MEMORANDUM

TO: Genevieve Salmonson, Director
   Office of Environmental Quality Control

FROM: Dierdre S. Mamiya, Administrator
       Land Division, Department of Land and Natural Resources

SUBJECT: Final Environmental Assessment (FEA)/Finding of No Significant Impact (FONSI) for Allen Single Family Residence (SFR) in the Conservation District at TMK Parcel: (4) 4-2-03:02, located at Wailua, Kawaihau District, Kauai

The Department of Land and Natural Resources has reviewed the Allen's revised Conservation District Use Application (CDUA) KA-3121 and Final Environmental Assessment (FEA) for the construction of a Single Family Residence. The Draft Environmental Assessment (DEA) for CDUA KA-3045 was published in the August 8, 2001 OEQC Environmental Notice for the subject project. The FEA is being submitted to OEQC. We have determined that this project will not have significant environmental effects, and have therefore issued a FONSI. Please publish this notice in the February 23, 2003 OEQC Environmental Notice.

We have enclosed four copies of the FEA and CDUA KA-3121 for the project. The OEQC Bulletin Publication Form is attached. Comments on the draft EA were sought from relevant agencies and the public, and were included in the FEA.

Please contact Dawn Hegger of our Planning Branch at 587-0380 if you have any questions on this matter.

Enclosures

cc: Greg Allen
(ALLEN SINGE FAMILY RESIDENCE)

CDUA Application
For
A Single Family Residence
TMK: (4) 4-2-03: 02

Owner:
Greg & Joanne Allen

August 2002
CDUA Application
for
A Single Family Residence
TMK: (4) 4-2-03:02

OWNER:
Greg & Joanne Allen

JAN 2003
SECTION I AND SECTION II

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P.O. BOX 621
HONOLULU, HAWAII 96809

CONSERVATION DISTRICT USE APPLICATION FORM

FOR BLNR USE ONLY
Reviewed by
Date
Accepted by
Date
Decision/Title No.
180-Day Exp.
KES Required
PH Required
Board Approval
Disapproved

SUMMARY PAGE

I. LANDOWNER
(If State land, to be filled
by State of Hawaii or
government entity with
management control over
parcel.)

Name
Greg & Joanne Allen

Address
161 Wallus Road
Wallus, HI 96766

Telephone No. (808) 245-4555

SIGNATURE

DATE 1/23/03

NOTE: Signature of an
authorized representative
of DLNR under this section
is not to be construed as
an approval or as an
Appliation which shall be
substituted separately with
the appropriate fee. Also,
for private lands with multiple
owners, the application shall
be signed by landowners who's
property interests (apportioned
of equal to 83% of the first
ownership of the parcel(s).

II. APPLICANT

Name
Agor Architecture

Address
4374 Kukui Grove # 204
Liliuokalani Gardens

Telephone (808) 245-4550

Interest in Property

Project Architect
(Indicate interest in property:
Submit written evidence of this
interest.)

SIGNATURE

Date 1/23/03

AGENT

Name

Address

Telephone No.
Owner's Authorization

Greg & Joanne Allen
161 Wailua Road
Wailua, Hi 96746

September 27, 2002

TO WHOM IT MAY CONCERN:

We would like to confirm that the members of your firm, Agor Architecture, are hereby authorized to act as our representative and sign all necessary documents on our behalf as owners relating to the Conservation District Use Application and permits from the County of Kauai relative to the construction of a single family dwelling on TMK: (4) 4-2-03:02.

Sincerely,

Greg Allen, Owner
III. TYPE OF PERMIT

This application is for a Board Permit. This applicant is requesting permission to build a single family residential structure on a property that once had a single family residence.

IV. LAND PARCEL LOCATION

Island: Kauai
County: Kauai
District: Kauai
Tax Map Key: 4-2-03: 02
Area of Parcel: 33,183 Square Feet
Owned By: Greg & Joanne Allen

V. SUMMARY OF PROPOSED IDENTIFIED LAND USE

The Identified Land Use for this application falls under Section 13-5-24, R-8, (D-1). Section 13-5-24 pertains to Resource Sub zone. R-8, (D-1) pertains to single family residences. This application is for a single family residence. The home is elevated so that the first floor is 17 ft above MSL to meet flood zone requirements. It is a 4 bed, 3 bath residence with 1 living room, 1 office, 1 kitchen and a theatre room. The house will be powered by solar energy. A well will provide water to the property. A pool will be located partially under and partially beyond the footprint of the house. This is required by the county to meet its lot coverage requirements. The house is located in an area that in about 1967 was designated as Poliahu State Park. It is also on Wailua river along the north bank. This lot has had several homes on it. The last was left to nature after hurricane Iwa in 1982. There have been two previous CDUA 3024, which was incomplete, and CDUA 3045, which was withdrawn. The land adjoining this lot on the up riverside is leased for cattle ranching. The land adjoining this lot on the down riverside is a narrow driveway. The easement agreement for the driveway was purchased in the 1950's. To the north of the lot is a rock cliff and in one area a steep dirt hill beyond the hill is Kuamoo road. The lot is surrounded by hill and vegetation on all sides. The only glimpse the public can get of the lot is while traveling down Kuamoo road. Someone in a tall truck one can see the down river corner of the lot for a second if they look over the 50 ft long guardrail. In a boat one can see glimpses of the lot through the vegetation along Wailua River.
SECTION VI

FINAL ENVIRONMENTAL ASSESSMENT

FOR

A SINGLE FAMILY RESIDENCE FOR
GREG & JOANNE ALLEN

AT

TMK: (4) 4-2-03: 02

Jan 2003
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VI. ENVIRONMENTAL REQUIREMENTS

1. IDENTIFICATION OF APPLICANTS:

   Project Architect:
   AGOR ARCHITECTURE
   4374 KUKUI GROVE, SUITE 204
   LIHUE, KAUAI, HAWAII 96766
   Phone: (808) 245-4550  Fax: (808) 246-1091
   Contact Person:  Ron Agor, Architect

2. IDENTIFICATION OF APPROVING AGENCY:
   Department of Land and Natural Resources (DLNR) of the State of Hawaii.

3. IDENTIFICATION OF AGENCIES CONSULTED IN MAKING ASSESSMENT:

   STATE:
   State Archaeological Office
   Department of Health
   Nancy McMahon
   Gerald Takamura

   COUNTY:
   Planning Department
   Public Works
   George Kalisik
   Wallace Kudo

   PROFESSIONAL CONSULTANTS:
   Roger Caires, Surveyor
   Roger Caires

   COMMUNITY
   Richard Sheldon
   Freckles Smith
4. GENERAL DESCRIPTION OF ACTION'S TECHNICAL, ECONOMIC, SOCIAL, AND ENVIRONMENTAL CHARACTERISTICS:

GENERAL DESCRIPTION OF REQUEST FOR ACTION

This application concerns the new construction of a single family residence. The following is an itemized list of the project:

1. A 3,086 sf elevated residence.
2. A 408 sf pool more than half of which is under the house.
3. A well with a 1 square foot concrete cover.
4. Retaining walls at the upper northwest of the property to keep rock slides from continuing.

The applicant would like each of the above itemized list of the project to be considered separately. In other words, should one item be denied, the entire project should not necessarily be denied.

The site is designated Conservation Land by the County of Kauai. It is in Flood Zone AE with a base flood elevation of 17 feet above mean sea level (msl). Location of the site is as depicted in Exhibits A & B.

There was an existing residence on this site from 1958 to 1983. (See Exhibit E) The residence was destroyed in 1982. The County of Kauai has on file, records of an 849 square foot residence as of 1958. There is physical evidence on site showing portions of the foundation and a waste water line. (See Exhibit N & O). Since 1958, nearly 44 years, there have been no taro farming or any other type of farming conducted on the property.

TECHNICAL

Structure:

The structure consists of a 3,086 square feet residence which includes the living areas. The floor plan consists of four bedrooms, three baths, a theatre room, a laundry room, an office, and a living-dining area. The residence will be elevated with concrete columns to an elevation such that the floor level will be above the base flood elevation of 17 feet msl. The highest point of the roof will be no higher than 15 feet above the finished floor. The overall height of the structure will be 25 feet high.

Under the structure are proposed open spaces (See Exhibit H). A pool is also under the structure. The pool is 408 sq.ft., 165 square feet of the pool deck is outside the footprint of the elevated floor.

The exterior finish of the residence will be stucco over concrete walls. The roofing will be flat made of concrete. The structure will be of concrete construction.

A zero to three feet excavation under this structure is required for a level pad. Approximately 60 cubic yards of cut and 30 cubic yards of fill will occur under the structure. Approximately 30 cubic yards will be exported to the retaining walls.

The proposed retaining walls at the upper northwest portion of the property are intended to keep rocks from sliding down. There is also a state rock wall at the top of the site along the roadway. This rock wall is hanging precariously on the bank and does pose a danger to the site. (See Exhibit K) The Department of Transportation has approved the concept of the retaining walls. (See Exhibit Q)

The retaining walls retain an average of 8 feet of dirt each. There will be 227 cy of fill and 97 cy of cut, thus resulting in a required import fill of 130 cy. Using the 30 cy from the house excavation for fill, the retaining walls will require a net imported fill of 100 cubic yards.
A septic tank and leach field is proposed for the wastewater generated by the residence. (See Exhibit F.
Water will be furnished by an on site well. (See Exhibit F). A 1 inch water line from the tank to the residence will be in a 12" x 12" trench.

Electricity will be off the grid and furnished by photo electric cells mounted on the roof.

Television reception shall be by a disc mounted on the roof.

A gravel drive way will be installed as shown on Exhibit F.

ECONOMIC

The proposed action will have only the impact of employing 6 construction workers for the duration of a nine month construction period. This project will have a positive impact on the construction industry on Kauai.

SOCIAL

This application concerns the construction of a single family dwelling. This use remains the same as from 1958 to 1983. This action will have no negative social impacts. There are no adjoining neighbors to impact. The property is adjacent to Palihau State Park. No infrastructure exists in this area to attract the public thus no negative impact will occur. The river boats, water skiers, and kayakers view of the house is through the foliage on the bank of the Wailua river. The house will be obscured from view by adding to and nurturing the existing foliage. Mitigation of this impact will be achieved by maintaining and planting additional foliage along river side of property. The owners desire is to achieve privacy. This desire complements the states desire to minimize any negative social impact. The house will also be of colors designed to make it blend into its surroundings. The roof and mid level floors will be bordered with plants to further enable this home be become part of its environment. Noise will be present during the construction period of approximately nine months. The masonry construction method to be used on this home will not require as much sawing and nailing noise as is normally associated residential construction. After occupying the residence the noise impact will be negligible.

ENVIRONMENTAL

The single family residence will be of earth toned colors set back 40 feet from the river and shielded by a continuous line of foliage. It will have no reflective roofing or wall materials. The height of the structure will be at a maximum of 25 feet with a maximum roof height of 15 feet above the main finished floor. The finished floor will be at the required 17 feet above msl. The design incorporates planters along and around the flat roof edge of the structure and along and around the exterior of the elevated main level floor line. These planters will break the up the mass of the structure with plants and hanging vines. (See Exhibits I & J). Exhibit "L" shows the structure with existing landscaping. The site is intended to be heavily landscaped along the river to mitigate the visual impact from the river. (See Exhibit F & M). The property has only one area where soil erosion is an issue. The steep grade below the Kuamoo road is eroded. This problem will be solved by the retaining walls on the north side of the property. (See Exhibits F & K)

There are no known plant or living creatures that are on the endangered species list on the site. After two years of observation the only animals observed have been wild chickens, cats and once a mouse. The lot has three Mango trees, Java plum, Coconut, Mone, Lauhala, Areca Palm trees and Hau trees. It also has Mexican creeper vine, buffalo grass and lauole koa plants. One Noni (Morinda Citrifolia) has been identified by National Tropical Botanical Garden personal it is on the south west corner of the property. (See Exhibit E).

The structure is set back from the river shoreline. Construction will not have a negative impact on the river. The existing rivers edge foliage will insure that the project doesn’t cause a negative visual impact. In
addition the geography, with the cliff behind the project and higher elevation land near the rivers edge will naturally prevent runoff. By utilizing water and grass we will eliminate fugitive dust.

5. SUMMARY DESCRIPTION OF THE AFFECTED ENVIRONMENT, INCLUDING SUITABLE AND ADEQUATE LOCATION AND SITE MAPS:

The site is located in Wailua approximately 6,500 feet west of Kuhio Highway along the Kuamo’o Highway (See Exhibit A & B). It is located south and along the Wailua River (See Exhibit B). The property is bordered to the north by a cliff. Kuamo’o Highway and State land is at the top of the cliff. State land also borders the west and east side of the property. An access easement through the State land exists to the east of the property (See Exhibit B & C).

Today the site has Hau ranging from 4 feet to as high as 25 feet (See Exhibit E). The Hau forest has been hand cut for the archaeological survey access as shown in Exhibit E. The soil appears to be of dark brown loamy silt.

The Wailua river borders the south of the property as shown on Exhibit D, a certified survey.

6. IDENTIFICATION AND SUMMARY OF MAJOR IMPACTS AND ALTERNATIVES CONSIDERED, IF ANY:

There will be a visual impact of the proposed residence from the river as it had by the former residential structure. The Owner proposes to line the property along the river with heavy landscaping. (See Exhibits F & M)

An Archaeological inventory survey of the property (TMK: 4-2-03: 02) was conducted in April of 2001. (Survey attached). No archaeological findings were discovered. The survey recommended that should any findings be discovered during construction, activities should be ceased and the proper authorities be notified prior to continuing work. A mitigating archaeological monitoring plan and a burial treatment plan will be implemented during construction.

The alternatives are to not build the house. Another alternative is to build a bigger house as shown in an earlier application. We reduced the size to meet the states requirement that says a pool counts towards maximum developable floor area.

7. PROPOSED MITIGATION MEASURES:

There are no major negative impacts identified with this request of action. However we will be following best management practices. We will maintain and improve the landscaping visual impact barrier. We will plant grass and use water to control dust. We will have solar power to eliminate the need and noise associated with generator power.

8. DETERMINATION:

It is determined that no Environmental Impact Statement is required. Thus, a NEGATIVE DECLARATION should be filed with the Office of Environmental Quality Control by the accepting authority.

9. FINDINGS AND REASONS SUPPORTING DETERMINATION:

The following findings and reasons support the determination of a NEGATIVE DECLARATION for the proposed action. It has been determined that:

The proposed action will not involve a loss or destruction of any natural or cultural resource. A mitigating archaeological monitoring plan and a burial treatment plan will
be implemented during construction.

The proposed action will not cause this project to be in harms way in the AE Flood Zone. Construction will conform to Fema and the County Engineering Department's requirements and recommendations.

The proposed action will not cause a visual impact from the river. The proposed landscaping along the river will mitigate the possible visual impact.

The proposed action will not be a burden to the county's existing power, waste or sewer system. The project is completely self sustainable.

The proposed action will not curtail the range of beneficial uses of the environment.

The proposed action will not conflict with the State's long term goals or guidelines.

The proposed action will not substantially affect the economic and social welfare of the Community or State.

The proposed action will not adversely affect the health and welfare of the public.

The proposed action will not create substantially secondary effects, such as population changes or infrastructure demands.

The proposed action will not have a negative cumulative effect on the environment.

The proposed action will not and does not commit or involve the State in larger actions, nor does it commit any State owned resources to the realization of the objectives of the proposed action.

The proposed action will not negatively affect a rare, threatened, or endangered species or its habitat.

The proposed action will not negatively affect an environmentally sensitive area.

The proposed action will not negatively affect river users.

The proposed action will not negatively affect Polihua or Wailua river state park users.

10. **AGENCIES TO BE CONSULTED IN THE PREPARATION OF AN EIS, IF APPLICABLE:**

The determination of a NEGATIVE DECLARATION makes this section not applicable.
VII. DESCRIPTION OF PARCEL

A. EXISTING STRUCTURES:

There existed an 849 square feet residence on the site (See Exhibits E) from 1958 to 1983. Evidence of this structure is in the remains of the foundation and waste water lines on site (See Photos in Exhibit N). The attached archaeological survey also mentions evidence of the existing structure.

B. EXISTING UTILITIES:

The Owner chooses to be off the electric grid. The residence will be powered by photo cells mounted on the roof. Water will be provided by the installation of a private water well. Cell phones will be used so no telephone lines will be required. Television reception will be via a small dish mounted on the side of the roof. The waste water system shall be a septic system.

C. EXISTING ACCESS:

Exhibit C depicts an existing access easement that begins from Kuamo‘o Highway through State property. This easement was documented Dec-2-1958. It is perpetual and has been and still is in use. It is 16 feet wide and runs 1058 feet along the river.

D. VEGETATION:

Refer to Exhibit E, a map with a list of vegetation. The lot has three Mango trees, Java plumb, Coconut, Mone, Lauhala, Areca Palm trees and Hau trees. It also has Mexican creeper vine, buffalo grass and haole koa plants. One Noni (Morinda Citrifolia) has been identified by National Tropical Botanical Garden personnel, it is on the south west corner of the property. (See Exhibit E)

E. TOPOGRAPHY:

Refer to Exhibit D & F. In the general vicinity where the proposed residence will be it is relatively level. It slopes across the lot to the river approximately five feet in eighty linear feet. This allows for a good natural drainage of the site. The property slopes up drastically towards the highway above and north. An area where rocks have historically slide down to the property is proposed to be retained with terraced walls as requested by this application. (See Exhibit F & K)

F. DESCRIPTION OF SHORELINE:

This property is not along the ocean shoreline. However, it is along the Wailua River. The elevation of the site along the river is approximately 4.7 feet above mean sea level. It appears that the river is approximately two feet below the property.
G. EXISTING COVENANTS, EASEMENTS, RESTRICTIONS:

There are no known covenants, easements or restrictions on the property. There is an access easement through State land as shown on Exhibit C.

H. HISTORIC SITES AFFECTED

There were no archaeological findings on the property. An archaeological Inventory Survey was conducted in April of 2001. Attached is the report.

Conclusion of Report
As there were no significant cultural sites or deposits encountered within the study parcel, it is recommended that no further archaeological work need be conducted prior to development. However, in the unlikely event subsurface deposits or human burials are inadvertently discovered during construction activities, such activities should be immediately suspended in the vicinity of the discovery, and DLNR-SHPD notified as outlined in the Draft Hawai‘i Administrative Rules 13 13-284.
VIII. COMMENCEMENT DATE:

The applicant wishes to have work commence within seven months after the acceptance of this application. The commencement date for the work described in this CDUA will be immediately following all approvals from the State of Hawaii (DLNR) and the County of Kauai.

COMPLETION DATE:

The completion date of the work described is anticipated as being twelve months after State and County approvals for construction have been acquired. A projected date of December 2003 is anticipated.

IX. CITE AND DESCRIBE IN DETAIL THE PROPOSED IDENTIFIED LAND USE:

The Identified Land Use for this application falls under category R-8, (D-1) Single Family Residence in the Resource Subzone, Section 13-5-24. The proposed project is a single family residence for Mr. & Mrs. Allen, owners of the property. Their intent is to live on the property full time.

The Resource Subzone allows the development of a single family residence as long as the use of the natural resources in the area are sustained. The natural resource prominent in the area is the Wailua River and its use for the public. This project will not curtail or diminish the use of the river.

X. AREA OF PROPOSED USE:

The area of the parcel Tax Map Key: (4) 4-2-03: 02 is 33,186 square feet. The approximate area for the construction of the proposed residence will 3495 square feet.

XI. NAME AND DISTANCE OF NEAREST TOWN OR LANDMARK:

The nearest popular landmark is the Wailua Bridge on Kuhio Highway approximately 7,000 feet from the site. Wailua Town is within a mile and a half away along Kuhio Highway. The Subject parcel is within Poliahu State Park and adjacent to the Wailua River State Park.

XII. LAND USE COMMISSION BOUNDARY INTERPRETATION:

The Land Use Designation of this property is conservation.

XIII. SUBZONE BOUNDARY DETERMINATION:

The subzone boundary for the property is Resource Subzone.

XIV. FEES:

The appropriate fees are attached to this application.
XV. PLANS

A. AREA PLAN:

The land is located along the Wailua River off of Kuamo’o Highway approximately 6500 feet from the intersection of Kuhio and Kuamo’o Highways. The property is bordered to the north by an up cliff of State land and to the east and west is also State land. The Wailua River borders the property on the south.

B. SITE PLANS:

Please refer to:

Exhibits A, B, C, D, E, & F.

C. BUILDING PLANS:

Exhibit F, Site Plan, indicates the location of proposed dwelling, gravel driveway, septic tank and leach field and the water well/storage tank.

Exhibits G & H are the upper floor plan and lower plan respectively.

Exhibits I, J & K show the exterior elevations of the structure.

D. MAINTENANCE PLANS:

This application requires no maintenance plans.

E. MANAGEMENT PLANS:

This application requires no management plans.

F. HISTORIC OR ARCHAEOLOGICAL SITE PLAN:

There are no historical or archaeological site plans. Refer to attached archaeological inventory survey.
XVI. DEMONSTRATE THAT THE PROPOSED USE IS CONSISTENT WITH THE FOLLOWING CRITERIA

1. PURPOSE OF THE CONSERVATION DISTRICT:

The proposed work under this application pertains to the construction of a new residence on a property that had an existing residence on it from 1958 to 1983. In 1983 the remains of the destroyed residence were disposed of. The continual use of an existing residential property as a residential property will not be adverse to the Conservation District. The property was a residential property prior to the land being designated as conservation land.

2. OBJECTIVES OF THE SUBZONE:

The proposed work under this application is consistent with the objectives of the Resource Subzone. The work falls under Section 13-5-24, R-8, D-1, HAR. The identified land use of D-1 is for single family residence.

The proposed work will not undermine the Conservation District’s purpose to protect the valuable resources of this designated area.

3. COMPLIANCE WITH “COASTAL ZONE MANAGEMENT”:

The proposed project is within the Coastal Zone Management Area. A County of Kauai Special Management Area permit will be obtained along with a county building permit prior to any work commencing. The SMA includes the CZM policies and objectives as part of its requirements. This application is consistent with the CDUA criteria and requirements. The process has led the applicant to seek out possible conditions and comments from local and state agencies. These have been included for examination.

4. NOT HAVING AN ADVERSE IMPACT ON EXISTING NATURAL RESOURCES WITHIN THE SURROUNDING AREAS, COMMUNITY, OR REGION:

The work proposed in this application will not adversely impact the existing natural resources within the surrounding area, community, or region. Work areas and construction storage areas will be at the location of the proposed residence. The structure is set back from the river shoreline. Construction will not have a negative impact on the river. The existing rivers edge foliage will insure that the project doesn’t cause a negative visual impact. In addition the geography, with the cliff behind the project and higher elevation land near the rivers edge will naturally prevent runoff. Both elements combined will work together to control dust migration.

5. COMPATIBILITY OF STRUCTURES WITH THE LOCALITY AND SURROUNDING AREAS:

Consideration must be given to the fact that there was a residence on the property from 1958 through 1983. The proposed residence will be compatible with the pre-existing residence in terms of it being a house. Along the Wailua River just approximately 5000 feet towards the river
mouth exists several residences. This project is certainly compatible with the existing residences along the river. The residence will be naturally screened from the nearest public road via existing landscaping and the natural cliffs. Earth toned colors will be chosen for the exterior finishes. There will not be any substantial grading for this project.

6. **PRESERVATION AND IMPROVEMENT OF EXISTING PHYSICAL AND ENVIRONMENTAL ASPECTS OF THE LAND:**

The natural beauty and open space characteristics of the land will continue to be preserved with the work proposed in this application. The site, in recent history, has been occupied by the homeless with make shift shelters and has been a dumping ground for trash of all sorts. This project will result in the land being kept clean by the owners who will reside on the property.

7. **SUBDIVISION OF LAND WILL NOT BE UTILIZED TO INCREASE THE INTENSITY OF LAND USES:**

There will be no subdivision of the land.

8. **MATERIALLY NOT DETRIMENT TO THE PUBLIC HEALTH, SAFETY, AND WELFARE:**

The proposed work will be using only acceptable construction materials of the industry. No materials detrimental to the Public Health, Safety, and Welfare will be used.

9. **CONFORMANCE WITH THE DESIGN STANDARDS, EXHIBIT 4 OF CHAPTER 13-5 H.A.R.:**

The project substantially conforms to the design standards, Exhibit 4, for single family residences.

**SETBACK:**

The front, sides, and back setbacks exceed the required 15 feet.

**MAXIMUM DEVELOPABLE AREA:**

The total square feet of the project is 3,495 square feet. This includes the foot print of the elevated floor, the pool deck and the 1 square foot of concrete well cover. See Exhibit G for calculations of the elevated main floor.

**MAXIMUM HEIGHT:**

The structure has a maximum height of 25 feet. The height from the base flood elevation, the finish floor level, to the top of the structure is 15 feet maximum.

**COMPATIBILITY:**

Per paragraph 5 above, the design is compatible with the surrounding environment.
RESPONSE TO AGENCY COMMENTS

OFFICE OF ENVIRONMENTAL QUALITY CONTROL:

1. FLOODPLAIN CONSIDERATIONS:

Following the response to agency comments is an excerpt from the FEMA Map for the area of the property concerned. Please note that the area is designated as Flood Zone AE with a base flood elevation of 17 feet MSL. The property concerned is marked on the flood map. Also marked is an area down river that has existing home sites. These existing home sites are also located in the Flood Zone AE area.

Please understand that many home sites on Kauai are located within the Flood Zone AE area. Many homes will continue to be built within this flood zone area. There are engineering and structural criteria that will have to be met during the building permit process. These criteria established by FEMA and the County Engineering Office allows construction of commercial and living environments.

The destruction of the former residence was due to wind forces of 100 mph or more from Hurricane Iwa. There was flooding but the structure was actually destroyed by the wind. During Hurricane Iniki, some of the homes depicted in the existing home sites on the attached FEMA map were destroyed by the wind and rebuilt thereafter. Many of the homes were flooded but not structurally destroyed.

In conclusion, building a structure in the AE Flood Zone is not prohibitive by FEMA, the County Engineering Office or sound engineering principles.

2. VISUAL CONSIDERATIONS:

The County Planning Department has indicated concerns about the visual impact this development may have from the river. A heavily landscaped plan is proposed along the river to mitigate the departments concern. Please look at Exhibit 'L.' which shows the proposed structure with existing landscaping. Exhibit 'F' shows the proposed landscaping and Exhibit 'M' shows the site from the river with the new landscaping. This Exhibit nearly conceals the structure from the river. We have presented this information to George Kalisik, (808) 242-6677, of the planning department and have received a verbal approval, he will make his comments should he be presented this application again.

3. WASTE WATER CONSIDERATIONS:

The applicant has retained a civil/septic engineer for the proposed septic system. Their preliminary site tests indicate that a septic system will be allowed as located for this project. We expect the septic system to be designed, installed and inspected in accordance with the Department of Health requirements and the responsible engineer's recommendations.
Exhibit 'N' shows the remains of a waste water line for the former residence. The waste line shown is just a short piece and no indication is visible to determine the type of waste system the former residence had.

4. LEGIBILITY OF PAGES IN DOCUMENTS:

All pages appear to be legible.

5. CULTURAL IMPACTS:

Discussions with two people, Freckles Smith and Richard Sheldon, have taken place by the landowner.

Freckles Smith (821-6880): Mr. Smith recollects historically that the property was used since 1958 for residential purposes. Access to the site was with their boat on the river. Mr. Smith believes no burial sites or artifacts were discovered.

Richard Sheldon (822-1661): Mr. Sheldon, who's grandfather was the last guardian of the burials was also consulted. He stated that no burial sites are known to be on the property.

Since the inception of the property being used for modern residential purposes, none of the property owners, first the Isenburgs and then the Ellis's, recollect the gathering of peoples on the property of the use of the property to access gathering places.

Mr. Robert Rechtman, in his attached archaeological inventory survey, makes good references to the project area description, background and historical context.

6. DISCLOSURE OF TOTAL FLOOR AREA:

The total floor areas proposed are disclosed properly on Page 7 and summarized on Page 16.

7. GUIDELINES FOR SUSTAINABLE BUILDING DESIGN FOR HAWAII:

The project is designed with consideration of sustainable building design.

The residence will be constructed of all concrete foundations walls floors and roofs. The roof will be "flat roof" type of construction to allow solar photo voltaic panels and water heating panels to be placed to proper orientation and angles such that the panels will not be visible from the river. Lots of exterior wall glass is proposed in the design to allow natural light to be the main source of light during daylight.

Solar will be the source of electricity and water heating throughout the house. This project will not be connected to any source from the electric company. Telephone and television sources will be remote and not connected to the islands existing grid. The water source shall be self sustainable via a private well with a pump. A septic system for waste water will be designed and installed in accordance with the Department
of Health's requirements.

In summary, this project will be self sustainable in electricity, telephone, cable, water and waste water treatment. The structure is proposed to be built with concrete walls, floors and roofs to minimize maintenance and mitigate potential wind and flood damages. The Owner and family are currently practicing the separation of recyclable materials for pick-up and will continue to do so in this proposed residence.

In conclusion, this project meets the criteria for sustainable building design for Hawaii.

8. USE OF RECYCLED GLASS:

The only feasible use of recycled glass will be for the base cushion layer under the concrete slabs on grade below the upper main floor building line. The Architect has approved the use of crushed glass for the base cushion layer under concrete slab. The approval of the enclosed space under the main floor building line, as outlined on Page 7, will give this project the opportunity to use recycled glass.

9. INDIGENOUS AND POLYNESIAN INTRODUCED PLANTS FOR USE IN PUBLIC LANDSCAPING:

It is the concern of the County Planning Department that the proposed project may have a visual impact from the river. The proposed heavily landscaped plan mitigates the planning Department's concern. The use of fast growing palms (areca) and lau hala trees are appropriate for this project. (See Exhibit F & M)

10. REVISION OF DISCUSSION OF THE SIGNIFICANT CRITERIA:

The proposed action will not involve a loss or destruction of any natural or cultural resource. A mitigating archeological monitoring plan and a burial treatment plan will be implemented during construction.

The proposed action will not cause this project to be in harms way in the AE Flood Zone. Construction will conform to Fema and the County Engineering Department's requirements and recommendations.

The proposed action will not cause a visual impact from the river. The proposed landscaping along the river will mitigate the possible visual impact.

The proposed action will not be a burden to the county's existing power, waste or sewer system. The project is completely self sustainable.

The proposed action will not curtail the range of beneficial uses of the environment.

The proposed action will not conflict with the State's long term goals or guidelines.

The proposed action will not substantially affect the economic and social welfare of the Community or State.

The proposed action will not adversely affect the health and welfare of the public.
The proposed action will not create substantially secondary effects, such as population changes or infrastructure demands.

The proposed action will not have a negative cumulative effect on the environment.

The proposed action will not and does not commit or involve the State in larger actions, nor does it commit any State owned resources to the realization of the objectives of the proposed action.

The proposed action will not negatively affect a rare, threatened, or endangered species or its habitat.

The proposed action will not negatively affect an environmentally sensitive area.
STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Land Division  

OCT 1 2001

Ref: EB: TC

file: CDUA 188-35450

Greg & Joanne Allen  
c/o Ron Agor, Architect  
4373 Kukui Grove, Suite 204  
Lihue, HI 96766

Dear Mr. & Mrs. Allen:

SUBJECT: Draft Environmental Assessment (EA) for the proposed Single-Family Residence, TMK (4) 4-2-03:02, Wailua, Kawaihau, Kauai

Enclosed for your consideration and use are copies of comments that we received regarding the subject draft EA. As you may know, pursuant to the rules for EAs (Section 11-200-9.1, Hawaii Administrative Rules), a written response must be prepared (and provided to the commenter) for all comments submitted during the public comment period. Further, copies of all comment letters and your responses must be included in the Final EA for the project, along with any modifications to the original draft EA that may be necessary in light of your response to the comment letters.

Please submit six paper copies of the Final EA to us as soon as possible, but at least 60 days prior to your Conservation District Use Application's (CDUA) 180-day expiration date of January 7, 2002. Otherwise, we may not be able to complete our processing of your CDUA, and negative action by the Board of Land and Natural Resources may result. Also include an Office of Environmental Quality Control (OEQC) Publication Form for the Final EA, and if the project summary has changed, a new summary on a diskette. We also request that you include the digital file for the entire CDUA with the Final EA on a diskette (preferably in Microsoft Word 2000) with your submittal.

Please feel free to contact Traver Carroll of our Planning Branch at 587-0439 should you have any questions.

Sincerely,

Harry Yada, Administrator  
Land Division

Enclosures

cc: Kauai Board member
FILE NO.: KA-3115B

REF: PB: DH

Greg & Joanne Allen
c/o Ron Agor, Architect
4374 Kukui Grove, Suite 204
Lihue, HI 96766

SUBJECT: CDUA KA-3115B for the Proposed Allen Family, Single-Family Residence, Wailua, Kawaihau District, Kauai, TMK (4) 4-2-03:02.

The Department has determined that your Conservation District Use Application (CDUA) KA-3115B and Final Environmental Assessment (FEA) for the proposed Allen Family, Single-Family Residence (SFR), Wailua, Kawaihau District, Kauai, (TMK: (4) 4-2-03:02) is incomplete.

The Department would like to point out that the following sections need more description regarding the proposed improvements and/or need updated changes:

- **II. APPLICANT** - please sign and date.

- **V. SUMMARY OF PROPOSED IDENTIFIED LAND USE** - Give a detailed description of the proposed uses (i.e. SFR, number of room, size and height of house, accessory structures such as driveway and pool area footage, proposed landscaping, leach field). Please note there were two prior CDUA's filed for the subject property, CDUA 3024, which was incomplete, and CDUA 3045, which was withdrawn.

- **VI. ENVIRONMENTAL REQUIREMENTS**
  1) General Description of Requested Action - Refer construction of well to CWRM.
  2) Technical - Check numbers for inaccuracies (i.e. 17 or 18 msl). Describe total height of the SFR. Describe if the 30 cubic yards of fill (from the 60 cubic yards of cut) will be used for the remaining fill for the retaining wall or exported away.

  **Economic** – Describe how many construction workers will be employed and the length of time of employment.
Social – This section requires a more detailed explanation of the impacts to the surrounding social environment, not only to the construction of the SFR. Please describe impacts, if any, (i.e. to Wailua River and Polihau State Park users) and what mitigation measures will occur.

Environmental – List and identify plants and animals on the subject parcel and discuss mitigation measures. Describe short term and long-term effects of building the SFR (fugitive dust, ambient noise, soil erosion) and mitigation measures.

7) Proposed Mitigation Measures – please describe why there are no major negative impacts regarding the proposed action. Please include mitigation measures for fugitive dust, soil erosion and ambient noise. [NOTE: The proposed project is adjacent to two major state park recreation areas – Polihau and Wailua River State Park.

9) Determination – please revise this section as applicable to changed text.

- VII. Description
  C) Existing Access - Describe how long and wide the existing easement is and that it goes through Polihau State Park.
  D) Vegetation – Describe the existing vegetation.

- X. Area of Proposed Use – Check numbers for inaccuracies (i.e. the approximate area for the construction of the proposed residence will be 5,600 square feet. This exceeds the maximum developable area for the lot).

- XI. Name and Distance of Nearest Town or Landmark – Describe the subject parcel as within Polihau State Park and adjacent to Wailua River State Park.

- XV. Plans
  B) Site Plans - Check numbers for inaccuracies. Exhibit F - write in square footage for SFR, leach field, driveway, and well. Exhibit G, I and K - check numbers for inaccuracies. Please add a photographic exhibit of the subject parcel.

- XVI. Demonstrate that the Proposed Use is Consistent with the Following Criteria –
  3) Compliance with "Coastal Zone Management" – Note that the proposed area is within the State designated Coastal Zone Management Area and the County of Kauai Special Management Area, and the policies and objectives of the CZM and SMA should be addressed. In addition, since the subject parcel abuts Polihau State Park and Wailua River State Park the application must address that the proposed use is consistent with Conservation District criteria.

  4) Not Having an Adverse Impact on Existing Natural Resources within the Surrounding Areas, Community, or Region – Describe why there is no impact to the surrounding areas, community and/or region. Address concerns regarding the river's users and mitigation measures. Check numbers for inaccuracies.

  9) Conformance with the Design Standards – Check numbers for inaccuracies. Please break down and list square footage for the house, decks, pool deck, pool, well cover, and driveway. Check numbers for inaccuracies.
In addition, all agency letters need to be incorporated in the CDUA application and the FEA, and comments if needed, need to be addressed from participating agencies. Please respond to the substantive comments and/or identify where in the CDUA or FEA they are addressed. Please address the following agency's letters:

- Department of Health;
- OEQC;
- Division of State Parks;
- Historic Preservation Division;
- Division of Aquatic Resources;
- Division of Forestry and Wildlife;
- County of Kauai- Department of Public Works;
- County of Kauai- Department of Water; and
- County of Kauai- Planning Department.

Please note, although the applicant has responded to OEQC’s letter in the FEA, OEQC will not accept the FEA unless it’s Environmental Assessment Checklist has been answered completely.

The Department is returning to the applicant twenty copies of the CDUA and FEA for revisions. Please make the appropriate changes and/or improvements to the CDUA and FEA, then resubmit both back to the Department. You check for the CDUA has been cashed. The funds will be retained and applied to the revised CDUA. If you should have any questions, please contact Dawn Hegger at 587-0380, Planning Branch of the Land Division.

Aloha,

[Signature]

Dierdre S. Mamiya, Administrator
Land Division

Attachment
Receipt
Agency letters

cc: Kauai Board Member
Kauai District Land Office
DOH/OHA
County of Kauai Planning Department
   Department of Public Works
   Department of Water Supply
DAR/DOFAW/DOCARE/HPD
OEQC
August 30, 2001

Mr. Harry M. Yada, Acting Administrator
Land Division
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Yada:

Subject: CDUA Application for Greg & Joanne Allen
KA-3045B

Thank you for allowing us to review and comment on the subject proposal. We have no comments to offer at this time.

Sincerely,

GARY GILL
Deputy Director
Environmental Health Administration
September 6, 2001

Mr. Greg Allen and Mrs. Joanne Allen
161 Wailua Road
Lihu'e, Hawai'i 96766

Mr. Ron Agor, Agor Architecture
4374 Kuai Grove, No. 204
Lihu'e, Hawai'i 96766

Mr. Harry Yada, Administrator
Mr. Traver Carroll, Planner
Land Division, Department of Land and Natural Resources
State of Hawai'i
P.O. Box 621
Honolulu, Hawai'i 96809

Dear Mrs. Allen, and Messrs. Allen, Agor, Carroll and Yada:

We have reviewed your draft environmental assessment (DEA) for a board permit requesting permission to build a single family residential structure in the conservation district at Tax Map Key 4-2-03, parcel 02 in the district of Waialua on the island of Kaua'i. We offer the following comments for your consideration and response.

1) FLOODPLAIN CONSIDERATIONS: One of the significance criteria (see, Section 11-200-12, Hawai'i Administrative Rules, item 11) missing from the discussion of significance on page 10 of the DEA is whether the action “[a]ffects 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.” [Emphasis supplied]. It is imperative that the effects of the structure being located in a riparian floodplain be adequately disclosed. In describing the environmental setting of the project, please include copies of the most current Flood Insurance Rate Map for the project site and identify the flood highwater marks (the debris line) on the project site and include photographs of the debris line or highwater marks. Discuss the circumstances involved in the destruction of the former residence in 1982. Identify both adverse and beneficial impacts based on the FIRM maps. Formulate mitigation, and if no mitigation is feasible or prudent, consider relocating the home. In a 1995 application for single family residences in Kahanu Valley on O'ahu, the Division of State Parks of the Department of Land and Natural Resources determined that sitting in a floodway was “significant” within the context of Chapter 343, Hawai'i Revised Statutes (letter enclosed).

2) VISUAL CONSIDERATIONS: Another one of the significance criteria (see, Section 11-200-12, Hawai'i Administrative Rules, item 12) missing from the discussion of significance on page 10 of the DEA is whether the action “[s]ubstantially affects scenic vistas and viewplanes identified in county
Mrs. Allen, and Messrs. Allen, Agor, Carroll and Yada
Agor Architecture, and the Department of Land and Natural Resources, State of Hawai‘i
Re: Draft Environmental Assessment for a Single Family Residence in Waikua, Kaua‘i
September 6, 2001
Page 3 of 3

Hawai‘i Administrative Rules), as to whether the proposed action “requires substantial energy consumption.”

(11) ENVIRONMENTAL ASSESSMENT CHECKLIST: With due regard for our comments above, we have also enclosed an environmental assessment checklist to assist in the writing of a more concise and complete environmental assessment.

If there are any questions, please call Leslie Segundo of my staff at (808) 586-4185. Thank you for the opportunity to comment.

Sincerely,

GENEVIEVE SALMONSON
Director

Enclosures
Greg and Joanne Allen
161 Wailua Road
Kapaa, HI 96746

State
Office of Environment Quality Control
Genevieve Salmonson

December 17, 2002

Re: Your Letter Dated September 6, 2001

Dear Ms. Salmonson,

Thank you for your letter. We have revised our CDUA application to better answer the comments you provided. Enclosed is a copy of pages 17 – 20 and 6 – 10 for your review.

Thank you,

Greg Allen
MEMORANDUM

TO: Harry Yada, Administrator
   Land Division

FROM: Don Hibbard, Administrator
       State Historic Preservation Division

SUBJECT: CDUA KA-3045B Construction of a Single Family Residence
         (Greg and Joanne Allen), TMK: 4-2-03: 2, Wailua, Kauai

August 22, 2001

According to the application, an archaeological survey was conducted on the property in April 2001 (Rechtman and Clark, Rechtman Consulting). The entire 33,183 foot area was walked by two archaeologists, and two backhoe trenches were dug. No historic sites or subsurface archaeological deposits were found. Near the corner of the property at the base of the pali (NW corner) there are some rock alignment features that were noted by our staff archaeologist. These are outside of the property boundary for this project, based on the information that the property owner gave you.

We agree with that no historic sites are present and that this project will have "no effect" on significant historic sites.

If you have any questions, please call Nancy McMahon at 742-7033.

NM:amk
MEMORANDUM

To: William Devick, Administrator
From: Richard Sixberry, Aquatic Biologist
Subject: Comments on Conservation District Use Application KA-3045B

Comments Requested By: Harry Yada - Land Division
Date of Request: 8/1/01 Date Received: 8/1/01

Summary of Project

Title: Single Family Residence & Associated Improvements
Proj. By: Greg & Joanne Allen
Location: Wailua, Kauai

Brief Description:

The applicant proposes to construct a single family dwelling with improvements on a 33,183 sq. ft. parcel abutting the Wailua River in the Conservation District at Wailua, Kauai. Evidence of a previous structure on the property consists of the remains of a foundation and waste water line.

Comments:

The proposal as described should not significantly impact aquatic resource values provided construction activities are restricted to periods of minimal rainfall and low runoff, and the areas denuded of vegetation or susceptible to erosion are appropriately stabilized. Also, precautions shall be taken to prevent debris, landscaping chemicals, eroded soil, petroleum products and other potential contaminants from flowing blowing or leaching into the Wailua River.

Any additional or undescribed construction or landscape modifications within the Conservation District should be submitted to the Department for review.

Richard Sixberry
Aquatic Biologist
August 2, 2001

MEMORANDUM

TO: Traver Carroll  
Land Division

THRU: Harry Yada, Acting Administrator  
Land Division

FROM: Michael G. Buck, Administrator  
Division of Forestry and Wildlife


We have reviewed this CDUA application KA-3045B and have no objections to this project abutting Wailua river to the south and Poliahu State Park to the north in resource subzone of the State Conservation District. As always, thank you for the opportunity to review this application.

C: Kauai DOFAW Branch
State of Hawaii
Department of Land and Natural Resources
Land Division
P.O. Box 621
Honolulu, HI 96809

Attention: Mr. Traver Carroll

Gentlemen:

SUBJECT: REQUEST FOR COMMENTS
Conservation District Use Application (CDUA)
Allen Single-Family Residence TMK: 4-2-3-02 PW 8.013

We reviewed the subject conservation district use application and offer the following comments in regards to flooding and grading:

A. Flood:

1. Based on panel no 140 D of the Federal Insurance Rate Maps (FIRM) dated September 30, 1995, the captioned property is susceptible to flooding from Wailua River. The flood zone is a zone AE with a corresponding base flood elevation of 16.4 feet Mean Sea Level (MSL). The property is also located within the floodway limits of Wailua River for which new structures are prohibited unless certified by a professional engineer that the floodway encroachments (structure and grading) will not cause a rise in the base flood elevation. A no rise determination needs to be submitted by the professional engineer for our review and approval.

2. Pending approval of the no rise determination, the structure will need to comply with the following flood requirements:

   a. The building plans needs to be designed and stamped by either a structural engineer or architect duly licensed in the State of Hawaii. The above designer needs to certify that the structure will resist flood forces and be structurally stable under flooding conditions.
b. The lowest floor of the structure will need to be elevated one foot above the
determined base flood elevation and noted on the building plans.

c. Enclosures of spaces below the base flood elevation such as storage spaces
and parking needs to be designed as breakaway. The breakaway details needs
to be shown on the building plans.

d. All new replacement and water supply and sanitary sewage systems shall be
designed to minimize or eliminate infiltration of flood waters into the systems
and discharged from the system into flood waters. The onsite waste disposal
system shall be located to avoid impairment to the system from flood waters
or contamination of flood waters during flooding.

e. After the lowest floor is constructed the attached “Elevation Certificate”
   needs to be completed by either a professional engineer or surveyor duly
   licensed in the State of Hawaii.

f. The applicant needs to complete a Waiver and Indemnity Agreement which
   allows the structure to be constructed within the flood limits of Wailua River.
   The agreement will need to be recorded with the Bureau of Conveyances prior
to receiving building permit approval from the Division of Engineering.

B. Grading:

1. Although the grading limit is not shown, we believe the grading will be close to
   Wailua River. We are concerned on the grading activity which may cause erosion
   and siltation to occur to Wailua River. We recommend that erosion control
   measures be incorporated with the project.

2. A grading permit will not be required for this project since the grading quantity
   is less than 100 cubic yards. We are concerned with the grading that will be
   occurring within the floodway limits. The filling of the floodway limits needs to
   be mitigated with a no rise determination.

3. Fill within the shoreline setback area as established by our Planning Department
   shall be of material compatible with the marine environment. Soil is not
   considered an acceptable material compatible with the marine environment. The
   applicant needs to check with our Planning Department as to the limits of the
   shoreline setback area for this property.
State of Hawaii  
Department of Land and Natural Resources  
Page (3)  

Thank you for this opportunity to provide our comments. Should you have any questions, please feel free to contact Wallace Kudo of my staff at 241-6620.

Very truly yours,

CESAR C. PORTUGAL  
County Engineer

wk  
cc: Val Reyna
Greg and Joanne Allen  
161 Wailua Road  
Kapa'a, HI 96746

County of Kauai  
Department of Public Works  
Cesar C Portugal

December 17, 2002  

Dear Mr. Portugal,

Thank you for your comments on August 15, 2001 regarding The CDUA application for Allen Single Family Residence TMK 4-2-3-02 PW 8.013.

To address comment (1) We will include a no rise determination from Esaki Engineers with our County of Kauai building application. (2) Ron Agor will provide stamped plans that comply with the requirements. (3) We will not be filling within the shoreline setback.

Thank you.

[Signature]

Greg Allen
Mr. Harry Yada, Administrator
State of Hawaii
Department of Land & Natural Resources
PO Box 621
Honolulu, HI 96809

Dear Mr. Yada:

Subject: Conservation District Use Application (CDUA) for Allen Single Family Residence on TMK: 4-2-03:002, Kuamoo Road, Wailua, Kauai, Hawaii

We have no objections to the proposed single family dwelling unit on parcel 2. However, the Department of Water does not have a domestic water system in the near vicinity of this parcel. Prior to the Department of Water recommending building permit approval the applicant will be required to sign and execute a “Waiver and Release Agreement” with the Department of Water, agreeing that water service is presently not available to this parcel.

If you have any questions, please contact Mr. Edward Doi of my staff at 808-245-5417.

Sincerely,

Ernest Y.W. Lau
Manager & Chief Engineer
August 23, 2001

Harry Yada, Administrator
Department of Land and Natural Resources
Land Division - Planning Branch
P. O. Box 621
Honolulu, HI 96809

Attention: Traver Carroll

Subject: Conservation District Use Application KA-3045B
Single Family Residence
Greg and Joanne Allen
TMK:4-2-03:02, Wailua, Kauai

Dear Mr. Yada:

Thank you for the opportunity to comment on the above referenced Conservation District Use Application (CDUA) for a single family residence along the Wailua River, in Wailua, Kauai. The following comments are offered for your consideration.

Page 7 of the CDUA Draft Environmental Assessment states that the site is designated Conservation Land by the County of Kauai. The State Land Use Conservation District is actually a State designation.

Page 14 of the CDUA States that "the proposed project is not within the Coastal Zone Management Area." However, the project is within the State designated Coastal Zone Management Area, and the County of Kauai Special Management Area (SMA). Therefore, consistency with the policies and objectives of the Coastal Zone Management Area and SMA should be addressed.

Construction of one single family residence on an existing parcel is not considered development according to the County SMA Rules and Regulations, and an SMA Permit is not required for the proposed residence. However, an after the fact SMA Permit is required for the previously conducted grubbing and grading that has taken place on the property, and an SMA Permit application has been submitted for that work.
The project site is located on a gently sloping area adjacent to the Wailua River, and the proposed residence location is highly visible from the River. The River in this area is frequented by commercial visitor barge tours, kayak tour groups, individual kayakers and boaters, and other recreational users. Therefore, the impact of the proposed development on the area’s scenic qualities is of concern.

The proposed structure has a total square footage of 5,013 square feet including garage and storage, slightly above the maximum permitted within the State Land Use Conservation District. Due to its high visibility and sensitive location it may be appropriate to consider a structure with less mass.

The project site is located against an undeveloped hillside, and other development against the cliffs along the river in this area is limited. Use of medium to dark earth tone exterior colors, and landscaping composed of native species or species common to the area may help the structure blend with its relatively natural surroundings.

We hope these comments will be of value in your assessment of the project CDUA. Please contact George Kalisik of my staff at 241-6677 if you have any questions.

Sincerely,

[Signature]

Dee M. Crowell
Planning Director

c: Greg Allen
Agor Architecture
Greg and Joanne Allen
161 Wailua Road
Kapaa, HI 96746

County of Kauai
Planning Department
George Kalisik

December 17, 2002

Regarding: CDUA Application KA-3045B

Dear Mr. Kalisik,

Thank you for your comments.

We have corrected the CDUA to reflect the correct Designation of State Conservation District.

We have also addressed the visual impact in our application and corrected the square footage to meet state and county guidelines.

See page 17 section 2 and page 7 respectively.

Thank You,

Greg Allen
FIGURE 1
State of Hawai'i

FIGURE 2
General Location Map of Kaua'i Island

EXHIBIT A
PARCEL 02
33,183 SQ.FT.

WAILUA RIVER

TOPOGRAPHIC MAP

ROYAL PATENT 4891, L.C. AWAIKINO
WAILUA, KAUAI

Tax Map Key: 4891-00-00-000
Prepared For: [Name]
Date of Topo: [Date]

Note:
Bench Mark - BM-18 - Elevation 80.01 Feet
Crest cut on open cut along East side of Kuilau Highway on North and downstream side of Wailua Bridge 2.
Parcel 02
33,183.3 Sq. Ft.

Noni (Morinda citrifolia)  Coconut Trees

Boundary of Hau Trees & Brush

National Tropical Botanical Garden

Note:
- Bench Mark - RM-19 - Elevation 9.01 feet.
- Cross cut on concrete curb along East side of Kuhio Highway on North end and downstream side of Waiako Bridge 2.

Topographic Map
Parcel 02
Royal Patent 4891, L.C. AW 3
Wailua, Kauai, HI
Tax Map Key: (4)
Prepared For: Mr.
Date of Topo: Ma
EXISTING LANDSCAPE PLAN
NOTE: ALL HAU-BUSH/TREES TO BE REMOVED.

GRAPHIC MAP
PARCEL 02
L.C. AW. 3551, APANA 2 TO KAIHUUH
A, KAUAI, HAWAII

AP Key: (4) 4-2-03: 02

For: Mr. Greg Allen
Topo: March 28, 2000

EXHIBIT E
June 20, 2002

Mr. Ron Agor
Agor Architecture
4374 Kukui Grove Drive, Suite 204
Lihue, Hawaii 96766

Dear Mr. Agor:

Subject: Wailua, Kauai, Hawaii
        TMK: 4-2-03:02

This responds to your memo dated June 19, 2002 regarding construction of retaining wall within the subject parcel and alongside Kuanoo Road in Wailua.

Our comments/recommendations regarding your inquiry are as follows:

1. Retaining wall should be designed by a Hawaii licensed Structural Engineer.

2. Subsurface investigation shall be done as part of the retaining wall design process.

3. Retaining wall design loading shall include highway surcharge loading.

4. During construction of the retaining wall, the sloped area along the highway shall not be undermined by the contractor. Also, proper erosion controls shall be implemented during construction to preclude erosion of the slope areas along the highway.

5. All new fill areas shall be grassed/hydromulched as soon as possible.

6. No over excavations shall occur at both ends (mauka and makai ends) of all of the retaining walls.

EXHIBIT Q
7. Properly sized and spaced drainage weepholes shall be installed on the retaining wall faces to prevent hydraulic pressure buildup in back of the retaining walls.

8. No work shall be conducted from within the Kuanoo Road right of way. During construction, no road closures shall be permitted on Kuanoo Road.

9. Delineate the Kuanoo Road right of way line on the plans and on the sectional detail sheets.

10. Recommend fencing on the top and along the entire length of the uppermost wall.

11. Refer to enclosed marked plans for additional notes/comments.

12. Portions of the uppermost retaining wall footing appears to encroach upon the State Park lands. No encroachment shall occur without the written authorization of the land owner (State DLNR).

13. The existing CRM rock wall shall not be disturbed in any way. Damages due to the contractor's operations shall be repaired by the contractor at no cost to the State.

14. Plans shall be submitted to this office for review/approval.

15. This office reserves the right to add, or impose, additional conditions as necessary to mitigate adverse impacts to state highway facilities.

If you have any questions, please call Steve Morikawa at 274-3118.

Sincerely,

[Signature]

GLENN YAMAMOTO, P.E.
Acting District Engineer

SM:es
Encl. (marked plans)
An Archaeological Inventory Survey
of TMK: 4-4-4-03:02

Wailua Ahupua‘a
Puna District
Island of Kaua‘i
An Archaeological Inventory Survey of TMK: 4-4-2-03:02

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Puna District
Island of Kaua‘i

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INTRODUCTION

At the request of Mr. Greg Allen, Rechman Consulting conducted an archaeological inventory survey of TMK: 4-4-2-03:02, Land Commission Award (LCAw.) 35512, comprising approximately 33,183 square feet located in Wailua Ahupua'a, Puna District, Island of Kaua'i. The objective of the survey was to record the locations of all archaeological sites and features that might be present within the study area and to provide preliminary significance evaluations for any recorded sites. This report is intended to fulfill the requirements of the County of Kaua'i Planning Department (in support of an SMA) and the Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD) with respect to permit approvals for land altering and development activities within a Conservation District. The current project was undertaken in compliance with the historic preservation review process requirements of DLNR-SHPD as specified in draft Hawaii Administrative Rules.13§13–284 (dated 10-15-98).

This report details the current project objectives and scope of work, field methods and procedures, and survey findings. A brief archaeological and historical background is provided, which forms the basis for a set of project expectations. Lastly, recommendations addressing future historic preservation concerns are offered.

Scope of Work

Given the nature of known archaeological resources in the general vicinity of the current project area, a discussion was conducted with Nancy McMahon, Kaua'i Island Archaeologist for DLNR-SHPD to define an appropriate scope of work to guide the research effort. In accordance with the historic preservation review requirements of DLNR-SHPD the following tasks were determined adequate to constitute an appropriate scope of work:

1. Conduct a limited archival search of the readily available archaeological and historical literature, historic documents and records, and cartographic sources relevant to the immediate project area;

2. Perform an intensive surface survey of the subject parcel, locating and documenting all archaeological sites and features;

3. Excavate backhoe trenches to sufficiently sample subsurface deposits within the proposed development area (along the Wailua River) in an effort to identify buried archaeological materials; and

4. Analyze the researched and recovered information and prepare a report of the findings that includes significance evaluations and recommendations for any subsequent historic preservation work that may be required.
Project Area Description

The project area (Figure 1) consists of approximately 33,183 square feet located in Waikua Ahupua‘a, Puna District, Island of Kaua‘i (TMK: 4-2-03-02). It falls within the Lili‘u‘e Basin, the coastal plain that formed during the Waima Canyon volcanic series and was later covered by lava during the Kōla volcanic series (during the late Pliocene). The Waikua River and its tributaries provide the major drainage for the central Lili‘u‘e Basin (Folk and Ida 1981). Soils in the area have been classified as the Kapa‘a-Po‘okala-Hālī‘i-Makapili association (Foote et al. 1972).

The study area lies approximately 900 meters inland from Waikua Bay along the north bank of the Waikua River, just west of where Opaeka‘a stream empties into the river. The parcel is bounded on the south by the Waikua River, on the north by a 50 ft. pali along the south edge of Kukui‘o‘o Road (State Route 580), and on the east and west by undeveloped land belonging to the State of Hawai‘i (Figure 2). The terrain throughout the project area is flat, having been subjected to the periodic flooding of the Waikua River. The project area supports a dense tangle of hau (Hibiscus tiliaceus) and other non-indigenous flora. At the time of the archaeological fieldwork much of the vegetation had been cleared away (Figure 3) by the property owner. Present on the parcel are the remains of at least one modern house as evidenced by fragments of a cement slab, plumbing pipes and drains, and electrical wires.

Figure 3. General view of project area prior to subsurface testing; Waikua River in background.
Figure 1. Project area location.
Figure 2. Portion of TMK 4-4-3-03 showing study parcel.
BACKGROUND

To generate set of expectations regarding the nature of archaeological resources that might be encountered on the study parcel, and to establish an environment within which to assess the significance of any such resources, previous archaeological studies relative to the project area and a general historical context for the Wailua River region are presented.

Previous Archaeological Research

In his *Hawaiian Annual* of 1907, Thrum (1906) conducted a survey of Kaua‘i heiau. He recorded five such sites in the Wailua area. Bennett (1931) also conducted early archaeological research on Kaua‘i. He recorded these five heiau sites, as well as another heiau, a large burial site in the coastal dunes, and an adze quarry on Nounou Ridge. Folk and Ida (1981) provide a good summary of the heiau sites previously recorded in the lower Wailua River area. It wasn’t until after the establishment of Wailua State Park that the first systematic surveys of the area were conducted (Ching 1968; Soehren 1967). Much of the work since then has been focused on specific compliance projects in and around the park at known sites (Cox 1977; Kawachi 1993; Yent 1980, 1987, 1989a, 1989b, 1991, 1996). A few studies have been conducted further inland within Wailua Ahupua‘a (Carpenter and Yent 1997; Folk and Ida 1981; Hammatt 1988; Yent 1988).

Although there have been no archaeological studies conducted within the boundary of the study parcel, and those studies that have been conducted in the region can be characterized as limited in scope and area (Kawachi 1993), the combined results of those studies do paint a picture of the past settlement pattern. This was aptly summarized by Beardsley:

> The site or settlement pattern that emerges is one in which high status or sacred sites are confined to the banks of the lower reaches of the Wailua River, with agricultural and subsistence based sites located along the river, its tributaries, and in the associated wetlands and marsh areas; habitation sites and associated activity areas are located primarily on dry ground in the inland tributary drainages and in the near shore zone on the coastal plain; and burials are confined to the dune land and bench deposits along the coast. The distribution pattern of historic era sites is similar to the pattern established in the prehistoric era, though with some differences. Agricultural/subsistence activities are still practiced primarily in the river drainages, its tributaries, and in the inland reaches of the coastal plain, while the majority of habitations are confined to the coastal zone, concentrated in towns and villages. Among the differences, however, are abandonment of the sacred or high status sites on the banks of the river and a shift in burial location from the dune land to established cemeteries within the villages and towns. (Beardsley 1994:22)

Historical Context

The ahupua‘a of Wailua is 4.4 kilometers wide at the coast and 10.8 kilometers wide at its inland extent, which is 17.8 kilometers from the shore. This ahupua‘a was an important legendary place (Carpenter and Yent 1997; Dickey 1917) and figured prominently in the sociopolitical development of Kaua‘i (Kawachi 1993). Oral traditions recount that Wailua was where the first chief of Kaua‘i (Moikeha) landed on his voyage from Kahiki, and where all subsequent ocean voyages were initiated (Lydgate 1916). Wailua is considered the birthplace of the island’s royal lineage, and according to Dickey (1916) the most culturally appropriate location for the birth of Kaua‘i chiefs. The lower reaches of Wailua River Basin, below the confluence of the north and south forks, comprise a region known as Wailuanuiho‘anu. This region was
considered sacred with portions kapu to commoners (maka‘ainana) (Dickey 1916). The presence of many heiau also attests to the socioreligious importance of Wai‘aumalihana. The missionary Hiram Bingham provided the earliest historical account of this area during an 1824 visit:

Thence I passed round to Wallua, once the residence of Kaoo. There I visited the sacred birthplace of Kaumuali‘i, a rocky nook at the foot of a hill on which the sacrifices of heathenism had been offered. (Brigham 1981)

The immediate coastal area around Wallua River was also the location of a pu‘uhonua (place of refuge) and Kaluauehe (King’s Highway) (Polo and Ida 1981). Poli‘ahu Road closely mirrors the former course of the King’s Highway (Ching 1968).

Historical records describe how during the conquest of the Hawaiian Islands by Kamehameha I, the ruling chief of Kau‘i (Kaumualii) avoided personal defeat through a peaceable transfer of power. Kaumualii’s, who was born at Wallua (Dickey 1916), established a will that left Kau‘i to Kamehameha upon his death. Although subject to Kamehameha during the remainder of his life, Kaumualii retained leadership over the island. Kamehameha died five years before Kaumualii.

Upon Kaumualii’s death in 1824 his agreement to Kamehameha was honored, rather than the traditional reassignment of lands to local chiefs, the O‘ahu powers selected and installed Kaumualii’s nephew (Kahalae) as the new chief of Kau‘i. The O‘ahu chief Kalaninoku was sent to Kau‘i to inform the local chiefs. The local chiefs rebelled, and a bloody one-sided battle ensued. Well-armed and well-trained warriors were sent to Kau‘i from O‘ahu and Maui to support Kalaninoku. The ill-prepared farmers of Kau‘i were easily defeated, and Kau‘i became under the direct rule of the young king (Kamehameha III). Kalihoheva was appointed governor and the lands were redivided with the best tracts going to the “loafers and hangers-on (peleuaha) of O‘ahu and Maui” (Kamakau 1992:269). “Thus, the old order of political power on Kau‘i is dissolved and displaced by a new society of konohiki (land managers) who descend from O‘ahu and Maui lines” (Silva 1995:4).

This sociopolitical transformation was affirmed and codified by the Mahalo of 1848. The bulk of the akupua of Wallua appears to have been land retained by the crown, with many small kuleana awards made to both ali‘i (i.e., wife and son of Kaumualii) and maka‘ainana. The current study area was a kuleana award (LCAw. 3551:2) made to Kahi‘eni as a house lot. Although the size of the lot does not correspond to the description in the Native Register, “my house lot is 100 fathoms in length and 15 fathoms in width,” its location along the north bank of the river is correct. In the Foreign Testimony, Kawakalani verifies Kahi‘eni’s claim and provides the following description:

No. 2 is bounded:
North by house lot of Napula‘u
East by pali of Pā‘ai o Noliha
South by Pāhua of Noliha
West by Wallua River

Claimant received his land from [un unclear] in the days of Kaumualii and has had possession ever since.

The cardinal directions provided in the testimony do not seem to be accurate. We know that the pali is north of the parcel and the river is south. This would place the Napula‘u house lot to the west (upriver) and the pāhana to the east. The other LCAw.s in the area are shown on Figure 4. The pattern is one of houses along the riverbank and agricultural loi (feed by an ‘umua) and kula north of the river.
Figure 4. Map showing LCAw. Information for lower Wailua River (after Stauffer 1992).
George Washington Bates visited the area shortly after the *Mahale*, and provided the following description:

Wallua is a small and scattered village, located on either side of the river bearing the same title. The only interest it now retains is its having once been the abode of royalty. Everything was going rapidly to decay. The canoes that were once occupied by her majesty [Kaumuali‘i’s wife] and her friends I found rotting in a shed that stood near the banks of the stream. The only interest the natives seem to cherish is the cultivation of their taro plantations, and in taking care of their numerous fish-ponds. It was difficult to conceive that the village had ever been honored with a “royal presence” (Bates 1854).

Bates’s description of the Wallua River area documents the rapid decline of the indigenous sociopolitical structure following the breaking of *kapu* and the reorganization of land tenure practices.

By the early 1900s much of the area along the river was converted to rice cultivation (Iao 1923 in Carpenter and Yent 1997). Information contained on the TMK map, and corroborated by the current landowner, indicates that Wayne Ellis lived in the house that was situated on the parcel. The current landowner also offered that during the 1970s there were also a couple of “Hollywood type prop houses” erected on the parcel.

**PROJECT EXPECTATIONS**

Given the amount of archaeological research conducted along the lower Wallua River, the comprehensive historical and cultural background developed for the area (Beardsley 1994; Carpenter and Yent 1997; Folk and Ida 1981), and the *Mahale* data, the following set of expectations concerning potential findings can be generated. The parcel is recorded as having been in the possession of a Hawaiian tenant for residential purposes from at least the 1820s. However, given the intensive land use recorded for the study parcel during recent times, it is expected that *mahale*-age and earlier cultural material would be difficult to identify in situ. It is possible though, that subsurface testing could reveal previously undisturbed cultural deposits.

**FIELDWORK**

On March 30, 2001, Robert B. Rechtman, Ph.D. and Mathew R. Clark, B.A. conducted a 100%-coverage on-foot surface reconnaissance of the study parcel. In addition, two backhoe trenches were excavated at the proposed locations of the septic system and house footprint (Figure 5); areas unlikely to be impacted by subsurface construction were avoided to help maintain the environmental integrity of the parcel.

**Methods**

The survey strategy included a visual inspection of the entire surface of the study parcel. Based on observations made during this activity, two locations for subsurface testing were selected that were distributed over the proposed construction area. A backhoe was used to excavate the roughly five-meter long trenches, one bucket-width wide, at two selected locations. The width of the backhoe bucket used was 60 centimeters. The soil removed during backhoe excavation was visually examined for cultural material and the stratigraphy visible in the walls of the trenches was recorded and described.
Figure 5. Study parcel showing location of test trenches.
Findings

No archaeological resources of any kind—be they traditional Hawaiian sites, features, cultural material, or Historic Period items—were encountered during the current investigation. Modern construction materials were encountered to a depth of 75 centimeters below current ground surface.

The soil profile was similar in both trenches, exhibiting four distinct soil layers (I, II, III, and IV). In Trench 2 a 20-centimeter layer (Layer I) of dark brown (10YR 3/3) loamy silt with some vegetal matter covers a 95-centimeter stratum (Layer II) of dusky red (10R 3/4) clayey silt that also contained a modern metal pipe and concrete fragments. Below the clayey silt is a 70-centimeter layer (Layer III) of dark olive brown (2.5Y 3/3) silty clay slowly transitioning into a greenish black (Gley 1 2.5/1 10Y), nearly impermeable clay layer (Layer IV), which corresponds with the water table (Figure 6). All of the layers were culturally sterile. In Trench 1 a large boulder was encountered in the eastern half of the trench at a depth of 107 centimeters below ground surface (Figure 7). Table 2 summarizes the observed trench stratigraphy.

Table 2. Backhoe trenches and depths* of observed strata.

<table>
<thead>
<tr>
<th>BT #</th>
<th>Layer II/II Interface</th>
<th>Layer II/III Interface</th>
<th>Layer III/IV Interface</th>
<th>Base of Excavation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25</td>
<td>80</td>
<td>135</td>
<td>227</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>110</td>
<td>180</td>
<td>275</td>
</tr>
</tbody>
</table>

*Depths in centimeters below surface.

RECOMMENDATIONS

As there were no significant cultural sites or deposits encountered within the study parcel, it is recommended that no further archaeological work need be conducted prior to development. However, in the unlikely event subsurface deposits or human burials are inadvertently discovered during construction activities, such activities should be immediately suspended in the vicinity of the discovery, and DLNR-SHPD notified as outlined in the Draft Hawai’i Administrative Rules 13§13-284.
Figure 6. Trench 2, south wall profile.
Figure 7. Trench 1, north wall profile.
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