

Chroman Residence

STATE OF HAWAII
Department of Land and Natural Resources
Land Division
Honolulu, Hawaii

RECEIVED

September 9, 1997

'97 SEP 11 P2:11


REF:PB:LT

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

File No.: HA-2870
180-Day Exp. Date: 12/5/97

MEMORANDUM

TO: Gary Gill, Director
Office of Environmental Quality Control

FROM: Dean Uchida, Administrator 
Land Division

SUBJECT: Negative Declaration for the Chroman Residence and
Associated Improvements, TMK: 1-3-08: 03 at Puna,
Hawaii

The Department of Land and Natural Resources has reviewed the comments received from your office on the draft environmental assessment (EA). Your comments together with the applicant's response is included in the final EA.

There were no other comments received during the 30-day public comment period which began on July 8, 1997.

We have determined that this project will not have significant impacts on the environment and have issued a negative declaration. Please publish this notice in the September 23, 1997 OEQC Bulletin.

Enclosed is a completed OEQC Bulletin Publication Form and four copies of the final EA. A copy of this document will be deposited with the Pahoia library.

Should you have questions, please call Lauren Tanaka at 587-0385.

Enclosures

97

1997-09-23-HI-PEA-Chroman
Residence

SEP 23 1997

**FINAL ENVIRONMENTAL ASSESSMENT
CHROMAN RESIDENCE & RELATED IMPROVEMENTS**



RECEIVED
DIVISION OF
LAND MANAGEMENT
AUG 27 9 41 AM '97

Applicant: Michael Chroman
2411 Ocean Front Walk
Venice, CA 90291

Consultant: Linda Copman
P. O. Box 383284
Waikoloa, HI 96738

TABLE OF CONTENTS

I. INTRODUCTION.....	4
A. APPLICANT'S REQUEST.....	4
B. IDENTIFICATION OF APPLICANT.....	4
C. PROPERTY LOCATION AND EXISTING LAND USE.....	4
D. LAND USE DESIGNATIONS.....	4
E. BACKGROUND INFORMATION.....	5
F. PROPOSED ACTION.....	5
G. ALTERNATIVES TO THE PROPOSED ACTION.....	6
1. No Action.....	6
2. Alternative Siting.....	6
3. Alternative Design Features.....	6
II. EXISTING CONDITIONS AT THE SITE.....	7
A. PHYSICAL ENVIRONMENT.....	7
1. Existing Land Use.....	7
2. Surrounding Land Uses.....	7
3. Climate.....	7
4. Topography and Soils.....	7
5. Flood Hazard.....	8
6. Flora and Fauna.....	8
7. Marine Environment.....	8
8. Air Quality.....	8
9. Ambient Noise.....	8
10. Visual Resources.....	9
11. Archaeological/Historical Resources.....	9
B. SOCIO-ECONOMIC ENVIRONMENT.....	9
1. Population.....	9
2. Economy.....	9
C. PUBLIC SERVICES.....	9
1. Recreational Facilities.....	9
2. Police and Fire Protection.....	10
3. Solid Waste Disposal.....	10
4. Health Care.....	10
5. Schools.....	10
D. INFRASTRUCTURE.....	10
1. Wastewater.....	10
2. Water.....	10
3. Vehicular Access.....	10
4. Drainage.....	11
III. PROJECT IMPACT ASSESSMENT.....	11
A. PHYSICAL ENVIRONMENT.....	11
1. Site Conditions.....	11
2. Surrounding Uses.....	11
3. Topography.....	12
4. Flora and Fauna.....	12

5. Marine Resources	12
6. Air Quality.....	13
7. Noise Impacts.....	13
8. Visual Resources	13
9. Archaeological Resources.....	14
B. SOCIO-ECONOMIC ENVIRONMENT	14
C. PUBLIC SERVICES	14
D. INFRASTRUCTURE	15
1. Wastewater	15
2. Water	15
3. Traffic.....	15
4. Drainage.....	15
IV. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS.....	16
A. STATE LAND USE LAWS	16
1. Conservation District Use Application.....	16
B. GENERAL PLAN OF THE COUNTY OF HAWAII.....	21
1. Economic	21
2. Environmental Quality	21
3. Historic Sites	21
4. Natural Beauty	21
5. Natural Resources and Shoreline.....	22
6. Housing	22
7. Land Use.....	22
V. FINDINGS AND CONCLUSIONS.....	22
VI. LIST OF AGENCIES CONSULTED DURING PREPARATION OF FINAL ENVIRONMENTAL ASSESSMENT.....	23
VII. AGENCY COMMENTS AND APPLICANT'S RESPONSE TO COMMENTS	24
Viii. PHOTOGRAPHS OF PROJECT SITE	26

ATTACHMENTS

LIST OF FIGURES

- Figure 1 - Regional Map
- Figure 2 - Location Map
- Figure 3 - Property Plan
- Figure 4 - Topographical Map
- Figure 5 - Proposed Landscaping
- Figure 6 - Floor & Roof Plans
- Figure 7 - Elevations

APPENDICES

- Appendix A - Flora/Fauna Survey
- Appendix B - Archaeological Inventory Survey
- Appendix C - Individual Wastewater System Engineering Plans
- Appendix D - Sample Letter to Affected Agencies

I. INTRODUCTION

A. APPLICANT'S REQUEST

Pursuant to Chapter 13-5, Hawaii Administrative Rules (HAR), the applicant is requesting a Conservation District Use Permit (CDUP) in order to construct a single-family dwelling, accessory structures, and landscaping improvements within the State Land Use Conservation District. The subject property consists of approximately 4.54 acres located in the "Resource" Sub-zone, in Pohoiki and a portion of Keahialaka, Puna District, Island of Hawaii, Hawaii.

B. IDENTIFICATION OF APPLICANT

Applicant/Property Owner: **Michael Chroman**
2411 Ocean Front Walk
Venice, CA 90291
(310) 301-8371

Tax Map Key (TMK): **(3) 1-3-08:03**

Planning Consultant: **Linda Copman**
P. O. Box 383284
Waikoloa, HI 96738
(808) 883-2246

Accepting Agency: **Dept. of Land and Natural Resources**
State of Hawaii
1151 Punchbowl Street
Honolulu, HI 96813

C. PROPERTY LOCATION AND EXISTING LAND USE

The project site is a 4.54-acre portion of a 17.01-acre shoreline property, located in the Puna District of the island of Hawaii. The site is located approximately one (1) mile south of Isaac Hale Beach Park, with the ahupuaa of Pohoiki and a portion of Keahialaka, TMK (3) 1-3-08:03. The site is accessible via the Kalapana-Kapoho Beach Road.

The subject property is currently unoccupied and overgrown with various flora, as described in *Appendix A, "Flora/Fauna Survey."*

D. LAND USE DESIGNATIONS

State Land Use Designation: **Conservation District, Resource Sub-zone**

Hawaii County General Plan: **Conservation**

Hawaii County Zoning: **Open**

Other: **Special Management Area**

E. BACKGROUND INFORMATION

The 4.54-acre project area was bulldozed approximately 35 years ago in order to harvest the mature coconut trees growing on the site. According to long-time resident Mr. Billy Hale, who lives in close proximity to the project site, the trees were removed to landscape the then newly constructed Mauna Kea Beach Hotel. Existing vegetation, including indigenous and endemic plants, and archaeological features were destroyed during the harvest operation, and no significant natural or historic resources are present on the project site. The project site was selected precisely for this reason, since developing this portion of the property for the proposed residence will not detract from the value of the site as a whole.

The remainder of the 17.01-acre parcel does contain native plant colonies, including the rare Hilo *ischaemum* grass, and evidence of ancient remains, including pits and stone mounds. These features were presumably used for agricultural purposes during the prehistoric and historic occupation of the land by the Hawaiian people. Other features present on the undisturbed portion of the property include remnants of the King's Trail, Mahinaakaaaka Heiau located on the shoreline to the east of the parcel, and the Hale family graves (dating between 1927 and 1954) located on the northwestern corner of the parcel. None of these features will be disturbed by the proposed development.

Mr. Chroman purchased the property in 1996 with the intention of constructing a home and small fruit orchard on the previously disturbed portion of the parcel. No work will be conducted outside of this 4.54-acre project site.

F. PROPOSED ACTION

The applicant proposes to construct a two-story residence and related improvements on a 4.54-acre portion of the property. (See *Figures 6 & 7.*) The proposed structures will incorporate a mix of local and Mediterranean-style architectural features to create a low-profile, functional home.

The proposed landscaping plan will maintain the natural flora to the north and south of the project area, as well as along the coastal frontage of the property. No land alteration will occur within 70 feet of the shoreline, and all structures will be located a minimum of 100 feet from the shoreline. (See *Figure 5.*) Approximately two acres to the west of the residence will be planted as a fruit orchard. The landscaping plan will also introduce a number of native and ornamental trees, shrubs, and ground covers designed to enhance the naturally occurring Hawaiian coastal plants found on the site.

The residence and attached carport will have a total floor area of 3,916 square feet, and a maximum height of 25 feet. The residence and carport will be constructed of a natural-colored stucco with a tile roof.

The proposed development will also include the following related improvements:

- 288 square-foot utility shed/workshop
- 60 square-foot generator storage shed
- Two 12,000-gallon water catchment tanks
- 1,000-gallon septic system and leach field
- Two-acre fruit orchard
- Koi pond and garden
- New cinder driveway

G. ALTERNATIVES TO THE PROPOSED ACTION

1. No Action

The property is ideally suited for a combination of residential and agricultural uses, based on its topographical features and its attractiveness as an oceanfront parcel. Those areas of the property which are suitable for agricultural use will be used for agricultural purposes.

The "no action" alternative would not achieve Mr. Chroman's goal of building a single-family residence and planting a small fruit orchard on the property. The proposed action will enable Mr. Chroman to build a home, while still retaining the majority of the parcel in an undisturbed state. Therefore, the "no action" alternative is less desirable than the proposed action.

2. Alternative Siting

The proposed house site was selected for its relatively level topography and available buildable area. Alternative sites on the property would have required significant grading and filling to accommodate the residence, or clearing of previously undisturbed land.

3. Alternative Design Features

Mr. Chroman will employ a well-respected, capable architect to prepare construction drawings for the proposed residence and related improvements. Mr. Chroman will make every effort to ensure that the residence maintains a low-profile appearance, consistent with island-style architecture.

The size of the proposed residence and the nature of the related improvements were designed based upon Mr. Chroman's desire to permanently relocate to the Big Island. The guest rooms will enable the applicant to provide semi-separate quarters for his parents.

II. EXISTING CONDITIONS AT THE SITE

A. PHYSICAL ENVIRONMENT

1. Existing Land Use

The subject property is currently vacant land, covered with dense vegetation. The coastal frontage of the parcel is rocky. The portion of the property proposed for development by Mr. Chroman has been previously grubbed and graded, thereby destroying any potentially significant historical sites.

2. Surrounding Land Uses

The subject property is situated along a rugged and relatively remote stretch of coastline, approximately one (1) mile to the south of Isaac Hale Beach Park. Surrounding land uses reflect the rural character of the property. (See *Figures 1 & 2.*) Surrounding land uses include the following:

South: The adjacent property has a dilapidated house, with a driveway and related structures in various degrees of disrepair.

North: Properties to the north include residential parcels and Isaac Hale Beach Park.

East: To the east, the property is bounded by the Pacific Ocean.

West: Parcels to the west are developed for a mixture of larger-scale agricultural uses and residential uses.

3. Climate

Similar to most areas in Hawaii, the Big Island has a relatively uniform year-round climate. The subject property experiences mild temperatures year round, and relatively heavy rainfall. Consistent northeasterly trade winds are present at the site during much of the year.

Average temperatures at the site range from lows in the 60's to highs in the mid-80's. August is generally the warmest month, while January and February are the coolest. Rainfall at the site averages 95 inches per year.

4. Topography and Soils

The highest point of the subject property is located at the western end of the site, at the existing roadway. This area is approximately 45 feet above sea level. The property slopes very gradually down from the roadway to the shoreline, which is located approximately 25 feet above sea level. The entire project area has been previously bulldozed and is relatively flat.

The soils underlying the property belong to the Puna soil series. Specifically, the soil type is identified as lava flows, pahoe-hoe (rLW). This soil is characterized as "poor," with fragmented aa lava at a topsoil depth of less than 10 inches.

5. Flood Hazard

The subject property is located in an area which has been designated by the Flood Rate Insurance Map as Zone "X," or outside of the 500-year flood plain.

6. Flora and Fauna

During a walk-through survey of the property conducted by Bobby Camara on July 8, 1996, a list of plant species found on the subject property was compiled. A list of these plants is contained in *Appendix A*.

Animal life present on the property is typical of the surrounding region. Mammals common to this area include mongoose and rodents. There is also some visual evidence of feral pigs on the property. Avifauna characteristic of this region consists primarily of introduced species which are transient in nature, including cardinals and mynah birds.

The applicant is unaware of any endemic species inhabiting the property, although some endemic birds such as the Pueo and Hawaiian hawk may forage in this area. No unique habitat has been found on that portion of the property which is the subject of this application.

7. Marine Environment

The coastline of the subject property consists of rugged wave-eroded cliffs, with an average height of 25 feet above sea level. As a result of exposure to wave activity, near-shore underwater conditions at the site are generally turbulent, especially during the winter months.

8. Air Quality

The air quality in this area is considered good, and high concentrations of pollutants have not been detected at the subject property. The parcel's constant exposure to the trade winds helps to disperse any concentrations of emissions which might otherwise linger over the site.

9. Ambient Noise

The primary sources of background noise at the project site are due to naturally occurring conditions, such as wind and surf.

10. Visual Resources

The subject property is located between the shoreline and the "Red Road." Portions of Isaac Hale Beach Park are visible along the coastline to the north of the site. The proposed residence will not be visible from the coast, due to the steep drop off at the makai end of the property. Also, mature coconut groves flank both sides of the site, further reducing its visibility from the shoreline. The upper slopes of Kilauea Volcano are visible from the mauka portion of the site.

11. Archaeological/Historical Resources

An Archaeological Inventory Survey of the subject property was conducted by Mr. Terry L. Hunt, Ph.D., in July of 1996. This survey was conducted according to the State Historic Preservation Division's guidelines for an inventory-level survey. The following elements were included in the preparation of this survey:

- Research of historical, archival, and archaeological literature concerning the project area and surrounding area;
- Interviews with local informants knowledgeable with the area, its history, occupation, and use;
- A complete, intensive pedestrian survey of the project area in order to identify all archaeological remains on the property;
- Detailed mapping, written descriptions, and photographs of any identified archaeological remains;
- An analysis of historical, archival, oral history, and field evidence, including an assessment of site/feature function, age and significance;
- Report preparation, with recommendations for impact mitigation and historic preservation.

The Archaeological Inventory Survey is included as *Appendix B*.

B. SOCIO-ECONOMIC ENVIRONMENT

1. Population

The population of the County of Hawaii has exhibited relatively strong growth during the past decade. Growth in the County, and specifically in the Puna District, is expected to continue throughout the next decade.

2. Economy

The local economy in Puna is primarily based upon small-scale agricultural endeavors. Many Puna residents also commute back and forth daily to service-oriented jobs in Hilo.

C. PUBLIC SERVICES

1. Recreational Facilities

Recreational opportunities in this area include fishing and other shoreline activities, including surfing and picnicking at nearby Isaac Hale Beach Park. Vehicular and pedestrian accesses to the shoreline about the

subject property's northern boundary. The property itself does not appear to contain any routinely utilized shoreline access trails.

2. Police and Fire Protection

The nearest police substation is located in Pahoa town, approximately 7 miles west of the project site.

Fire protection is provided by the County's Pahoa Station, also located 7 miles west of the site in Pahoa town.

3. Solid Waste Disposal

Collection of solid waste from the proposed single-family residence shall be provided by an independent rubbish hauling service. Waste shall be disposed of in a municipal landfill, in a manner meeting with the County's requirements.

4. Health Care

The nearest major medical facility to the project site is Hilo Hospital, located approximately 22 miles to the northwest. Hilo Hospital provides acute, general, and emergency care services for residents of the Hilo, Puna, and Hamakua Districts of the Big Island.

5. Schools

The nearest public schools to the project site are located in Pahoa, approximately 7 miles to the west. The public schools in Pahoa accommodate elementary, intermediate, and high school students.

D. INFRASTRUCTURE

1. Wastewater

Domestic wastewater generated by the proposed residence will be disposed of via an individual wastewater system, consisting of a 1,000-gallon septic tank and an adjacent absorption bed.

2. Water

County water is not available at the project site. Therefore, the applicant will rely on two 12,000-gallon water catchment tanks to supply potable and non-potable water for the residence. The project site receives approximately 95 inches of rain annually, which should be more than adequate to supply the proposed residence. Historical evidence has demonstrated that a single-family residence in the Puna District can easily sustain itself on 75-90 inches of rain per year.

3. Vehicular Access

A 50'-wide unimproved government beach road runs adjacent to the western boundary of the project site. This government road, commonly referred to as the "Red Road," provides vehicular access to the coastal properties located between Kapoho in the north and Kalapana in the south. This road is maintained by the County.

4. Drainage

The 4.54-acre building site was selected because it was previously graded and grubbed, and because it is relatively level. Thus, the amount of additional land disturbance necessary to construct the residence will be relatively minimal. The existing basaltic surface of the site is extremely permeable and will continue to accommodate storm-water runoff. No injection wells or dry wells will be constructed on the site to dispose of storm-water runoff. Additional measures to minimize soil erosion and control runoff have been incorporated into the design of the proposed residence; these are discussed in detail on page 12, in the "Marine Resources" section of this Final Environmental Assessment.

III. PROJECT IMPACT ASSESSMENT

A. PHYSICAL ENVIRONMENT

1. Site Conditions

The parcel is undeveloped at this time. A small graveyard is situated at the far northern boundary of the parcel; this site belongs to the Hale family and will not be disturbed since it is outside the 4.54-acre portion of the parcel proposed for development. The 4.54-acre building site was selected because this area was previously disturbed during bulldozing and land clearing activities which occurred there during the early 1960's. The remaining 12.47 acres of the 17.01-acre parcel will not be altered by the proposed development, and the natural vegetation will remain undisturbed.

2. Surrounding Uses

The proposed development of the property for single-family residential and small-scale agricultural use is compatible with existing land uses in the area. Surrounding properties are also being utilized for residential and agricultural purposes, or they are vacant. The 4.54-acre portion of the property proposed for development was selected because it has undergone previous grading and provides a relatively level building site, and because it is adequately buffered from surrounding properties. The majority of the parcel (approximately 12.47 of the 17.01 acres) will be left undisturbed, and the proposed residence and related improvements will be buffered from adjoining properties to the north and south by the existing natural vegetation. A landscaping buffer will be established along the property's shoreline boundary, to minimize potential impacts on the coastal environment. The residence will be buffered from the government beach road by a 60'-wide strip of existing vegetation as well as by the two-acre fruit orchard. No man-made structures should be visible from the road. Therefore, the proposed residence should not have any adverse impacts on surrounding land uses.

3. Topography

The highest point on the property is located at the mauka boundary adjacent to the government road. The highest elevation is approximately 45 feet above sea level. The property slopes gradually down from the roadway to the shoreline, where the elevation is approximately 25 feet above sea level. The shoreline at the site is composed of rugged cliffs, which drop off abruptly into the sea.

The applicant proposes to preserve the natural character of the property as much as possible. The proposed residence and related structures will be located on the portion of the property that was previously bulldozed and is, therefore, relatively flat. Only minimal additional grading will be required to construct the residence. The driveway will follow existing contours and avoid any steep grades. The project should, therefore, have no significant impact on existing topographical features.

4. Flora and Fauna

Plant life at the site is typical of coastal properties in the Puna district, where the shoreline is constantly exposed to northeast trade winds and salt spray from waves crashing against the rocky coast. Vegetation consists of coconut palms, hala, kukui, Christmas berry, guava, peperomia, and mango. *Hilo ischaemum* grass, a rare and endangered plant, is located along the shoreline of the site – outside of the proposed development area. There are no known significant habitats of rare, endangered, or threatened species of flora located within the project area.

Animal life present on the property is also typical of the surrounding region. Mammals common to this area include mongoose and rodents. There is also some visual evidence of feral pigs on the property. Avifauna characteristic of this region consists primarily of introduced species which are transient in nature, including cardinals and mynah birds. The applicant is unaware of any endemic species inhabiting the property, although some endemic birds such as the Pueo and Hawaiian hawk may forage in this area. No significant habitats of rare, endangered, or threatened species of fauna have been found on that portion of the property which is the subject of this application.

5. Marine Resources

Potential short-term impacts to marine resources could occur during construction of the proposed residence due to increased storm-water runoff. Because the project area is less than 5 acres in size, a National Pollution Discharge Elimination System Permit (NPDES) is not required for this project. The applicant paid careful attention to the existing topography of the site in planning his residence. The 4.54-acre building site was selected because it will require minimal additional grading. The applicant will also implement the following measures during construction of the residence to ensure that soil erosion and runoff are minimized:

- The duration of construction will be kept to a minimum.
- Ground covers will be established on active construction areas as soon as possible.
- Graded areas will be thoroughly watered after construction activity has ceased for the day or for the weekend.

After the construction of the proposed residence, impacts to marine water quality could result from increased storm-water runoff due to the creation of impervious surfaces on the site. In order to minimize the potential for increased storm-water runoff, the applicant will establish a landscaping buffer along the shoreline boundary of the project site. Also, gutters and down-spouts will be used to divert runoff from the roofs of the proposed structures into water catchment tanks. The use of a cinder driveway will also help to accommodate storm-water runoff. As a result of these measures, there should be no noticeable increase in the volume of storm-water runoff into the coastal waters at the site as a result of the proposed development.

6. Air Quality

Dust generated during the construction of the proposed residence might cause short-term impacts to the air quality at the project site. Measures intended to control dust at the site will be implemented as needed to minimize potential wind-blown emissions; these include regular watering of exposed soil when construction activity has ceased for the day or weekend. The proposed residence should have no long-term adverse impacts on the ambient air quality.

7. Noise Impacts

Short-term impacts to the ambient noise level may occur during construction of the proposed residence due to heavy machinery operating at the site. Once the construction phase is completed, however, the development should have no long-term adverse impacts on the ambient noise level at the site.

8. Visual Resources

Due to the topography of the site, which slopes gently downward from the government beach road, and the distance of the residence from the road – no man-made structures should be visible to the public traveling along the road. The residence will be buffered from the government beach road by a 60'-wide strip of existing vegetation and by the two-acre fruit orchard, and from the adjoining properties to the north and south by the existing natural vegetation. Therefore, the proposed development should not interfere with any naturally occurring vistas.

The applicant will preserve the existing beauty of the shoreline by establishing a landscaping buffer along the makai boundary of the building site. All landscaping improvements will be situated at least 70 feet makai of the shoreline and all structures will be located at least 100 feet inland. These proposed setbacks will exceed the minimum 40-foot

shoreline setback required by County law. Therefore, the proposed residence should not impinge upon the open character of the shoreline in the area.

9. Archaeological Resources

An Archaeological Inventory Survey of the project site was conducted on May 31, 1996. This Inventory consisted of a 100% coverage pedestrian ground survey; research of historical, archival, and archaeological literature; interviews with local residents knowledgeable with the area, its history of occupation, and land use; detailed mapping, written descriptions and photography of any identified archaeological remains; analysis of all evidence; and report preparation with recommendations for impact mitigation and historic preservation.

This Survey confirmed that the 4.54-acre portion of the parcel selected for development was previously disturbed by extensive bulldozing in order to harvest coconut trees growing at the site. As a result, no archaeological resources remain within the area proposed for development. No significant sites were found in the course of the Survey, and no significant sites will be impacted by the proposed development. No further study or mitigation action was recommended.

B. SOCIO-ECONOMIC ENVIRONMENT

In the short term, the proposed development will support the local construction industry and generate construction-related employment opportunities. These opportunities are not expected to continue after the completion of the project, however.

As a single-family residence, this project will not have any significant impact on the local population level.

C. PUBLIC SERVICES

The proposed residence should not place an undue burden on public services. Police and fire protection are available at the project site, and comprehensive medical services are available in Hilo, located 22 miles northwest of the site. The proposed residence will have a negligible effect on educational and recreational facilities in the Puna District. Solid waste collection will be provided by a private rubbish hauling company, and all waste will be disposed of in a municipal landfill, in a manner meeting with County requirements.

D. INFRASTRUCTURE

1. Wastewater

The disposal of wastewater at the site is regulated by the State Department of Health. The applicant is proposing to construct a 1,000-gallon septic tank and leach field which meets the design and performance standards outlined in Chapter 62, HAR. The leach field will be located at an elevation of approximately 35 feet above sea level. The applicant will obtain a maintenance contract for the septic system, and sludge disposal will be by private pumping at a site approved by the Department of Health. Based upon the system's proposed depth to the water table and its distance from the shoreline, and upon the applicant's adherence to the Department of Health's design and performance standards, the proposed septic system should not have a significant impact on the marine water quality at the site.

2. Water

Since the project site is not currently served by a County water system, the proposed residence will rely on natural rainfall to supply potable and irrigation water. The applicant is proposing to construct two 12,000-gallon water catchment tanks to supply water to the site. Therefore, the proposed residence will have no impact on the existing County water system.

3. Traffic

The average speed of vehicles traveling along the government beach road fronting the property is 15 miles per hour. Based on a speed limit of 20 miles per hour, the required sight distance at the driveway access to the property is 225 feet to the left and 150 feet to the right. The available sight distances at the proposed driveway access are more than twice the minimum standards. Therefore, the proposed driveway should not create hazards for traffic traveling along the roadway. The proposed single-family residence also will not cause a substantial increase in the volume of traffic traveling along the road.

4. Drainage

All necessary measures to control erosion and sedimentation will be implemented during the construction of the proposed residence, to minimize potential short-term impacts to the marine water quality at the site. No injection wells or dry wells will be constructed on site to dispose of storm-water runoff. The existing permeable basaltic surface of the site, the use of a cinder driveway, and the planting of extensive ground covers around all proposed structures will help to accommodate storm-water runoff at the site. The project should, therefore, have a negligible impact on the existing hydrologic characteristics at the site and at the adjoining properties.

IV. RELATIONSHIP TO GOVERNMENT PLANS, POLICIES, AND CONTROLS

A. STATE LAND USE LAWS

The subject property is located in the "Resource" Sub-zone of the State Land Use "Conservation" District. Single-family residences are identified as a permitted use within the "Resource" Sub-zone, subject to the approval of a Conservation District Use Permit by the Board of Land and Natural Resources. Landscaping, defined as "alteration of plant cover, including trees," is also listed as an identified use, subject to a Departmental permit. Pursuant to Section 13-5-33b, Hawaii Administrative Rules (HAR), "in those applications whose identified land uses require a combination of board permit(s) and departmental permit(s), a board permit shall be required covering all of the proposed uses." Hence, the applicant is requesting a board permit for both the single-family residence and the proposed landscaping improvements.

1. Conservation District Use Application

Pursuant to Section 13-5-30, HAR, all land uses within the Conservation District require a Conservation District Use Permit approved by the Board of Land and Natural Resources. The Board evaluates proposed land uses according to the following criteria, as established in Sub-section 13-5-30c.

Criteria No. 1:

The proposed land use is consistent with the purpose of the Conservation District.

Response:

The purpose of the Conservation District is to conserve, protect, and promote the long-term sustainability of Hawaii's important natural resources through appropriate management strategies. As demonstrated in this Final Environmental Assessment, the proposed development has been designed to minimize potential adverse effects to the area's natural resources. Planning for the project has relied upon sound management principles – in order to promote the long-term sustainability of existing natural resources at the site.

The landscaping plan utilizes elements which are compatible with existing vegetation at the site, and seeks to preserve and enhance native coastal plant species. The use of plants which are well adapted to the windy coastal environment at the site will lessen the need for fertilizers and intensive irrigation. A planting strip along the shoreline boundary of the site will help to minimize potential runoff generated by the creation of additional impervious surfaces at the building site. All proposed structures will have gutter and down-spout systems to divert water runoff into the proposed water catchment tanks. The project will utilize only that 4.54-acre portion of the property that has already been extensively graded and grubbed. The applicant will preserve all previously undisturbed portions of the property, and no construction

activity will occur outside of the designated building site. Based on the foregoing, the proposed development is compatible with the goals of the Conservation District.

Criteria No. 2:

The proposed land use is consistent with the objectives of the sub-zone of the land on which the use will occur.

Response:

The purpose of the Resource Sub-zone is to ensure the sustained use of the natural resources on the lands contained within the Sub-zone. The applicant is proposing to construct a single-family residence and related improvements, as well as to conduct modest agricultural activity, on the previously disturbed portion (4.54 acres) of his property. The remainder of the 17.01-acre site will remain in its current pristine state. The proposed development has incorporated appropriate design and management principles to ensure that the natural resources of the site will be preserved to the fullest extent possible. A landscaping buffer along the shoreline boundary of the project site will minimize potential runoff from the building site, and all structures will use gutters and downspouts to divert runoff into water catchment tanks. The proposed structures have been sensitively sited on the property – to preserve the natural environment to the north, east, and south of the project area. The landscaping plan will utilize native coastal plants to enhance the naturally occurring vegetation at the site. The applicant will comply with Federal and State criteria to ensure the protection of archaeological resources on the property. Pristine areas of the property and the Hale family graveyard will be preserved and protected. In light of the above, the applicant feels that the proposed development is a long-term sustainable use of the property.

Criteria No. 3:

The proposed land use complies with provisions and guidelines contained in Chapter 205A, Hawaii Revised Statutes (HRS), entitled "Coastal Zone Management," where applicable.

Response:

The subject property is located within the County's Special Management Area (SMA). Single-family residences do not require an SMA Permit, and therefore the proposed development does not require an SMA Permit. The project must, however, comply with Shoreline Setback requirements. The County of Hawaii requires that the proposed development be located a minimum of 40 feet from the seasonal high water mark. No land alteration is proposed within 70 feet of the seasonal high water mark, and all structures will be located a minimum of 100 feet from the shoreline.

Criteria No. 4:

The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region.

Response:

The Pacific Ocean is the most significant natural resource in proximity to the proposed development. The applicant has exercised great care in planning this project to ensure that the marine environment is not degraded by the construction of his proposed residence. The building site was selected because it was previously graded and grubbed, and because it is relatively level. Thus, the amount of additional land disturbance necessary to construct the residence will be relatively minimal. Because the project area is less than 5 acres in size, a National Pollution Discharge Elimination System Permit (NPDES) is not required. The applicant will, however, implement the following measures during construction of the residence, to ensure that soil erosion and runoff are minimized:

- The duration of construction will be kept to a minimum.
- Ground covers will be established on active construction areas as soon as possible.
- Graded areas will be thoroughly watered after construction activity has ceased for the day or for the weekend.

After the construction of the proposed residence, impacts to marine water quality could result from increased storm-water runoff due to the creation of impervious surfaces on the site. In order to minimize the potential for increased storm-water runoff, the applicant will establish a landscaping buffer along the shoreline boundary of the project site. Also, gutters and down-spouts will be used to divert runoff from the roofs of the proposed structures into water catchment tanks. As a result of these measures, there should be no noticeable increase in the volume of storm-water runoff at the site as a result of the proposed development.

The disposal of wastewater at the site is regulated by the State Department of Health. The applicant is proposing to construct a septic tank and leach field which meets the design and performance standards outlined in Chapter 62, HAR. The leach field will be located at an elevation of approximately 35 feet above sea level. The applicant will obtain a maintenance contract for the septic system, and sludge disposal will be by private pumping at a site approved by the Department of Health. Based upon the system's proposed depth to the water table and its distance from the shoreline, and upon the applicant's adherence to the Department of Health's design and performance standards, the proposed septic system should not have a significant impact on the marine water quality at the site.

To summarize, the mitigation measures described above will ensure that potential adverse impacts to near-shore waters are minimized. It should

also be noted, however, that ocean conditions in the immediate vicinity of the project are generally very turbulent. In the unlikely event that surface runoff or subsurface flows from the septic tank do enter the near-shore waters, they will be rapidly diluted.

Criteria No. 5:

The proposed land use, including buildings, structures and facilities shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.

Response:

The proposed development of the property for single-family residential and small-scale agricultural use is compatible with existing land uses in the area. Surrounding properties are also being utilized for residential and agricultural purposes, or they are vacant. The 4.54 acre portion of the property proposed for development was selected because it has undergone previous grading and provides a relatively level building site, and because it is adequately buffered from surrounding properties. The majority of the parcel (approximately 12.47 of the 17.01 acres) will be left undisturbed, and the proposed residence and related improvements will be buffered from adjoining properties to the north and south by the existing natural vegetation. A landscaping buffer will be established along the property's shoreline boundary, to minimize potential impacts on the coastal environment. The residence will be buffered from the government beach road by a 60'-wide strip of existing vegetation as well as by the two-acre fruit orchard, so that no man-made structures should be visible from the road.

Criteria No. 6:

The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable.

Response:

The applicant proposes to develop only that portion of the property which has already undergone extensive grading and grubbing as a result of coconut tree harvesting on the site during the 1960's. The remainder of the parcel to the north and south, and along the shoreline to the east, will not be disturbed by construction of the proposed residence; and these areas will retain their existing vegetation. Due to the topography of the site, which slopes gently downward from the government beach road, and the distance of the residence from the road – no man-made structures should be visible to the public traveling along the road. Therefore, the proposed development should not interfere with any naturally occurring vistas.

The applicant will preserve the existing beauty of the shoreline by establishing a landscaping buffer along the makai boundary of the building site. All landscaping improvements will be situated at least 70

feet makai of the shoreline and all structures will be located at least 100 feet inland. These proposed setbacks well exceed the minimum 40-foot shoreline setback required by County law. Therefore, the proposed residence should not impinge upon the open character of the shoreline in the area.

Criteria No. 7:

Subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District.

Response:

The proposed development involves the construction of a single-family residence and related improvements, and the establishment of a fruit orchard on a pre-existing lot of record. No subdivision of land is required for this project.

Criteria No. 8:

The proposed land use will not be materially detrimental to the public health, safety and welfare.

Response:

As detailed in this Final Environmental Assessment, the proposed development will comply with all applicable County, State, and Federal requirements governing environmental and health concerns during the construction and post-construction phases of the project. The septic system will be designed and operated in accordance with State Department of Health regulations. Appropriate mitigation measures, as identified in this Final Environmental Assessment, will be implemented during the construction of the residence – to minimize potential adverse impacts to air quality, ambient noise levels, and marine water quality. A shoreline landscaping buffer and a system of gutters and drainpipes installed on all structures will ensure that no appreciable increase in runoff is generated by the proposed development. Lastly, the sight distance at the intersection of the government beach road and the proposed driveway is over double the minimum sight distance required by law. In summary, adequate measures will be taken to ensure that the project does not in any way threaten the public health, safety, and welfare.

B. GENERAL PLAN OF THE COUNTY OF HAWAII

The 1989 General Plan of the County of Hawaii specifies long-term goals, policies, and standards intended to ensure the improvement of living conditions in the County. The General Plan addresses social, environmental, and economic issues which influence future growth in the County. The proposed development is consistent with the following long-term goals, as expressed in the County's General Plan:

1. Economic**Goal:**

Economic development and improvement shall be in balance with the physical and social environments of the island of Hawaii.

Standard:

The island of Hawaii should be developed into a unique scientific and cultural model. The island should become a model of living where economic gains are in balance with social and physical amenities. Development should be reviewed on the basis of total impact on the residents of the County, not only in terms of immediate short-run economic benefits.

2. Environmental Quality**Goal:**

Maintain and, if feasible, improve the existing environmental quality of the island.

Standard:

Federal and State environmental regulations shall be adhered to.

3. Historic Sites**Policy:**

The County of Hawaii shall require both public and private developers of land to provide a historical survey prior to the clearing or development of land when there are indications that the land under consideration has historical significance.

4. Natural Beauty**Goal:**

Protect, preserve, and enhance the quality of areas endowed with natural beauty, including the quality of coastal scenic resources.

5. Natural Resources and Shoreline

Goal:

Protect and promote the prudent use of Hawaii's unique, fragile, and significant environmental and natural resources.

Policy:

The shoreline shall be protected from the encroachment of man-made improvements and structures.

6. Housing

Goal:

Maintain a housing supply that allows a variety of choice.

7. Land Use

Goal:

Designate and allocate land uses in appropriate proportions and mix and in keeping with the social, cultural, and physical environments of the County.

V. FINDINGS AND CONCLUSIONS

The applicant proposes to construct a single-family residence, accessory structures, and landscaping improvements on a portion of his property. As demonstrated in this Final Environmental Assessment, the proposed single-family residence has been carefully designed to minimize potential adverse impacts to the area's natural resources and to promote long-term sustainability of those resources.

Storm-water runoff will be diverted away from the shoreline and will be disposed on-site in a manner meeting with County and State requirements. The proposed shoreline planting strip will further protect the shoreline from any non-point source runoff generated by this project. The landscaping plan is compatible with the surrounding area and will preserve and enhance native coastal plant colonies. The use of plants which are well adapted to a windy coastal environment will lessen the need for fertilizers and intensive irrigation. The project has also been designed to minimize alterations to the existing topography, by utilizing the previously graded portion of the property as a building site.

In order to construct the proposed residence, some land clearing and heavy construction activity will be required. In the short-term, this activity may cause minor annoyances typically associated with the construction of a house, such as increased noise and dust levels. All construction activities are anticipated to be limited to daylight hours, and all necessary measures to minimize dust and soil erosion will be implemented on a daily basis. Therefore, negative impacts associated with the short-term construction of the residence should be minimal.

From a long-term perspective, the proposed project is not anticipated to result in adverse environmental impacts. Because of the sloping topography of the site and the distance of the proposed residence from the road, the project will have no impact on existing scenic views from the government beach road. The property is located in Flood Zone "X," or outside the 500-year flood plain. The project will have no significant impacts upon archaeological or historic resources, since these resources were obliterated during the previous clearing of the property in the 1960's. The project will have virtually no effect on long-term employment opportunities or on the local population level. Public services, such as police and fire protection, medical services, and public educational facilities are available in close proximity to the project site, and these services will not be overburdened by construction of the proposed single-family residence. Due to the small size of the proposed development, impacts upon roadways also are not considered significant. The project will have no impact on municipal water, sewer, and drainage systems, since these systems are not available at the project site. Self-contained water, wastewater, and drainage systems will be installed on the site and will be managed in accordance with County and State regulations.

In light of these findings, it is reasonable to conclude that the proposed development will not have any significant adverse impacts on the natural resources and infrastructure of the surrounding area.

VI. LIST OF AGENCIES CONSULTED DURING PREPARATION OF FINAL ENVIRONMENTAL ASSESSMENT

State of Hawaii

- DLNR, Division of Historic Preservation
- DLNR, Division of Land Management

County of Hawaii

- Planning Department
- Department of Public Works, Engineering Division
- Department of Water Supply

VII. AGENCY COMMENTS AND APPLICANT'S RESPONSE TO COMMENTS

A copy of a letter dated August 7, 1997, from the State Office of Environmental Quality Control (OEQC) is included on page 24 of this Final Environmental Assessment. The applicant's response to the OEQC letter is included on page 25 of this Final EA.

BENJAMIN J. CAYETANO
GOVERNOR



GARY GILL
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

276 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4186
FACSIMILE (808) 586-4186

August 7, 1997

Mr. Michael Chroman
2411 Ocean Front Walk
Venice, California 90291

Dear Mr. Chroman:

We submit for your (or your agent's) response (required by Section 343-5(c), Hawai'i Revised Statutes), the following comments on a draft environmental assessment (received May 12, 1997 by the Department of Land and Natural Resources, and received June 13, 1997, by our Office) entitled "Chroman Residence and Related Improvements." The Office published notice of availability of this DEA in the July 8, 1997, edition of the *Environmental Notice*.

1. **PHOTOGRAPHS OF THE SITE.** While Figure 4 in the Appendix provides an indication of the site topography, it would be helpful to have photographs both of the undisturbed and disturbed areas of the parcel. Please include these in the final environmental assessment for the project.

Please include this letter and your response to it in the final environmental assessment for this project. If there are any questions, please call Mr. Leslie Segundo, Environmental Health Specialist, at 586-4185. Thank you for the opportunity to comment.

Sincerely,

GARY GILL
Director

c



Lauren Tanaka, DLNR Land Division

August 23, 1997

Mr. Gary Gill
Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, HI 96813

Dear Mr. Gill:

Chroman Residence and Related Improvements

We received your letter dated August 7, 1997, in which you specifically requested that the applicant provide photographs of both the disturbed and undisturbed portions of the site as part of the Final Environmental Assessment (Final EA) for the proposed residence. We are happy to comply with your request, and we have included the following six photos of the site for your review and as part of the Final EA for the project.

Photo #1: View of the disturbed area of the site from the government road, showing the Christmas berry, miniature guava, and various other introduced species of weeds typical of recently bulldozed areas in the vicinity. These species are listed in detail in the Flora/Fauna Survey which was included as Appendix A of the Draft EA for the project.

Photo #2: View of the undisturbed area of the site from the government road, showing Hala, mango, and other early introductions and native species to the area as outlined in the Flora/Fauna Survey.

Photo #3: View of the disturbed area of the site from the coast, showing old dead coconuts and new coconut regrowth. This is the area where the Mauna Kea Beach Hotel purportedly pirated coconut and kamani trees in the early 1960's.

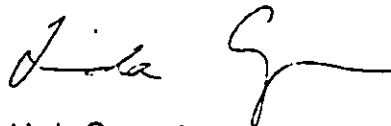
Photo #4: View of the undisturbed area to the north of the disturbed area, showing the healthy coconut and kamani forest which was not pirated by the hotel.

Photo #5: View of the kamani trees in the undisturbed area of the site to the north of the proposed residence.

Photo #6: View of an old flatbed truck remnant in the disturbed area of the site. The truck is covered with crushed rock; this was identified as bulldozer tracks in the Archaeological Inventory Survey of the site (included as Appendix B of the Draft EA).

Please do not hesitate to contact me at 883-2246 or Mr. Steven Freedman at 966-8943 if you have any further questions regarding Mr. Chroman's application.

Sincerely,



Linda Copman
Planning Consultant

VIII. PHOTOGRAPHS OF PROJECT SITE

Photo #1

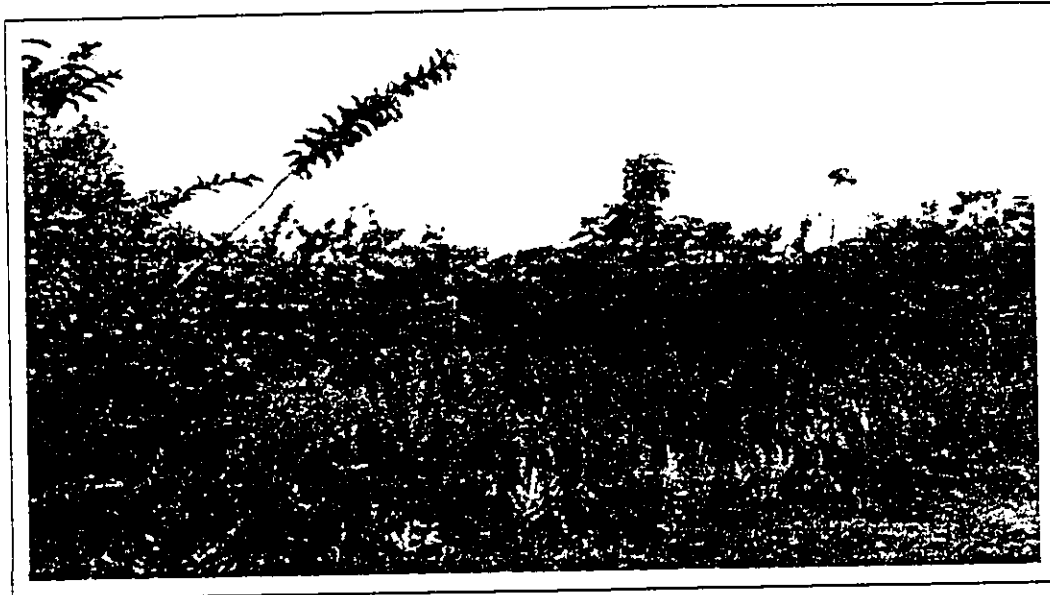


Photo #2



Photo #3



VIII. PHOTOGRAPHS OF PROJECT SITE

Photo #4



Photo #5



Photo #6

