
June 6, 2015

County of Hawaii
Planning Department
101 Pauahi St, Suite 3
Hilo, Hawaii 96720

Dear Mr. Kanuha

Subject: Your letter, dated April 27, 2016 to Lauren Yasaka, DLNR regarding Request for Comments: CDUA HA 3767 Church single family residence on TMK 2-9-003 060.

Thank you for reviewing my project application. I have been in contact with Esther Imamura several times over the past 2 years since I purchased the property. I have every confidence in her assistance and reviews of my projects including the SMA for the residence.

Thank you again for reviewing and responding to our CDUA and related documents.

Sincerely,

Ken Church
EXHIBIT 28

Applicant’s response to citizen

Robin Rudolph
June 4, 2016

To: Robin Rudolph  rudophr@hawaii.edu

From: Ken Church

Subject: public comment on DEA-AFNSI Church Residence

Dear Robin,

Ms. Yasaka of the Office of Conservation and Coastal Lands forwarded your email to her, dated May 02, 2016, to me for my response as that is part of the Conservation District Use Application and Environmental Assessment process for a project such as my planned residence construction on my property.

You asked if there “might be any efforts to plant native species and/or remove invasive ones?”. You may not be aware but the process for a land owner such as myself to apply for permits for land uses on my own private property, which is zoned in the Conservation District, with the Department of Land and Natural Resources, Office of Conservation and Coastal Lands is a very onerous, lengthy and tedious process and can also involve substantial permit fees. This includes the possible removal of invasive species and the planting of native species on a property the size of mine (4.6 acres).

In my case I have already spent 2 years in the application process and several hundreds of pages of communications just to get to the point of the CDUA that triggered your email. As a result of the onerous process most land owners are reluctant to even try or they break the law and do such things without proper permitting which may result in substantial fines if they are found out. As an example of the delay and tedium that I experienced I refer to - when I applied to plant 12 small potted fruit trees on the property the application suffered a delay as I had not identified what I was going to do with the shovel full of dirt that I removed from each of the planting holes. Once I corrected that deficiency in my application to plant the 12 trees the permit was issued without further delay.

Another example of expense, delay and tedium in application process that I suffered regarding my land uses early after purchasing the property I applied to combine and re-subdivide the property. Before purchasing the property I had been
given assurances, in writing, that my plan to combine and re-subdivide the property was ‘technically do able’. Initially there were 6 lots (comprising 3 TMK parcels). I applied to combine and re-subdivide into 3 lots (three TMK parcels). Basically it was intended by me that the former 3 railway lots that crossed the property would be absorbed into and become part of the 3 lots. The process suffered tedium, expense and delay.

First the application process suffered delay and tedium as the earlier written assurances to me by the authorities seemingly were ignored and I had to start from scratch. Finally when the authorities were reminded of their earlier assurances that my plans to combine and subdivide the property would be viewed as an allowable land use on terms acceptable to me it was required that I then update the existing 2004 botanical study on the property which was a very expensive undertaking that required several months to research and prepare.

When I first responded to the request by the regulating authority that I update the existing botanical study I stated that the combining and subdividing of the property would not result in any disturbance to the identified existing botanical species on the property. In short nothing was directly going to impact the physical nature of the property but rather simply its description at the county and land titles.

Anyway after subsequent further delays and more letter writing I was advised that ‘a bird(s) may have deposited seed(s) of endangered plants on the property since the earlier study that needed to be identified’ and therefore an updated botanical study was insisted upon before I advanced my land use application to combine and re-subdivide my property. This was not-with-standing that nearly all of the area had grass growing on it that was regularly mowed (an allowed land use) and again the combining and re-subdividing would not result in the disturbance of any such plants anyway.

Finally I pointed out that reducing the number of lots from 6 to 3 would seem to be a result highly desired by the regulating authorities as it would reduce the future potential intensity of land uses. None-the-less I complied with the regulators at considerable expense and resulting in a substantial delay in my intended land use.

I have used my best efforts to secure proper permitting for all of my land uses. While the law requires government employees to assist a landowner such as myself
‘in the early planning stages of my planned coastal land uses’ the amount and quality of the support that I received early on, despite repeated requests for such support) did not meet the standard that the law appears to me to require. None-the-less after considerable effort and expense and the passing of 2 years in process I expect that I am now in the final stages of approval sufficient that I can get on with my life living on and using my property.

Frankly it appears to me that a positive turning point for me began following the appointment of a new Board Chairperson at the DLNR around one year ago. Since that time my applications appear to me to have been processed with greater efficiency by both the DLNR and the OCCL.

Coming back to your question about the possibility of me “planting native species and/or removing invasive ones?” I do plan to address this particular land use over time but my first priority will be to build my home and a storage and processing structure. I am wary however that if I introduce native and or endangered/endemic species will likely result in the DLNR/OCCL taking a more active interest in scrutinizing my future use of my property thereafter as the property will then be partially restored to its natural condition. I find the regulators present interest onerous already and inviting additional scrutiny by restoring the natural nature of the property may not be wise on my part.

You have asked ‘what crops were formerly grown on the property?’ 3.2 of the 4.6 acres of my property was formerly used for the production of sugar cane for over 100 years (another portion was also used for a railway that crossed the property and a very small remaining portion was jungle and bluff above the ocean). The formerly cultivated and railway area is presently maintained as mowed grass interspersed with fruit, bean and nut trees which I planted. There also exists some coconuts, bananas and breadfruit scattered around the property. The remaining portions have invasive species as you noted in your email. If the permitting process does not prove to be too difficult, expensive or onerous I do expect, in time, to consider weeding out the invasive species and planting native species but that will not be in the near term.

Your final question asked ‘what legacies might the previous land uses have left behind?’ I expect not much. The former railway left behind a crushed rock
roadbed which currently is overgrown with grass. This specific property was used as a seed development plot by the sugar cane company. As such access was strictly prohibited so native persons and non natives have almost no recent familiarity/history regarding this property as access was highly restricted. Since its days as a seed farm it has been a private gated community with restricted access.

Finally thank you for your letter of inquiry and interest.

Sincerely,

Ken Church
EXHIBIT 29

Applicant’s response to DLNR Engineering
June 7, 2016

Department of Land and Natural Resources
Engineering Division
P.O. Box 373
1151 Punchbowl St #221, Honolulu, HI 96813
Honolulu, Hawaii 96809

Attn: Carty Chang, Chief Engineer

Subject: Draft Environmental Assessment (DEA) and Conservation District Use Application CDUA HA 3767 for the Church Single Family Residence

Dear Mr. Chang,

I am in receipt of your response dated April 18, 2016 regarding Flood Hazard Zone designation regarding my planned residence construction.

The NFIP classification for the subject project site is Zone X.

Thank you for the reference to the Hawaii Island: County of Hawaii, Department of Public Works. They advised that the County has no particular ordinances regarding the potential for flooding of the subject project site. Also a SMA assessment has been applied for with the County Planning Department and a determination that the project will be SMA exempt is anticipated.

Thank you for your consideration in this matter.

Sincerely,

Ken Church
EXHIBIT 30

Road description
Exhibit 21

ROAD REPAIR

The grass along the road path and car parking and turn around area adjacent to the residence will first be sprayed to and kill the grass with Roundup and subsequently cutting the grass/sod layer 12 – 14 ft. wide to a depth of approx 2-4” depth resulting in a volume of approx. 25-50 cubic yards of cut soil/sod. This material is substantially composed of organic material mixed with a modest amount of soil. The organic material has value as a composting material useful in support of the Applicant's farming operations on the Property (specifically fruit, nut and bean trees that have already been planted on the Property). The sod pieces will therefore be placed in areas (dead grass layer facing up) surrounding these agricultural use, planted trees, so that the gradual composting of the sod will benefit the nutrient support of the trees. The areas will be subsequently mulched to control plant growth below the trees and prevent erosion of any soil that becomes exposed during the composting/rotting of the grass mat over time.

The placement of the sod around each tree will be variable depending on the slope of the land surrounding the tree. Generally a circle placement of the sod will be in the order of a 4'-8' dia. around each tree however smaller trees may have a smaller circle of sod placed around them and larger trees may have larger circles of sod. Also down-slope areas within each circle of sod may be layered 2 or 3 levels deep with sod effectively leveling the area under each tree.

It is believed that there currently exist sufficient agricultural use trees to use all of the cut sod resulting from both the roadway and the residence site in this way. In the event that there exists left over sod it will be placed in the same fashion as the fruit trees described herein surrounding the substantial bamboo line planting which is along the Southern boundary of lot 060 and a planned garden area on Lot 029.

After the sod removal the roadway will then be roto-tilled to a depth of about 6” resulting in the mixing of any remaining soil into the road bed of the former railroad bed/field road.

4” of crushed rock will be applied to the described roadway and car turn around area adjacent to the planned residence and again roto-tilled into the previously roto-tilled area mixing the added crushed rock into the road base. In areas where it is determined that the road base requires further enhancement a fabric layer typically used for roadway construction will be applied over the mixed base materials of the road.

Thereafter an additional layer of 4-6” of crushed rock will be applied as a final topping to the roadway and parking area.
Listing of Permits and Approvals.

- Federal..................... None
- State of Hawaii...........
  Department of Land and Natural Resources.......approval of CDUA
  Department of Health-Approval of individual Waste-water system; and Building Permit
  Department of Quality Control...............FONSI
- County of Hawaii
  Planning Department.......Approval of SMA Assessment Application
  Building Permit
  Electrical permit
  Plumbing permit
  Occupancy permit
### Table of Contents

<table>
<thead>
<tr>
<th>Page</th>
<th>Description</th>
</tr>
</thead>
</table>
| 2     | Brief description of project  
       | Background and history |
| 3     | Discussion regarding similarities of project to former 2008 McCully(s)  
       | FONSI, exhibit 6 hereto |
| 5     | Ownership History |
| 6     | Prior Applications |
| 7     | Lot sizes |
| 8     | Land use designations |
| 10    | Detailed proposed uses descriptions |
| 14    | Pictures of house site including soil cut lines |
| 15    | Setbacks |
| 17    | Site leveling |
| 18    | Repair of access road & utilities corridor |
| 20    | Septic system |
| 21    | Landscaping (site restoration) |
| 21    | Solar energy |
| 23    | Existing conditions- |
| 23    | Geology |
| 24    | Soils |
| 25    | Climate |
| 26    | Hydrology and drainage |
| 27    | Water quality |
| 28    | Flora and fauna |
| 30    | Air quality |
| 31    | Noise |
| 32    | Scenic resources |
| 33    | Socio economic characteristics |
| 34    | Adjacent land uses |
| 35    | Public facilities and services |
| 35    | Roads |
| 35    | Water systems |
| 35    | Protective services |
| 36    | Schools |
| 36    | Power and communication |
| 36    | Wastewater |
| 37    | Solid waste |
| 37    | Archaeology, historic and cultural |
Page 39………..  Summary of Potential adverse environmental impacts and proposed mitigation measures, short term and long term and alternatives
Page 41………..  Alternatives to proposed development
Page 42………..  Evaluation criteria section
  42 – Section 1, Purpose of the Conservation District
  43 – Section 2, Land use consistent with the objectives of the Conservation District
  45 – Section 3, Land use complies with HRS 205A
    45 – Recreational resources
    46 – Historic resources
    50 – Scenic and open spaces
    52 – Coastal ecosystems
    53 – Economic uses
    55 – Coastal hazards
    56 – Managing development
    57 – Public participation
    57 – Beach protection
    58 – Marine resources
  60 – Section 4, preservation of Natural Resources
  62 – Section 5, Compatible with surrounding areas
  62 – Section 6, Preservation of natural beauty and open space
  63 – Section 7, Subdivision of land
  63 – Section 8, Public health, safety and welfare
Page 65………..  Cultural impacts
Page 68…………  Other impacts
Page 70…………  Best management practices
Page 72…………  Determination, Findings and reasons supporting determinations
Page 76 ……..  List of exhibits (note exhibit 6 is provided as a separate book to this book)
After page 76 …..  Exhibits
Page……  Permits and approvals anticipated to be required
End of document…….Table of Contents
March 22, 2018

Mr. Ken Church
P.O. Box 100014
Hakalau, HI 96710

Dear Mr. Church:

SUBJECT: Request for SMA Determination

Land Owner: Kenneth Stanley Church
Request: Determination of Agricultural Uses in the SMA
Tax Map Key: (3) 2-9-003:029 & 060, Wailea, South Hilo, Hawai‘i

We have received your letter dated March 19, 2018 requesting a determination if agricultural uses can be conducted within the Special Management Area on above referenced properties.

Parcel 029 is 1.116 acres in size and Parcel 060 is 2.252 acres in size. The parcels are zoned Agricultural (A-20a) by the County and designated Conservation by the State Land Use Commission. Hawai‘i Revised Statutes Chapter 205-5(a) states that the Department of Land and Natural Resources has jurisdiction over uses and activities on State designated Conservation land.

The parcels are also designated Open by the General Plan Land Use Pattern Allocation Guide (LUPAG) Map. Lastly, they are located within the Special Management Area (SMA) and have frontage along the coastline.

Special Management Area Determination:
According to Chapter 205A-22, Hawai‘i Revised Statutes (HRS), and Planning Commission (PC) Rule No. 9-4 (e)(2)(H), relating to Special Management Area (SMA), the use of any land for the purpose of cultivating, planting, growing, and harvesting plants, crops, trees, and other agricultural, horticultural, or forestry products or animal husbandry, or aquaculture or mariculture of plants or animals, or other agricultural purposes is exempt from the definition of “development” and does not require review against the Special Management Area rules and regulations.
Mr. Ken Church
Page 2
March 22, 2018

As stated above, the Department of Land and Natural Resources has jurisdiction over uses and activities on State designated Conservation land and you will need to consult and receive approval for any uses and activities, including agricultural activities, within the State Land Use Conservation District.

If you have questions, please contact Jeff Darrow of this office at (808) 961-8158.

Sincerely,

[Signature]

MICHAEL YEE
Planning Director

JWD:mad
P:\wpwin60\Jeff\Letters\SMA Letters\LChurch-SMADetermination-29003029.doc
As stated above, the Department of Land and Natural Resources has jurisdiction over uses and activities on State designated Conservation land and you will need to consult and receive approval for any uses and activities, including agricultural activities, within the State Land Use Conservation District.

If you have questions, please contact Jeff Darrow of this office at (808) 961-8158.

Sincerely,

[Signature]

MICHAEL YEE
Planning Director

JWD:mad
Ref: OCCL:LY

Mr. Ken Church
P.O. Box 100014
Hakalau, HI 96710

SUBJECT: Ken Church Properties Located in Wailea, South Hilo, Hawai‘i
Tax Map Keys: (3) 2-9-003: 013, 029, and 060

Dear Mr. Church:

The Office of Conservation and Coastal Lands (OCCL) is in receipt of your latest five (5) correspondences.

Regarding your correspondence dated December 16, 2016, you are requesting a permit determination for the removal of invasive species. Based on the information you have provided, the level of permitting required would be determined by the total area you are proposing to clear as it appears that the identified land use you would be applying for is “Landscaping” and not “Removal of Invasive Species.” Pursuant to Hawai‘i Administrative Rules (HAR) §13-5-22, the “Removal of Invasive Species” must be for the purpose of “protecting, preserving, or enhancing native species, native habitat, or native ecosystem functions…”

By contrast, under HAR §13-5-23(L-2) landscaping in an area less than 2,000 square feet would require a Site Plan Approval (SPA), landscaping in an area more than 2,000 square feet but less than 10,000 square feet would require a Departmental Conservation District Use Permit, and Landscaping in an area of or more than 10,000 square feet would require a Board Conservation District Use Permit.

Regarding your correspondences dated December 17th and 19th, in regards to the former railroad right-of-way, we have acknowledged that the right-of-ways are a part of the subject parcels and that they are privately owned. This obviously supersedes earlier contradictory comments we made in regards to this matter.

I want to bring to your attention that our office has received approximately 130 emails and letters from you, comprised of hundreds of pages of text. Throughout this process, this office has been responsive and has made reasonable efforts to address your questions and concerns despite the volume and frequency of your inquiries. Moreover, we have cooperated with you to make reasonable use of your land. All of your requests to make use of your land have been approved either by the Department or the Board of Land and Natural Resources (Board). For example:

1. Approval of landscaping (planting of trees and a garden);
2. Approval of consolidation and re-subdivision of your properties;
3. Approval of construction of a 700 square foot storage shed;
4. Approval of construction of a 4,649 square foot single family residence (SFR); and
5. Agreement over the continuance of non-conforming agriculture uses.

With respect to the non-conforming agricultural use, we have asked that you submit a management plan to our Office for the Department’s review prior to initiating work. The reason for this is that in addition to recognizing your right to continue an agricultural use, the Department must continue to ensure that the use is actually what you say it is, and is, furthermore, conducted in a judicious manner, and in a way that adheres to appropriate best management practices to reduce or prevent environmental damages. Since you would like to continue an agricultural use which would involve land disturbance and potential on-site and off-site impacts (e.g., water pollution), we have indicated that you may do so. However, we want you to demonstrate that the work will be conducted in an appropriate and safe manner and is in conformance with governing laws (e.g., Chapter 183C, HRS). Our December letter stated that a Management Plan must be prepared and submitted for the Department’s review and approval. We wish to clarify that statement by stating that if the work proposed in your agricultural management plan is consistent with non-conforming agricultural use of the property, we would use the plan for informational purposes only.

With respect to your request to go before the Board, this does not appear to be required or necessary at this time since you have no discretionary matters pending before the Department or Board.

You have also suggested that in lieu of a discussion with the Board, the Department may issue a supporting letter for your petition to the Land Use Commission for a boundary amendment to take your properties out of the Conservation District and put them in the Agricultural District. We are unable to accommodate this request as this would be inappropriate. However, if the Land Use Commission wished to seek our input on this matter, we would be happy to respond to an inquiry from them.

We also remind you that any work that you conduct on your land may be subject to other Federal, State or County laws, rules, and ordinances with which you may be required to comply.

Should you have any questions regarding this correspondence, you may contact me at (808) 587-0377.

Sincerely,

[Signature]

Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands

c: Chairperson
Review of the Regulation of Residential Construction in the Conservation District

A Report to the Governor and the Legislature of the State of Hawai‘i

Report No. 91-1
January 1991

THE AUDITOR
STATE OF HAWAI‘I
The Office of the Auditor

The missions of the Office of the Auditor are assigned by the Hawaii State Constitution (Article VII, Section 10). The primary mission is to conduct post audits of the transactions, accounts, programs, and performance of public agencies. A supplemental mission is to conduct such other investigations and prepare such additional reports as may be directed by the Legislature.

Under its assigned missions, the office conducts the following types of examinations:

1. **Financial audits** attest to the fairness of the financial statements of agencies. They examine the adequacy of the financial records and accounting and internal controls, and they determine the legality and propriety of expenditures.

2. **Management audits**, which are also referred to as **performance audits**, examine the effectiveness of programs or the efficiency of agencies or both. These audits are also called **program audits**, when they focus on whether programs are attaining the objectives and results expected of them, and **operations audits**, when they examine how well agencies are organized and managed and how efficiently they acquire and utilize resources.

3. **Sunset evaluations** evaluate new professional and occupational licensing programs to determine whether the programs should be terminated, continued, or modified. These evaluations are conducted in accordance with criteria established by statute.

4. **Sunrise analyses** are similar to sunset evaluations, but they apply to proposals rather than existing regulatory programs. Before a new professional and occupational licensing program can be enacted, the statutes require that the measure be analyzed by the Office of the Auditor as to its probable effects.

5. **Health insurance analyses** examine bills that propose to mandate certain health insurance benefits. Such bills cannot be enacted unless they are referred to the Office of the Auditor for an assessment of the social and financial impact of the proposed measure.

6. **Analyses of proposed special funds** and existing **trust and revolving funds** determine if proposals to establish these funds and existing funds meet legislative criteria.

7. **Procurement compliance audits** and other procurement-related monitoring assist the Legislature in overseeing government procurement practices.

8. **Fiscal accountability reports** analyze expenditures by the state Department of Education in various areas.

9. **Special studies** respond to requests from both houses of the Legislature. The studies usually address specific problems for which the Legislature is seeking solutions.

Hawaii's laws provide the Auditor with broad powers to examine all books, records, files, papers, and documents and all financial affairs of every agency. The Auditor also has the authority to summon persons to produce records and to question persons under oath. However, the Office of the Auditor exercises no control function, and its authority is limited to reviewing, evaluating, and reporting on its findings and recommendations to the Legislature and the Governor.

---

THE AUDITOR

STATE OF HAWAII

Kekuewa's Building
465 South King Street, Room 500
Honolulu, Hawaii 96813
Citizens wanting to protect Hawaii’s natural beauty have turned to the laws and rules governing land use in the conservation district. The laws, however, and the rules implementing them, may disappoint many. Framed about thirty years ago, they allow residential construction in the conservation district under certain designations. We reviewed Chapter 205 and Section 183-41, *Hawaii Revised Statutes*, and Title 13, Chapter 2, of the *Hawaii Administrative Rules* and also examined the process for approving applications to build on conservation lands. We believe that current regulation would be strengthened by adopting specific standards for residential construction, by making the statutes and rules more consistent with each other, and by reexamining—and reframing if necessary—the definition of nonconforming use.

State law assigns zoning authority over conservation lands to the Department of Land and Natural Resources. The department exercises its authority through the Board of Land and Natural Resources—the body that decides on applications to build in these areas. Approval or denial of an application rests mainly on the requirements of the particular subzone and whether the proposed use is deemed either “nonconforming” or “conditional.”

We found that because the department’s rules lack specific standards for residences, they give wide discretion to the board. Provisions in the rules for nonconforming use may exceed the authority of the statutes, and provisions for conditional use are not strongly backed by construction standards. Further, by allowing new homes to be built under the nonconforming designation, both statutes and rules part from the usual regulatory practice of phasing out nonconforming uses.

In the processing of applications, the department has for the most part complied with the statutes and rules. However, our survey of a sample of applications showed that the department has accepted applications with inadequate environmental assessments and has also incorrectly designated certain proposed uses as nonconforming.

The laws and rules contain the dual public purposes of preservation and conservation. Preservation seeks to protect land areas from any kind of development, while conservation seeks to manage an area’s resources.
Therefore, additional steps would be needed to achieve the level of protection many would desire. These measures could include reexamining the intent of the laws governing the conservation district, designating particular natural landmarks for special protection, using the State’s powers of eminent domain, and other political initiatives.

Recommendations and Response

We recommend that the Department of Land and Natural Resources propose legislation to describe the construction standards, such as house size and height, that the rules should include and then adopt these specific standards in the rules. The department should make the rules’ definition of nonconforming use consistent with the statute and link the definition of conditional use to standards for residential construction. If the department determines that it is inappropriate to give landowners a legal right to a future residence under a nonconforming designation, it should propose corrective legislation. In the processing of applications, the department should take greater care to ensure that all legal requirements are met.

The department concurs with our recommendations. It says it will seek immediately to develop appropriate legislation. In addition, based on an opinion from the Land Use Division of the Department of the Attorney General, the department will ask the Board of Land and Natural Resources to give special protection to Mount Olomana, one of the areas where residential construction has become a concern.

Background

State law divides Hawaii’s lands into four land-use districts—urban, rural, agricultural, and conservation. Conservation lands make up approximately 48 percent of the total. Owned either by government or private parties, the conservation district consists of environmentally sensitive areas, such as forests, watersheds, scenic and historic sites, park lands, and areas containing threatened or endangered plants, fish, and wildlife.

The rules of the Department of Land and Natural Resources regulate land use, including residences, in the conservation district. The department’s Office of Conservation and Environmental Affairs processes the applications for residential construction and makes recommendations to the Board of Natural Resources. Final decisions to approve, modify, or deny the recommendation rest with the board.

Office of the Auditor
State of Hawaii
465 South King Street, Suite 500
Honolulu, Hawaii 96813
(808) 548-2450
FAX (808) 548-2693
Review of the Regulation of Residential Construction in the Conservation District

A Report to the Governor and the Legislature of the State of Hawaii

Submitted by

THE AUDITOR
STATE OF HAWAII

Report No. 91-1
January 1991
Foreword

Senate Concurrent Resolution 150 of 1990 requested the auditor to review the rules of the Department of Land and Natural Resources regulating residential construction in the conservation district and to examine the granting of permits for residential construction under these rules. This report presents our evaluation and recommends some improvements.

We acknowledge the cooperation and assistance of the Department of Land and Natural Resources, the Department of the Attorney General, the Land Use Commission, the Office of State Planning, county planning and land utilization departments, the Save Mount Olomana Association, and the Friends of Hawea Point.

Newton Sue
Acting Auditor
State of Hawaii

January 1991
# Table of Contents

Chapter 1  Introduction

Objectives of the Review ........................................ 1
Scope and Methodology ........................................... 1

Chapter 2  Background

Legal Basis for Residential Construction .................. 3
Review Process for Residential Construction .......... 11

Chapter 3  Findings and Recommendations

Summary of Findings ............................................. 15
Dual Public Purpose .............................................. 15
Problems in the Regulatory Framework .................. 17
Implementation of the Statutes and Rules ............... 22
Recommendations ................................................... 24

Notes ........................................................................ 27

Response of the Affected Agency .............................. 29

Appendix: Characteristics of Examined Applications for
New Residential Construction in the Conservation
District ................................................................. 33
List of Tables

Table 2.1: Conditions for Land Use in the Conservation District ..12

List of Figures

Figure 2.1: Conservation District Boundaries - County of Kauai ....5
Figure 2.2: Conservation District Boundaries - Island of Oahu .......6
Figure 2.3: Conservation District Boundaries - County of Maui ......7
Figure 2.4: Conservation District Boundaries - Island of Hawaii ....8
Chapter 1
Introduction

Hawaii’s land area is divided by the State into four districts—urban, rural, agricultural, and conservation. Conservation lands, owned by government and private parties, take up nearly half the area. The scenic qualities of these lands can make them highly desirable for building a home.

Many citizens who believe in preserving the natural wonders of the state have questioned the appropriateness and legality of residential construction on conservation lands. Their concerns have been intensified by recent requests for single-family residences in environmentally sensitive areas, particularly Mount Olomana (Oahu) and Hawea Point (Maui). These proposed houses, and others, have been criticized for threatening the environment and scenery.

This report explores some of the concerns being expressed. It reviews aspects of the State’s regulation of residential construction in the conservation district under the statutes and under the rules implementing them. The 1990 Legislature, in Senate Concurrent Resolution 150, requested the review. The resolution questioned whether the rules of the Department of Land and Natural Resources (DLNR) violate or are inconsistent with their enabling statutes and whether permits for residential construction have been granted in violation of the rules themselves. Reports by the legislative committees declared that the size, number, and configuration of proposed single-family residences in the conservation district have been the source of controversy.

Objectives of the Review

1. Determine the adequacy of existing statutes and rules in providing a suitable framework for regulating residential construction in the conservation district.

2. Examine the review and approval process for residential construction in the conservation district.

3. Recommend improvements if appropriate.

Scope and Methodology

We analyzed the pertinent statutes and rules and reviewed DLNR’s procedures and practices for approving and denying applications for residential construction in the conservation district. Our focus
was on the activities of DLNR's Office of Conservation and Environmental Affairs (the conservation office), which analyzes applications and submits them to the Board of Land and Natural Resources for approval or denial. We did not examine DLNR activities outside the application, review, and approval process, such as enforcement activities designed to detect and punish parties who fail to submit applications when required by law or who fail to abide by the terms of the board's approvals.

Fieldwork for the review consisted of interviews and data collection at DLNR and the conservation office. We interviewed representatives of other entities with jurisdiction over or knowledge of land use in the conservation district, including the Department of the Attorney General; the Land Use Commission; the Office of State Planning; the county departments of planning or land utilization; and the Save Mount Olomana Association and Friends of Hawea Point, two community groups that had testified on Senate Concurrent Resolution 150.

We analyzed the statutes and rules for comprehensiveness, consistency, clarity, reasonableness, and fairness, and we examined DLNR's review and approval process for compliance with the statutes and rules, as well as consistency, reasonableness, and fairness.

A base of 50 applications for new residential construction (construction proposed for land previously undeveloped) was compiled from materials provided by the conservation office. These were applications processed by the office in the five-year period from 1985 through 1989. We examined every fifth file for a sample of 10 cases (20 percent of the total).

We also examined four application files outside the random sample for residential construction from 1988 to 1990. Two of these cases, for the houses at Mount Olomana (Oahu) and Hawea Point (Maui), were cited in the committee reports for Senate Concurrent Resolution 150. The other two cases, for residences at Lanikai (Oahu) and Kiholo Bay (Hawaii), were particularly controversial or of special concern to legislators.

Our work was performed from May through November 1990 in accordance with generally accepted government auditing standards.
Chapter 2

Background

Here we describe the legal basis for residential construction and the process followed by the Department of Land and Natural Resources (DLNR) in reviewing the applications for residential construction on conservation lands.

Our discussion centers on two key laws enacted about 30 years ago—one of them before statehood—governing land use in Hawaii. These laws, and the rules adopted to implement them, constitute the legal basis for residential construction in the conservation district. The laws "grandfather" certain previous and intended uses, and they specify residences as a use that may, under certain circumstances, be permitted.

Legal Basis for Residential Construction

Land use law

The legal basis for residential construction in the conservation district is found in Chapter 205, Hawaii Revised Statutes (the land use law) and Section 183-41, HRS (the forest and water reserve zones law).

Originally enacted in 1961, the land use law requires that all lands in the state be placed into one of four land use districts: urban, rural, agricultural, or conservation. The law makes the Land Use Commission, placed administratively with the Department of Business and Economic Development, responsible for determining the boundaries of each district and for deciding upon petitions for boundary amendments. The DLNR is responsible for administering the conservation district; it exercises its authority through the Board of Land and Natural Resources. The land use law gives the counties zoning authority in other districts.

The land use law says little about the urban district, requiring simply that it include activities or uses provided by the ordinances and regulations of the counties. The law defines the rural and agricultural districts in greater detail. In summary, it says the rural district contains land uses characterized by low-density residential lots in non-urban areas and the agricultural district includes such uses as farming, aquaculture, wind-generated energy production, agricultural parks, and open area recreational facilities including golf courses and driving ranges.
Conservation district

The land use law requires that as of July 11, 1961, the conservation district would consist of the forest and water reserve zones established under the forest and water reserve zones law enacted in 1957. The Land Use Commission, whose responsibility is to classify the use of all lands in the state, determines the boundaries of the conservation district.¹

The conservation district is made up of lands in the existing forest and water reserves, lands in national or state parks, marine waters and offshore islands, and all submerged state lands. The land use law defines the conservation district as follows:

Conservation districts shall include areas necessary for protecting watersheds and water sources; preserving scenic and historic areas; providing park lands, wilderness, and beach reserves; conserving indigenous or endemic plants, fish, and wildlife, including those which are threatened or endangered; preventing floods and soil erosion; forestry; open space areas whose existing openness, natural condition, or present state of use, if retained, would enhance the present or potential value of abutting or surrounding communities, or would maintain or enhance the conservation of natural or scenic resources; areas of value for recreational purposes; other related activities; and other permitted uses not detrimental to a multiple use conservation concept.²

Made up of federal, state, county, and private lands, conservation is the largest of the four districts. As of January 1989, the Land Use Commission classified approximately 1,967,194 acres, or 48 percent of the state’s total area, as conservation.³ Conservation land makes up approximately 51 percent of Hawaii, 42 percent of Maui, all of Kauai, 42 percent of Lanai, 30 percent of Molokai, 40 percent of Oahu, 56 percent of Kauai, none of Niihau, and 2,300 acres on other Hawaiian islands. (See Figures 2.1, 2.2, 2.3, and 2.4).

The land use law, in Section 205-2(4), sets the boundaries of the conservation district as those “forest and water reserve zones” established as of July 11, 1961, by the forest and water reserve zones law, Section 183-41, HRS. This law, enacted in 1957 and containing the zoning provisions on forests and water reserves, directs DLNR to adopt regulations that govern essentially all land use within the conservation district. It states that no use—except a use deemed to be “nonconforming”—may be made of these lands unless that use is in accord with DLNR’s regulations.⁴
FIGURE 2.4
Conservation District Boundaries - Island of Hawaii

[Map showing Conservation District boundaries on the Island of Hawaii]

Under the authority of the forest and water reserve zones law, DLNR has adopted regulations (Title 13, Chapter 2, Hawaii Administrative Rules) that establish general provisions, define key terms, create subzones within the conservation district, and set forth the procedures for processing the applications for residential construction on conservation lands. The rules define residence as a "building used or designated and intended to be used as a home or dwelling place for one family." They also state that the Board of Land and Natural Resources must approve the use of all buildings, structures, premises, or land in the district.

Subzones

The DLNR's regulations, which have the force of law, establish subzones within the conservation district and specify the uses permitted in these subzones. These uses may be residential, agricultural (farms, flower gardens, nurseries, orchards, commercial timber, grazing), and recreational. The regulations also control the extent, manner, and times of permitted uses. They require that subzone objectives be given "primary consideration" when applications for land use are reviewed.

Prior to 1978, the rules established two subzones--general use and restricted watershed. The current rules establish four subzones, for protective, limited, resource, and general uses. The protective use subzone is the most restrictive and the general the most permissive. The objective of the protective subzone is to protect restricted watersheds, marine sanctuaries, plant and wildlife sanctuaries, sites of historic, archaeological, and geological significance, and other unique areas. The objective of the limited subzone is to limit uses where natural conditions, such as steep slopes, may constrain human activities. The objective of the resource subzone is to develop areas to ensure the sustained use of natural resources. The objective of the general subzone is to designate open space where specific conservation uses may not be defined but where "urban use would be premature."

The Board of Land and Natural Resources approves applications for residences in the conservation district if they qualify under "conditional use" or "nonconforming use" defined in the regulations and statutes. Simply stated, a nonconforming use is a past use that does not have to conform to all of the restrictions in the statutes and rules; a conditional use is one that is allowed under certain conditions. In theory, these definitions permit residential construction in every subzone of the conservation district. The provisions of the forest and water reserve zones law allow landowners who can prove nonconforming status the right to a residence in any subzone. In addition, board policy allows
landowners to build conditional use residences in the general and resource subzones. The board allows one conditional or nonconforming use house on each lot.

Nonconforming use

"Grandfather" clauses in the forest and water reserve zones law allow two kinds of nonconforming use within the conservation district. These clauses cover activities that were (1) already being conducted or (2) intended to be conducted, on or before the dates stated in the statutes.

The first clause covers a range of activities circumscribed by previous use of the land. It allows continued use of "any building, premises or land for any trade, industrial, residential, or other purpose for which the building, premises or land is used on July 1, 1957, or at the time any regulation adopted under authority of this part takes effect." The second provision covers a narrower range of activities circumscribed by intended use of the land. It considers as nonconforming any parcel of ten acres or less in the forest reserve "which, as of January 31, 1957, was subject to real property taxes and upon which the taxes were being paid, and which was held and intended for residential or farming use, whether actually put to such use or not." The rules include in the definition the requirement that intended nonconforming use is limited to either one residential dwelling or a farm with no more than one residential dwelling.

Conditional use

Conditional use is not mentioned in the forest and water reserve zones law but is defined in the rules. A conditional use is "a use, other than a permitted use . . . which may be allowed by the board under certain conditions as set forth in this chapter and as determined by the board." The term is essentially a discretionary land use designation that authorizes the Board of Land and Natural Resources to approve an activity that is not a permitted use.

Some have challenged the legality of creating a conditional use category in the rules when there is no specific mention of conditional use in the statute. But the Hawaii Supreme Court in 1985 upheld the authority of the Board of Land and Natural Resources to approve conditional use applications under the provisions of the forest and water reserve zones law, Section 183-41, HRS. The court held that the conditional use may be allowed as long as it "will not have a detrimental impact on necessary forest growth, present and future water resources, and/or open spaces for the public use and enjoyment."
Guidelines and conditions

The rules provide the following guidelines for the board in reviewing applications for residential construction:

1. All applications shall be reviewed so that the objectives of the subzone or subzones are given primary consideration.

2. All applications shall be reviewed so that any physical hazard, as determined by the department, shall be alleviated by the applicant when required by the board.

3. All applications shall meet the purpose and intent of the State's conservation district.7

The rules also establish 15 conditions for land use in the conservation district (see Table 2.1). A structure, for example, must be compatible with the locality, preserve or improve the natural beauty of the area, and harmonize with physical and environmental conditions. The board may deviate from the 15 conditions if it accepts written justification that there are no practical alternatives; there will be no significant adverse effects to the environment; there is no conflict with the objective of the subzone; and there is no inconsistency with the public health, safety, or welfare.

Landowners and other users of the conservation district must comply with all applicable laws, rules, and regulations of the federal, state, and county governments. The Board of Land and Natural Resources may revoke its approval if an applicant fails to comply with the board's conditions.

Review Process for Residential Construction

The DLNR's Office of Conservation and Environmental Affairs (the conservation office) processes the applications for land use in the conservation district and makes recommendations to the Board of Land and Natural Resources. The board makes the final decision and can approve, modify, or deny the recommendations of the conservation office.

A conservation district use application is the form used to review proposed residences and other land uses. Applications submitted to DLNR must be approved by the board before any work may begin. Actions of an emergency nature may be acted on by the board's chairperson.
TABLE 2.1
Conditions for Land Use in the Conservation District

1. The use shall be compatible with the locality and surrounding areas, and appropriate to the physical conditions and capabilities of the specific parcel or parcels of lands.

2. The existing physical and environmental aspects of the subject areas, such as natural beauty and open space characteristics, shall be preserved or improved upon, whichever is applicable.

3. All buildings, structures, and facilities shall harmonize with physical and environmental conditions stated in this rule.

4. Use of the area shall conform with the program of the appropriate soil and water conservation district or plan approved by and on file with the department.

5. When provided or required, potable water supply and sanitation facilities shall have the approval of the Department of Health and the Board/Department of Water Supply.

6. When provided or required, boat harbors, docks, and similar facilities shall have the approval of the Department of Transportation.

7. The construction, alteration, moving, demolition and repair of any building or other improvement on lands within the conservation district shall be subject to the building codes of the respective counties in which the lands are located; provided that prior to the commencement of any construction, alteration, or repair of any building or other improvement, four copies each of the final location map, plans, and specifications shall be submitted to the chairperson or an authorized representative, for approval; provided, further that any alteration or repair which does not change or expand on the existing land use shall not be subject to the above.

8. Provisions for access, parking, drainage, fire protection, safety, signs, lighting, and changes in the landscape shall have the approval of the chairperson or an authorized representative.

9. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the applicant shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard.

10. Obstruction of public roads, trails, and pathways shall be minimized. If obstruction is unavoidable, the applicant shall provide roads, trails, or pathways acceptable to the department.

11. Except in the case of public highways, access roads shall be limited to a maximum of two lanes.

12. Overloading of off-site roadways, utilities, and public facilities shall be minimized.

13. Clearing areas for construction purposes shall require prior approval by the chairperson; ground cover of slopes over 40 percent shall not be removed unless specifically authorized by the chairperson.

14. Cleared areas shall be revegetated within 30 days unless otherwise provided for in a plan on file with and approved by the department.

15. Upon approval of a particular use by the board, any work or construction to be done on the land shall be initiated within one year of the approval of the use and all work and construction shall be completed within three years of the approval of the use.

Source: Section 13-2-21, Hawaii Administrative Rules.
The 180-day requirement

The provisions of the forest and water reserve zones law say that landowners may "automatically" put their land to the requested use if DLNR fails to make a decision within 180 days after an application is received. The board may, at the applicant's request, approve an extension of 90 days when an environmental impact statement is required or a contested case hearing is requested. The 180-day clock begins to run when the department receives the application.

Environmental assessments

The environmental impact statements law (Chapter 343, HRS) requires an environmental assessment of any proposed use within the conservation district. An environmental assessment is a written evaluation of whether an action may have a significant effect on the environment. Such actions require the preparation of another document, an environmental impact statement. The impact statement must disclose the environmental, economic, and social effects of the proposal on the community; describe ways to minimize the adverse effects; and identify alternatives to the proposed action.

The staff of the conservation office reviews the applicant's project description and the environmental assessment. If either is incomplete or not in compliance with the laws and rules, the office rejects the application. If an environmental impact statement is required, the office informs the applicant and withholds approval until the statement is received and approved.

Special management areas

Clearance from the counties is required if the property is within a "special management area" created under the coastal zone management law (Chapter 205A, HRS). This law was enacted in response to a federal statute that sought to encourage the planning, management, and regulation of land use in coastal areas. Because of their unique nature and value, special management areas require attention beyond that given in a typical management plan. Most projects in these areas require a permit from the appropriate county. Single-family residences that are not part of a larger development are one exception to the requirement. The conservation office informs applicants for residential construction that they are responsible for obtaining clearance from the appropriate county.

Staff analysis

Once it has accepted an application for residential construction, the conservation office determines whether the application is for nonconforming or conditional use and whether a public hearing is required. Public hearings are usually not required for residential construction. (Hearings are required for a proposed commercial use, a proposed conditional use in the protective subzone, or a proposed subdivision of a parcel in the conservation district.) The office notifies applicants of its findings and any requirements for special management areas or environmental impact statements.
The office sends copies of the application to federal, state, and county agencies, as well as other divisions within DLNR, that may have special expertise or an interest in the application. In its report to the board, the office includes the agency comments and a recommendation for approval or denial of the application. The office presents the report to the board at a regularly scheduled meeting. After a decision is made the department informs the applicant in writing of the decision and any conditions the board may have imposed.

**Appeals and contested cases**

Applicants may appeal the board’s decision to the circuit court of the circuit in which their land is located. The board can also review its decision in a contested case hearing under Chapter 91, HRS (Administrative Procedure Act). Decisions in contested cases can be appealed to the circuit court.

Contested case requests are made by the board on its own motion or upon the written petition of a government agency or interested person who qualifies as a “party.” The DLNR’s rules of practice and procedure define “party” as (1) the petitioner, (2) government agencies whose jurisdiction includes the land in question, (3) persons who have a property interest in the land, lawfully reside on the land, are adjacent property owners, or who otherwise can demonstrate they will be “directly and immediately affected” by the board’s decision, or (4) other persons who can show a substantial interest in the matter.

**Enforcement**

The DLNR is responsible for providing procedures and personnel to enforce the forest and water reserve zones law and the zoning regulations adopted under that statute. The department or the owners of land affected by the zoning regulations can go to court to enforce them. Violators may be fined up to $500 in addition to administrative costs and damages to state land. Persistent willful violations can result in an additional fine of up to $500 per day.
Chapter 3
Findings and Recommendations

We first discuss the dual public purpose of the laws governing use of conservation lands. We then address some problems in the regulatory framework for residential construction and review the manner in which the Department of Land and Natural Resources (DLNR) implemented the statutes and rules in processing applications for this construction.

Summary of Findings

1. The regulatory framework for residential construction in the conservation district has problems that need attention.

   - The standards for residential construction in the conservation district are much broader than those governing construction in the urban district. These give the Board of Land and Natural Resources wide discretion in approving applications for residential construction.

   - The statute and rules for nonconforming use contain longstanding inconsistencies.

   - The statute and the rules allow new homes to be built as a nonconforming use. This differs from usual legal and regulatory practice, which seeks to discourage new uses under this designation.

   - The definition of conditional use in the rules should be linked to standards for residential construction, which are now lacking.

2. The Department of Land and Natural Resources has for the most part complied with the statutes and rules governing residential construction. However, there have been problems with environmental assessments, designations of nonconforming use, and the 180-day requirement.

Dual Public Purpose

Citizens concerned with preserving the natural wonders of the state have turned to the land use law (Chapter 205, Hawaii Revised Statutes) and the forest and water reserve zones law (Section 183-41, HRS) for help in protecting the conservation district. It is in these laws that scenic and natural values find their expression. But the laws, and the rules adopted under them, are
bound to disappoint many. They do not have, as some might wish, an orientation that is purely preservationist. Instead, the laws contain the dual public purposes of preservation and conservation. Preservation seeks to protect land areas from any kind of development, while conservation seeks to manage natural resources and fully use them.

The dual public purposes of preservation and conservation are apparent in the land use law and the forest and water reserve zones law. The land use law speaks of "protecting," "preserving," and "conserving"; it also speaks of uses "not detrimental to a multiple use conservation concept." In multiple use, land is used for two or more purposes (for example, water conservation, timber production, and foraging) in order to increase the benefits derived from an area. The forest and water reserve zones law requires DLNR both to "maintain, improve, protect, limit the future use of, or otherwise conserve open spaces" and to "allow and encourage the highest economic use" consistent with maintaining pure water supplies.

The dual public purposes of preservation and conservation can also be found in the Constitution of the State of Hawaii:

For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals, and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State.

Concerned citizens have wondered if residential construction violates the intent of the conservation district. The Legislature, through the forest and water reserve zones law, apparently intended to allow residences. The provisions of nonconforming use in that law permit certain preexisting residential uses to continue and allow certain land previously intended for residential use to be developed in that manner. That law also names residences as a possible permitted land use in the conservation district.

The land use law and the forest and water reserve zones law therefore cannot now protect the conservation district to the degree some might want. This chapter suggests some improvements to make the regulatory framework more effective. But ultimately the protection desired by many citizens cannot be achieved without taking additional steps. With the recognition that attitudes toward the proper balance of environmental protection and development may have changed over 30 years, there could be a comprehensive reexamination of the intent of both the land use law and the forest
and water reserve zones law. Other measures could be the designation of particular natural landmarks for special protection, increased use of the State’s powers of eminent domain, and other political initiatives.

Problems in the Regulatory Framework

Thoughtful effort should be focused on the laws and rules governing residential construction in the conservation district. This section discusses the need to frame specific standards for residential construction, to bring consistency between the rules and the statute for nonconforming use, and to reexamine the statutory definition of nonconforming use and the standards for conditional use. We also touch on some constitutional concerns related to regulation in this area.

The broad standards for residential use contained in the rules give wide discretion to the Board of Land and Natural Resources in approving applications for residences. The absence of specific standards may have contributed to a perception that the board grants applications for any development of any size or scope and that certain applications have been granted illegally.

The conditions for building and the guidelines for reviewing applications are often vague and subjective. For example, it is hard to determine whether certain controversial residences violate the vague condition that uses must be “compatible with the locality and surrounding areas.” It is hard to decide whether a proposed single-family residence, especially a large one, violates the subjective condition that natural beauty and open space be preserved or improved upon. The condition that buildings and structures “harmonize” with the environment and the guideline that all applications be reviewed in “such a manner” that subzone objectives are given “primary consideration” are other examples of vagueness.

The Board of Land and Natural Resources should adopt clearer, more specific standards in its rules to regulate such things as the size and height of single-family residences. These standards could be modeled on county zoning ordinances. Unlike DLNR’s rules, county land use ordinances address permitted uses and structures; minimum and maximum lot sizes; footage requirements for front, side, and rear yards; maximum building areas; maximum heights; and setback requirements. These are far more specific and comprehensive than DLNR’s rules.

The DLNR should not be expected to adopt zoning regulations identical to those of the counties. The conservation district differs in many ways from the urban district. Lot sizes can vary from less
than an acre to several thousand acres, whereas urban lots are fairly uniform in size. The department should look to tailoring building standards to the conservation district’s unique features. For example, standards for minimum and maximum square footage and height could be adopted that vary depending upon the subzone.

The Office of Conservation and Environmental Affairs has argued that existing standards do ensure that houses blend into the landscape. Placing maximum house sizes on private lots of several acres, it says, would be “somewhat subjective.” We believe, however, that the current controversy surrounding the construction of large houses in environmentally sensitive areas suggests this approach is not sufficient. The Legislature has charged DLNR with regulating the conservation district. Clearer, more specific rules for residential construction would help to ease controversy and ensure minimal intrusion into environmentally sensitive areas. To facilitate the adoption of clearer rules, the conservation office should propose amendments to the forest and water reserve zones law to the Legislature that specify what sorts of standards the rules will include.

In line with general principles of administrative law, the Hawaii Supreme Court has said that rules and regulations exceeding the scope of the statute they were designed to implement are not valid. We found that in two instances, the rules for nonconforming use may have exceeded the authority of the statute. In one case, the rules are more restrictive than the statute and may prohibit activity the statute intended to allow. In the second case, the rules are broader than the statute and may allow activity that the statute intended to restrict.

The forest and water reserve zones law, in Section 183-41(a), states that no use, except a nonconforming use, shall be made of the forest and water reserves zones (now the conservation district) unless that use is in accord with zoning regulations adopted by DLNR. The department’s current rules state that no use, including a nonconforming use, may be made unless that use is in accord with the regulations. When the law was enacted in 1957, the Legislature apparently intended to exempt nonconforming uses from all regulations adopted by DLNR. The provision in the rules appeared some years later, in 1978. By including nonconforming use within the scope of regulation, the department may have intended to limit the intrusion of residences into sensitive areas. In spite of good intentions, however, the rule did exceed the scope of the statute.

The second case concerns one of the two definitions of nonconforming use. The forest and water reserve zones law, in Section 183-41(b), designates as “nonconforming” any parcel of
ten or fewer acres contained within the boundaries of the forest reserve which, as of January 31, 1957, was subject to real property taxes and upon which the taxes were being paid, and which was held and intended for residential or farming use, whether actually put to such use or not. The rules, while retaining most of the language, omit the words "contained within the boundaries of the forest reserve."

The original intent of the law was to "grandfather" the right to build a residence on land that as of January 31, 1957, was within the forest and water reserve zones. The omission of the key clause when DLNR first adopted the rules in 1964 broadened the definition of nonconforming lands. The rules subsequently could be interpreted as permitting any parcel of land that meets the other legal criteria to be given nonconforming status, no matter when that land was included in the conservation district. As we discuss later, the DLNR has made this interpretation on at least one occasion.

When zoning regulations are adopted or amended, some existing land uses will no longer conform. The first statutory definition of nonconforming use is consistent with usual regulatory practice. It "grandfathers" uses that existed prior to the enactment of the law. The second definition, however, differs from usual regulatory practice. It provides for future residential use based on the prior paying of property taxes and the previously existing intent to use land for residential purposes. Usual practice seeks to discourage nonconforming uses, not to encourage new uses under a nonconforming designation. The second statutory definition of nonconforming use has given landowners the legal right to build on sensitive or hazardous lands where the Board of Land and Natural Resources would otherwise deny requests for residences.

That the second definition of nonconforming use is out of step with usual regulatory practice is also revealed by comparing the forest and water reserve zones law with sections of the laws relating to county zoning and land use. The statute granting zoning authority to the counties for lands outside the conservation district (Section 46-4, HRS) does not provide for new uses under a nonconforming designation. Instead, it allows (1) the continuation of existing nonconforming uses or (2) their gradual elimination by county ordinance (except for existing buildings or premises used for residential or agricultural purposes which cannot be phased out). The four counties all define nonconforming use as a use that lawfully existed before the adoption of their zoning ordinances and which does not conform to the regulations of the district in which it is located.
Similarly, the land use law, in Section 205-8, does not allow new uses under a nonconforming designation in other districts. In the agricultural and rural districts, it permits the continuation of lawful uses of land existing when the districts were established. But it prohibits the change or expansion of any nonconforming use to another nonconforming use, including the replacement, reconstruction, or enlargement of nonconforming buildings. If any nonconforming use is discontinued or held in abeyance for one year, the further continuation of that use is prohibited.

The provisions for nonconforming use in the forest and water reserve zones law were enacted in 1957, when environmental concerns in Hawaii may have been different from what they are today. The second definition in the statute should be examined to determine if giving landowners a legal right to a future residence in the conservation district is still appropriate. If it is not, the law should be amended to delete the second definition and make the law consistent with other zoning practice. One model for such legislation can be found in Section 205-8, HRS, of the land use law described above.

The rules' definition of conditional use describes it as "a use, other than a permitted use . . . which may be allowed by the board under certain conditions as set forth in this chapter and as determined by the board." This is the only provision in the rules that directly addresses conditional use. Without standards for such use, the Board of Land and Natural Resources has great discretion in approving applications for residences.

The term "conditional use" first appeared in the rules when they were revised in 1978. The Office of Conservation and Environmental Affairs acknowledges that the term is vague but states that there is a "perceived need of flexibility in allowing for land to be used." The office felt it could not specifically identify conditional use because land use is still evolving. Listing conditional uses in the rules, the office argues, could make it difficult to approve a land use not listed and defined in the rules.

This may be a valid argument for unanticipated land uses, but it need not apply to residences where it is possible to anticipate the types of uses that applicants may request and create standards for them. At the very least, DLNR should require that residential construction allowed under a conditional use conform to standards for residences, such as for house size and height, that we discussed in a previous section.

In its efforts to regulate residential construction, the Department of Land and Natural Resources feels constrained by U.S. Supreme Court decisions relating to the concept of "taking." The Fifth
Amendment to the Constitution of the United States, which under the Fourteenth Amendment applies to the states, requires that "private property [shall not] be taken for public use, without just compensation." When a land use regulation excessively restricts land use without compensation, the landowner can argue that there has been a taking without compensation. The U.S. Supreme Court recently held that if certain land use regulations result in a taking, then just compensation through monetary damages is owed to the landowner under the fifth amendment, no matter what state law says.

The following are seven factors a court might examine when determining if a regulatory taking has occurred. Courts will examine some, but not necessarily all, of these factors; they will usually at least look at the degree of decline in property value. With few exceptions, no single factor would mean a taking by itself:

1. A land use regulation does not relate to a legitimate state interest;

2. Assuming a legitimate state interest, the regulation does not substantially advance that interest;

3. The advancement of a legitimate state interest places the disproportionate burden of securing a benefit upon a single landowner when it is more properly borne by the general community;

4. The regulation entails a permanent physical occupation;

5. Reasonable investments were made prior to general notice of the regulatory program;

6. The economic effect of the regulation is to deprive the landowner of all, or substantially all, beneficial use of the property and there are no compensating reciprocal benefits; or

7. The regulation abrogates an essential element of private property.

Under these criteria, forbidding residential construction on private land in the conservation district might constitute a regulatory taking, and the State could be liable to landowners. We suggest, however, that specifying standards similar to those adopted by the counties for the urban district would not unreasonably restrict property owners from using their land. Specific standards, we believe, for such things as house size and height would not amount to a taking. To resolve its concerns, DLNR should request the
attorney general’s opinion on the constitutionality of any proposals for restricting residential construction in the conservation district.

**Precedent**

The Board of Land and Natural Resources has been hesitant to deny conditional use applications for residences in the general subzone of the conservation district because this would break with the past practice of granting such applications. Like other administrative bodies, the board is justifiably concerned with avoiding arbitrary and capricious decisions. However, the board’s policy on residential construction states that each case must be *treated on its individual merits*. The board is therefore not bound by precedent and is obligated by its own policy to examine applications for residences on a case-by-case basis.

**Implementation of the Statutes and Rules**

Our review of a sample of applications for residential construction in the conservation district indicates that the Department of Land and Natural Resources has complied for the most part with the statutes and rules when processing such applications. The few problems we found were with environmental assessments, designations of nonconforming use, and the 180-day requirement. Our sample consisted of 14 applications processed by the Office of Conservation and Environmental Affairs. A summary of the characteristics of the cases we examined is provided in the appendix to this report.

The Department of Health’s rules specify the contents of environmental assessments and the criteria for determining when an environmental impact statement is needed.\(^\text{10}\) Of the 14 cases we examined, 11 were not in compliance. Of these, one file did not contain an environmental assessment and ten had assessments that did not meet the requirements of the rules. In our sample, two had adequate assessments and one had an environmental impact statement that was accepted by the conservation office.

Those assessments we examined did not satisfactorily describe the potential environmental impacts or the proposed mitigation measures required by the rules of the Department of Health. In some cases, the environmental assessment could not be distinguished from the rest of the application. Most assessments were two pages or less in length; one assessment was only two sentences long. The most blatantly inadequate assessment that the conservation office accepted stated only: “The proposed use qualifies as an exempt action according to Section 1:33a.3 of the EIS regulations.”
These problems were underscored by the staff of the conservation office, who noted in a report to the board in one case that "more detailed information and analysis is required to consider potential environmental impacts." The office made this statement after it accepted the environmental assessment for that application.

The Office of Environmental Quality Control in one case expressed concern that the intent of Chapter 343, HRS (the environmental impact statements law) had been circumvented. This was because the conservation office failed to require the applicant to submit a new environmental assessment when the residence for which the assessment had been prepared differed substantially from the one the board approved.

The consequences of the noncomplying environmental assessments were not serious in all cases. In 6 of the 11 cases of noncompliance, the potential environmental impact appeared to warrant an environmental impact statement under the "significance criteria" in the Department of Health's rules. In these 6 cases, however, the conservation office recommended, and the board approved, conditions to address the significant impacts.

The appearance of inadequate environmental assessments in 11 of the 14 cases we examined suggests that the conservation office is not guided by standards for these documents nor is the office doing enough analysis of applications before accepting them. Part of the problem may be that applicants do not receive enough guidance in preparing a proper assessment (copies of previous assessments may not be sufficient). The office should develop standards for environmental assessments that comply with the rules of the Department of Health and from these draft a model assessment for applicants.

The office incorrectly gave nonconforming status to 3 of the 14 applications in our sample. As a result, in two cases the applicants obtained a legal right to a house in the limited subzone where they otherwise would have been prohibited from building under the policy of the Board of Land and Natural Resources. In the first case, the office erred by giving nonconforming status to a property that was not included in the conservation district until 1969. Prior to that, the land had been designated agricultural and in 1968 the parcel had also been subdivided from a larger lot. In the second case, the office gave nonconforming status to property that had been enlarged by the purchase in 1967 of a separate plot of 2,229 square feet.

In the third case, the office incorrectly granted nonconforming status to a lot in the general subzone that had been formed by consolidating two adjoining properties.
All three cases violated the definition of nonconforming use found in the forest and water reserve zones law. The lands were not parcels as of the date specified in the law, since one lot resulted from a subdivision and two lots from the merger of separate properties. According to the law, nonconforming land must have been contained within the boundaries of the forest reserve (later the conservation district) as of January 31, 1957. One property clearly did not meet this requirement because it was in the agricultural district until 1969. Designating land as nonconforming which was not placed in the conservation district until 1969 may have resulted from the omission of key statutory language from the rules. As we discussed earlier, the rules did not include the clause "contained within the boundaries of the forest reserve."

**Missed 180-day deadline**

In one case where the board denied an application, the First Circuit Court overturned the decision because the board failed to render it within the 180 days required by the forest and water reserve zones law. The DLNR argued that the 180-day clock began to run upon payment of a $50 fee owed by the applicant to cover the cost of a public hearing. The court, however, said that the $50 was not a processing fee and that the clock began to run on the date the application was received. To avoid legal challenge and ensure that residential construction is allowed by design and not by default, the office should be more careful in its starting of the 180-day clock.

**Recommendations**

1. The Department of Land and Natural Resources should propose legislation amending the forest and water reserve zones law, Section 183-41, HRS, to describe the standards, such as for house size and height, that the rules for residential construction should include. Based upon this legislation, the department should adopt rules with specific standards.

2. The Department of Land and Natural Resources also should ensure that the statute and rules are consistent in defining nonconforming use.

3. The Department of Land and Natural Resources should determine whether giving landowners a legal right to a future residence in the conservation district under a designation of nonconforming use is appropriate. If building a new residence is inappropriate, the department should propose legislation to delete the second definition of nonconforming use contained in the forest and water reserve zones law. The department should also amend its rules to ensure that the definition of conditional use is linked to standards for residential construction.
4. In reviewing conservation district use applications for residential construction, the Department of Land and Natural Resources should take greater care in ensuring that environmental assessments comply with the rules of the Department of Health, in classifying applications as nonconforming uses, and in ensuring that applications are acted upon within 180 days of their receipt.
Notes

Chapter 2

1. Section 205-2, HRS.

2. Ibid.

3. Hawaii, Department of Business and Economic Development, *The State of Hawaii Data Book, 1989: A Statistical Abstract*, Honolulu, November 1989, p. 171. The acreage of the other three districts is as follows: 171,214 in the urban district, or 4 percent of the state's total area; 10,196 in the rural district, or .2 percent of the state's total area; and 1,963,784 in the agricultural district, or 48 percent of the state's total area.

4. Section 183-41, HRS, also states that land uses may be made under a temporary variance granted by the Department of Land and Natural Resources. Temporary variances are not granted for residential construction.

5. Section 13-2-15, *Hawaii Administrative Rules*, also establishes a special subzone for "areas possessing unique developmental qualities which complement the natural resources of the area." These include the following special subzones: Hawaii Loa College; Haka Site (cemetery); Kapakahí Ridge (nursing/convalescent home); Sea Life Park; Milolii-Hoopuloa (fishing village); and Hale O Ho‘oponopono (educational purposes).


Chapter 3


2. Article XI, Section 1, Constitution of the State of Hawaii.

4. As of January 1989, there were 104,594 more acres in the conservation district than there were in August 1964, when records were first kept. See Hawaii, Department of Business and Economic Development, *The State of Hawaii Data Book, 1989: A Statistical Abstract*, p. 171.


10. Sections 11-200-10 and 11-200-12, *Hawaii Administrative Rules*. One application was filed shortly before these sections took effect, and the board made its decision after the rules were in force. We used these sections as a framework for reviewing this particular environmental assessment.

11. There is also a question in this case of whether the applicant has complied with the requirement in the rules that any work or construction on the property begin within one year of approval of the application. The board could revoke the approval if the applicant has not fulfilled this condition. The question in this case is whether soil test borings satisfy the requirement. The Office of Conservation and Environmental Affairs has requested an attorney general’s opinion on this subject.
Response of the Affected Agency

Comments on
Agency
Response

We transmitted a draft of this Review of the Regulation of Residential Construction in the Conservation District to the Department of Land and Natural Resources on December 12, 1990. A copy of the transmittal letter to the department is included as Attachment 1. The response from the department is included as Attachment 2.

The department concurs with our recommendations. It will work immediately to develop appropriate legislation to implement our recommendation that specific standards be developed for residential construction. It will ensure consistency in the definition of nonconforming use in the statutes and the rules. It will also act to meet our concerns about inadequate environmental assessments, incorrect designations of applications as nonconforming uses, and missing the 180-day deadline for acting on applications. The department agrees with us that most zoning does not allow nonconforming residential use based on previously intended use but provides a historical explanation for why Hawaii's conservation land laws are an exception to the rule.

The department also says that it had already begun to reexamine some of its procedures; that it will be increasing its efforts at public education; and that based on an opinion from the Land Use Division of the Department of the Attorney General, it will be seeking special protection for Mount Olomana, one of the areas where there has been concern about residential construction.
December 12, 1990

The Honorable William W. Paty, Jr.
Chairperson
Board of Land and Natural Resources
Department of Land and Natural Resources
Kalanikumoku Building
1151 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Paty:

Enclosed are three copies, numbers 6 to 8 of our draft report, Review of the Regulation of Residential Construction in the Conservation District. We ask that you telephone us by Monday, December 17, 1990, on whether you intend to comment on our recommendations. This report will be issued around the beginning of January. If you wish your comments to be included in the report, please submit them no later than Thursday, December 27, 1990.

The Governor and presiding officers of the two houses of the Legislature have also been provided copies of this draft report.

Since the report is not in final form and changes may be made, access to this report should be restricted to those whom you might wish to assist you in preparing your response. Public release of the report will be made solely by our office and only after the report is published in its final form.

Sincerely,

Newton Sue
Acting Auditor

Enclosures
TO: Honorable Newton Sue  
Acting Legislative Auditor

FROM: William W. Paty, Chairperson  
Board of Land and Natural Resources

SUBJECT: Legislative Auditor's Review of Residential Construction in the Conservation District

Our review of your report finds it to be comprehensive, properly focused, and well researched. It points out to the reader some of the highly complex and technical aspects on administering the land use laws as they relate to the State Constitution, the statutes, Administrative Rules and the Conservation District.

We understand that as a part of your audit you also reviewed the organization of the Office of Conservation and Environmental Affairs, and the number of permanent staff assigned as well as their job descriptions. Although not a focus or mentioned, your interview of our Administrator did incorporate our concerns regarding staffing, and the need to hold and attract planners needed for this key function.

Included in the administration biennium budget for the upcoming Legislature to consider, we have provisions for four (4) additional planners, to better serve the public with these complex and technical aspects of the Conservation District, as well as increasing our enforcement activity.

Given the recent concerns regarding residential construction at the windward side, we had begun, at the request of the Land Board, to reexamine and evaluate our procedures, and your review enabled us to focus on the issues in a timely manner. We concur with all four of your recommendations.

We will be asking the Governor to allow us to submit proposed legislation to implement Recommendation Number 1 this upcoming session. Perhaps the reader may appreciate the complexity of this issue from a review of the appendix which indicate a wide variance in parcel size resulting in varying house square footage estimates. Additionally, we feel that the U. S. Supreme Court's action in Nollan v. California Coastal Commission in June 1987 (107 S. Ct. 3141 (1987)) effectively restricts our abilities somewhat in this area.
Relative to Recommendation Number 2, we will ensure that the statute and rules are consistent in defining non-conforming use.

Of particular interest was your bringing to our attention the omission of the key clause when DLNR first adopted the rules in 1964, relative to "within the forest and water reserves zones," regarding non-conforming use on pg. 19. That is very educational to us.

Also, we agree that most land use zoning does not provide for the second definition of non-conforming use where land intended for a residential unit could, if in compliance with the other criteria, qualify as a non-conforming use. Our understanding was that, when the Legislature enacted this provision, Hawaii was somewhat unique in that these parcels, usually under ten (10) acres were known as kuleana lands, and were parcellled out to native Hawaiians under a legislative act of August 6, 1850, more commonly known as the Kuleana Act. However, this issue may certainly be discussed more as a part of Recommendation Number 3.

Additionally, we will review our action in ensuring Environmental Assessments comply with the rules of the Department of Health, in classifying applications as non-conforming uses, and, in ensuring that applications are acted upon within 180 days of their receipt as suggested in Recommendation Number 4.

Also, towards increasing our public education efforts we will be coming out shortly with a special section in our next issue of the Hawaii Resource devoted to conservation zoned lands.

Although mentioned, but not a focus of the report, based upon an opinion from the Land Use Division of our Department of Attorney General, we will be asking the Board for the designation of Mt. Olomana on Windward Oahu, one of the areas of concern which brought about the report, as designated unique area, which will then allow it the criteria to be placed in the Protective subzone of the Conservation District.

Lastly, we feel it's important to note that throughout the auditing process we felt that the standards of reasonableness and fairness that were mentioned in the report relative to analyzing the statutes and rules were also applied to us.
## APPENDIX
Characteristics of Examined Applications for New Residential Construction in the Conservation District

<table>
<thead>
<tr>
<th>Island</th>
<th>Acreage of Parcel</th>
<th>Subzone</th>
<th>House Square Footage Estimates</th>
<th>Use</th>
<th>EIS</th>
<th>Public Hearing</th>
<th>Land Board Decision¹</th>
<th>Year of Land Board Decision</th>
<th>Contested Case Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>8.65</td>
<td>General</td>
<td>5,000</td>
<td>Conditional</td>
<td>No</td>
<td>No</td>
<td>Approved</td>
<td>1985</td>
<td>No</td>
</tr>
<tr>
<td>Hawaii</td>
<td>5.00</td>
<td>Limited</td>
<td>1,500</td>
<td>Conditional</td>
<td>No</td>
<td>No</td>
<td>Denied</td>
<td>1986</td>
<td>No</td>
</tr>
<tr>
<td>Maui</td>
<td>.26</td>
<td>Limited</td>
<td>N/A²</td>
<td>Nonconforming</td>
<td>No</td>
<td>No</td>
<td>Approved</td>
<td>1988</td>
<td>No</td>
</tr>
<tr>
<td>Oahu</td>
<td>20,807 sq. ft.</td>
<td>Limited</td>
<td>3,162</td>
<td>Nonconforming</td>
<td>No</td>
<td>No</td>
<td>Approved</td>
<td>1988</td>
<td>No</td>
</tr>
<tr>
<td>Oahu</td>
<td>79,511 sq. ft.</td>
<td>General</td>
<td>5,000</td>
<td>Conditional</td>
<td>No</td>
<td>No</td>
<td>Approved</td>
<td>1988</td>
<td>No</td>
</tr>
<tr>
<td>Kauai</td>
<td>35,218 sq. ft.</td>
<td>Limited</td>
<td>N/A¹</td>
<td>Conditional⁰</td>
<td>No</td>
<td>No</td>
<td>Approved</td>
<td>1987</td>
<td>No</td>
</tr>
<tr>
<td>Hawaii</td>
<td>24.40</td>
<td>Resource</td>
<td>N/A⁶</td>
<td>Conditional</td>
<td>No</td>
<td>No</td>
<td>Approved</td>
<td>1985</td>
<td>No</td>
</tr>
<tr>
<td>Oahu</td>
<td>34.31</td>
<td>Resource</td>
<td>N/A⁷</td>
<td>Conditional</td>
<td>No</td>
<td>No</td>
<td>Approved</td>
<td>1989</td>
<td>Yes¹⁰</td>
</tr>
<tr>
<td>Kauai</td>
<td>12,019 sq. ft.</td>
<td>Limited</td>
<td>1,400</td>
<td>Conditional⁰</td>
<td>No</td>
<td>No</td>
<td>Approved</td>
<td>1989</td>
<td>No</td>
</tr>
<tr>
<td>Hawaii</td>
<td>25.50</td>
<td>Resource</td>
<td>2,192</td>
<td>Conditional</td>
<td>No</td>
<td>No</td>
<td>Approved</td>
<td>1989</td>
<td>No</td>
</tr>
<tr>
<td>Maui</td>
<td>7.70</td>
<td>General</td>
<td>45,750¹²</td>
<td>Conditional</td>
<td>No</td>
<td>No</td>
<td>Approved</td>
<td>1990</td>
<td>Yes¹⁴</td>
</tr>
<tr>
<td>Oahu</td>
<td>75.90¹³</td>
<td>Limited</td>
<td>32,680</td>
<td>Conditional</td>
<td>Yes</td>
<td>Yes¹⁶</td>
<td>Denied¹⁷</td>
<td>1988</td>
<td>Yes¹⁸</td>
</tr>
<tr>
<td>Hawaii</td>
<td>3.00</td>
<td>Resource</td>
<td>21,164</td>
<td>Nonconforming</td>
<td>No</td>
<td>No</td>
<td>Approved</td>
<td>1989</td>
<td>No</td>
</tr>
</tbody>
</table>

¹The Board of Land and Natural Resources approves residential applications with 8 or 9 standard conditions and with additional conditions on a case-by-case basis.
²Not available. File indicated use of .26 acre and 3-bedroom house.
³Rejected in 1987 when applicant could not prove nonconforming use. Applicant was informed application would be approved if nonconforming use could be proven.
⁴File indicated a house of no more that 2,500 square feet.
⁵The Office of Conservation and Environmental Affairs usually recommends denial of conditional use residences in the limited subzone. But the board approves such applications for parcels that are part of the Haena Hul petition approved by the Fifth Circuit Court in 1967. The board feels legally obligated to grant all such applications.
⁶File indicated a “medium sized” single-family residence.
⁷File indicated a “2-bedroom, 1-1/2 bath, prefabricated house.”
⁸Latest estimate available.
⁹The board subsequently revoked this approval in 1990 for noncompliance with one of its conditions.
¹⁰Petitions for a contested case were received but rendered moot when the board revoked the approval.
¹¹Application involved a commercial farm.
¹²Includes building area, covered walkways and lanais, paved recreation space, and garage and guest parking.
¹³Public informational hearing.
¹⁴The board granted a petition for a contested case hearing. However, the case became moot when the parties entered into a conflict mediation process.
¹⁵Application sought to change 4.36 acres of this parcel to the general subzone, where the residence would be located.
¹⁶Application involved a subzone boundary amendment request.
¹⁷However, the First Circuit Court overturned the board’s denial because the board failed to make its decision within 180 days.
¹⁸A petition for a contested case hearing was filed but later withdrawn.

Source: Conservation district use application files, Department of Land and Natural Resources, Office of Conservation and Environmental Affairs.
Mr. Ken Church  
400 Hualani Street, Suite 275  
Hilo, Hawai‘i 96720

SUBJECT: Existing Land Uses at Wailea, South Hilo, Hawai‘i  
Tax Map Key (TMK): (3) 2-9-003: 013, 029, and 060

Dear Mr. Church:

The Office of Conservation and Coastal Lands (OCCL) is in receipt of your inquiry regarding existing squash, sweet potato, and taro crops currently being cultivated on the subject properties.

Based on the information you have provided, you are inquiring whether or not the current crops found on your properties could be considered a nonconforming use as the area was once cultivated for sugar cane. What you have described appears to be more appropriately described as a garden, which the Department has no objections to. As it was existing prior to you purchasing the property, the Department has no concerns with the continued cultivation of squash, sweet potato, taro.

To characterize the lands as a nonconforming agricultural use, you as the landowner, would need to submit proof that such lands were indeed used for agriculture production. Pursuant to Hawai‘i Revised Statutes (HAR) 13-5-7 (f), *The burden of proof to establish that the land use or structure is legally nonconforming shall be on the applicant.* Proof may include historic photos or records showing that the specific area in question was used for agriculture.

If you have any questions in regards to this correspondence, please contact Lauren Yasaka of our Office at (808) 587-0386.

Sincerely,

Samuel S. Lemmo, Administrator  
Office of Conservation and Coastal Lands

C: HDLO  
County of Hawai‘i, Dept. of Planning
March 3, 2008

Ms. Lisa Muragin
P.O. Box 179
Ninole, Hawaii 96773

Dear Ms. Muragin:

Subject: **BOUNDARY INTERPRETATION No. 07-19**

This is in response to your letter dated July 16, 2007, requesting a boundary interpretation for the subject parcels. Please accept our apologies for the lateness of this response.

Upon receipt of your request, we reviewed the Commission's records currently on file at our office and the information that you provided.

For your information, the designation of the subject parcels was established on August 4, 1969, and in accordance with Hawaii Administrative Rules Subchapter 16, 15-15-111. As depicted on the official State Land Use (SLU) District Boundaries Map H-59, Papaaloa Quadrangle, the landward portion of the subject parcels was designated SLU Agricultural, any coastal lands from the "Top of Sea Pali" was deemed SLU Conservation District. For a more precise determination, the top of pali shall be located in metres and bounds relative to subject parcels and with the additional locations of the SLU Agricultural / Conservation District as depicted on your attached boundary interpretation survey map.

As requested two (2) copies of your boundary interpretation survey map of the subject parcel is enclosed for your reference. Again, we apologies for the lateness of this response and should you require clarification or further assistance, please feel free to call Fred Talon or Bert Saruwatari at 587-3822.

Sincerely,

RODNEY A. MAILE
Executive Officer

Enclosure:

c: Samuel J. Lemmo, Administrator, Office of Conservation and Coastal Lands, Department of Land and Natural Resources (w/enclosure)

Christopher Yuen, Planning Director, County of Hawaii Planning Department (w/enclosure)

Mike McCall Valuation Analyst, Mapping Section, Real Property Tax Division, County of Hawaii (w/enclosure)

Lisa Nahoopi, GIS Analyst, County of Hawaii (w/enclosure)
CONSERVATION

AIRCULTURAL

CONSOLIDATION OF 5 PARCELS, ON N. E. SIDE OF HAWAII BELT RD., CONSISTING OF 3 PARCELS OF GRANT 4708 TO G. VIERRA AND A PORTION OF HAWAII CONSOLIDATED RAILWAY LTD. RIGHT OF WAY AND A PORTION OF A GOVERNMENT ROAD RESERVE AND RESUBDIVISION INTO LOTS 4-A, 4-B AND 4-C
HA'IKU, NO. HILO, HAWAII, HAWAII
May 1, 2007

Mr. R. Ben Tsukazaki, Esq.
Tsukazaki Yeh & Moore
85 W. Lanikaula Street
Hilo, HI 96720

Subject: Preliminary Geotechnical Evaluation of Sea Cliff at McCully Property

Dear Mr. Tsukazaki:

Based on your recent request and Yogi Kwong Engineers, LLC’s (YKE) sea cliff evaluation in support of a planning study at the McCully property, more specifically identified as TMK: 2-9-003: 013, 029 and 060, Wailea, South Hilo, Hawaii, below is a brief summary of our preliminary geotechnical opinions in support of the planning study. Our services are performed based on our earlier proposal to Mr. James McCully.

We understand the proposed McCully single-family dwelling and related improvements to be constructed on TMK: 2-9-003: 029 will be sited no less than 70 feet inland of the bluff edge. During our site reconnaissance in November 2005, the property was maintained as a grassed area with scattered landscape plantings which did not show observable sign of recent mass wasting above the edge of the sea cliff. Review of 2007 aerial photograph of site observed similar surface conditions.

Based on a review of various historical aerial and topographic photos and maps, as well as the siting of the proposed single-family dwelling no less than 70 feet inland of the top of the bluff at the time of design and construction, I feel that the setback appears prudent based on the height of the existing bluff (approximately 100 to 140 feet high) and a 75-year design life for the dwelling and associated structures against potential coastal erosion caused by intensive or storm wave action, tsunami, and related coastal flooding. The proposed 70-foot setback from the top of the bluff appears reasonable considering the height of the bluff.

We understand that Mr. McCully will retain a qualified geotechnical engineer to perform site and project specific detailed geotechnical investigation for the design and construction of the dwelling and associated structures and related earthworks and hillside stability pertaining to the new development. These services are beyond the scope of YKE’s study.

Please feel free to contact us if you have any questions concerning this letter report.

Yours truly,

Yogi Kwong Engineers, LLC

James Kwong, Ph.D., P.E.
Principal
Introduction

This biological survey was prepared for Ken Church, landowner of a roughly 4.6-acre property that includes TMKs (3rd.) 2-9-003:013, 029 & 060 (Figure 1) (“the property”). The survey was prepared accessory to an application for a Conservation District Use Permit for consolidation/resubdivision and subsequent activity on the property. As shown in Figures 2 and 3, which are aerial and ground photos of the property, most of the property is covered with lawn and crop plantings, including bamboo, bananas coconut palms and squash, associated with long-standing agricultural use. The landowner plans a residence on Parcel 060, and at present has no plans to develop additional residences on the other parcels. Also planned are agricultural activities on the grassy areas of Parcels 029 and 013 and a structure accessory to this use on Parcel 029. It is our understanding that development will be limited to the already heavily disturbed areas and their fringes. All land not maintained in this manner is located on or adjacent to a sea cliff that is 100 to 140 feet in height or in the Puahanui Stream gulch, the center of which is the north boundary of the property. These steep areas are forested with trees, shrubs and understory plants. The sea cliff itself and the seashore below the cliffs are State property makai of the land owned by Mr. Church.

The objectives of the botanical survey component of this survey were to 1) describe the vegetation; 2) list all species encountered; and 3) determine the likelihood of the presence of rare, threatened or endangered plant species, and to identify the locations of any individuals found. The area was surveyed by Ron Terry and Patrick Hart in November 2014. Plant species were identified in the field and, as necessary, collected and keyed out in the laboratory. Special attention was given to the possible presence of any federally (USFWS 2014) listed threatened or endangered plant species, although the habitat did not indicate a strong potential for their presence.

The survey also included a limited faunal survey restricted to a list of birds and introduced mammals, reptiles, or amphibians observed during the botanical survey. Also considered in this report is the general value of the habitat for native birds and the Hawaiian hoary bat. Not included in the survey were invertebrates or aquatic species or habitat.

Vegetation Type and Influences

The geology of the property consists of Hamakua Volcanics from Mauna Kea that are 70,000 to 250,000 years in age and covered with weathered Pahala Ash (Wolfe and Morris 1996). The natural slope perpendicular to the sea on the interfluve on the property
between stream gulches is on the order of 5 to 7 percent. Steep slopes over 100 percent (i.e., 45 degrees) are present on Puahanui Stream and on the sea cliffs makai of the property. The area receives an average annual rainfall of about 140 inches (Giambelluca et al 2014)). The natural vegetation of this part of the Hamakua Coast was most likely lowland rain forest dominated by ‘ohi’a (Metrosideros polymorpha), uluhe (Dicranopteris linearis) and hala (Pandanus tectorius) (Gagne and Cuddihy 1990). However, the general landscape of the Hamakua Coast has been radically altered by centuries of agriculture and settlement, and little to no native vegetation remains in most locations. Gulches and sea cliffs continue to have remnant spots with at least some native elements, although even these are generally dominated by non-natives.

This property is currently in agriculture and open space but has a history of sugar cane cultivation (Tsukazaki Yeh & Moore 2008). After the cessation of sugar cane cultivation in (presumably) the mid-1980s, the area lay fallow until 1992, after which it was maintained in grass with scattered landscape plantings of crop plants such as bamboo, squash, bananas and coconut palms. A 2004 survey of a portion of the property by botanist Evangeline Funk conducted as part of a previous application for a Conservation District Use Permit (Tsukazaki Yeh & Moore 2008) found a number of weedy species, only two native species (hala and popolo – Solanum americanum) and no threatened or endangered plant species.

Results: Vegetation

The vegetation consists of basically three types, as shown in Figures 2a-c:

1. Open, mown grass with scattered maintained plantings of landscape and agricultural species, including non-native grasses, sedges, herbs, vines, shrubs and trees;
2. Gulch vegetation with some hala but primarily non-native trees and shrubs with an understory of herbs, heavily covered by lianas; and
3. Sea cliff fringe vegetation of various non-native trees along with the native hala, with a fairly spare understory of non-native shrubs and herbs with the occasional native vine nanea (Vigna marina) and native shrub naupaka (Scaevola sericea).

In some areas, the hala is dense enough that it represents native vegetation that is similar, if not as rich in native species, to what might have been here prior to human settlement and alteration. We did not observe any ‘ohi’a or other native trees aside from hala that might be expected to be present if the vegetation were pristine.

Flora

All plant species found on the property during the survey are listed in Table 1. Of the 94+ species detected, four were indigenous (native to the Hawaiian Islands and elsewhere) and none were endemic (found only in the Hawaiian Islands). No rare or unusual plant species were present. Many of the species detected were specifically planted rather than naturally occurring.
Threatened and Endangered Plant Species and Critical Habitat

No threatened or endangered plant species as listed by the U.S. Fish and Wildlife Service appear to be present on the property, nor are there uniquely valuable habitats. No existing or proposed federally designated critical habitat is present on the property.

Botanical Impacts and Recommended Mitigation Measures

The history of continuous disturbance coupled with the lowland context has resulted in a flora and vegetation on the part of the property planned for development that has little value in terms of conserving native vegetation or threatened or endangered plant species. We understand that the hala patches near the sea cliff and within the gulch will not be disturbed and that the semi-native vegetation here will remain intact. As such, no adverse botanical impacts are expected as a result of the proposed development and continuing uses.

Fauna

A total of ten bird species were observed during the survey, all of them common non-natives (see Table 2). We would expect the migratory resident Golden Plover (*Pluvialis fulva*) to be at least occasionally present, as it frequently rests and forages on mowed lawns throughout the State of Hawai‘i during its residence here from August to April.

The area is also undoubtedly utilized by the endemic Hawaiian Hawk (*Buteo solitarius*). The endangered Hawaiian Hawk is widespread, hunting throughout forested, agricultural and even residential areas of the island of Hawai‘i. It nests in large trees and can be vulnerable during the summer nesting season. Aside from the hawk, it is unlikely that native forest birds would make much use of the property because of its relatively low elevation and lack of native plants.

Additionally, it is possible that small numbers of the endangered endemic Hawaiian Petrel (*Pterodroma sandwichensis*) and the threatened Newell’s Shearwater (*Puffinus auricularis newelli*) over-fly the property between the months of May and November. The Hawaiian Petrel was formerly common on the Island of Hawai‘i. This pelagic seabird reportedly nested in large numbers on the slopes of Mauna Loa and in the saddle area between Mauna Loa and Mauna Kea, as well as at the mid-to-high elevations of Hualalai. It has within recent historic times been reduced to relict breeding colonies located at high elevations on Mauna Loa and, possibly, Hualalai. Hawaiian Petrels were first listed as an endangered species by the USFWS in 1967 and by the State of Hawai‘i in 1973. Newell’s Shearwaters were also once common on the Island of Hawai‘i. This species breeds on Kaua‘i, Hawai‘i, and Moloka‘i. Newell’s Shearwater populations have dropped precipitously since the 1880s (Banko 1980, Day et al., 2003). This pelagic species nests high in the mountains in burrows excavated under thick vegetation, especially *uluhe* (*Dicranopteris linearis*) fern. Newell’s Shearwater was listed as a threatened species by the USFWS in 1975 and by the State of Hawai‘i in 1973.

The primary cause of mortality in both Hawaiian Petrels and Newell’s Shearwaters in Hawai‘i is thought to be predation by alien mammalian species at the nesting colonies.
Collision with man-made structures is considered another significant cause. Nocturnally flying seabirds, especially fledglings on their way to sea in the summer and fall, can become disoriented by exterior lighting. When disoriented, seabirds often collide with man-made structures, and if they are not killed outright, the dazed or injured birds are easy targets of opportunity for feral mammals. There is no suitable nesting habitat within or close to the property for either species.

Various mammals would be expected on the property, including small Indian mongoose (*Herpestes a. auropunctatus*), mice (*Mus* spp.), rats (*Rattus* spp.), cats (*Felis catus*) and domestic dogs (*Canis f. familiaris*). None of these alien mammals have conservation value and all are deleterious to native flora and fauna. During the survey, only the mongoose was observed.

Although not detected in the survey, which took place in daylight, the only native Hawaiian land mammal, the Hawaiian Hoary Bat (*Lasiurus cinereus semotus*), may also be present in the general area, as it is present in many areas on the island of Hawai‘i. They may forage for flying insects on the property on a seasonal basis and may also roost in trees and large shrubs.

There are no native terrestrial reptiles or amphibians in Hawai‘i. The only reptile observed was an unidentified species of skink (Family: Scincidae). No other reptiles and amphibians were detected during the survey, but we understand that coqui frogs (*Eleutherodactylus coqui*) are also present. It is likely that the bufo toad (*Bufo marinus*) and several species of gecko and anole lizards are also present.

No invertebrate survey was undertaken as part of the survey, but rare native invertebrates tend to be associated with native vegetation and are very unlikely to be present. Although no lava tube openings were observed, if caves are present, native invertebrates including spiders and insects could be present, especially if the roots of native trees extend into the caves.

**Impacts and Mitigation Measures for Fauna**

We offer the following recommendations in order to avoid impacts to endangered but widespread native birds and the Hawaiian hoary bat:

- To minimize impacts to the endangered Hawaiian hoary bat, we recommend that trees taller than 15 feet should not be removed or trimmed during the bat birthing and pup rearing season (June 1 through September 15), to the extent practical.
- To minimize impacts to Hawaiian Hawks, we recommend avoiding earthmoving within 100 meters of tall trees or tree cutting during the breeding season for Hawaiian Hawks (March through the end of September). If this time period cannot be avoided, arrange for a hawk nest search to be conducted by a UH Hilo biologist or other qualified biologist. If hawk nests are present in or near the project site, all land clearing activity should cease until the expiration of the breeding season.
• If any of the homes or other activities incorporate outdoor lighting, they may attract endangered Hawaiian Petrels and Newell’s Shearwaters, which may become disoriented by the lighting, resulting in birds being downed. To avoid the potential downing of Hawaiian Petrels and Newell’s Shearwaters by their interaction with outdoor lighting, we recommend no construction or unshielded equipment maintenance lighting after dark between the months of April and October. All permanent lighting should be shielded in strict conformance with the Hawai‘i County Outdoor Lighting Ordinance (Hawai‘i County Code Chapter 9, Article 14), which requires shielding of exterior lights so as to lower the ambient glare caused by unshielded lighting.

Report Limitations

No biological survey of a large area can claim to have detected every species present. Some plant species are cryptic in juvenile or even mature stages of their life cycle. Dry conditions can render almost undetectable plants that extended rainfall may later invigorate and make obvious. Thick brush can obscure even large, healthy specimens. Birds utilize different patches of habitat during different times of the day and seasons, and only long-term study can determine the exact species composition. The findings of this survey must therefore be interpreted with proper caution; in particular, there is no warranty as to the absence of any particular species.
Literature Cited


Figure 1. Property TMK Map
Figure 2a. Aerial Image

Base Map © Google Earth
Figure 3. Property Vegetation Photos

3a. Maintained vegetation over most of property ▲ ▼ 3b. Gulch vegetation
Figure 3. Property Vegetation Photos

3c. Sea cliff vegetation ▲ ▼ 3d. Gulch flows to sea as waterfall (off property)
Table 1. Plant Species Observed on Property*

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Family</th>
<th>Common Name</th>
<th>Life Form</th>
<th>Status*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adiantum hispidulum</td>
<td>Pteridaceae</td>
<td>Rough maidenhair fern</td>
<td>Fern</td>
<td>A</td>
</tr>
<tr>
<td>Ageratum conyzoides</td>
<td>Asteraceae</td>
<td>Ageratum</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Aleurites moluccana</td>
<td>Euphorbiaceae</td>
<td>Kukui</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Allocasia macrorrhizos</td>
<td>Araceae</td>
<td>Ape</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Archontophoenix alexandrae</td>
<td>Arecaceae</td>
<td>Alexander palm</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Ardisia elliptica</td>
<td>Myrsinaceae</td>
<td>Shoebutton ardisia</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Asystasia gangetica</td>
<td>Acanthaceae</td>
<td>Chinese violet</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Bambusa vulgaris</td>
<td>Poaceae</td>
<td>Yellow clumping bamboo</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Begonia sp.</td>
<td>Begoniaceae</td>
<td>Begonia</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Carica papaya</td>
<td>Caricaceae</td>
<td>Papaya</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Casuarina equisetifolia</td>
<td>Casuarinaceae</td>
<td>Ironwood</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Cecropia obtusifolia</td>
<td>Cercropiaceae</td>
<td>Cercropia</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Centella asiatica</td>
<td>Apiaceae</td>
<td>Gotu kola</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Chamaecrista nictitans</td>
<td>Fabaceae</td>
<td>Partridge pea</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Chamaesyce hirta</td>
<td>Euphorbiaceae</td>
<td>Hairy spurge</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Chamaesyce hypericifolia</td>
<td>Euphorbiaceae</td>
<td>Graceful spurge</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Citharexylum sp.</td>
<td>Verbenaceae</td>
<td>Fiddlewood</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Citrus maxima</td>
<td>Rutaceae</td>
<td>Pomelo</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Citrus reticulata</td>
<td>Rutaceae</td>
<td>Tangerine</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Clusia rosea</td>
<td>Clusiaceae</td>
<td>Autograph tree</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Cocos nucifera</td>
<td>Arecaceae</td>
<td>Coconut</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Coffea arabica</td>
<td>Rubiaceae</td>
<td>Coffee</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Coix lachryma-jobi</td>
<td>Poaceae</td>
<td>Job’s tears</td>
<td>Grass</td>
<td>A</td>
</tr>
<tr>
<td>Colocasia esculenta</td>
<td>Araceae</td>
<td>Taro</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Commelina diffusa</td>
<td>Commelinaceae</td>
<td>Honohono</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Cordyline fruticosa</td>
<td>Agavaceae</td>
<td>Ti</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Crassocephalum crepidioides</td>
<td>Asteraceae</td>
<td>Crassocephalum</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Crepis capillaris</td>
<td>Asteraceae</td>
<td>Hawk’s beard</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Commelina diffusa</td>
<td>Commelinaceae</td>
<td>Honohono</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Crotalaria sp.</td>
<td>Fabaceae</td>
<td>Crotalaria</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Cucurbita pepo</td>
<td>Cucurbitaceae</td>
<td>Squash, pumpkin</td>
<td>Vine</td>
<td>A</td>
</tr>
<tr>
<td>Cyperus involucratus</td>
<td>Cyperaceae</td>
<td>Umbrella sedge</td>
<td>Sedge</td>
<td>A</td>
</tr>
<tr>
<td>Cyperus polystachyos</td>
<td>Cyperaceae</td>
<td>Cyperus</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Cyperus rotundus</td>
<td>Cyperaceae</td>
<td>Purple nut sedge</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Cyrtomium falcatum</td>
<td>Dryopteridaceae</td>
<td>Holly fern</td>
<td>Fern</td>
<td>A</td>
</tr>
<tr>
<td>Desmodium triflorum</td>
<td>Fabaceae</td>
<td>Desmodium</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Diplazium esculentum</td>
<td>Athyriaceae</td>
<td>Warabi</td>
<td>Fern</td>
<td>A</td>
</tr>
<tr>
<td>Eleusine indica</td>
<td>Poaceae</td>
<td>Wiregrass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Emilia sonchifolia</td>
<td>Asteraceae</td>
<td>Pualele</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Epipremnum pinnatum</td>
<td>Araceae</td>
<td>Pothos vine</td>
<td>Vine</td>
<td>A</td>
</tr>
<tr>
<td>Eucalyptus robusta</td>
<td>Myrtaceae</td>
<td>Eucalyptus</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Ficus microcarpa</td>
<td>Moraceae</td>
<td>Chinese banyan</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Garcinia sp.</td>
<td>Clusiaceae</td>
<td>Mangosteen</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Hedychium sp.</td>
<td>Zingiberaceae</td>
<td>Ginger</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Ipomoea triloba</td>
<td>Convolvulaceae</td>
<td>Little bell</td>
<td>Vine</td>
<td>A</td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Family</td>
<td>Common Name</td>
<td>Category</td>
<td>Status</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------</td>
<td>-------------------</td>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td>Kyllinga brevifolia</td>
<td>Cyperaceae</td>
<td>Kili‘o’opu</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Kyllinga nemoralis</td>
<td>Cyperaceae</td>
<td>Kili‘o’opu</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Lantana camara</td>
<td>Verbenaceae</td>
<td>Lantana</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Litchi chinensis</td>
<td>Sapindaceae</td>
<td>Lychee</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Macaranga tanarius</td>
<td>Euphorbiaceae</td>
<td>Bingabing</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Malavavicus penduliflorus</td>
<td>Malvaceae</td>
<td>Turk’s cap</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Mangifera indica</td>
<td>Anacardiaceae</td>
<td>Mango</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Megathyrsus maximus</td>
<td>Poaceae</td>
<td>Guinea grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Melinis repens</td>
<td>Poaceae</td>
<td>Red top grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Melochia umbellata</td>
<td>Sterculiaceae</td>
<td>Melochia</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Merremia tuberosa</td>
<td>Convolvulaceae</td>
<td>Wood rose</td>
<td>Vine</td>
<td>A</td>
</tr>
<tr>
<td>Mimosa pudica</td>
<td>Fabaceae</td>
<td>Sleeping grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Morinda citrifolia</td>
<td>Rubiaceae</td>
<td>Noni</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Musa x paradisiaca</td>
<td>Musaceae</td>
<td>Banana</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Nepheleium lappaceum</td>
<td>Sapindaceae</td>
<td>Rambutan</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Neprolepis multiflora</td>
<td>Neprolepidsiaceae</td>
<td>Sword Fern</td>
<td>Fern</td>
<td>A</td>
</tr>
<tr>
<td>Odontonema cuspidatum</td>
<td>Acanthaceae</td>
<td>Odontonema</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Oplismenus sp.</td>
<td>Poaceae</td>
<td>Basket grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Oxalis corniculata</td>
<td>Oxalidaceae</td>
<td>Creeping wood sorrel</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Oxalis debilis var. corymbosa</td>
<td>Oxalidaceae</td>
<td>Pink wood sorrel</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Paederia foetida</td>
<td>Rubiaceae</td>
<td>Maile pilau</td>
<td>Vine</td>
<td>A</td>
</tr>
<tr>
<td>Pandanus tectorius</td>
<td>Pandanaceae</td>
<td>Hala</td>
<td>Tree</td>
<td>I</td>
</tr>
<tr>
<td>Panicum repens</td>
<td>Poaceae</td>
<td>Torpedo grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Paspalum conjugatum</td>
<td>Poaceae</td>
<td>Hilo grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Pennisetum purpureum</td>
<td>Poaceae</td>
<td>Napier grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Persea americana</td>
<td>Lauraceae</td>
<td>Avocado</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Philodendron sp.</td>
<td>Araceae</td>
<td>Philodendron</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Phlebodium aureum</td>
<td>Polyopodiaceae</td>
<td>Phlebodium</td>
<td>Fern</td>
<td>A</td>
</tr>
<tr>
<td>Phyllanthus sp.</td>
<td>Euphorbiaceae</td>
<td>Phyllanthus</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Phymatosorus grossus</td>
<td>Polyopodiaceae</td>
<td>Maile-scented fern</td>
<td>Fern</td>
<td>A</td>
</tr>
<tr>
<td>Pinus spp.</td>
<td>Pinaceae</td>
<td>Pine</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Pluchea symphytifolia</td>
<td>Asteraceae</td>
<td>Sourbush</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Polygala paniculata</td>
<td>Polygalaceae</td>
<td>Bubble-gum plant</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Psidium cattleianum</td>
<td>Myrtaceae</td>
<td>Strawberry guava</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Psidium guajava</td>
<td>Myrtaceae</td>
<td>Guava</td>
<td>Shrub</td>
<td>A</td>
</tr>
<tr>
<td>Saccharum officinarum</td>
<td>Poaceae</td>
<td>Sugar cane</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Scaevola sericea</td>
<td>Goodeniaceae</td>
<td>Naupaka</td>
<td>Shrub</td>
<td>I</td>
</tr>
<tr>
<td>Schefflera actinophylla</td>
<td>Araliaceae</td>
<td>Octopus tree</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Solanum americanum</td>
<td>Solanaceae</td>
<td>Popolo</td>
<td>Shrub</td>
<td>I</td>
</tr>
<tr>
<td>Spathodea campanulata</td>
<td>Bignoniaceae</td>
<td>African tulip</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Sphagneticola trifolbata</td>
<td>Asteraceae</td>
<td>Wedelia</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Syzygium jambos</td>
<td>Myrtaceae</td>
<td>Rose apple</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Thunbergia fragrans</td>
<td>Acanthaceae</td>
<td>White thunbergia</td>
<td>Vine</td>
<td>A</td>
</tr>
<tr>
<td>Thunbergia grandifolia</td>
<td>Acanthaceae</td>
<td>White thunbergia</td>
<td>Vine</td>
<td>A</td>
</tr>
<tr>
<td>Trema orientalis</td>
<td>Ulmaceae</td>
<td>Trema</td>
<td>Tree</td>
<td>A</td>
</tr>
<tr>
<td>Urochloa mutica</td>
<td>Poaceae</td>
<td>California grass</td>
<td>Herb</td>
<td>A</td>
</tr>
<tr>
<td>Vigna marina</td>
<td>Fabaceae</td>
<td>Nanea, Beach pea</td>
<td>Vine</td>
<td>I</td>
</tr>
</tbody>
</table>

A=Alien   E=Endemic   I=Indigenous   END=Federal and State Listed Endangered
### Table 2. Bird Species Observed on Property

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Common name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Acridotheres tristis</em></td>
<td>Common Myna</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Cardinalis cardinalis</em></td>
<td>Northern Cardinal</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Carpodacus mexicanus</em></td>
<td>House Finch</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Geopelia striata</em></td>
<td>Zebra Dove</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Leiothrix lutea</em></td>
<td>Red-billed Leiothrix</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Lonchura punctulata</em></td>
<td>Nutmeg Mannikin</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Serinus mozambicus</em></td>
<td>Yellow-Fronted Canary</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Sicalis flaveola</em></td>
<td>Saffron Finch</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Streptopelia chinensis</em></td>
<td>Spotted Dove</td>
<td>Alien Resident</td>
</tr>
<tr>
<td><em>Zosterops japonicus</em></td>
<td>Japanese White-eye</td>
<td>Alien Resident</td>
</tr>
</tbody>
</table>
Sept. 16, 2015

Subject: Tax Map Keys (TMK’s): (3) 2-9-03: 029, 033, 039, South Hilo, Hawaii

To whom it may concern,

My name is John C. Cross. I am a resident of Hakalau, Hawaii and was born and raised in Hilo. I am very familiar with the subject property listed above. I was in the employ of Mauna Kea Agribusiness and C. Brewer & Company, Ltd. from 1984 to 2005. During those years I was the crop control superintendent for the sugar company until the closure of cane operations in 1994, after that I became Land Manager then Vice President of Real Estate for C. Brewer & Co. Ltd. On or around 1992 the company sold the subject property to James McCully.

Leading up to that time the subject property’s continuous land use was agricultural production. I have maps in the C. Brewer archives know owned by the Olson Trust that show the sugar companies had used the land for agricultural production for over 100 years. I was the custodian of records for C. Brewer & Co. Ltd. and continue in that capacity under the Trust from 2005 to present.

Specifically the 3 subject TMK parcels had a cultivated area of 3.2 acres that were used for agriculture. Specifically, this area was part of my “seed field” under my management. The balance of their area was a gulch on the Northern end of the field and a narrow uncultivated area along the ocean pali. Ref. attached survey document of BLOCK F31B and aerial photo. The area of the cultivated field is outlined with a bold black line.

Should you need to contact me please e-mail me at john@olsontrust.com or call me at (808) 987-4229.

Sincerely,

[Signature]

John C. Cross
Layer Name: Agricultural Lands of Importance to the State of Hawaii

Coverage Name: ALISH

Layer Type: Polygon

Status: Complete

Geog. Extent: Main Hawaiian Islands

Projection: Universal Trans Mercator, Zone 4

Datum: NAD 83

Description: Agricultural Lands of Importance to the State of Hawaii for islands of Kauai, Oahu, Maui, Molokai, Lanai & Hawaii.

Source: State Department of Agriculture 1:24,000 hand drafted blueine maps; compiled and drafted in 1977. Prepared with the assistance of the Soil Conservation Service, U.S. Department of Agriculture, and the College of Tropical Agriculture, University of Hawaii. See text below for information about the classification system, including criteria for classification.

History: Digitized in Arc/Info version 6 using ArcEdit by the Office of State Planning (OSP) from State Department of Agriculture's 1:24,000 blueine maps.

Attributes: Polygons:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AREA</td>
<td>area of polygon (sq. meters)</td>
</tr>
<tr>
<td>PERIMETER</td>
<td>perimeter of polygon (meters)</td>
</tr>
<tr>
<td>ALISH#</td>
<td>Polygon internal number (for Arc/Info use)</td>
</tr>
<tr>
<td>ALISH-ID</td>
<td>Polygon ID (for Arc/Info use)</td>
</tr>
<tr>
<td>AGTYPE</td>
<td>Agricultural Type</td>
</tr>
</tbody>
</table>

AGTYPE Definition:

Unclassified

0 Unclassified

1 Prime Lands

2 Unique Lands

3 Other Lands


The Classification System:

The classification system for identification of agriculturally important lands in the State of Hawaii provides for the:

1. Establishment of classes of agricultural lands primarily, but not exclusively, on the basis of soil characteristics;
2. Establishment of criteria for classification of lands; and

3. Identification of lands which meet the criteria for the respective classes.

Three classes of agriculturally important lands were established for the State of Hawaii with the intent of facilitating the SCS effort to inventory prime farmlands nationally and adapting the classification to the types of agricultural activity in Hawaii. These classes and their corresponding SCS (national) equivalents are:

<table>
<thead>
<tr>
<th>Hawaii Classification System</th>
<th>SCS Classification System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime Agricultural Land</td>
<td>Prime Farmland</td>
</tr>
<tr>
<td>Unique Agricultural Land</td>
<td>Unique Farmland</td>
</tr>
<tr>
<td>Other Important Agricultural Land</td>
<td>Additional Farmland of Statewide</td>
</tr>
<tr>
<td></td>
<td>and Local Importance</td>
</tr>
</tbody>
</table>

The criteria for classification of PRIME AGRICULTURAL LAND are identical to the criteria established by SCS for national application. The criteria for UNIQUE AGRICULTURAL LAND and OTHER IMPORTANT AGRICULTURAL LAND were established cooperatively by the Soil Conservation Service in Hawaii, the College of Tropical Agriculture, and the State Department of Agriculture.

Land considered for classification may or may not currently be in agricultural use, or may be in an agricultural use other than that which its classification may indicate as its agricultural capability. An example of the latter situation is land currently being used for grazing but which meets the criteria for Prime Agricultural Land. Lands not considered for classification as agricultural lands of importance to the State of Hawaii are:

1. Developed urban land over 10 acres;
2. Natural or artificial enclosed bodies of water over 10 acres;
3. Forest reserves;
4. Public use (parks and historic sites) lands;
5. Lands with slopes in excess of 35%; and
6. Military installations, except undeveloped areas over 10 acres.

The classification of agriculturally important lands does not in itself constitute a designation of any area to a specific land use. The classification should, however, provide decision makers with an awareness of the long-term implications of various land use options for production of food, feed, forage, and fiber crops in Hawaii.

Over time new areas may be developed for agricultural uses, other areas may be converted to irreversible non-agricultural uses, and new knowledge may be gained regarding soil interpretations. These and other developments will necessitate the periodic review and revision of the classification system and lands identified for the various classes.
The Criteria for Classification:

PRIME AGRICULTURAL LAND

PRIME AGRICULTURAL LAND is land best suited for the production of food, feed, forage and fiber crops. The land has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically when treated and managed, including water management, according to modern farming methods.

PRIME AGRICULTURAL LAND meets the following criteria:

1. The soils have an adequate moisture supply. Included are:
   a. Soils having aquic or udic moisture regimes. (For definitions of moisture regimes see Soil Taxonomy, Agricultural Handbook 436, December 1975). These soils commonly are in humid or subhumid climates that have well distributed rainfall or have enough rain in the summer that the amount of stored moisture plus rainfall is approximately equal to or exceeds the amount of potential evapotranspiration. Water moves through the soils at some time in most years.
   b. Soils having xeric or ustic moisture regimes and in which the available water capacity is great enough to provide adequate moisture for the commonly grown crops in 7 or more years out of 10.
   c. Soils having aridic or torric moisture regimes and the area has a developed irrigation water supply that is dependable and of adequate quality. Also included are soils having xeric or ustic moisture regimes in which the available water capacity is limited but the area has a developed irrigation water supply that is dependable and of adequate quality.
   d. Soils having sufficient available water capacity within a depth of 40 inches (1 meter), or in the root zone if the root zone is less than 40 inches deep, to produce the commonly grown crops in 7 or more out of 10 years.

      A dependable water supply is one in which enough water is available for irrigation in 8 out of 10 years for the crops commonly grown.

2. The soils have a soil temperature regime that is isomesic, isothermic, or isohyperthermic. These are soils that, at a depth of 20 inches (50 cm), have a mean annual temperature higher than 47 degrees F (8 degrees C), and the difference between the mean summer and mean winter temperature differ by less than 9.0 degrees F (5 degrees C).

3. The soils have a pH between 4.5 and 8.4 in all horizons within a depth of 40 inches (1 meter) or in the root zone if the root zone
is less than 40 inches deep. (Soils which have a pH of less than 4.5 in surface soil because of use of fertilizers are excluded). This range of pH is favorable for growing a wide variety of crops without adding large amounts of amendments.

4. The soils have no water table or a water table that is maintained at a sufficient depth during the cropping season to allow crops common to the area to be grown.

5. The soils can be managed so that in all horizons within a depth of 40 inches (1 meter) or in the root zone if the root zone is less than 40 inches deep, during part of each year the conductivity of saturation extract is less than 4 mmhos/cm and the exchangeable sodium percentage (ESP) is less than 15.

6. The soils are not flooded frequently during the growing season (less often than once in 2 years).

7. The soils have a product of K (erodability factor) x percent slope of less than 2.0. That is, soils having a serious erosion hazard are not included.

8. The soils have a permeability rate of at least 0.06 inches (0.15 cm) per hour in the upper 20 inches (50 cm) and the mean annual soil temperature at a depth of 20 inches is less than 57 degrees F (14 degrees C). Permeability rate is not a limiting factor if the mean annual soil temperature is 57 degrees F (14 degrees C) or higher.

9. Less than 10 percent of the surface layer in these soils consists of rock fragments coarser than 3 inches (7.6 cm). These soils present no particular difficulty in cultivating with large equipment.

10. Must not be thixotropic and have isomesic temperature regime.

UNIQUE AGRICULTURAL LAND

UNIQUE AGRICULTURAL LAND is land other than PRIME AGRICULTURAL LAND and is used for the production of specific high-value food crops. The land has the special combination of soil quality, growing season, temperature, humidity, sunlight, air drainage, elevation, aspect, moisture supply, or other conditions, such as nearness to market, that favor the production of a specific crop of high quality and/or high yield when the land is treated and managed according to modern farming methods. In Hawaii, some examples of such crops are coffee, taro, rice, watercress and non-irrigated pineapple.

Land that qualifies as PRIME AGRICULTURAL LAND and is used for a specific high-value crop is classified as PRIME AGRICULTURAL LAND rather than as UNIQUE AGRICULTURAL LAND.
OTHER IMPORTANT AGRICULTURAL LAND

OTHER IMPORTANT AGRICULTURAL LAND is land other than PRIME or UNIQUE AGRICULTURAL LAND that is of state-wide or local importance for the production of food, feed, fiber and forage crops. The lands in this classification are important to agriculture in Hawaii yet they exhibit properties, such as seasonal wetness, erodibility, limited rooting zone, slope, flooding, or droughtiness, that exclude them from the PRIME or UNIQUE AGRICULTURAL LAND classifications. Two examples are lands which do not have an adequate moisture supply to qualify as PRIME AGRICULTURAL LAND and lands which have similar characteristics and properties as UNIQUE AGRICULTURAL LAND except that the land is not currently in use for the production of a "unique" crop. These lands can be farmed satisfactorily by applying greater inputs of fertilizer and other soil amendments, drainage improvement, erosion control practices, flood protection and produce fair to good crop yields when managed properly.

Other criteria which may qualify lands as OTHER IMPORTANT AGRICULTURAL LAND are:

1. The land has slopes less than 20%, is presently in crop or has cropping potential, and is not classified as PRIME or UNIQUE AGRICULTURAL LAND. The soils have a moisture supply which is adequate for the commonly grown crop.

2. The land has slopes less than 35%, is presently used for grazing or has grazing potential, and is not classified as PRIME or UNIQUE AGRICULTURAL LAND. The soils have:
   a. An aquic, udic, xeric, or ustic moisture regime in which the available water capacity is sufficient to produce fair to good yields of adapted forage.
   b. Less than 10% rock outcrops and coarse fragments coarser than 3 inches (7.6 cm) in the surface layer.

3. The soils are thin organic soils underlain by aa lava (typic tropofolis) having aquic, udic, xeric, or ustic moisture regimes and isohyperthemic (greater than 72 degrees F) or isothermic (59 - 72 degrees F) soil temperature regimes.

Contact: Joan Delos Santos, Office of Planning, State of Hawaii, PO Box 2359, Honolulu, HI. 96804; (808) 587-2895. email: JDelos_Santos@dbedt.hawaii.gov
Name: CHURCH, KENNETH STANLEY
Site: 29-3792 HAWAII BELT ROAD
Sale: $700000 on 2014-07-16 Reason=1 Qual=
Mail: PO BOX 100014 HAKALAU, HI 96710-0014

Land Value: 252700
Land Exemption: 0
Taxable Land Value: 50200
Building Value: 0
Building Exemption: 0
Taxable Bldg. Value: 0
Total Taxable Value: 50200

*Hawaii County makes every effort to produce the most accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use or interpretation. The assessment information is from the last certified taxroll. All data is subject to change before the next certified taxroll. The parcels' layer is intended to be used for visual purposes only and should not be used for boundary interpretations or other spatial analysis beyond the limitations of the data. The 'parcels' data layer does not contain metes and bounds described accuracy therefore, please use caution when viewing this data. Overlaying this layer with other data layers that may not have used this layer as a base may not produce precise results. GPS and imagery data will not overlay exactly.

Date printed: 11/27/17 15:11:33
MINUTES FOR THE
MEETING OF THE
BOARD OF LAND AND NATURAL RESOURCES

DATE: FRIDAY, FEBRUARY 9, 2007
TIME: 9:00 A.M.
PLACE: KALANIMOKU BUILDING
LAND BOARD CONFERENCE ROOM 132
1151 PUNCHBOWL STREET
HONOLULU, HI 96813

Chairperson Peter Young called the meeting of the Board of Land and Natural Resources to order at 9:05 a.m. The following were in attendance:

MEMBERS

Mr. Peter Young
Mr. Ron Agor
Mr. Samuel Gon III

Mr. Tim Johns
Mr. Jerry Edlao
Mr. Robert Pacheco

STAFF

Ms. Charlene Unoki, Land
Mr. Dan Quinn, State Parks
Ms. Jennifer Bethel
Mr. Russell Tsuji, Land
Mr. Gavin Chun, Land
Mr. Blaine Rogers, DAR

Ms. Sam Lemmo, OCCL
Mr. Paul Conry, DOFAW
Ms. Tiger Mills, OCCL
Mr. Dan Polhemus, DAR
Mr. Dolan Eversole, OCCL

OTHERS

(Note: language for deletion is [bracketed], new/added is underlined)

Item A-1 Minutes of January 26, 2007

Unanimously approved as submitted (Jerry, Johns)

Item A-2 Amendment of November 17, 2006 Minutes as approved on December 8, 2006

Unanimously approved as submitted (Agor, Johns)

Member Johns recused himself.
Item D-11  Consent to Assign General Lease No. S-5654, Cates International, Inc., Assignor, to Grove Farm Fish and Poi, LLC, Assignee, Ewa, Oahu, Tax Map Key: (1) 9-1-005:Seaward. (ODLO/Steve M.)

Mr. Russell Tsuji, Administrator for Land Division, reported that the Land Division staff evaluated the financials to determine whether the premiums might be appropriate and met with Mr. Cates recently. The agreed upon premium was $1,000. Mr. Cates will decide whether to make arrangements to pay or he will make a percentage due to the past years.

Chairman Young asked if the premium calculation was circulated. Mr. Tsuji responded in the affirmative.

Unanimously approved as submitted (Agor, Gon)

Item D-3  Cancellation of Revocable Permit No. S-2902 to United States of America and Issuance of Direct Lease to United States of America, Department of Transportation, Federal Aviation Administration for Air Traffic Navigational Aid Purposes Together With a 20-Foot Wide Easement for Access and Utility Purposes, Kalahea, Koloa, Kauai, TMK: (4) 2-3-07:21. (HDLO/Joanne)

Unanimously approved as submitted (Edlao, Ron)

Item D-7  Amend Prior Board Action of October 28, 2005 (Agenda Item D-11), Acquisition of Private Lands and Set Aside to Division of Boating and Ocean Recreation for Addition to the Manele Small Boat Harbor, Manele, County of Maui, Island of Lanai, TMK: (2) 4-9-17:02 por. and Rescind Prior Board Action of July 13, 2001 (Agenda Item J-2) Issuance of Lease by Direct Negotiation to Castle and Cooke Resorts LLC, Manele Bay Small Boat Harbor, Island of Lanai. (PROJECT DEVELOPMENT/Gavin)

Mr. Gavin Chun, from the Land Division, reported amending prior board action of October 28, 2005 related to acquisition of land at Manele Bay. He also reported that beside the Land Division, the Engineering Division and Attorney General's Office has been working a long time to negotiate the terms of the deal. He presented a warranty deed which indicates that Castle and Cooke are asking for some changes which staff and the AG's office approve but there seem to be other issues involved.

Deputy Attorney General Randy Ishikawa reported that the acquisition of land from Castle and Cooke at the Manele Bay Small Boat Harbor will be used as part of an improvement project that is underway now. On October 28, 2005 the Board approved this transfer of two acres to the State. Several discussions with Castle and Cooke have taken place over the past year. They're requesting that the deed be changed or amended
to delete testing of hazardous materials. After many discussions it was agreed to remove the testing provision Castle and Cooke would still indemnify if any hazardous materials are located on the property. After the subdivision there will be only three encumbrances, one is a subdivision and two unilateral agreements that are going to be remaining against this property. We won’t be encumbering this two acre parcel which is coming over to the State. Castle and Cooke had also agreed to secure entitlement forecast in the earlier submittal. If it is approved by the board today we will go ahead and record it.

Mr. Midler of Castle and Cooke expressed the intent is not to impose material obligations on the County, but recognition that there are unilateral agreements affecting all of the property. We don’t believe the County would be willing to take those on.

Chairman Young clarified the question whether those obligations stay with Castle and Cooke or should it transfer over to the State? The question is whether we do it or you keep the obligation? On the subject of the encumbrance does that mean we have the obligation to do it?

Mr. Midler replied yes. Again, the intent is not to impose the obligations on to the State.

Chairman Young asked if it would be done, whatever the conditions?

Mr. Midler stated that he was not that familiar with the conditions. I’m assuming they are pretty in oculus. There could be certain conditions that are peculiar to the owner of the property. For instance logs and things like that, but in regards to material obligations our intent is it should stay with Castle and Cooke.

Mr. Ishikawa stated so you could do a side agreement that goes through some split encumbrances where some we could take and some they should take.

Chairman Young asked Mr. Midler if he was ok with the drafted deed? Mr. Midler affirmed.

Mr. Ishikawa stated there’s a number of encumbrances present and recorded against the larger part of this 2 acre parcel which is being subdivided.

Chairman Young asked if phase one has been reviewed?

Mr. Ishikawa stated yes.

Mr. Midler replied we look forward to continuing our relationship with D.L.N.R.

Unanimously approved as submitted (Edlao, Johns)
Item D-4  Amend Prior Board Action of June 12, 1992, Item F-14, Authorization to Withdraw Land from the Operation of General Lease No. S-4413 and Right-of-Entry to the Department of Transportation, Highways Division for Contra-Flow Road Purposes, Wailua, Kawaihau, Lihue (Puna), Kauai, TMK: (4) 3-9-06:01 (por) and 012. (KDLO/Barry)

Unanimously approved as submitted (Agor, Gon)

Item M-1  Issuance of a sublease to Slow Down Town LLC., dba Down Town at the HISAM for a Restaurant, Bar, and Grill, Including related Activities such as Catering for Events; Retail and Office Use at the No. 1 Capitol District (formerly the Hemmeter Building), Honolulu, Oahu, Tax Map Key: (1) 2-1-17-001.

Unanimously approved as submitted (Johns, Edlao)

Item K-2  3rd Request for 60-Day Time Extension to the 180-day Processing Period for Conservation District Use Application (CDUA) OA-3266 to process Haseko request to utilize State-owned land for proposed drainage system improvements Ewa District, Island of Oahu, Subject Parcel TMK: (1) 9-1-11:002 and 003, c/o Sandra Wilhide Ishikawa Morihara Lau & Fong LLP, 400 Davis Pacific Center, 841 Bishop Street, Honolulu, Hawaii 96813, 808-528-4200

Unanimously approved as submitted (Johns, Edlao)

Item K-1  Conservation District Use Application (CDUA) MO-3376 for Kuleana Land Use Single Family Residence and Sustainable Agriculture located at Kiaao, Wailau Valley, Halawa, island of Molokai, TMK: (2) 5-9-005:007

Sam Lemmo of Conservation and Coastal Lands related that it was approved that a parcel used for residential and agriculture purposes has the right to continue those uses as presumably statute. This request is low key due to the relatively small structure, all self sufficient and obviously no road access. She plans to hike in on the trail to the residence. She went through the review process. Concerns were raised and addressed. She is here to seek your approval on the continued use of substandard conditions.

Sam Gon stated it seems clear the applicant is suppose to have those rights with the family who had those kuleana rights.

Unanimously approved as submitted (Edlao, Johns)

Unanimously approved as submitted (Edlao, Johns)

Item D-9  Forfeiture of General Lease No. S-4890, Millicent U. Crawford, Lessee, Maunalaha Homesites, Opu, Makiki, Oahu, TMK: (1) 2-5-24:07. (ODLO/AI)

Land Division Administrator, Mr. Russell Tsuji related that Ms. Crawford was going to have a relative take over the lease of the property.

Ms. Crawford requested if she could have until the end of the month to pay the rent and insurance. The tax office stated they will not charge her the real property tax because no one is on the property. She wants to pass the property on to her relatives.

Mr. Tsuji suggested deferring to March, but these legislations have a lot of restrictions with who can take over.

Chairman Young recommended withdrawing this and bringing it back lat

Unanimously approved as submitted (Johns, Edlao)

Item D-1  Consent to hire a consultant to design and implement a central database system to receive data from heterogeneous systems from multiple state agencies in order to comply with the reporting requirements of Section 5, Act 178, Session Laws of Hawaii 2006 (SLH 2006). (INFORMATION SYSTEMS/Arthur)

Item D-2  Amend Prior Board Action of February 10, 2006 (Item D-1), Set Aside to the Division of Forestry and Wildlife for addition to Puu Ka Pele Forest Reserve at Waimea, Kauai, Tax Map Keys: (4) 1-5-1:1 and (4) 1-5-3:9, 13, 16, 20, 22 and 27; and Game Reserve Purposes at Waimea, Kauai, Tax Map Keys: (4) 1-5-1:2 and (4) 1-5-3:7, 8, 10, 15, 17, 19, 21, 24, and 40.

Authorize the Division of Forestry and Wildlife to conduct a public hearing to add these lands into the Forest Reserve System. (ADMINISTRATION/Russell)

Item D-5  Grant of Term, Non-Exclusive Easement to William T. Sturgis,

Item D-6 Grant of Term, Non-Exclusive Easement to Thomas R. Brayton and Christine D. Brayton for Seawall Purposes, Lahaina, Maui, TMK: (2) 4-6-003:seaward of 05. (MDLO/Daniel)

Item D-10 Issuance of Quitclaim Deed to Goon Moon Lum, and Evelyn Sau Lan Wong Lum, Honolulu, Oahu; TMK: (1) 3-1-046:049. (ODLO/Barry)

Unanimously approved as submitted (Johns, Edlao)

Item J-1 Request for Renewal of Revocable Permits on the Islands of Oahu, Maui, and Hawaii.

Item L-1 Approval for Award of Construction Contract – Job No. F00CF54A, Individual Wastewater System Improvements At Wailua River State Park Opaekaa Falls, Wailua, Kauai, Hawaii


Unanimously approved as submitted (Johns, Edlao)

Item C-1 Request for Approval of the Design and Placement of Warning Signs on Improved Public Land. (Pursuant to Act 82, Session Laws Hawaii, 2003)

Paul Conry, Administrator of Forestry and Wildlife reported a change to the Sunshine law. After discussion with the Attorney General we will go ahead and approve the signs, but not approve the placement on those particular trails because they weren’t noted in the title. Therefore, we are asking the board to approve the signs. The changes are page 2 the amendments to the submittal would be item 3, 2nd paragraph line 2 would remove the phrase [and approval]. We ask the board to provide us with some feed back on the actual form we would be using in the future. We’re not asking for approval.

Chairman Young asked if the board will need to approve the placement of every sign on every trail?

Mr. Conry stated we are proposing to use it in the maps. Which will be the form and the process the board will use. Does this discussion meet the board’s needs for information and presentation? If that is agreeable then that will be the process we will use. We will
be back for the next board meeting and bring back the actual board submittal that lists the actual trails and the action specifically and have the maps attached for submittal.

Then Chairman Young queried is that required by statute where the board authorizes the specific placement of the signs as well?

Mr. Conry acknowledged, yes. The act does specifically state the board approves the placement. He agreed it would be cumbersome for us to go to every trail, but agreed the maps would suffice to full fill the intent of the trail.

Curt Cottrel, Na Ala Hele Program Manager added it’s a cumbersome act for staff. The reason the AG is so interested and supportive of this is once you approve the design and approves the placement then we determine the way the placement works for you. We have 137 locations statewide that need signs. This triggers the presumptive conclusion that the signs are adequate. Should the sign say flash flood and the person is injured or killed by a flash flood we have immunity because the signs have been deemed adequate through this rigorous process and by the board. So what it means is the user has a responsibility. Government has done everything it could do to warn them. The user now has a choice and the user makes a choice and something happens. It’s not government’s fault. That is why this is a potent act for State Parks, Na Ala Hele and City and County of Honolulu, who is now interested, too. Once we get this through we are paving the way for them.

Member Johns asked has there been discussion with Bob (Robert Toyofuku, representative of Consumer Lawyers of Hawaii)? Is the act being complied with through this process as you described?

Mr. Cottrel replied Bob was really helpful with the rules. He doesn’t have his comments on the map portion, but Bob wanted to give a consistent template placement. In terms of the plaintiff’s methods it’s just the design and placement. We are trying to agree on the placement. Where they are he didn’t know. Bob didn’t say anything negative.

Chairman Young stated there are three things we need to recommend on page two, number one, remove the words [in approval], we want to substitute the signed copy of the rules for exhibit 1 and we provided that. And on page six for the recommendations to strike in it’s entirety a recommendation. What we are asking as a board is to approve the design of the signs to the entrance to sites specific hazard and site specific management signs.

Staff is requesting the following changes:

1. Page 2, Item 3, second paragraph

   “Staff has selected two priority locations and have prepared two prototype maps for your review [and approval] that delineate the placement of the warranted signage”
2. The Board deleted recommendation #2)

[Approve the placement of the signs at Manoa Falls Trail and Kealakekua Bay State Park as depicted on the maps showing the placement of signs in Exhibit 3 and 4]

Unanimously approved as amended (Johns, Edlao)

Item C-2  Issuance of Revocable Permit No. FW-2007-01 to Palani Ranch Company, Inc., Kailua-Kona, North Kona, Hawaii, TMK (3)-7-4-002:007 and (3)-7-4-001: por. 003.

Unanimously approved as submitted (Pacheco, Johns)

Respectfully submitted,

[Signature]

Adaline Cummings

Approved for submittal:

[Signature]

RETER T. YOUNG
Chairperson
Department of Land and Natural Resources
14.8 OPEN SPACE
14.8.1 Introduction and Analysis
A vital part of the environment, open space is land that is basically not used for buildings or structures and is characterized by scenic beauty, existing openness, and natural conditions. It is the counterpart of development. Retained in its state of use, open space would maintain and/or enhance the conservation of needed or desired natural, scenic, or historical resources that might otherwise be permanently lost. It would also enhance the present or potential value of abutting or surrounding urban development.

Open space is used to maintain and/or provide forestry pursuits, water supply, fish and marine protection, wildlife and endemic plant preservation, recreational pursuits and visual and scenic amenities. Open space also demarcates potential natural hazard areas. Just as the use of open space is affected by development, so is the character and quality of development influenced by what is done with open space.

Three basic functions are served by open space. Positive human needs such as active and passive recreation amenities can be provided. The natural resource base such as air, water, soil and plants can be protected and enhanced. Economic development decisions, e.g. tourism, real estate values and development patterns, can be affected. The planning of open space is an integral part of any comprehensive planning consideration.

Other elements of the General Plan affect or are affected by this element. Together, these elements and their interrelationships form an overall picture of the County of Hawaii.

Open space on the island of Hawaii consists of lands zoned as Open by the County as well as those in the State Land Use Conservation District. The “Open” zoning district permits golf courses, with a use permit, some recreational facilities, and various public and utility-type facilities. There is currently no County zoning district that calls for land to be preserved in a largely natural state.

Various categories of open space areas have been designated according to use or amenities. Restricted watershed areas are strictly regulated in order to protect the island's essential water resources. Some of these are in close proximity and easy accessibility to development and without protection could be contaminated. All watershed areas are in forest reserves under the jurisdiction of the State Department of Land and Natural Resources.

Potential natural hazard areas are designated as open space for the welfare and safety of the public. These include areas that are highly susceptible to flooding, erosion, volcanic activity and tsunami inundation.

The following goals, policies, and standards are set forth to insure the protection and wise use of open space in the County of Hawaii.
14.8.2 Goals
(a) Provide and protect open space for the social, environmental, and economic wellbeing of the County of Hawaii and its residents.
(b) Protect designated natural areas.

14.8.3 Policies
(a) Open space shall reflect and be in keeping with the goals, policies, and standards set forth in the other elements of the General Plan.
(b) Open space in urban areas shall be established and provided through zoning and subdivision regulations.
(c) Encourage the identification, evaluation, and designation of natural areas.
(d) Zoning, subdivision and other applicable ordinances shall provide for and protect open space areas.
(e) Amend the Zoning Code to create a category for lands that should be kept in a largely natural state, but that may not be in the Conservation District, such as certain important viewplanes, buffer areas, and very steep slopes.

14.8.4 Standards
Open Space designations shall include:
(a) Forest Reserves
(b) Water Areas
(c) Potential Natural Hazard Areas
(d) Natural Areas and Reserves
(e) Open Space Recreation Areas
(f) Scenic Vistas and Viewplanes
(g) General Use Conservation Sub-zones with Compatible Uses
(h) Scientific Areas, including Habitats of Endemic Species
PHOTO 1: Photo directly facing the entrance to the Property. Person in photo is holding a 12-foot measuring stick.
PHOTO 2: Photo of entrance to Property from the Hawaii Belt Road, facing generally southeast.
Exhibit 107, 1905 Historic pictures of the Property
Exhibit 100 Newly planted woody orchard species, planted by the Petitioner(s) and pre-purchase existing non-conforming cultivated agricultural use areas on Middle lot in 2014.
Petitioner preparing an agricultural planting area on the North Lot in 2014 with his Kubot farm tractor.
Sweet Potato growing area 2017
Pineapple area 2017
Cultivated area 2014
Storage and processing structure accessory to the agricultural uses of the Property on the Middle lot and early potted plant nursery area 2017
Sept 17, 2015
State of Hawaii

Department of Land and Natural Resources
Office of Conservation and Coastal Lands
P.O. Box 621
Honolulu, Hawaii 96809

Subject: REQUEST FOR A DETERMINATION regarding non conforming land use on Tax Map Key (TMK's): (3) 2-9-003: 013, 029, 060 at Wailea, South Hilo, Hawaii

Dear Ms. Yasaka,

During the last year both I and OCCL have corresponded back and forth regarding modest non-conforming agricultural land uses that existed at the time of my purchasing the subject property in July of 2014. In those correspondences I pointed out that these modest non-conforming uses existed since around 1990-2. In those correspondences I also pointed that these properties have been previously used for sugar cane production up to around 1992. The use being agriculture on the subject parcels. It seems to me that according to HAR 13-5 this agricultural use is a non-conforming land use and such non-conforming agricultural use has existed since the property was designated to lie in the Conservation Resource zone.

The purpose of this letter is to seek a DETERMINATION from OCCL whether non-conforming agricultural land use on the subject parcels is allowable according to HAR 13-5. As noted earlier OCCL and I have exchanged correspondences over the last year as it regarded current existing non-conforming land uses on my property and I am comfortable with the communications from OCCL as it respects these existing modest uses. This request for a DETERMINATION is more as it respects the future possible lawful use of my property. A request for such a DETERMINATION is provided for in HAR 13-5.......

§13-5-30 Permits, generally. (a) Land uses requiring comprehensive review by the board are processed as board permits, management plans, or comprehensive management plans, and temporary variances. Departmental permits and emergency permits are processed by the department and approved by the chairperson. Site plans are processed by the department and approved by the chairperson or a designated representative. If there is any question regarding the type of permit required for a land use, an applicant may write to the department to seek a determination on the type of permit needed for a particular action.

While in the past I have applied for SPA’s for fruit trees and a garden (both seeming agricultural uses) on my property I did this believing that this was required by HAR 13-5. However today when I read HAR 13-5-7 it seems to me that I can use most of
my property, which portions were formerly used for agricultural use, to expand my fruit tree orchard and my gardening activities and perhaps even general agricultural uses without a SPA or CDUP as non-conforming agricultural land use and that such use would be lawful provided for in HAR 13-5. While my property is comprised of some 4.6 acres the area of my property which was formerly used for agriculture comprises 3.2 acres (ref. enclosed documents F31B field survey map and John Cross letter Sept 15, 2015). There exists a wooded gulch area on the North end of lot 060 that was never farmed of approx. .6 acres.

§13-5-7 Nonconforming uses and structures. (a) This chapter shall not prohibit the continuance, or repair and maintenance, of nonconforming land uses and structures as defined in this chapter.

"Nonconforming use" means the lawful use of any building, premises, or land for any trade, industry, residence, or other purposes which is the same as and no greater than that established prior to October 1, 1964, or prior to the inclusion of the building, premises, or land within the conservation district.

§183C-5 Nonconforming uses.

(a) Neither this chapter nor any rules adopted here under shall prohibit the continuance of the lawful use of any building, premises, or land for any trade, industrial, residential, or other purpose for which the building, premises, or land was used on October 1, 1964, or at the time any rule adopted under authority of this part takes effect. All such existing uses shall be nonconforming uses. Any land identified as a kuleana may be put to those uses which were historically, customarily, and actually found on the particular lot including, if applicable, the construction of a single family residence. Any structures may be subject to conditions to ensure they are consistent with the surrounding environment. [L 1994, c 270, pt of §1]

I do realize that HAR 13-5 requires the burden of proof would lie on me to prove the former agricultural use and its area but I have good evidence of that from the previous property owner who purchased the property from the sugar cane company around 1990-2. This use was also documented in the 2008 FONSI document that can be found at......


I am also enclosing at the end of this letter several photographs of survey and areal pictures that I have archived that show that my 3 TMK parcels were utilized for agricultural production for over 100 years.
The **DETERMINATION** that I request from OCCL is whether my use of my property for agricultural use requires a CDUP or SPA or whether this evidence of past non-conforming agricultural use is sufficient to allow me non-conforming agricultural use according to HAR 13-5 of up to 3.2 acres of my 4.6 acres of land (excluding the gulch portion on lot 060 and the narrow treed strip along the top of the ocean pali on all 3 lots) permitted on my property according to HAR 13-5? To be clear I do not intend to utilize my property in an illegal way. As OCCL's capacity as the administrative/enforcement department is the **determining** body for what evidence is sufficient in order to establish my lawful use of my property I am asking for a **DETERMINATION** whether this evidence provided herein is sufficient?

I have spoken to a representative of the former sugar cane company that sold this property in 1992 to the previous owner who subsequently sold it to me in 2014. This representative asserted to me that he had assisted another property owner, that the sugar cane company had similarly sold property to, in successfully defending their continued use of that property for non-conforming agricultural use which, at the time, was being opposed by OCCL.

Please be clear in your response. Also please clearly identify in your response that it is a **DETERMINATION**. I am respectful of the law and I will not use my property for any use that is not permitted in law.

Respectfully submitted by,

Ken Church
1905 survey map of agricultural use land with red box shown area of TMK's 3 2-9-003: 029, 060 (2015).
These portions are of a survey document that is on file at the C. Brewer & Co. Ltd. Office (Edmund C. Olson Trust No. 2) located in Papaikou, Hawaii.
Picture 1 of 4 following herein. 1953 survey map showing area of TMK’s 3 2-9-003: 029, 060 (2015).

These portions are of a survey document that is on file at the C. Brewer & Co. Ltd. Office (Edmund C. Olson Trust No. 2) located in Papaikou, Hawaii.
Picture 2 of 4 following herein. 1953 survey map of agricultural use land showing area of TMK’s 3 2-9-003: 029, 060 (2015).

These portions are of a survey document that is on file at the C. Brewer & Co. Ltd. Office (Edmund C. Olson Trust No. 2) located in Papaikou, Hawaii.
Picture 3 of 4 following herein. 1953 survey map legend showing the date of the 1953 picture of agricultural use land TMK’s 3 2-9-003: 029, 060 (2015). These portions are of a survey document that is on file at the C. Brewer & Co. Ltd. Office (Edmund C. Olson Trust No. 2) located in Papaikou, Hawaii.
1953 survey map of agricultural use land with red box showing area of TMK's 3 2-9-003: 029, 060 (2015).

These portions are of a survey document that is on file at the C. Brewer & Co. Ltd. Office (Edmund C. Olson Trust No. 2) located in Papaikou, Hawaii.
Archaeological Inventory Survey and Limited Cultural Assessment of TMKs: 3-2-9-03:13, 29, and 60
Wailea Ahupua‘a
South Hilo District
Island of Hawai‘i

PREPARED BY:
Michael Desilets, M.A.
Amy Kasberg, B.A.
and
Robert B. Rechtman, Ph.D.

PREPARED FOR:
Mike Shewmaker
McCully Works, Inc.
40 Kamehameha Ave.
Hilo, HI 96720

August 2004
Archaeological Inventory Survey and Limited Cultural Assessment of TMK: 3-2-9-03:13, 29, and 60

Wailea Ahupua‘a
South Hilo District
Island of Hawai‘i
EXECUTIVE SUMMARY

At the request of Mike Shewmaker, on behalf of McCully Works, Inc., Rechtman Consulting, LLC conducted an archaeological inventory survey and limited cultural assessment of three land parcels (TMK 3-2-9-03: 13, 29, 60) in Wailea ahupua'a, South Hilo District, Island of Hawai'i. The project area begins approximately 112 feet east (makai) of Hawaii Belt Road in Wailea and extend to the shoreline cliffs. The parcels incorporate a former railroad corridor along their western side. The project area is located squarely in what was traditionally known as Hilo-pali-Kū or ‘Hilo of the upright cliffs.’ The name is apt for such a treacherous coastline; sheer cliffs run from the Wailuku River to Waipi'o and beyond, broken only by a string of relatively narrow gulches pouring down from the slopes of Mauna Kea. Historic maps indicate that a railroad right-of-way once crossed the western portion of the project area. A search of the records on file with DLNR-SHPD revealed that the project area had not been previously surveyed for archaeological sites. Amy Kasberg, B.A., Michael Desilets, M.A., and Robert Rechtman, Ph.D. conducted fieldwork for the current project on May 17, 2004. Project area boundaries were clearly identifiable in the field, and the entire area was systematically and intensively examined using parallel north to south trending transects. Visibility was excellent across most of the project area. On site, SIHP Site 50-10-26-24212, was recorded during the field survey. This site includes two Historic Period railroad features: a railway grade section and a trestle abutment. Site 24212 is considered significant under Criteria D for the information it has yielded regarding early twentieth century sugar cane transportation infrastructure; however, as the current inventory survey project recorded Site 24212 in detail, no further work is recommended.

The fieldwork produced no evidence of traditional Hawaiian artifacts or features. Also, there is no evidence that the area is currently being accessed for the exercise of traditional and customary practices associated with any traditional cultural properties or resources. As part of the current study, the Office of Hawaiian Affairs and other organizations and individuals were contacted in an effort to obtain information about any potential traditional cultural properties and associated practices that might be present or have occurred in this portion of Wailea Ahupua'a. None of the organizations/individuals contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the current project area; nor did they provide any information indicating past or current use of the area for traditional and customary practices.
CONTENTS

INTRODUCTION .................................................................................................................. 1
PROJECT AREA DESCRIPTION ......................................................................................... 4
BACKGROUND .................................................................................................................. 6
Hilo-pali-Kū ........................................................................................................................ 6
Railroads ............................................................................................................................. 9
Previous Archaeology ....................................................................................................... 12
Māhele Land Awards and Grants ..................................................................................... 12
PROJECT EXPECTATIONS ............................................................................................... 13
FIELDWORK RESULTS ................................................................................................. 13
Feature 1 ............................................................................................................................ 15
Feature 2 ............................................................................................................................ 15
Site 24212 Discussion ........................................................................................................ 18
CONSULTATION ............................................................................................................. 18
CONCLUSIONS ................................................................................................................. 18
SIGNIFICANCE EVALUATION AND TREATMENT RECOMMENDATIONS .................... 20
REFERENCES CITED ....................................................................................................... 21

FIGURES

1. Project area location (portion of USGS 7.5 minute series Papaaloa and Papaikou
   quadrangles, HI). ............................................................................................................ 2
2. Tax Map Key 3-2-9-03 showing study parcels 13, 29, and 60. ..................................... 3
3. Central portion of project area, view to the south ........................................................... 5
4. Northern portion of project area, view to the east .......................................................... 5
5. Southern portion of project area, view to the east/southeast ........................................... 6
6. Project area showing camps near Hakalau. Adapted from a detail of the 1940 Hakalau
   Plantation Company Domestic Water Supplies Map (Courtesy of James McCully) .......... 8
7. Hawaii Consolidated Railway map of rail system as of November 1923
   (Annual Report 1926) .................................................................................................... 10
8. View of Kolekole Bridge after 1946 tsunami, center support washed out. 
   (Pacific Tsunami Museum Archives- Henrietta Carvalho Collection) ............................... 11
9. Detail of Tax Map Key 3-2-9-03 showing feature locations ............................................ 14
10. SIHP Site 24212 Feature 1, possible railroad grade, view to the south ......................... 15
11. Plan view of SIHP Site 24212 Feature 2 ......................................................................... 16
12. SIHP Site 24212 Feature 2, trestle abutment, view from above ....................................... 16
13. SIHP Site 24212 Feature 2, trestle abutment, view to the west ....................................... 17
14. SIHP Site 24212 Feature 2, trestle abutment, view to the east ....................................... 17
15. Profile of Hilo Railroad-Hawaii Consolidated Railway’s Hamakua Division
   showing locations and elevations of trestles and tunnels from Hilo to Pa‘auilo ............. 19
INTRODUCTION

At the request of Mike Shewmaker, on behalf of McCully Works, Inc., Rechtman Consulting, LLC conducted an archaeological inventory survey and limited cultural assessment of three land parcels (TMK 3-2-9-03: 13, 29, 60) in Wailea ahupua’a, South Hilo District, Island of Hawai’i (Figures 1 and 2). The purpose of this study is to document the presence of any historic properties (including traditional cultural properties and associated practices) that might exist within the 4.5-acre project area and assess the significance of any such resources. This report is intended to fulfill the requirements of the County of Hawai’i Planning Department and the Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD) with respect to permit approval for a proposed State land use boundary amendment.

In the Hawai’i Administrative Rules (HAR 13§13-275-2) that would govern the regulatory activities of the State Historic Preservation Division, a definition of historic property is provided.

“Historic property” means any building, structure, object, district, area, or site, including heiau and underwater site, which is over 50 years old.

This definition should not be confused with the definition of Historic Property contained in the Federal legislation and its implementing regulation (Section 106 of the National Historic Preservation Act and 36 CFR 800, respectively), where Historic Property is defined as a resource “listed or eligible for listing in the National Register of Historic Places.” The difference being that in the state-used definition ALL buildings, structures, objects, districts, areas, or sites older than fifty years are historic properties and need to be assessed as such. In the Federally used definition, ONLY those buildings, structures, objects, districts, areas, or sites that are determined to be significant are considered Historic Properties.

The criteria for the evaluation of significance contained in the Hawai’i Administrative Rules generally follows that which was promulgated by the Federal government, with the addition of Significance Criterion E, which is not contained in the Federal evaluation criteria. To be significant, the resource must possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following criteria:

A  Be associated with events that have made an important contribution to the broad patterns of our history;
B  Be associated with the lives of persons important in our past;
C  Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;
D  Have yielded, or is likely to yield, information important for research on prehistory or history;
E  Have an important value to the native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group’s history and cultural identity.
Figure 2. Tax Map Key 3-2-9-03 showing study parcels 13, 29, and 60.
A working definition of Traditional Cultural Property is as follows:

“Traditional cultural property” means any historic property associated with the traditional practices and beliefs of an ethnic community or members of that community for more than fifty years. These traditions shall be founded in an ethnic community’s history and contribute to maintaining the ethnic community’s cultural identity. Traditional associations are those demonstrating a continuity of practice or belief until present or those documented in historical source materials, or both.

The origin of the concept of Traditional Cultural Property is found in National Register Bulletin 38 published by the U.S. Department of Interior-National Park Service. “Traditional” as it is used, implies a time depth of at least 50 years, and a generalized mode of transmission of information from one generation to the next, either orally or by act. “Cultural” refers to the beliefs, practices, life-ways, and social institutions of a given community. The use of the term “Property” defines this category of resource as an identifiable place. Traditional Cultural Properties are not intangible, they must have some kind of boundary; and are subject to the same kind of evaluation as any other historic resource, with one very important exception. By definition, the significance of Traditional Cultural Properties should be determined by the community that values them.

PROJECT AREA DESCRIPTION

The project area consists of three adjoining parcels (TMK 3-2-9-03: 13, 29, and 60) that begin approximately 112 feet east (makai) of Hawaii Belt Road in Wailea and extend to the shoreline cliffs. The parcels incorporate a former railroad corridor along their western side (see Figure 2). The nearest major drainage is Kolekole Gulch, which is only a few hundred meters to the south. A smaller stream named Ka‘ahakini is also nearby and ultimately feeds into Kolekole Gulch near its mouth. An even smaller, unnamed gulch is just north of Ka‘ahakini and forms the northern boundary of the project area. Shoreline cliffs form the southern and eastern boundaries. Elevation within the project area ranges from 100 to 140 feet above sea level.

The project area is predominantly a mowed and highly maintained grass lawn with various landscaped vegetation along its perimeter (Figures 3, 4, and 5). Vegetation includes African tulip (Spathodea campanulata Beauv.), sword fern (Nephrolepis multiflora), maidenhair fern (Adiantum radianum), ironwood (Casuarina equisetifolia), guava (Psidium guajava), hala (Pandanus odoratissimus), autograph tree (Clusia rosea), banana (Musa spp.), papaya (Carica papaya L.), liliko‘i (Passiflora spp.), ti (Cordyline fruticosa (L.) A. Chev.), blue gum eucalyptus (Eucalyptus globus), ‘ape (Alocasia macrorrhiza, Xanthosoma robustum), bamboo (Bambus vulgaris var. aureo-variegata Hort.) and various types of ginger (Zingiberaceae), palms (Palmae) and grasses (Poaceae). The project area was sectioned off into thirds by two stands of vegetation that ran roughly east to west. The northern stand consists of bamboo and the southern of palms.

Terrain in the project area is smooth and slopes down to the east. A terrace is present in places along the western portion, and appears to be associated with past (prior to the current land owner) landfiling and slope altering activities. Soils within the project area are classified as ‘Hilo silty clay loam, 0 to 10 percent slopes’ (Sato et al. 1973:17). This soil type falls within the Hilo Series, which is described as “well-drained silty clay loams,”

These soils formed in a series of volcanic ash layers that give them a banded appearance. They are gently sloping to steep soils on uplands at an elevation ranging from near sea level to 800 feet. They receive from 120 to 180 inches of rainfall annually, and their mean annual soil temperature is between 72° and 74° F. The natural vegetation consists of hilo grass, californiagrass, guava, ohia, and tree fern. (Sato et al. 1973:17)
Figure 3. Central portion of project area, view to the south.

Figure 4. Northern portion of project area, view to the east.
BACKGROUND

This section of the report presents several classes of background information relevant to the project area and its surrounding region. Current understanding of traditional Hawaiian land-use is outlined along with an explanation of Historic Period modifications and exploitation. A historical overview of the Hilo Railroad-Hawaii Consolidated Railway is also presented. Prior archaeological studies conducted in and around the project area are then reviewed, followed by a discussion of relevant Land Commission Awards and Grants. The background information is then used in the following section to develop a set of expectations for the current survey.

Hilo-pali-Kū

The project area is located squarely in what was traditionally known as Hilo-pali-Kū or ‘Hilo of the upright cliffs.’ The name is apt for such a treacherous coastline. Sheer cliffs run from the Wailuku River to Waipi'o and beyond, broken only by a string of relatively narrow gulches pouring down from the slopes of Mauna Kea. Although travel along this coast was once difficult, the broad plateaus, or kula, between the gulches are very fertile as are the lush bottom-lands of the larger gulches. These areas once supported a large pre-contact Hawaiian population subsisting on crops such as taro, sweet potato, banana, and coconut. Other crops such as ‘awa, bamboo, and sugar cane were also cultivated on the kula lands. According to Handy and Handy (1972:537), much of the kula land along the nearby and comparable Hāmākua Coast was forested with kukui. This may have been the case for South Hilo as well. Early accounts provide some information on the South Hilo kula landscape in the early 1800s:
The light and fertile soil is formed by decomposing lava, with a considerable portion of vegetable mould. The whole is covered with luxuriant vegetation, and the greater part of it formed into plantations, where plantains, bananas, sugar-cane, taro, potatoes and melons, come to the greatest perfection. Groves of cocoa-nut and bread-fruit trees are seen in every direction, loaded with fruit, or clothed with luxuriant foliage. (Ellis in Handy and Handy 1972:539)

For North Hilo, which contains an identical environment:

The face of the country by which we sailed, was fertile and beautiful, and the population throughout considerable. The numerous plantations on the tops or sides of the deep ravines, or vallies, by which they were frequently interspersed, with the meandering streams running down them into the sea, presented altogether a most agreeable prospect. (Ellis in Handy and Handy 1972:539)

Accounts of Hāmākua to the north also speak of organized agriculture and habitation in the kula lands:

The land we passed in the forenoon rose in a steep bank from the water side and from thence the country stretched back with an easy acclivity for about four or five miles, and was laid out into little fields, apparently well cultivated and interspersed with the habitations of the natives. Beyond this the country became rugged and woody, forming mountains of great elevations. (Menzies in Handy and Handy 1972:537)

The lowland portion of South Hilo was clearly a region thriving with traditional Hawaiian habitation and cultivation. Like most other parts of Hawai‘i, introduced diseases and global economic forces would have a devastating impact on traditional life-ways in the early to mid-1800s. Due to its rugged coastline and many deep gulches, however, transportation difficulties were severe in South Hilo, North Hilo, and Hāmākua. This served to delay large-scale commercial exploitation of the kula lands. In the second half of the nineteenth century these problems were overcome and sugar cane plantations replaced subsistence agriculture and grazing as the dominant land use.

Within a few years of the 1876 Treaty of Reciprocity a number of new plantations were in production. According to Best (1978:123), the new plantations commonly extended some two to three miles inland from the coast. Elevations ranged from 250 feet above sea level along the shoreline bluffs to 2,000 feet above sea level at their western (mauka) limits. Ocean frontage could range from two to six miles. Railroads operating on steam and animal power were built on some plantations by 1887. Other plantations utilized flumes or cable railways to transport cane from the fields to the coastal mills. The redoubtable Claus Spreckles owned much of this acreage including both Hakalau and Wailea Plantations. By 1911, both these plantations were served by the newly built Hāmākua Division of the Hilo Railroad. Sugar production in the area weathered the partial destruction of the Hakalau Mill by a tsunami in 1946 and operations continued into the late twentieth century.

Throughout their productive existence, the Wailea and Hakalau plantations employed large numbers of immigrants and their Hawai‘i-born offspring. This labor force was housed in camps situated at various elevations within the plantations. Two camps, known collectively as the Wailea Camps, were located to the south and west of the current project area (Figure 6). The camp to the south of the project area housed workers employed at the Wailea Mill and was known as Wailea Japanese Camp (Maly 1994:A-18). One marked gravesite is present there and is under the jurisdiction of the State of Hawaii.

To the west of the project area was Spanish Camp. This site is now occupied by a greenhouse and residential structure. Interestingly, Spanish Camp abuts the unnamed Gulch that bounds the project area to the north. The region west (mauka) of Spanish Camp is reported to contain an area where Hawaiian families had graves (Maly 1994:A-18). Although most graves from the camps were probably disinterred (particularly the Japanese), interviews with former residents conducted by Kepā Maly suggest that some may still be present (Maly 1994:A18).
Figure 6. Project area showing camps near Hakalau. Adapted from a detail of the 1940 Hakalau Plantation Company Domestic Water Supplies Map (Courtesy of James McCully).
Railroads

Historic maps indicate that a railroad right-of-way once crossed the western portion of the project area; therefore, we briefly review the history of railroads in South Hilo, North Hilo, and Hamakua Districts.

The story of railroads in Hawai‘i is a study in the ebb and flow of economic forces and governmental policy. With the 1875 ratification of the Treaty of Reciprocity between the United States of America and the Hawaiian Kingdom, economic conditions were ripe for the development of many large-scale commercial enterprises in the islands. Among the products which could be exported to the United States free of tariff under the treaty were muscovado, brown, and all other unrefined sugar, meaning hereby the grade of sugar heretofore commonly imported from the Hawaiian Islands, and now known in the markets of San Francisco and Portland a "Sandwich Island Sugar," syrups of sugar-cane, molasses, and molasses (Article I, Treaty Of Reciprocity between the United States and the Hawaiian Kingdom, 1875).

These words would prove to have a profound impact on the economy, landscape, and ethnic composition of the Hawaiian Islands. Until this time, sugar was produced on a relatively small scale using labor-intensive methods of cultivation, harvesting, and transportation (Conde 1971:11). Crops and product were still transported by beast and cart. Now that Hawaiian sugar had free access to the American market, the cane plantations were poised to expand and modernize their operations. Railroad construction was one of the most important elements of governmental and private sector planning in this regard.

On the Island of Hawai‘i, the first major line to be constructed was in North Kohala District. Operated as the Hawaiian Railroad Company, the narrow-gauge line ran some 20 miles connecting Māhukona Harbor with Honolii Landing, Kohala Landing, and six sugar cane plantations (Conde 1971). The Hawaiian Railroad Company was the brainchild of one Samuel Gardner Wilder (1831-1888), already the owner of an inter-island steamship company and Minister of the Interior of the Hawaiian Islands. Wilder’s railroad operated continuously, with occasional changes in ownership and name, until truck hauling took over transportation in 1945. The North Kohala line, however, was envisioned as only the first step toward a much larger system connecting the cane fields of Kohala, Hamakua, and Hilo Districts with Hilo Harbor, the only protected deep-water port on the island. Although Wilder didn’t live to see it happen, rail lines eventually connected Hilo with plantations as far north as Pa‘auilo and with sugar, logging, and tourism operations in Puna District (Clark et al. 2001).

The Hilo Railroad Company

In 1898, Benjamin F. Dillingham planned a large sugar mill at ‘Ōla‘a (now Kea‘au) with its produce to be transported to Hilo via a railroad he would also construct—the Hilo Railroad. A 50 year charter for the Hilo Railroad Company was granted by the Republic of Hawaii in 1899. Under the charter, the Hilo Railroad Company was authorized to construct rail lines anywhere on the Island of Hawai‘i. Furthermore, government land was offered free of charge for the purposes of right-of-way, yards, or station areas (Best 1978:125). Following construction trends in the United States, Dillingham was determined to build both his internal Olaa Sugar Company tracks and the common carrier running to Hilo to standard gauge (4 ft 8½ in). This was to be the first and only standard gauge railroad in Hawai‘i.

Initial construction began in 1899 and by 1900 the grade had reached ‘Ōla‘a. By 1901 the Olaa Sugar Company tracks had been finished with production scheduled to begin in 1902. Other tracks were constructed in the following years as tourism to Kilauea and harvesting of mahogany, koa, and ʻōhiʻa above of Pāhoa became viable enterprises (see Clark et al. 2001:5-10).

In 1908 Hilo Railroad’s trunkline was expanded with construction of the Hamakua Division (Figure 7). The impetus for this new line was a stipulation in a Rivers and Harbors bill recently passed by the United States Congress. In exchange for construction of a breakwater in Hilo Bay, the Hilo Railroad was required to build a new wharf, a one-mile rail extension from Waiākea, and a 50 mile rail extension north to Honoka‘a Mill (the Hamakua Division). The extension to Honoka‘a would finally connect the sugar mills of South Hilo, North Hilo, and Hamakua with Hilo’s protected harbor.
The Hamakua Division

A detailed description of the construction and operation of the Hamakua Division can be found in Best (1978), from which much of the following is abstracted.

The first section of the Hamakua Division ran 12.7 miles from Hilo to Hakalau Mill, crossing many deep gulches and valleys along its route. Construction of the so-called Hakalau extension began in 1908 and was completed by 1911 at a cost of $800,000. Although the Hakalau extension went far over budget, the Hilo Railroad floated another $750,000 in authorized bonds and continued on to Pa'auilo. This 21 mile section proved even more difficult than the first, requiring the construction of 13 steel bridges, most of which were over 100 feet high (Best 1978:133). The highest bridge reached 193 feet and the longest spanned 1,006 feet. In all, fully 3,100 feet of tunnel was excavated, the longest single tunnel measuring 2,700 feet. By any measure of railroad aesthetics, the tunnels, turns, trestles, and rugged coastline of the Hamakua Division marked it as a breathtakingly beautiful railroad.

As might be expected, these engineering feats came at a cost. Following completion of the Pa'auilo section in 1913, the company reported a total cost of $3,500,000. This comes to a staggering $106,000 per mile. Indeed, expenditures by the Hilo Railroad Company during its 16 year existence totaled $6,036,105 for only 100 miles of line (Best 1978:139).

By 1915, Dillingham's railroad was in dire financial straits. Unable to pay bondholder coupons, Hilo Railroad Company soon went into receivership. It was thereupon purchased by the bondholders for $1,000,000 on March 1, 1916 and reorganized as the Hawaii Consolidated Railway. Additional engines and rolling stock were purchased over the next few years.
In 1920 the company attempted to capture a larger piece of the growing tourist business with its Scenic Express. It had long offered service to Glenwood for tourists visiting Kilauea, but motorbusses now dominated this route. The Hamakua coast, by contrast, was not easily accessible by automobile. Hawaii Consolidated Railway was therefore able to run passenger coaches profitably along the Hamakua Division with stops at scenic points.

The rise of the automobile, however, was a harbinger for the railroads. Passenger business declined precipitously in the early decades of the twentieth century. In 1920, 60,120 passengers were carried. In 1930 the number dropped to 77,894 and in 1936 to 16,681 (Best 1978:145-146). At this point, the remaining passenger cars were converted to other uses. The little passenger traffic which remained was hauled on custom-built railbusses. Passenger service saw a significant spike in the early 1940s due to war-time gas rationing and the presence of large numbers of servicemen. In 1943 passenger totals had rebounded to 103,635.

The automobile was also taking a toll on the railroad's industrial customers. As roads were improved and gasoline prices dropped, simple economics favored trucking over rail. The trend was clear at the time and is even more so from an historical perspective. Ironically, just as rail transportation was in the throes of decline, Hawaii Consolidated Railway was by 1945 almost out of debt for the first time since its inception. The great tsunami of 1946, however, would soon seal its fate.

End of the Railroad

On April 1, 1946 a tsunami triggered by an earthquake in the Aleutians slammed into Hawai'i's north shore. The Hawaii Consolidated Railway had received a fatal blow. Track along the waterfront was entirely washed out and the Hilo Station was a wreck. An entire span of the Wailuku Bridge was torn out and washed upriver. In the north, the center span of the Kolekole Bridge was destroyed (Figure 8). Water in Kolekole and Hakalau Gulches reached 37 feet (Klein et al. 1985:10). In addition to the outright destruction, the tsunami also damaged the foundations, bracing members, and struts of bridges in its path (e.g. Hakalau Bridge (Klein et al. 1985:10)). Needless to say, the Hamakua Division was out of business and total costs for repairs were estimated at $500,000.

Hawaii Consolidated put the question of rebuilding to a vote. Shippers were asked to decide the matter, and with the exception of Theo. H. Davies Ltd., they voted to ship by truck. The Hamakua Division would not be repaired.

Figure 8. View of Kolekole Bridge after 1946 tsunami, center support washed out. (Pacific Tsunami Museum Archives-Henrietta Carvalho Collection).
With the Hamakua Division officially defunct, Hawaii Consolidated Railway offered its right-of-way, bridges, and tunnels to the territorial division of highways and Hawai‘i County supervisors. In a bold act of short-sightedness, both agencies refused. Un-phased, Hawaii Consolidated liquidated its assets on December 26, 1946. The entire railroad was sold to Gilmore Steel & Supply Co. of San Francisco for a mere $81,000. Most of the bridges were dismantled and the rails were pulled up along the length of the Hamakua Division. Together with the remaining rolling stock, they were shipped to California as scrap metal. In the midst of the disassembly, the Division of Highways belatedly decided that Route 19 needed to be relocated and improved. It purchased the remaining bridges, plus some that were awaiting shipment in Hilo, for $302,723.53. Steel from the dismantled railroad bridges was used to widen the standing bridges for their new roles as highways. Five of the former Hamakua Division bridges remain in use today.

In Hilo, the damaged docks and track were repaired and rail service was continued to Olaa Sugar under lease from Gilmore Steel & Supply Co. Product was transported by train from Olaa Sugar until December of 1948, at which time the line was permanently closed. All remaining assets were sold to The Independent Ironworks of Oakland for scrap.

**Previous Archaeology**

Among the earliest archaeological work to be done in East Hawai‘i was that of the early twentieth century heiau researchers Thrum and Stokes (Thrum 1908, Stokes and Dye 1991). Neither investigator was able to identify heiau in the project area nor in the larger region between Honomulu and Hakalau. In the early 1930s, A.E. Hudson, working under the aegis of the Bishop Museum, also conducted archaeological investigations in East Hawai‘i (Hudson 1932). He found little in the region surrounding the project area, although he did note the presence of a .25 mile square area of taro terraces in the upper part of Hakalau Gulch (Hudson quoted in Maly 1994:A-15).

A search of archaeological reports filed with SHPD-DLNR was conducted as part of the background research for this project. No archaeological reports within the project area or in the surrounding land parcels were registered. In fact, no archaeological research has been reported for TMK 3-2-9-003 or TMK 3-2-8-015. As part of an environmental assessment for seismic retrofitting of Kolekole Bridge, however, an archaeological survey was performed at the base of Kolekole Gulch (Hammatt and Colin 1998). The project area consisted of “the slopes of Kolekole Gulch under and surrounding the Kolekole Bridge and approximately 100.0 feet of the slopes mauka and makai of the bridge” (Hammatt and Colin 1998:1). Square footings from the pre-1946 Kolekole Bridge were noted outside the project area and a cylindrical cement footing was observed in the middle of Kolekole Stream. No other cultural remains were observed.

One archaeological project (Walker and Rosendahl 1994a, 1994b) was completed in TMK 3-2-9-002, 004. This project involved the survey of some 595 acres between Hawaii Belt Road and the 1,500 foot elevation mark. The parcels were located on the northern side of Hakalau Gulch. Low-level aerial (helicopter) survey was conducted on some uncultivated portions of the area. Other uncultivated areas were inspected using “variable-coverage (partial to 100%) variable-intensity ground survey” (Walker and Rosendahl 1994b: 2). Walker and Rosendahl report that the project area had been extensively modified in historic times for sugar cane cultivation. For this reason, no archaeological sites or “significant cultural materials of any kind” were found (Walker and Rosendahl 1994b:2) (Walker and Rosendahl 1994b:2).

**Māhele Land Awards and Grants**

A review of historic documents associated with the project parcels indicates that no Land Commission Awards are present in or near the project area. However, the northern and central portions of the project area were originally granted to one Na‘ai in 1852 and 1855 (Grants 803 and 1874 respectively). The southernmost parcel within the project area was previously owned by Wailea Milling Company, Ltd. Historic maps also indicate that Hakalau Plantation Company and S. B. Hele‘ia deeded portions of a former railroad right-of-way along the western project area boundary to Hilo Railroad Company in 1910.
PROJECT EXPECTATIONS

Based on the background information summarized above, a set of archaeological expectations for the project area can be formulated. Historical data indicate that the general area was part of the heavily exploited traditional Hawaiian kula lands. For the last 100 years, however, the area has been utilized for sugar cane cultivation and associated transportation and employee housing infrastructure. It is likely that these historic era modifications have largely destroyed any traditional Hawaiian features once present in the project area. The extreme coastal fringe and the small gulch to the north may have been unaffected by these disturbances. The gulch, however, is very steep-sided and descends directly to a rocky streambed. It is a very unsuitable place for traditional Hawaiian cultivation or habitation.

Perhaps the most important disturbance to the project area was the construction of the Hamakua Division of the Hilo Railroad. This construction effort probably involved significant landscape modification to the western and central portions of the project area. Once the railroad was built, the project area was effectively cut off from the western (mauka) lands. The project area probably received little impact then until the railroad was scrapped in 1946. More recently, the current landowner claims to have significantly modified the project area landscape. This was accomplished primarily by filling in the western and central regions, but also included the planting of a variety of shrubs and trees.

It is expected that remains associated with historic sugar cane cultivation, transportation, and employee housing will be the most likely finds in the project area. These remains may be concentrated in the western and central portions of the area. Traditional Hawaiian agricultural and habitation features are unlikely to have survived historic disturbance. If present, they may include stone-constructed mounds, platforms, heiau, or walls. These would likely be found in the lesser-impacted eastern portion of the project area.

FIELDWORK RESULTS

Amy Kasberg, B.A. and Michael Desilets, M.A. conducted fieldwork for this project on May 17, 2004, under the supervision of Robert Rechtman, Ph.D. Project area boundaries were clearly identifiable in the field. The entire area was systematically and intensively examined using parallel north to south trending transects at 15 meter spacing. Visibility was very good across most of the project area, with dense vegetation present only along the eastern cliff-line.

Systematic survey of the subject parcels produced one site—SIHP Site 50-10-26-24212. The site includes two Historic Period railroad features (Features 1 and 2). These include a possible railroad grade section and a railroad trestle abutment. They were both recorded in the northwestern part of the project area (Figure 9). These features are described in detail below.

The survey produced no evidence of traditional Hawaiian artifacts or features. Also, there is no evidence that the area is currently being accessed for the exercise of traditional and customary practices associated with any traditional cultural properties or resources.
Figure 9. Detail of Tax Map Key 3-2-9-03 showing feature locations.
SIHP Site 21212 Feature 1

Feature 1 is a possible remnant of the former Hilo Railroad-Hawaii Consolidated Railway railroad grade (Figure 10). It is located in the northern portion of the project area (see Figure 9). The section measures 10.0 to 15.0 meters in length (north-south) and approximately 4.0 meters in width. Feature 1 is in an area that has been extensively landscaped and filled in modern times, so it is doubtful whether this possible railroad grade is in its original state. Tax Map Keys and U.S. Geologic Survey maps, however, do show the rail corridor as being in this location. No surface remains were observed on Feature 1 or in the surrounding area.

![Figure 10. SIHP Site 24212 Feature 1, possible railroad grade, view to the south.](image)

SIHP Site 24212 Feature 2

Feature 2 is a stone and concrete railroad abutment (Figures 11, 12, 13, and 14). This feature is located at the northern boundary of the project area (see Figure 9). It is situated near the bottom of a deep, unnamed gulch that leads to the ocean. The main body of the abutment is semi-circular in cross-section and runs east to west, parallel with the gulch. It is composed of cemented pāhoehoe cobbles and boulders and measures 16.6 meters long (east-west) by 1.9 meters wide (north-south) and stands 180 centimeters high. At its western extremity, the feature exhibits a raised section measuring 2.9 meters long (north-south) by 0.6 meters wide (east-west) and stands 170 centimeters high (see Figure 13). The raised portion is composed of stacked and faced, medium-sized, square-cut pāhoehoe cobbles. Concrete is present between the stones. The top of this segment slopes to the east at an approximately 45° angle.

A tire and two pieces of unidentified rusted metal were recorded to the immediate south of Feature 1, nestled between the feature and the southern gulch slope.
Figure 11. Plan view of SIHP Site 24212 Feature 2.

Figure 12. SIHP Site 24212 Feature 2, trestle abutment, view from above.
Figure 13. SIHP Site 24212 Feature 2, trestle abutment, view to the west.

Figure 14. SIHP Site 24212 Feature 2, trestle abutment, view to the east.
SIHP Site 24212 Discussion

From the background research, we know that the Hāmākua Division of the Hilo Railroad-Hawaii Consolidated Railway ran through the western portion of the project area, entering from a parcel to the south and exiting across a minor gulch to the north. A terrace (Feature 1) on the western slope of the project area is situated in the approximate location of the railroad grade. It is therefore very likely that this terrace is a remnant of the historic Hāmākua Division. Alternatively, it is possible that past land use associated with sugarcane cultivation by prior owners may have resulted in modified portions of the property in this vicinity. At present, it is not clear whether those earlier actions have entirely obscured the original Hāmākua Division grade.

Another railroad related feature was identified in the gulch that bounds the project area to the north. Feature 2 is in the approximate position at which the railroad crosses this small, unnamed gulch. It is interpreted as a possible trestle abutment. The original trestle, due to its elevation, likely survived the tsunami of 1946. Flood levels at Kolekole Gulch to the south and Hakalau Gulch to the north reached 37 feet above sea level (Klein et al. 1985:10). Given that this gulch is smaller and narrower, the water level likely reached an even higher elevation. Even if the surge water reached as high as the abutment, however, its force at this point would be greatly reduced. In this regard, it is important to note that the two trestles (Waikuku and Kolekole) along the Hāmākua Division that sustained the greatest damage from the tsunami were based at or very near sea level (Figure 15). It seems unlikely that the tsunami of 1946 destroyed the subject trestle, as it is situated some 50 feet or more above sea level.

A more likely scenario is that the trestle was removed either during initial deconstruction of the line by Gilmore Steel & Supply Co., or else later by the Division of Highways. The tire and metal remains may have been thrown over the bank from above or transported down the gulch any time in the last 100 years. It is even possible that they are discarded material from Spanish Camp, which was located only a few hundred feet upstream. In any case, they retain little integrity and have no clear association with the former railroad or camp.

CONSULTATION

As part of the current study, the Office of Hawaiian Affairs (Ululani Sherlock) and Kepā Maly (Kumu Pono Associates) were contacted in an effort to obtain information about any potential traditional cultural properties and associated practices that might be present or have occurred in this portion of Wailea Ahupua‘a. Neither had any specific information relative to this project area, however, the Office of Hawaiian Affairs suggested we contact the Laupāhoehoe Hawaiian Civic Club. To that end, we contacted Lucille Chung and Walter Victor, who in turn recommended that we contact Jack or Waichi Ouye, Yukio Takaya, or Lorraine Mendoza. Lorraine in turn suggested contacting Kiyoshi Kubo and Masaichi Chinen. Interviewees remembered that the railroad ran across the property until the 1946 tsunami destroyed the Kolekole Bridge. On the adjacent property to the Hilo side of the study area there was a pig farm in the gulch used by camp residents and a trail that accessed the shore. Fisherman used this trail and there was good fishing immediately shoreward of the study area.

None of the organizations/individuals contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the current project area; nor did they provide any information indicating past or current use of the area for traditional and customary practices.

CONCLUSIONS

Systematic survey of three parcels (TMK 3-2-9-03: 13, 29, 60) produced no evidence of traditional Hawaiian remains or evidence that the area was currently being accessed for the exercise of traditional and customary practices.

One historic era site—SIHP Site 24212, was recorded. The site contains two features associated with the Hamakua Division of Hilo Railroad-Hawaii Consolidated Railway and were recorded in the northwestern portion of the project area. One is a possible section of railroad grade and the other is a railroad trestle abutment. The features were in active use by the railroad from 1911 to 1946. Their primary function was to facilitate the transport of raw sugar from the many mills along the Hilo and Hāmākua Coasts to the harbor at Hilo Bay. In later years, they also served the secondary function of facilitating tourism.
Figure 15. Profile of Hilo Railroad-Hawaii Consolidated Railway’s Hamakua Division showing locations and elevations of trestles and tunnels from Hilo to Pa‘auilo.
SIGNIFICANCE EVALUATION AND TREATMENT RECOMMENDATIONS

The above-described archaeological site is assessed for its significance based on criteria established and promoted by DLNR-SHPD and contained in the Hawai'i Administrative Rules 13§13-284-6. This significance evaluation should be considered as preliminary until DLNR-SHPD provides concurrence. For a resource to be considered significant it must possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following criteria:

A  Be associated with events that have made an important contribution to the broad patterns of our history;

B  Be associated with the lives of persons important in our past;

C  Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;

D  Have yielded, or is likely to yield, information important for research on prehistory or history;

E  Have an important traditional cultural value to the native Hawaiian people or to another ethnic group of the state due to associations with traditional cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group’s history and cultural identity.

Site 24212 is considered significant under Criteria D for the information it has yielded regarding early twentieth century sugar cane transportation infrastructure. As the current inventory survey project recorded Site 24212 in detail, however, no further work is recommended.

In the unlikely event that archaeological resources are encountered during future development activities at TMK 3-2-9-03: 13, 29, and 60, work in the immediate area of the discovery should be halted and DLNR-SHPD contacted as outlined in Hawaii Administrative Rules 13§13-275-12.
REFERENCES CITED

Annual Report

Best, G.

Clark, M., R. Rudolph, and R. Rechtman

Conde, J.

Ellis, W.

Hammatt, H. and B. Colin

Handy, E., and E. Handy

Hudson, A.

Klein, G., M. Koob, and D. Lee

Maly, K.

Menzies, A.

Stokes, J.F.G., and T. Dye

Thrum, T.G.

Walker, A., and P. Rosendahl


Wolfe, E., and J. Morris
December 22, 2004

Robert Rechtman, Ph.D.
Rechtman Consulting Inc.
HC 1 Box 4149
Kea'au, Hawaii 96749

Dear Dr. Rechtman:

SUBJECT: Chapter 6E-42 Historic Preservation Review, Replacement Pages for: “Archaeological Inventory Survey and Limited Cultural Assessment of TMK 3-2-9-03:13, 29, 60” (RC 0247)
Ahupua'a of Wailea, South Hilo, Hawaii Island
TMK: (3) 2-9-003:013, 029, 060

Thank you for submitting the above mentioned revised report for our review, which we received on September 3, 2004. The report was originally submitted as an Archaeological and Cultural Assessment, however, since a historic property was identified during the survey (Site No. 50-10-26-24212), the report needed to be submitted as an Inventory Survey, subject to review under Hawaii Administrative Rules (HAR) §13-276.

Site 24212 consists of portions of a possible railroad grade section and trestle abutment, and is assessed as significant under Criterion D for the information it has yielded regarding early twentieth century sugar cane transportation. No further work is recommended for the 4.5-acre project area.

We agree with your assessment and recommended treatment. We consider the report to be adequate to meet the requirements of HAR §13-276 and accept it as final. If you have any questions about this review, please contact MaryAnne Maigret in our Hawaii Island office at (808) 327-3690 or Dr. Sara Collins at (808) 692-8026

Aloha,

Melanie A. Chinen, Administrator
State Historic Preservation Division

MM:jen

C: Christopher J. Yuen, Director, Hawaii Pinge, 101 Pauahi St, Ste 3, Hilo, HI 96720-3043
January 24, 2005

Brian T. Nishimura
Planning Consultant
101 Aupuni Street, Ste. 217
Hilo, Hawaii 96720

Dear Mr. Nishimura:

Subject: James McCully
Petition for District Boundary Amendment
TMK: (3) 2-9-003: 013, 029 & 060
Wailea, South Hilo District, Island of Hawaii

This letter serves to advise you of the approval status of the Archaeological Inventory Survey and Limited Cultural Assessment of TMKs: 3-2-9-03:13, 29, and 60; Wailea Ahupua’a, South Hilo District, Island of Hawai‘i, and also to provide you with additional information concerning the cultural assessment aspect of the study.

Background

The report was initially submitted to the State Department of Land and Natural Resources - Historic Preservation Division (“DLNR-SHPD”) on July 16, 2004 under the title Archaeological and Limited Cultural Assessment of TMK: 3-2-9-03:13, 29, and 60; Wailea Ahupua’a, South Hilo District, Island of Hawai‘i. It was acknowledged by letter dated August 27, 2004.

This letter states that the information presented, which was intended to satisfy the requirements of the County of Hawai‘i Planning Department and DLNR-SHPD with respect to permit approval for a proposed State land use district boundary amendment, “is generally adequate for predicting the kinds of historic properties that might be found during the survey” and that the “background information and previous archaeological research is likewise sufficient.” The letter also states that “[a]dditionally, the presence of traditional Hawaiian remains or evidence that the area was currently being accessed for the exercise of traditional and customary practices was found to be negative.”

Due to the presence of one historical site (SIHP Site 50-10-26-24212, a possible railroad grade station and a railroad trestle abutment), the report had to be revised and resubmitted as an Archaeological Inventory Survey (and not an Assessment).

The report was revised to reflect the requested changes and resubmitted to DLNR-SHPD on September 3, 2004. It was acknowledged by letter dated December 22, 2004. The letter states that DLNR-SHPD considers “the report to be adequate to meet the requirements of HAR §13-276 and accept it as final.”
Cultural Assessment

In relation to the archival and documentary research that was conducted for the Archaeological Inventory Survey, archival and documentary information was reviewed for the preparation of the Cultural Assessment as well. This research did not reveal any documentation of any previous or ongoing traditional and customary practices. The area was historically known as Hilo-pali-Kū (Hilo of the upright cliffs) and there are a few accounts that indicate that this area, which encompasses the sheer cliffs stretching along the Hāmākua Coast from the Wailuku River to Waipiʻo and beyond, once supported a large Precontact Hawaiian population that subsisted on crops such as taro, sweet potato, banana, and coconut. Other agricultural resources such as 'āwa, bamboo, and sugarcane were also cultivated on the kula lands that stretched from South Hilo to Hāmākua. In the second half of the nineteenth century, the transportation difficulties that had delayed the large-scale commercial exploitation of the kula lands were overcome and sugarcane plantations replaced subsistence agriculture and grazing as the dominant land use.

In an effort to identify cultural resources associated with the Petition Area, contact was made with Ululani Sherlock of the Office of Hawaiian Affairs (OHA) and Kepā Maly of Kumu Pono Associates in June of 2004. They were contacted in an effort to obtain information about any potential traditional cultural properties and associated practices that might be present or have occurred in this portion of the Wailea Ahupuaʻa. Neither contact had any specific information regarding this Petition Area. However, OHA suggested that the Laupāhoehoe Hawaiian Civic Club be contacted as they might have additional information. Lucille Chung and Walter Victor were contacted and they, in turn, suggested that Jack or Waichi Ouye, Yukio Takaya and Lorraine Mendoza be contacted. Lorraine Mendoza recommended that Kiyoshi Kubo and Masaichi Chinen be contacted. All calls were made between June and July, 2004.

Interviewees recalled that the railway used to run across the property until the Kolekole Bridge was destroyed by the tsunami of 1946. On the adjacent property to the south (Hilo-side), there used to be a pig farm that was used by camp residents and a trail that accessed the shore. This trail allowed the residents and local fishermen to access the shoreline below the pali that bounds the property to the east. This trail was not located on the subject property nor did it cross the subject property.

None of the organizations or individuals that were contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the Petition Area; nor did they provide any information indicating past or current use of the area for traditional and customary practices. It is unlikely that there are any traditional and customary practices occurring in the Petition Area as the lands were utilized for sugarcane cultivation and associated transportation for over 100 years. Any traditional Hawaiian features that may have been associated with former cultural practices that may have occurred in the Petition Area would have been destroyed by the sugarcane cultivation and related uses.

Please do not hesitate to contact me should you have any additional questions.

Sincerely,

Robert Rechtman, Ph.D.
Principal Archaeologist
December 22, 2004

Robert Rechtman, Ph.D.
Rechtman Consulting Inc.
HC 1 Box 4149
Kea'au, Hawaii 96749

Dear Dr. Rechtman:

SUBJECT: Chapter 6E-42 Historic Preservation Review, Replacement Pages for:
"Archaeological Inventory Survey and Limited Cultural Assessment
of TMK 3-28-03:13, 29, 60" (RC 0247)
Ahupu'a of Wailea, South Hilo, Hawaii Island
TMK: (3) 2-9-003:013, 028, 060

Thank you for submitting the above mentioned revised report for our review, which we received on September 3, 2004. The report was originally submitted as an Archaeological and Cultural Assessment, however, since a historic property was identified during the survey (Site No. 50-10-26-24212), the report needed to be submitted as an Inventory Survey, subject to review under Hawaii Administrative Rules (HAR) §13-276.

Site 24212 consists of portions of a possible railroad grade section and trestle abutment, and is assessed as significant under Criterion D for the information it has yielded regarding early twentieth century sugar cane transportation. No further work is recommended for the 4.5-acre project area.

We agree with your assessment and recommended treatment. We consider the report to be adequate to meet the requirements of HAR §13-276 and accept it as final. If you have any questions about this review, please contact MaryAnne Maigret in our Hawaii Island office at (808) 327-3690 or Dr. Sara Collins at (808) 692-8026

Aloha,

Melanie A. Chinen, Administrator
State Historic Preservation Division

MMjen

LOG NO: 2004.3657
DOC NO: 04122MM09

C: Christopher J. Yuen, Director, Hawaii Plng, 101 Pauahi St, Ste 3, Hilo, HI 96720-3043
January 24, 2005

Brian T. Nishimura
Planning Consultant
101 Aupuni Street, Ste. 217
Hilo, Hawaii 96720

Dear Mr. Nishimura:

Subject: James McCully
Petition for District Boundary Amendment
TMK: (3) 2-9-003: 013, 029 & 060
Wailea, South Hilo District, Island of Hawaii

This letter serves to advise you of the approval status of the Archaeological Inventory Survey and Limited Cultural Assessment of TMKs: 3-2-9-03: 13, 29, and 60; Wailea Ahupua’a, South Hilo District, Island of Hawai‘i, and also to provide you with additional information concerning the cultural assessment aspect of the study.

Background

The report was initially submitted to the State Department of Land and Natural Resources - Historic Preservation Division (“DLNR-SHPD”) on July 16, 2004 under the title Archaeological and Limited Cultural Assessment of TMK: 3-2-9-03: 13, 29, and 60; Wailea Ahupua’a, South Hilo District, Island of Hawai‘i. It was acknowledged by letter dated August 27, 2004.

This letter states that the information presented, which was intended to satisfy the requirements of the County of Hawai‘i Planning Department and DLNR-SHPD with respect to permit approval for a proposed State land use district boundary amendment, “is generally adequate for predicting the kinds of historic properties that might be found during the survey” and that the “background information and previous archaeological research is likewise sufficient.” The letter also states that “[a]dditionally, the presence of traditional Hawaiian remains or evidence that the area was currently being accessed for the exercise of traditional and customary practices was found to be negative.”

Due to the presence of one historical site (SIHP Site 50-10-26-24212, a possible railroad grade station and a railroad trestle abutment), the report had to be revised and resubmitted as an Archaeological Inventory Survey (and not an Assessment).

The report was revised to reflect the requested changes and resubmitted to DLNR-SHPD on September 3, 2004. It was acknowledged by letter dated December 22, 2004. The letter states that DLNR-SHPD considers “the report to be adequate to meet the requirements of HAR §13-276 and accept it as final”.

RC-0247
Cultural Assessment

In relation to the archival and documentary research that was conducted for the Archaeological Inventory Survey, archival and documentary information was reviewed for the preparation of the Cultural Assessment as well. This research did not reveal any documentation of any previous or ongoing traditional and customary practices. The area was historically known as Hilo-pali-Kū (Hilo of the upright cliffs) and there are a few accounts that indicate that this area, which encompasses the sheer cliffs stretching along the Hāmāka Coast from the Wailuku River to Waipi’o and beyond, once supported a large Precontact Hawaiian population that subsisted on crops such as taro, sweet potato, banana, and coconut. Other agricultural resources such as ‘awa, bamboo, and sugarcane were also cultivated on the kula lands that stretched from South Hilo to Hāmāka. In the second half of the nineteenth century, the transportation difficulties that had delayed the large-scale commercial exploitation of the kula lands were overcome and sugarcane plantations replaced subsistence agriculture and grazing as the dominant land use.

In an effort to identify cultural resources associated with the Petition Area, contact was made with Ululani Sherlock of the Office of Hawaiian Affairs (OHA) and Kepā Maly of Kumu Pono Associates in June of 2004. They were contacted in an effort to obtain information about any potential traditional cultural properties and associated practices that might be present or have occurred in this portion of the Wailea Ahupua’a. Neither contact had any specific information regarding this Petition Area. However, OHA suggested that the Laupāhoehoe Hawaiian Civic Club be contacted as they might have additional information. Lucille Chung and Walter Victor were contacted and they, in turn, suggested that Jack or Waichi Ouye, Yukio Takaya and Lorraine Mendoza be contacted. Lorraine Mendoza recommended that Kiyoshi Kubo and Masaichi Chinen be contacted. All calls were made between June and July, 2004.

Interviewees recalled that the railway used to run across the property until the Kolekole Bridge was destroyed by the tsunami of 1946. On the adjacent property to the south (Hilo-side), there used to be a pig farm that was used by camp residents and a trail that accessed the shore. This trail allowed the residents and local fishermen to access the shoreline below the pali that bounds the property to the east. This trail was not located on the subject property nor did it cross the subject property.

None of the organizations or individuals that were contacted had any information relative to the existence of traditional cultural properties in the immediate vicinity of the Petition Area; nor did they provide any information indicating past or current use of the area for traditional and customary practices. It is unlikely that there are any traditional and customary practices occurring in the Petition Area as the lands were utilized for sugarcane cultivation and associated transportation for over 100 years. Any traditional Hawaiian features that may have been associated with former cultural practices that may have occurred in the Petition Area would have been destroyed by the sugarcane cultivation and related uses.

Please do not hesitate to contact me should you have any additional questions.

Sincerely,

Robert Rechtman, Ph.D.
Principal Archaeologist