Board of Land and Natural Resources  
State of Hawai‘i  
Honolulu, Hawai‘i  


APPLICANT/LANDOWNER: Christopher & Wendi Roehrig

AGENT: James M. Leonard of JM Leonard Planning, LLC

LOCATION: 14-3543 Government Beach Road, Wa‘awa‘a, Puna, Island of Hawai‘i

TAX MAP KEY (TMK):  (3) 1-4-028:008

AREA OF PARCEL: 0.459 acres

USE: Structures – 2,573 square feet  
Landscaping & Related Improvements - ~6,825 square feet

SUBZONE: Resource Subzone

DESCRIPTION OF AREA/CURRENT USE

The subject property is an undeveloped shoreline parcel located in the Resource Subzone of the State Land Use Conservation District. The parcel is primarily covered in vegetation that consists of hala (Pandanus tectorius), naupaka (Scaevola taccada), and smaller coconut palms (Cocos nucifera). The property is located makai of Government Beach Road in the Puna District on the east side of the island of Hawai‘i. See Exhibit 1.

According to the application, portions of the Wa‘awa‘a Subdivision generally consist of larger residential-farm lots which are located to the west (mauka) of the subject property. The adjacent property to the northwest is developed with a home (CDUP HA-3682) as
are the two (2) parcels to the southeast. The adjacent property to the east appears to be undeveloped; however, was the subject of CDUP HA-3520 which has expired. To the north of the subject property, there is an approximately 12.6-acre narrow shoreline parcel (noted as TMK: (3) 1-4-028:051) that lies between the Pacific Ocean and the other fifty (50) parcels within the Wa’awa’a Subdivision that are located makai of Government Beach Road.

The subject property sits at an elevation range of 20ft above mean sea level at its makai boundary to approximately 40ft above mean sea level at the mauka boundary with the Government Beach Road. The area receives an average of about 103 inches of rain annually and experiences an average temperature around 75 degrees Fahrenheit.

The project site is located on the flank of the active volcano Kilauea in the District of Puna, in the Wa’awa’a Ahupua’a, on lava flows 750 and 1,500 years in age. It is about 1,000 feet southeast of an 1840 lava flow. A littoral (shoreline) cone created by the 1840 flow is present approximately a half mile to the northwest. Soil in the area is ‘Opihikao extremely rocky muck (3-25% slopes), part of a series of well-drained thin organic soils developed over pāhoehoe bedrock. They are found from sea level to 1,000 feet in elevation and are rapidly permeable, with slow run-off and slight erosion hazard (U.S. Soil Conservation Service 1973). This soil is within subclass VII, which means it has limitations that make it unsuitable for cultivation and restrict its use to pasture, range, woodland or wildlife.

Hazards

The volcanic hazard mapping produced by the U.S. Geological Survey places the property in Lava Flow Hazard Zone 2 on a scale of ascending risk from 9 (low) to 1 (high). The relatively high hazard risk is due to Kilauea being an active volcano. Zone 2 includes areas adjacent and downslope of active rift zones. Additionally, the island of Hawai’i experiences high seismic activity and the property is within Earthquake Zone 4 according to the County Building Codes. Structures that are poorly designed or built are at risk from major earthquake damage. The applicants understand that there are hazards associated with homes in this geologic setting and have made the decision that a residence in the subject area is not imprudent to construct or inhabit. They also understand and accept that there may be added structural requirements to address potential seismic hazards for any new construction.

A Flood Zone Map obtained from the State’s Flood Hazard Assessment Tool website shows that the subject property is in Flood Zone X which is defined as areas that are outside of the 500-year floodplain (Exhibit 2). The proposed home site has no evidence of tsunami inundation although the shoreline areas of the subject parcel have been affected by high storm waves similar in magnitude as the storm waves generated by Tropical Storm Iselle. Since the subject property is located along the shoreline and has been prone to erosion caused by storm and tsunami waves, a coastal erosion study was performed for the parcel by tesARCH Services. The coastal erosion study which included the anticipated and accelerating effects of sea level rise and global warming found that the annual erosion rate for the property was 0.15 feet per year. Based on the requirements and standards of Exhibit 4 of Hawai’i Administrative Rules (HAR) Chapter 13-5, the minimum shoreline setback for a single-family residence on the property would
be approximately 50.5-feet. The application notes that the landowners are proposing a minimum shoreline setback of 70-feet from the certified shoreline (55.9-feet from the property’s makai boundary) which would site the house on an area of the property that is approximately 30-35-feet above sea level. See Exhibit 3 and Exhibit 5.

Flora and Fauna

The entire subject property was systematically inspected for plants by biologist Dr. Ron Terry of Geometrician Associates LLC in January 2021. Prior to human settlement of Hawai‘i, the natural vegetation of this part of the Puna shoreline was mostly coastal forest and strand vegetation dominated by naupaka (*Scaevola taccada*), hala (*Pandanus tectorius*), ‘ōhīa (*Metrosideros polymorpha*), nanea (*Vigna marina*) and various sedges and coastal herbs (Gagne and Cuddihy 1990). Special attention was paid during several field visits to potential endangered species, particularly *Ischaemum byrone*, a State and federally listed endangered grass known to grow in the general area.

The vegetation presently found on the project site is dominated by native hala (*Pandanus tectorius*) and coconut palms (*Cocos nucifera*). Most of the other species present are non-native species, and all of the natives are very common in Puna and throughout the State of Hawai‘i. No rare, threatened or endangered plant species have been observed or are present on the parcel.

During the faunal survey, birds observed by the applicants’ consultant are those that are common to the area. These included the common myna (*Acridotheres tristis*), northern cardinal (*Cardinalis cardinalis*), spotted dove (*Streptopelia chinensis*), Japanese white-eye (*Zosterops japonicus*), and house finch (*Carpodacus mexicanus*). It is possible that the Hawaiian ‘amakihi (*Hemignathus virens*) may sometimes be present; however, was not observed during site visits. Common shorebirds, such as Pacific golden-plover (*Pluvialis fulva*), ruddy turnstone (*Arenaria interpres*), and wandering tattler (*Heteroscelus incanus*) are often seen on the Puna coastline feeding on shoreline resources. The application notes that they would be unlikely to make much use of the property itself, which is densely vegetated and offers no habitat for them, but it is possible they may utilize the shoreline area makai of the property.

Several endangered native birds may be present in the area as they may fly, roost, nest, or utilize resources of the property. These included the endangered Hawaiian hawk (*Buteo solitarius*), the endangered Hawaiian petrel (*Pterodroma sandwichensis*), the endangered band-rumped storm petrel (*Oceanodroma castro*), and the threatened Newell’s shearwater (*Puffinus auricularisnewelli*). No native birds were identified during site visits, and it is unlikely that many species of native forest birds would be expected to use the project site due to its low elevation, alien vegetation, and lack of adequate forest resources. To avoid potential seabird downing through interaction with outdoor lighting, no construction or unshielded equipment lighting will be used after dark between the months of April and October. Minimal exterior lighting will be included, and it will be shielded in strict conformance with the Hawai‘i County Outdoor Lighting Ordinance (Hawai‘i County Code Chapter 9, Article 14). Lighting will be constrained to utilize only low light-emitting fixtures using blue-deficient filtered LED lights with a Correlated Color
Temperature (CCT) of 2700 Kelvin or less, shielded to protect both transiting seabirds and dark skies.

The application notes that it is highly likely that the endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*), the only native Hawaiian land mammals, are sometimes present on the property. No bats were observed during the surveys of the property. The application states that potential impacts to the Hawaiian hoary bat will be mitigated through the timing of vegetation removal by avoiding the bat birthing and pup rearing season (June 1 through September 15). Any other mammal species, such as feral cats (*Felis catus*), feral pigs (*Sus scrofa*), small Indian mongooses (*Herpestes a. auropunctatus*) and various species of rats (*Rattus spp.*), that may be present on the property are introduced or non-native and are not of conservation concern.

**Historic/Cultural**

An archeological archaeological inventory survey and a cultural consultation report were prepared for the property. No gathering of plant or animal material was noted from the property. No consulted individuals with ties to and history with the area had any specific information concerning this parcel and no archaeological features were present. No specific traditional cultural sites or practices were identified to exist or have taken place within the property.

As part of the consultation process to address potential impacts to any cultural or historical resources as well as traditional practices, the applicants’ consultants contacted six (6) individuals known to have genealogical ties, long-standing residency, or knowledge of cultural and/or historical properties in the Wa’aawa’a Ahupua’a. Based on the interviews obtained for the project as well as from previous consultations efforts for other projects in the immediate area, the applicants’ consultants provided the following insights regarding traditional and customary practices that occur within the vicinity of the project area. Cultural practitioners have and continue to gather lauhala (pandanus leaves) from the district for various items of cultural importance and ornamental value. Cultural practitioners, fisherman, and community members access the shoreline area to gather a variety of marine resources. The general area of Puna is known to contain *iwi kupuna* and consultees have stressed that landowners in the area take a proactive approach for care and preservation of human remains.

According to the application, the applicants note that they intend to replant hala trees that are removed for the project as well as replace removed invasive trees with hala trees. They also note that hala trees are a widespread resource in the area. The project should not affect shoreline processes, nor the resources utilized by those fishing or gathering in the area. An archaeological survey of the entire property did not reveal the presence of human burials or *iwi kupuna*, and in the unlikely event that any archaeological resources are discovered during ground disturbing activity associated with the proposed development, the applicants or contractors will cease work in the area of the discovery and contact the State Historic Preservation Division (SHPD).

Part of the CDUA process requires that the applicant submit a Hawai‘i Revised Statutes (HRS), 6E form developed by SHPD. Pursuant to HRS, §6E-42, prior to any agency or
officer of the State [in this case the Board] approves any project involving a permit, license, certificate, land use change, subdivision, or other entitlement for use, which may affect historic property, aviation artifacts, or a burial site, the agency or office [OCCL] shall advise SHPD prior to any approval and allow SHPD an opportunity to review and comment on the effect of the proposed project on historic properties.

On February 24, 2022, SHPD issued the property owners a Chapter 6E-42 Historic Preservation Review letter and OCCL’s request for SHPD’s concurrence with the “No Historic Properties Affected” determination for the proposed use (SHPD Project No. 2022PR00077; Doc. No. 2202SN07). This letter reviewed and accepted the applicants’ and project’s archaeological inventory survey as well as its archaeological assessment. Due to the negative findings of significant historic properties during the archaeological inventory survey, SHPD concurs with the OCCL project effect of “no historic properties affected (Exhibit 4).

PROPOSED USE

The applicants are proposing to construct a one story post-on-pier 2,356 sq. ft single-family residence consisting of 2 bedrooms, 2 bathrooms, a living room, kitchen, dining area, pantry, lanai, breezeway, and garage. The total area of development for the proposed single-family residence and associated structures is 2,573 sq. ft. This includes the total areas for the proposed residence (1,867 sq. ft), garage (280 sq. ft), breezeway between the garage and residence (200 sq. ft), water storage tank (189 sq. ft), and propane storage tank (28 sq. ft). The application notes that all structures of the proposed residence [except the proposed water catchment tank] will be under one (1) roof in accordance with Hawai‘i Administrative Rules (HAR) Chapter 13-5 Exhibit 4 and Compatibility Provisions – All structures connected, or best alternative. The application also notes that the proposed single-family residence will be approximately 20 ft 2 in and will not exceed the Maximum Allowable Building Envelope of 25 ft as noted in Exhibit 4 of HAR Chapter 13-5 (Exhibit 5).

The applicants plan to install a roof-mounted photovoltaic system for electrical services as well as solar water heating panels. Water will be provided via rainfall water catchment and 10,000-gallon storage tank. The applicants also plan to utilize a propane tank for propane gas storage for cooking and backup water heating and electric power. Telecommunications will be provided by cell service and satellite receivers. Wastewater will be treated with a septic system in conformance with the requirements of the Department of Health and is planned to have a tank capacity of 1,000-gallons and a 320 sq. ft absorption field.

Access to the parcel is off the recently paved Government Beach Road which according to the application is a single lane lightly traveled road that connects several miles to the east at “Four Corners” of County Highway 132 and several miles to the west at Kahakai Boulevard. Access to the proposed residence will be provided by a gravel driveway that connects to Government Beach Road. The applicants are planning to construct a redwood panel-gate at the entrance of the gravel driveway as well as install a redwood
panel fence along the mauka boundary of the parcel that borders Government Beach Road.

The project includes some landscaping which will emphasize bolstering the natural hala and naupaka vegetation currently found on the property, replacing the hala trees that need to be removed for the proposed driveway and residence, and in areas that have already had or will have invasive trees removed. Land clearing and construction activities including the single-family residence, driveway, turnaround area, utility structures, catchment tank would occur over an approximate area of 0.2-acres leaving the remaining approximately 0.259-acres relatively undisturbed.

OTHER ALTERNATIVES CONSIDERED:
Alternative 1: No Action. Under the No Action Alternative, the residence would not be built. The lot would remain unused except for temporary camping and picnicking by the owners. The Environmental Assessment considers the No Action Alternative as the baseline by which to compare environmental effects from the project.

Alternative 2: Proposed Project, Alternative House Sites, and Alternative Uses. The proposed project and its location are described above. Other locations on the property could serve as the site for a residence, but none offered the advantages of the proposed site in terms of breezes and views while also avoiding limiting potential impacts to coastal hazards and resources. The application notes that there are no known environmental or other reasons for seriously considering other sites on the property.

No other alternative uses for the property that are identified in the Conservation District Rules (HAR 13-5) as allowable uses in the Conservation District, such as a commercial tourist nature park, are desired by the applicants, and thus none are addressed in the Environmental Assessment.

SUMMARY OF COMMENTS
The Office of Conservation and Coastal Lands referred the application, as well as the Draft Environmental Assessment (EA) to the following agencies and organizations for review and comment:

State Agencies:
DLNR, Water Resource Management
DLNR, Division of Conservation and Resource Enforcement
DLNR, Division of Aquatic Resources
DLNR, Engineering Division
DLNR, Division of Forestry and Wildlife
DLNR, Hawai‘i District Land Office
DLNR, Nā Ala Hele
Department of Health
Office of Hawaiian Affairs
County Agencies:
County of Hawai‘i, Department of Planning
County of Hawai‘i, Fire Department

Other Individuals/Organizations:
Malama O Puna

In addition, this application was also sent to the nearest public library, the Pahoa Public and School Library, to make this information readily available to those who may wish to review it.

Comments were received by the following agencies and individuals and summarized by Staff as follows:

THE STATE

DEPARTMENT OF LAND AND NATURAL RESOURCES
Commission on Water Resource Management:
Comments: Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore all water use is subject to legally protected water rights CWRM strongly promotes the efficient use of Hawaii’s water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code Chapter 174C Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. These documents are available via the Internet at http://dlnr.hawaii.gov/cwrm.

Our comments related to water resources are checked off below.

4. We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area’s freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at http://www.usgbc.org/leed. A listing of fixtures certified by the EAP as having high water efficiency can be found at http://www.epa.gov/watersense.

5. We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at http://planning.hawaii.gov/czm/initiatives/low-impact-development/
6. We recommend the use of alternative water sources, wherever practicable.


9. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.

12. A Well Construction Permit(s) is (are) are required before the commencement of any well construction work.

13. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.

14. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.

OTHER: The applicant proposes to use rainfall catchment as a water source. We recommend that the applicant reference the manual Guidelines on Rainwater Catchment Systems for Hawai‘i (available online at [https://www.ctahr.hawaii.edu/hawaiirain/guidelines.html](https://www.ctahr.hawaii.edu/hawaiirain/guidelines.html)). If there are any plans to construct a well, the applicant must apply for well construction and pump installation permits from the Commission on Water Resource Management.

Applicants’ response: Concerning the checklist comments from the Commission on Water Resource Management, please note that the Department of Health has had the opportunity to review the EA. Adequate BMPs to protect surface water and groundwater will be an integral part of construction and use of the home, as documented in the EA. No water well is planned, as the project will rely on the alternative source of rainfall catchment. In order to reduce electric pump costs and avoid the need to truck water, water efficient fixtures will be installed, and water efficient practices implemented. Note that the area has high rainfall and there is no need for irrigation. There are no known wells located within the property; therefore, no permit for well abandonment is required. According to the Hawaii Groundwater & Geothermal Resource Center database ([https://www.higp.hawaii.edu/hggrc/projects/hawaii-state-waterwells/](https://www.higp.hawaii.edu/hggrc/projects/hawaii-state-waterwells/)), existing wells are located on properties approximately 300 feet away, mauka from the owners' property. The owners' single-family residence should not impact these wells. This information has been added to the EA.
**Engineering Division:**

**Comments:** The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a Special Flood Hazard Area (high-risk areas). Be advised that 44CFR, Chapter 1, Subchapter B, Part 60 reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may stipulate higher standards that can be more restrictive and would take precedence over the minimum NFIP standards.

The owner of the project property and/or their representative is responsible to research the Flood Hazard Zone designation for the project. Flood zones subject to NFIP requirements are identified on FEMA's Flood Insurance Rate Maps (FIRM). The official FIRM can be accessed through FEMA's Map Service Center (msc.fema.gov). Our Flood Hazard Assessment Tool (FHA T) (http://gis.hawaiinfip.org/FHA T) could also be used to research flood hazard information.

If there are questions regarding the local flood ordinances, please contact the applicable County NFIP coordinating agency below:

- **Oahu:** City and County of Honolulu. Department of Planning and Permitting (808) 768-8098.
- **Hawaii Island:** County of Hawaii. Department of Public Works (808) 961-8327.
- **Maui/Molokai/Lanai:** County of Maui. Department of Planning (808) 270-7139.
- **Kauai:** County of Kauai. Department of Public Works (808) 241-4849.

**Applicants’ response:** Concerning the memo from the Engineering Division indicating a need for the property owner to research the flood hazard designation for the property, that has already been conducted and is documented in the EA.

**Hawai‘i District Land Office:**

**Comments:** No Comments.

**Applicants’ response:** In the interest of a complete record on comments to the EA/CDUA, I would first like to acknowledge receipt of a no-comment memo from the Hawai‘i Island Land Division.

**Office of Conservation and Coastal Lands (OCCL):**

**Comments:** The OCCL offers the following comments on the Draft EA and CDUA:

- Please include a topography map of TMK: (3) 1-4-028:008 in the CDUA and Draft EA.
- Please include a schematic of the proposed roof-mounted photovoltaic solar system and panels.
- Please include a site plan/more details regarding the proposed fence and wooden access/entry gate along the mauka / Government Beach Road portion of TMK: (3) 1-4-028:008.
• Please include more details in the proposed "LANDSCAPE PLAN" including approximate number and types of trees to be removed and replanted as well as their location on the property.

• Please clarify if all proposed structures such as the single-car garage will be under one (1) roof.
  o Note: Pursuant to HAR Chapter 13-5 Exhibit 4 Single Family Residential Standards and Compatibility Provisions: All structures connected, or best alternative.

• "Table 2. Plant Species Observed on Property" (Table 1 in the Draft EA) also identifies Indigenous plant species Ekaha and Mauu aki aki as being present on the property. Please discuss the abundance and conservation status of these indigenous plant species.

• Page 51 of the Draft EA states "Single-family residences are an identified use in the Resource Subzone under HAR 13-5-24, R-8." A single-family residence is an identified land use in the Resource Subzone of the State Land Use Conservation District that may be applied for pursuant to HAR, §13-5-24 R-7 SINGLE FAMILY RESIDENCE (D-1) A single family residence that conforms to design standards as outlined in Chapter 13-5, HAR. Please correct this discrepancy in the Draft EA as well as in the CDUA.

Applicant's response: I am in receipt of your letter to project planner James Leonard of January 5, 2022, accepting the CDUA and summarizing the Office of Conservation and Coastal Lands' (OCCL) comments upon acceptance of the Draft EA, and also OCCL's March 22, 2022 letter to Mr. Leonard, providing information on the processing status, repeating the comments of the previous letter, and requesting our responses. We have also received copies of all other comment letters on the Draft EA/CDUA from Planner Trevor Fitzpatrick. This letter responds to your letter and comments from all DLNR agencies. We have also copied your office in the attachment to this letter on our response letter to non-DLNR entities (in this case, the Hawai'i County Planning Department), which was sent directly to that agency.

The comments from OCCL contained in both the January 5 and March 22 letters are repeated below, followed by our responses.

1. Please include a topography map of TMK: (3) 1-4-028:008 in the CDUA and Draft EA.

The basic topo map included as Figure 1 in the Draft EA has been replaced in the Final EA with a more detailed topographic map that includes a Google Earth inset showing the approximate USGS contour line locations. The map also provides a roadway spot elevation from Google Earth, which was derived from NASA's Shuttle Radar Topography Mission (SRTM). Roadway spot elevations have been shown to be reasonably accurate, with mean absolute errors (MAE) on the order of 1.3 meters. The spot elevation is adequately congruent with the elevations depicted in the contour lines.
2. Please include a schematic of the proposed roof-mounted photovoltaic solar system and panels.

We note that the location and layout of the proposed roof-mounted photovoltaic (PV) panels are shown on the Elevation Perspectives (Sheet 3 of 4) on Page 7 of the Draft and Final EA. The solar system is planned to consist of 8 Q Cells-brand 400-watt solar panels, 2 lithium ferrous phosphate Fortress eFlex batteries, and a Sol-Ark 12K inverter. The conduit and wire from the solar panels on the roof would extend straight through the attic and down below to minimize any visible equipment on the exterior of the house. The area for the battery and solar equipment storage is located at the rear (south end) of the planned garage, as shown on the attached updated Floor Plan (Sheet 2 of 4). The updated plan and the information above are included in the Final EA.

3. Please include a site plan/more details regarding the proposed fence and wooden access/entry gate along the mauka/Government Beach Road portion of TMK: (3) 1-4-028:008.

The planned fencing and gate at the frontage with the Government Beach Road will be approximately 6 feet high and constructed using 6’ x 8’ lattice-topped, redwood fencing panels, as shown on the photo attached below. The 18-foot gate will be constructed using two of the same 6’ x 8’ foot panels. The entry gate and fencing are also depicted on the attached updated Site Plan, which is also included as Sheet I of 3 on Page 5 in the Final EA.

4. Please include more details in the proposed "LANDSCAPE PLAN" including approximate number and types of trees to be removed and replanted as well as their location on the property.

The Final EA now includes, as the last sheet of the site and design plans on Page 8, an enhanced version of the Landscape Plan included in the CDUA that shows the general locations of invasive plants that will be (or have been, through previous approvals) removed; the number of hala trees that will be removed from the area disturbed by grading for the home and accessory facilities; and the number of hala trees that will be planted in two locations (the side area near the septic system and water tank, and the front undisturbed area on either side of the driveway). A copy of the Landscape Plan is also attached with this letter for reference.

5. Please clarify if all proposed structures such as the single-car garage will be under one (1) roof as pursuant to HAR Chapter 13-5 Exhibit 4 Single Family Residential Standards and Compatibility Provisions: All structures connected, or best alternative.

All structures, as shown on the Site Plan (Sheet I of 3 on Page 5 of the EA), are connected under one roof, as noted by the dotted outline indicating the roof outline for the residence and garage.
6. *Please discuss the abundance and conservation status of the indigenous plant species 'Ekaha and Mau'u 'aki 'aki.*

As stated on Page 20, of the EA, these two plants, along with "all of the natives, are very common in Puna and throughout the State of Hawai'i." Virtually every shoreline property in Hawai'i (and much of the tropical Pacific) contains mau'u 'aki 'aki, and 'ekaha is an extremely common epiphytic fern in Puna and other areas of Hawai'i and the wet tropical areas of the Indo-Pacific region. There are no conservation concerns for this or any other of the native species found on the property.

7. *Page 51 of the Draft EA states "Single-family residences are an identified use in the Resource Subzone under HAR 13-5-24, R-8. "A single-family residence is an identified land use in the Resource Subzone of the State Land Use Conservation District that may be applied for pursuant to HAR, §13-5-24 R-7 SINGLE FAMILY RESIDENCE (D-1) A single family residence that conforms to design standards as outlined in Chapter 13-5, HAR. Please correct this discrepancy in the Draft EA as well as in the CDUA.*

The Final EA has corrected the rules section reference and utilized the conditional wording that you provided.

Thank you for your review of the Draft EA and for circulating the EA and CDUA for review by DLNR and other agencies.

COUNTY OF HAWAI'I

COUNTY OF HAWAI'I PLANNING DEPARTMENT

*Comments:* We have reviewed the request for a Single-Family Residence on 0.459 acre parcel in State Land Use Conservation District.

The subject parcel is designated as 'Open' by the Hawai'i County General Plan Land Use Pattern Allocation Guide (LUPAG) Map and has a Zoning designation of Agriculture (with a 3 acre minimum lot size). As another implementation mechanism of the State Plan, the Puna Community Development Plan (CDP) too, includes relevant considerations for action; for example, "strengthen the capacity of the County to identify important shoreline resources and evaluate development regulations and proposed developments in the shoreline area".

The project is within the Special Management Area (SMA) and not otherwise exempt from development review (shoreline parcel). A Special Management Area permit/approval is required from the County of Hawai'i; to include assessment of cumulative impacts such as native vegetation/ecosystem loss or any adverse impacts to adjacent Class AA waters.

We have no further comments to offer at this time.

*Applicants' response:* Thank you for your comment letter dated March 8, 2022. In answer to your specific comments:
1. The subject parcel is designated as 'Open' by the Hawai‘i County General Plan Land Use Pattern Allocation Guide (LUPAG) Map and has a Zoning designation of Agriculture (with a 3 acre minimum lot size).

Section 3.6.2 contains the zoning information, to which the LUPAG information has been added in the Final EA.

2. A Special Management Area permit/approval is required from the County of Hawai‘i; to include assessment of cumulative impacts such as native vegetation/ecosystem loss or any adverse impacts to adjacent Class AA waters. Special Management Area permit/approval is required from the County of Hawai‘i.

An SMA permit/approval is currently being sought. The assessment will address cumulative impacts to all resources, of which there are none.

3. The Puna Community Development Plan (CDP) states the need to strengthen the capacity of the County to identify important shoreline resources and evaluate development regulations and proposed developments in the shoreline area.

The Plan is discussed in Section 3.6.1 of the EA, which also demonstrates in various sections that the proposed action does not impact shoreline resources.

Thank you very much for your review of the Draft EA.

ANALYSIS

Following review and acceptance for processing, the Applicant was notified, by correspondence dated January 5, 2022 that:

1. The proposed uses are identified land uses in the Resource Subzone of the Conservation District, pursuant to Hawaii Administrative Rules (HAR), §13-5-23 L-2 LANDSCAPING (D-1) Landscaping (including clearing, grubbing, grading and tree removal), including chemical and mechanical control methods, in accordance with state and federal laws and regulations, in an area of or more than 10,000 square feet. Any replanting shall be appropriate to the site location and shall give preference to plant material that are endemic or indigenous to Hawaii. The introduction of invasive plant species is prohibited; and HAR, §13-5-24 R-7 SINGLE FAMILY RESIDENCE (D-1) A single family residence that conforms to design standards as outlined in Chapter 13-5, HAR. Please be advised, however, that this finding does not constitute approval of the proposal;
2. Pursuant to HAR §13-5-40 HEARINGS, a Public Hearing will not be required;

3. In conformance with Chapter 343, Hawaii Revised Statutes (HRS), as amended, and Chapter 11-200.1, HAR, a finding of no significant impact to the environment (FONSI) is anticipated for the proposed project; and

4. The subject area within the Special Management Area (SMA). The applicant’s responsibility includes complying with the provisions of Hawaii’s Coastal Zone Management law (Chapter 205A, HRS) that pertain to the Special Management Area (SMA) requirements administered by the various counties. Negative action on this application can be expected should you fail to obtain and provide us, one of the following:

   • An official determination that the proposal is exempt from the provisions of the county rules relating to the SMA
   • An official determination that the proposed development is outside the SMA; or,
   • An SMA Use Permit for the proposed development.

On April 7, 2022, the County of Hawai‘i Planning Department issued the applicants a letter stating the proposed project appears to be exempt from further SMA requirements due to the proposed single-family residence being less than seven thousand five hundred square feet. The letter notes that any substantive changes to the proposed improvements, as well as any subsequent phases or activities may require further review by the County of Hawai‘i Planning Department and possibly the submittal of another SMA Use Permit Assessment Application as well as comply with all other applicable Zoning and Building Code requirements. Additionally, the Director added twelve (12) conditions that the landowners and project must comply with. See Exhibit 6.

The Final EA/Finding of No Significant Impact (FONSI) was issued by the DLNR Chairperson and published in the April 23, 2022 edition of the Environmental Review Program’s The Environmental Notice¹.

CONSERVATION CRITERIA

The following discussion evaluates the merits of the proposed land use by applying the criteria established in §13-5-30, HAR.

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

The objective of the Conservation District is to conserve, protect, and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare. The applicants have stated that they are committed to management of the site in a manner that will support this objective.

The development of the single-family residence and landscaping use are in conformance with the purpose of the Conservation District. The single-family residence and landscaping are identified land uses within the Resource Subzone of the Conservation District and each land use requires a Board Permit for such use.

The primary natural and cultural resources associated with the Wa'awa'a area appear to the coastal resources and native hala vegetation. The proposed home and its associated uses will be sufficiently setback from the shoreline so as to have minimal to no impact on coastal related resources or lateral shoreline access. Any native vegetation such as hala that will be removed for the proposed residence and its associated uses will be replanted. The application notes that the landowners’ goals for landscaping is to restore the property to as close to the natural character as practical.

There does not appear to be potentially threatened or endangered plant species, nor any historical or archaeological features found on the property.

2) *The proposed land use is consistent with the objectives of the Subzone of the land on which the use will occur.*

The objective of the Resource subzone is to ensure, with proper management, the sustainable use of the natural resources of those areas. A single-family residence is an identified land use pursuant to HAR, §13-5-24, R-7, SINGLE FAMILY RESIDENCE (D-1) A single family residence that conforms to design standard as outlined in Chapter 13-5.

The design and construction of the residence conforms to the design standards set forth in HAR, Chapter 13-5. The property owners are committed to managing their property in a manner that is protective of the natural resources present. Staff believes the proposed land use is consistent with the objectives of the subzone, provided identified mitigation and best management practices are adhered to.

3) *The proposed land use complies with the provisions and guidelines contained in Chapter 205A, HRS entitled “Coastal Zone Management”, where applicable.*

The objectives, policies, and guidelines of the Coastal Zone Management (CZM) program contained in Chapter 205A, Hawai‘i Revised Statutes (HRS), are focused on the preservation, protection, and where possible, the restoration of the natural resources of the coastal zone in Hawai‘i. Staff believes the proposed project
complies with the provisions and guidelines contained in Chapter 205, HRS regarding Coastal Zone Management. The proposed use would be consistent with Chapter 205A because it would not affect public access to recreational areas, historic resources, scenic and open space resources, coastal ecosystems, economic uses, nor be exposed to coastal hazards. As mentioned above, the County of Hawai’i Planning Department determined the proposed construction of the 2,356 sq. ft single-family residence and related improvements, as presented in PL-SAA-2022-000060, is exempt from the definition of “development” and shall not require further review against the SMA guidelines. Based on the information provided, the Director found that proposed development of a single-family residence and related improvements will not have a cumulative impact, or significant adverse environmental or ecological effect on the SMA.

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

Because of the relatively minor nature of the project and the lack of threatened or endangered plant species or pristine native ecosystems, Staff believes that the proposed single-family residence is not likely to cause adverse biological impacts. The applicants have identified a number of mitigation measures that will be implemented during the construction and duration of the proposed land uses that should minimize or eliminate the interference, nuisance, harm, or hazard that the project may cause.

With implementation of a plan that includes ample setbacks from the coastal resources, as well as the protection of the existing native plantings, and through the ongoing care and management of the property afforded by the creation of the family’s residence, the proposed use of the property may have a positive and supportive impact to the native ecosystems. The proposed construction of the single-family home and its related improvements, together with the owners’ commitment to management of the site will effectively serve to conserve, protect, and preserve the natural resources on the subject property.

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.

The subject parcel is a portion of a group of lots of various sizes located along and makai of the Government Beach Road in the area that is about 1.5 miles southeast of the Hawaiian Shores Subdivision. As part of the 51 lot Waʻawaʻa Residential Subdivision, there are several other single-family residences nearby. The proposed uses are consistent with single-family residential and landscaping uses in the area.

The construction activities associated with the proposed single-family residence and its related improvements will be confined solely to the owner’s lot and will not pose any adverse impact to the natural resources of the area, community or region.
The required setbacks have been integrated as part of the site planning and the planned use of the property as a homesite, would be consistent with the existing and planned uses of adjacent or nearby properties and will not negatively affect how these properties are utilized. The proposed house site is appropriately located towards the central portion of the property so to be outside the area of the native coastal vegetation and potential coastal influence and yet sufficiently removed from the potential dust and noise impacts from the adjacent public road. Additionally, being a relatively modest, single-story home, it is planned at a scale that is appropriate to the physical conditions and capabilities of the site. It should be noted that the Department’s standards for a single-family residence within the State Conservation District, for a property of this size, limits the maximum development area to be less than 3,500 sq. ft., and the total development area (TDA) for the planned residence, at 2,573 sq. ft., will be well below this maximum.

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.

The site does not contain unique features either topographically or geologically. The proposed use of the subject property for a single-family residence, landscaping, and related improvements will help conserve, protect, and preserve the natural features of the area. The proposed use of the subject property for a single-family residence and owners’ stated commitment to the care and management of the site will help to conserve, protect, and preserve the natural features on the subject property.

Some of the current characteristics of the property are the open area on the makai portion of the property, which is fully covered in the native naupaka, and the dense cover of hala trees over much of the property. According to the application, the landowners’ goals for landscaping is to restore the property to as close to the natural character as practical which will help protect and possibly improve the areas natural beauty and open space characteristics.

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

No subdivision of land is proposed for this project.

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

Staff believes the proposed land use will not be materially detrimental to the public health, safety, and welfare as mitigated. With the incorporation of an appropriately designed and operated individual wastewater system, combined with other BMPs identified, the proposed residential land use will not result in materially detrimental impacts to public health, safety, and welfare.
CULTURAL IMPACT ANALYSIS

The subject property does not contain any springs, land features, or caves that might be of cultural importance. A Cultural Impact Assessment was completed for the parcel. No cultural resources or practices were identified on the undeveloped property. No consulted individuals with ties to and history with the area had any specific information concerning the property and no archaeological features were discovered on site. No traditional gathering of resources has been observed or is known to take place on the property.

As part of the oral consultations with residents and cultural practitioners of the area in development of the application, several conclusions were reached regarding cultural resources and practices in the general area of the Puna coastline. Hawaiian cultural practitioners have long gathered and continue to gather *lauhala* (pandanus leaves) from the Puna District. It is from the *hala* plant that various items of cultural importance and ornamental value were woven: *hi‘nā‘i* (burial baskets); *moena* (mats); *uluna* (pillows); and cordage. Additionally, *hala* is a key bio-cultural feature that has and continues to be synonymous with Puna District. Another constant through history has been the tradition of fishing and collecting food and other resources from the ocean, shoreline, and nearby groves. This orientation to the shoreline and the traditional practices developed in Hawai‘i are still passed down from generation to generation. Fishers and gatherers employ knowledge of their ancestors to select fishing locations, proper bait, and techniques. Finally, the Puna coast area is well known to contain *iwi kupuna* and consultees have repeatedly stressed that landowners should take a proactive approach for the care and preservation of human remains.

The application notes that *hala* is a widespread resource that is readily available in the Puna area, including on much of the 1,275 acres directly adjacent to the subdivision in the Nānāwale Forest Reserve. There will continue to be abundant areas for gathering of *hala* for use in customary crafts and practices. The applicants are also proposing to replace and landscape the subject property with *hala* trees to ensure that it retains some its natural setting. The cultural practices of shoreline fishing and gathering on the narrow Beach Reserve lot between the Roehrig property and the sea would not be affected by the construction or occupation of the home. The home will be set back 70 feet from the shoreline to help ensure that it does not interfere with coastal access. The applicants are fully committed to not hindering in any active or passive manner lateral shoreline access for fishing, gathering or any other cultural purpose. The project does not involve effects on shoreline processes, or the resources utilized by those fishing and gathering in the area. No *iwi kupuna* or access to them will be affected. The applicants have stated that they are fully aware that the exercise of traditional, customary, or religious practices of native Hawaiians in the immediate area of the property is provided for by the State Constitution and State law. They also expect that their proposed use be conditioned to ensure the protection of such practices.
DISCUSSION

The proposed project entails a single-family residence, landscaping and related improvements, gravel driveway improvements, a redwood panel-entrance gate and fence along the Government Road boundary, and utilities consisting of a water catchment tank, rooftop solar photovoltaic panels for electricity and water heating, a propane tank for cooking and backup electricity, and an individual wastewater system meeting all regulatory requirements. Telecommunications will be provided by cell service and satellite receivers.

The modest single-family residence is a one story post-on-pier 2,356 sq. ft single-family residence consisting of 2 bedrooms, 2 bathrooms, a living room, kitchen, dining area, pantry, lanai, breezeway, and garage. The total area of development for the proposed single-family residence and associated structures is 2,573 sq. ft. This includes the total areas for the proposed residence (1,867 sq. ft), garage (280 sq. ft), breezeway between the garage and residence (200 sq. ft), water storage tank (189 sq. ft), and propane storage tank (28 sq. ft).

The proposed residence is consistent with Chapter 13-5, Hawaii Administrative Rules, Exhibit 4, Single Family Residential Standards. Compatibility provisions such as the use of earth toned or compatible colors with the surrounding area will be utilized on the exterior of the residence and all structures will be connected under one (1) roof.

Landscaping will emphasize the natural hala and naupaka vegetation currently found on the property, replacing the hala trees that need to be removed for the proposed driveway and residence, and in areas that have already had or will have invasive trees removed. Land clearing and construction activities including the single-family residence, driveway, turnaround area, utility structures, catchment tank would occur over an approximate area of 0.2-acres leaving the remaining approximately 0.259-acres relatively undisturbed.

No streams or other water bodies are present on the property. All construction activities will follow Best Management Practices to mitigate impacts of earthwork and grading activities; water quality and hazardous materials; exterior lighting; and avoid impacts to endangered or rare native birds and the Hawaiian hoary bat.

Based on the information provided, staff believes that the project will have negligible adverse environmental or ecological effects provided that best management practices and mitigation measures as described in the application and environmental assessment, and as required by rule or laws, are fully implemented.
RECOMMENDATION

Based on the preceding analysis, staff recommends that the Board of Land and Natural Resources APPROVE Conservation District Use Application HA-3885 for a Single Family Residence, Landscaping, and Related Improvements located at 14-3543 Government Beach Road, Wa’aawa’a, Puna, Island of Hawai’i, TMK (3) 1-4-028:008 subject to the following conditions:

1. The permittee shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments, and applicable parts of HAR Chapter 13-5;

2. The permittee, its successors and assigns, shall indemnify and hold the State of Hawai’i harmless from and against any loss, liability, claim, or demand for property damage, personal injury, and death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit;

3. The permittee shall comply with all applicable Department of Health administrative rules;

4. The single family residence shall not be used for rental or any other commercial purposes unless approved by the board. Transient rentals are prohibited, with the exception of wilderness camps approved by the board;

5. The permittee shall provide documentation (e.g., book and page or document number) that the permit approval has been placed in recordable form as a part of the deed instrument, prior to submission for approval of subsequent construction plans;

6. Before proceeding with any work authorized by the department or the board, the permittee shall submit four copies of the construction plans and specifications to the chairperson or an authorized representative for approval for consistency with the conditions of the permit and the declarations set forth in the permit application. Three of the copies will be returned to the permittee. Plan approval by the chairperson does not constitute approval required from other agencies;

7. Unless otherwise authorized, any work or construction to be done on the land shall be initiated within one (1) year of the approval of such use, in accordance with construction plans that have been signed by the chairperson, and shall be completed within three (3) years of the approval of such use. The permittee shall notify the department in writing when construction activity is initiated and when it is completed;
8. All representations relative to mitigation set forth in the accepted application and environmental assessment or impact statement for the proposed use are incorporated as conditions of the permit;

9. The permittee shall plan to minimize the amount of dust generating materials and activities. Material transfer points and on-site vehicular traffic routes shall be centralized. Dusty equipment shall be located in areas of least impact. Dust control measures shall be provided during weekends, after hours and prior to daily start-up of project activities. Dust from debris being hauled away from the project site shall be controlled. Landscaping and dust control of cleared areas will be initiated promptly;

10. The permittee shall notify the Office of Conservation and Coastal Lands (OCCL) in writing prior to the initiation and upon completion of the project;

11. Should historic remains such as artifacts, burials or concentration of charcoal be encountered during construction activities, work shall cease immediately in the vicinity of the find, and the find shall be protected from further damage. The contractor shall immediately contact SHPD ((808) 692-8015), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary;

12. The permittee shall utilize Best Management Practices for the proposed project;

13. During construction, appropriate mitigation measures shall be implemented to minimize impacts to the aquatic environment, off-site roadways, utilities, and public facilities;

14. The single-family residence shall conform to the single-family residential standards included as Exhibit 4 of the Hawai‘i Administrative Rules, Chapter 13-5;

15. The permittee understands and agrees that the permit does not convey any vested right(s) or exclusive privilege;

16. In issuing the permit, the department and board have relied on the information and data that the permittee has provided in connection with the permit application. If, subsequent to the issuance of the permit such information and data prove to be false, incomplete, or inaccurate, this permit may be modified, suspended, or revoked, in whole or in part, and the department may, in addition, institute appropriate legal proceedings;

17. When provided or required, potable water supply and sanitation facilities shall have the approval of the department of health and the county department of water supply;
18. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the permittee shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard;

19. Obstruction of public roads, trails, and pathways shall be avoided or minimized. If obstruction is unavoidable, the permittee shall provide alternative roads, trails, or pathways acceptable to the department;

20. During construction, appropriate mitigation measures shall be implemented to minimize impacts to off-site roadways, utilities, and public facilities;

21. The permittee shall obtain a county building or grading permit or both for the use prior to final construction plan approval by the department;

22. Artificial light from exterior lighting fixtures, including but not limited to floodlights, uplights, or spotlights used for decorative or aesthetic purposes, shall be prohibited if the light directly illuminates or is directed to project across property boundaries toward the shoreline and ocean waters, except as may be permitted pursuant to section 205A-71, HRS. All exterior lighting shall be shielded to protect the night sky;

23. The permittee acknowledges that the approved work shall not hamper, impede, or otherwise limit the exercise of traditional, customary, or religious practices of native Hawaiians in the immediate area, to the extent the practices are provided for by the Constitution of the State of Hawai‘i, and by Hawai‘i statutory and case law;

24. Any landscaping shall be appropriate to the site location and shall give preference to plant materials that are endemic or indigenous to Hawai‘i. The introduction of invasive plant species is prohibited;

25. Trees taller than 15 feet shall not be removed or trimmed during the Hawai‘i Hoary bat birthing and pup rearing season from June 1st to September 15th;

26. If land clearing occurs between March 1 and September 30, a pre-construction hawk nest search by a qualified ornithologist using standard methods will be conducted. If Hawaiian Hawks are present, no land clearing will be allowed until October, when hawk nestlings will have fledged;

27. Other terms and conditions as may be prescribed by the Chairperson; and

28. Failure to comply with any of these conditions shall render this Conservation District Use Permit void under Chapter 13-5, as determined by the chairperson or board.
Respectfully submitted,

Trevor Fitzpatrick, Staff Planner
Office of Conservation and Coastal Lands

Approved for submittal:

SUZANNE D. CASE., Chairperson
Board of Land and Natural Resources
Roehrig Single-Family Residence in Wa‘awa’a Environmental Assessment

Figure 1  Project Location Map

Exhibit 1
November 8, 2021

James M. Leonard
56 Laukona Street
Hilo, Hawaii 96720

Dear Mr. Leonard:

Subject: BOUNDARY INTERPRETATION No. 21-04
Tax Map Key: 1-4-028: 008, Roehrig Property,
Waawaa, Puna, Hawai‘i

Pursuant to your email request dated May 13, 2021, and a certified shoreline survey map dated March 17, 2021, for the subject parcel, please be advised that we have determined the subject parcel is within the State Land Use (SLU) Conservation District.

Our determination is based on the commission’s record currently on file at our office, the certified shoreline survey map you provided, and especially the location of the SLU District Boundaries on the official SLU Map H-73, Kapoho Quadrangle. It is also our understanding that the intent of the SLU Agricultural / Conservation District Boundary follows mauka side (southern side) of the Government Beach Road.

We enclosed a copy of your survey map entitled, "Map Showing Parcel 4, Being a Portion of R. P. 1466, L. C. Aw. 2696, Ap. 4 to Kamakea", with the approximate certification of the SLU Urban / Agricultural District Boundaries for your reference. Should you require clarification or further assistance, please feel free to call Fred Talon of my staff at 587-3822.

Sincerely,

[Signature]

DANIEL E. ORODENKER
Executive Officer

Enclosure:

C:
Tiger Mills, Acting Administrator, Office of Conservation & Coastal Lands, Department of Land and Natural Resources, (w/enclosure)
Zendo Kerin, Planning Director, Planning Department, County of Hawai‘i (w/enclosure)
Dawn Matney, Tax Maps and Records, Supervisor, Department of Finance, County of Hawai‘i (w/enclosure)
Lisa Na hoopii, GIS Analyst, County of Hawai‘i (w/enclosure)
Disclaimer: The Hawai‘i Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use, accuracy, completeness, and timeliness of any information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the DLNR, its officers, and employees from any liability which may arise from its use of its data or information.

If this map has been identified as ‘PRELIMINARY’, please note that it is being provided for informational purposes and is not to be used for flood insurance rating. Contact your county floodplain manager for flood zone determinations to be used for compliance with local floodplain management regulations.

FLOOD HAZARD ASSESSMENT TOOL LAYER LEGEND
(Note: legend does not correspond with NFHL)

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD – The 1% annual chance flood (100-year), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. SFHAs include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

- Zone AE: BFE determined.
- Zone AH: Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- Zone AO: Flood depths of 1 to 3 feet (usually sheetflow on sloping terrain); average depths determined.
- Zone V: Coastal flood zone with velocity hazard (wave action); no BFE determined.
- Zone VE: Coastal flood zone with velocity hazard (wave action); BFE determined.
- Zone AEF: Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

NON-SPECIAL FLOOD HAZARD AREA – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- Zone X: Areas determined to be outside the 0.2% annual chance floodplain.
- Zone X (X shaded): Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER FLOOD AREAS
- Zone D: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase apply, but coverage is available in participating communities.
Shoreline Survey
of Lot 43, of the Waawao Subdivision
Being All of Grant 3687 to R.A Lyman,
Grant 1563 to Pokoko,
Grant 997, Apana 1 to Haole and
Grant 997 Apana 2 to Haole,
Situated at Waawao, Puna,
Island and County of Hawaii, Hawaii
TM(K) 1-4-028:008

Property Site:
14-3343 Government Beach Rd.
Pahoa, HI 96778

Owners:
Christopher J. Roehrig, Wend L. Roehrig
64-629 Kulamalu Pl.
Kamuela HI 96743

NOTES:
Photos taken August 22 at 4:00 p.m.
See Sheet 1 for Photo location and orientation.

Exhibit 3
The geological young volcanic coast of Nanawale is rocky with small cliffs and few beaches or reefs.
February 24, 2022

Michael Cain, Acting Administrator
Office of Conservation and Coastal Lands
P.O. Box 621
Honolulu, HI 96809
Michael.Cain@hawaii.gov

Dear Mr. Cain:

SUBJECT: Chapter 6E-42 Historic Preservation Review — Request for Concurrence for Conservation District Use Permit (CDUA) HA-3885

Single-Family Residence, Landscaping, a Related Improvements at 14-3643 Government Beach Road
Archaeological Inventory Survey
Wa’awa’a Ahupua’a, Puna District, Island of Hawai’i
TMK: (3) 1-4-028:008

This letter provides a State Historic Preservation Division’s (SHPD’s) review of the subject request for concurrence for an Office of Conservation and Coastal Lands (OCCL) CDUA application (HA-3885) received by our office on January 21, 2022. The submittal included the following:

- An OCCL cover letter dated January 19, 2022, requesting concurrence from SHPD for its determination of no historic properties affected for the current project
- The CDUA application for the Roehrig Single-Family Residence
- A Draft Environmental Assessment for CDUA HA-3885
- Chapter 6E Submittal form
- Maps and photos
- Construction plans
- Draft archaeological inventory survey (AIS) titled, An Archaeological Assessment of Lot 43 of the Wa’awa’a Subdivision, Wa’awa’a Ahupua’a, Puna District, Hawai’i Island, TMK (3) 1-4-028:008 (Kepa’a and Clark 2020) was submitted in support of the project effect determination for the proposed project.

Project Description
The applicants, Christopher and Wendi Roehrig, are proposing to construct an approximately 2,573-sq.-ft. single-story post-on-pier single-family residence and garage, a gravel driveway; fencing and a driveway gate on the mauka portion of the property. An individual wastewater system is also proposed to support the residence. The proposed project will include grading and grubbing that will be limited to the areas of the proposed house site and related improvements, landscaping and an access driveway.

Findings
ASM Affiliates (ASM) conducted the AIS (Kepa’a and Clark 2020) within 0.459-acre parcel. A 100% pedestrian survey was conducted of the entire project area using a systematic east-west transect spaced at approximately 3-meter intervals. Visibility was only slightly limited due to ground covering; no cultural resources were identified within the current project area. The current AIS was prepared to inform the application process and to support the

Exhibit 4
OCCL’s project effect determination. Based on the negative findings in the AIS, the report indicates that the project will not affect any historic properties.

**Determination**

The AA report meets the minimum requirements of HAR §13-276-5. **It is accepted.** Please send two hard copies of the document, clearly marked FINAL, along with a text-searchable copy of the AA report and a copy of this acceptance letter, to the Kapolei SHPD office, attention SHPD Library. Also submit a text-searchable PDF copy of the final AA report to HICRIS Project 2022PR00077 using the Project Supplement option in HICRIS, and a PDF copy to lehua.k.soares@hawaii.gov.

Due to the negative findings of significant historic properties during the AIS, **SHPD concurs with the OCCL project effect determination of “no historic properties affected”** pursuant to HAR §13-284-7(a)(1) for the current project. Further, pursuant to HAR §13-284-7(c), when SHPD comments that the proposed project shall not affect any significant historic properties, the HRS 6E historic preservation review process ends.

**SHPD hereby notifies the OCCL that the permit issuance process may continue.**

**Please attached to the permit:** In the unlikely event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the State Historic Preservation Division, at (808) 933-7651.

Please contact Sean Nāleimālie at (808) 933-7651 or at Sean.P.Naleimalie@Hawaii.gov for any questions or concerns regarding this letter.

Aloha,

*Alan Downer*

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc: Trevor J. Fitzpatrick, trevor.j.fitzpatrick@hawaii.gov
James Leonard, jmlleonald@mac.com
Matthew Clark, mclark@asmaffiliates.com

---

**Exhibit 4**
GOVERNMENT BEACH ROAD

PROPOSED 2 BEDRM / 2 BATH DWELLING W/ 1-CAR GARAGE

PROPOSED SEPTIC SYSTEM
(REFER TO ENGINEERED DRAWINGS)

PROPOSED WATER CATCHMENT TANK
TO PROPERTY LINE ± 55' - 9"
TO PROPERTY LINE ± 23' - 5"
FRONT SETBACK 15' - 0"
SIDE SETBACK 15' - 0"
REAR SETBACK 15' - 0"
SIDE SETBACK 15' - 0"

PROPOSED GATE
PROPOSED FENCE
(5' min.) ± 10' - 0"
18' - 0"
5' - 0"
10' - 0"
(min.) 5' - 0"
(5' min.) 5' - 0"

CONSTRUCTION STAGING AREA
30' - 0"  21' - 0"  100.00'

ENTRY GATE / FENCING
6' high fencing and gate to be constructed using 6' x 8' lattice-topped, redwood panels

2 PROPOSED PROPANE STORAGE TANK (3' 6" X 8')

SITE PLAN
SCALE: 1" = 30'-0"
TMK: (3) 1 - 4 - 028 : 008
LOT NO: 43
LOT AREA: 0.459 ACRES
WAA WAA RD, HAWAIIAN BEACHES, HAWAII

DEVELOPMENT AREA TABULATION
RESIDENCE
Living Area 1,344.50 SF
Garage 280.00 SF
Covered Lanai 419.50 SF
Breezeway 200.00 SF
Exterior Steps and Landings 112.30 SF
TOTAL AREA - RESIDENCE 2,356.30 SF

WATER STORAGE TANK 188.71 SF
PROPANE STORAGE TANK 28.00 SF
TOTAL DEVELOPMENT AREA 2,573.01 SF

Exhibit 5

HOME OWNER SIGNATURE

BY SIGNING ABOVE, I ACKNOWLEDGE THAT I ACCEPT THE PRELIMINARY DRAWINGS APPROVED ABOVE AS MY FINAL DESIGN. I'M READY TO MOVE FORWARD WITH PREPARING CONSTRUCTION DOCUMENTS FOR MY PROJECT, AND UNDERSTAND THAT ANY CHANGES TO THE SCOPE OF THE PROJECT OR REVISIONS TO THE DESIGN/SPECIFICATIONS MAY RESULT IN ADDITIONAL DRAFTING OR PROJECT COSTS AND AFFECT MY PROJECT TIMELINE.

DATE: 11/09/2021
REVISION NO.: 5

APPROVED NEW CONSTRUCTION FOR:
CHRISTOPHER J ROEHRRIG &
WENDI L ROEHRRIG
TMK: (3) 1 - 4 - 028 : 008

HOME PLANNING & DESIGN SERVICES BY
HPM BUILDING SUPPLY

SCALE: As indicated
SHEET NO.: 1 of 3

PACIFIC OCEAN
Natural area of untouched naupaka and hala fringe mauka of which home will be built

Areas in which invasives have been/will be removed will readily support additional hala

Exhibit 5
Photo Showing Proposed Fencing and Gate Appearance

Exhibit 5
April 7, 2022

James Leonard
56 Laukona Street
Hilo, HI 96720

Dear Mr. Leonard:

SUBJECT: Special Management Area (SMA) Use Permit Assessment Application (PL-SAA-2022-000060)

Applicant(s): Christopher and Wendi Roehrig
Landowner(s): Christopher and Wendi Roehrig
Project: Single-Family Residence and Related Improvements
TMK: (3) 1-4-028:008, Wa‘awa’a, Puna District, Hawai‘i

We have reviewed the subject Special Management Area (SMA) Use Permit Assessment Application (PL-SAA-2022-000060), received by this office on February 24, 2022. The 19,994 square foot subject parcel is zoned Agricultural 3-acre (A-3a) by the County and designated Conservation and Agricultural by the State Land Use Commission (LUC). The subject parcel is located within the Conservation Resource subzone. The subject parcel is designated as Open (O) and Extensive Agriculture (ea) by the Hawai‘i County General Plan Land Use Pattern Allocation Guide (LUPAG) map.

The parcel is situated entirely within the Special Management Area (SMA); however, the project site is not located within the “shoreline area” as defined by Section 205A-41, Hawai‘i Revised Statutes (HRS). The applicant submitted a Shoreline Certification (dated November 8, 2021) with the Draft Environmental Assessment which was required for proposed activities within the SLU Conservation District portion of the parcel. Staff notes that all work will be sited outside the minimum 40-foot shoreline setback area.

Proposed Project:

The applicant is proposing to construct a 2,356 square-foot single story single-family residence consisting of two (2) bedrooms, two (2) bathrooms, kitchen/dining area, living room, pantry, lānai, breezeway, one (1) car garage, septic system, one (1) 10,000-gallon water catchment tank, 20 roof mounted solar photovoltaic panels, solar water heating panels, propane gas, and fencing.

www.planning.hawaiicounty.gov Hawai‘i County is an Equal Opportunity Provider and Employer planning@hawaiicounty.gov

Exhibit 6
along property boundaries that includes a gated gravel driveway at the southernmost boundary of the subject parcel.

Currently there is no existing development or structures located on the subject parcel, and no other uses or activities, other than what is described above, are proposed.

Additional Regulatory:

The applicant submitted a Draft Environmental Assessment (DEA) for publication in the February 8, 2022 edition of the State of Hawai‘i Office of Planning and Sustainable Development Environmental Review Programs periodical the “Environmental Notice.” The DEA was submitted in conjunction with a Conservation District Use Permit Application (CDUA HA-3885) which is currently in process with the DLNR - Office of Conservation and Coastal Lands.

Shoreline Area Determination:

Pursuant to Hawai‘i Revised Statutes (HRS) 205A-43(a) Establishment of Shoreline Setbacks, “Setbacks along shorelines are established of not less than forty feet inland from the shoreline.” The applicant has sited the proposed improvements approximately 70 feet mauka from the certified shoreline location; staff notes that the certified shoreline and native vegetation are located within a long, narrow common Beach Reserve lot that lies between the subject parcel and the sea. There are no deeded shoreline or coastline access paths or easements present on the parcel.

Special Management Area Determination:

1. Pursuant to Hawai‘i Revised Statutes (HRS) §205A-22, as amended, and Planning Commission Rule 9-4(e)(2) relating to the Special Management Area, “Development means any of the [listed] uses, activities, or operations on land or in or under water within the special management area.” According to the application, the following definitions of “Development” can be applied to the proposed use:

   - Placement or erection of any solid material or any gaseous, liquid, solid or thermal waste.
   - Grading, removing, dredging, mining, or extraction of any materials; and
   - Construction, reconstruction, demolition, or alteration of the size of any structure.

2. Pursuant to Hawai‘i Revised Statutes (HRS) §205A-22, as amended, “Development” does not include the following uses, activities, or operations, and therefore is determined to be exempt from the definition of “Development”:

Exhibit 6
• Construction or reconstruction of a single-family residence that is less than seven thousand five hundred square feet of floor area, is not situated on a shoreline parcel or a parcel that is impacted by waves, storm surges, high tide, or shoreline erosion, and is not part of a larger development.

3. Pursuant to Planning Commission Rule 9-4(e)(4), “whenever the Director finds that any excluded use, activity, or operation may have a cumulative impact, or a significant adverse environmental or ecological effect on the Special Management Area, that use, activity, or operation shall be defined as “Development” for the purposes of this rule.”

• Based on the information provided, the Director finds that the proposed development of a single-family residence and related improvements will not have a cumulative impact, or significant adverse environmental or ecological effect on the Special Management Area.

Please note that any substantive changes to the proposed improvements, as well as any subsequent phases or activities may require further review by this office and possibly the submittal of another SMA Use Permit Assessment Application.

**Future Special Management Area Determinations:**

While further review of the proposed activities against the Special Management Area rules and regulations will not be required at this time, all other applicable Zoning and Building Code requirements must be satisfied.

Additionally, pursuant to Planning Commission Rule 9-10(g), “the Director may impose certain conditions with the exemption determination to assure that the proposed use, activity, or operation does not have a substantial adverse effect on the Special Management Area.” The Director has added the following conditions for the proposed project:

**Director’s Conditions:**

1. The applicant(s), its successor(s), or assign(s) (“Applicant”) shall be responsible for complying with all stated conditions of approval.

2. The Applicant shall secure all necessary approvals and permits from other affected federal, state, and county agencies as necessary to comply with all applicable laws and regulations, including but not limited to a Conservation District Use Permit.

3. Other than the proposed project as described in this permit, no further work is permitted under this approval.
4. The Applicant shall secure building permits for the proposed project within two (2) years from the date of the determination. If building permits have not been secured within that two (2) year period, this determination is automatically null and void, and a new Special Management Area Assessment Application must be submitted for review and approval.

5. Artificial light from exterior lighting fixtures, including, but not necessarily limited to floodlights, up-lights or spotlights used for decorative or aesthetic purposes shall be prohibited if the light directly illuminates, or is directed to project across property boundaries toward the shoreline and ocean waters, except as may otherwise be permitted pursuant to Section 205A-71(b), Hawai‘i Revised Statutes.

6. No land alteration, grubbing, landscaping or construction activities, including but not limited to, the stockpiling of debris, construction materials or equipment, shall occur in the shoreline setback area without securing a prior written determination of minor structure or activity pursuant to Rule 11-8 from the Planning Director or approval of a Shoreline Setback Variance from the Planning Commission.

7. The proposed work shall comply with the requirements of Hawai‘i County Code (HCC) Chapter 10, Erosion and Sedimentation Control.

8. In the event that surface or subsurface historic resources, including human skeletal remains, structural remains (e.g., rock walls, terraces, platforms, etc.), cultural deposits, marine shell concentrations, sand deposits, or sink holes are identified during the demolition and/or construction work, the Applicant shall cease work in the immediate vicinity of the find, protect the find from additional disturbance and contact the State Historic Preservation Division at (808) 933-7651. Subsequent work shall proceed upon an archaeological clearance from DLNR-SHPD when it finds that sufficient mitigation measures have been taken.

9. Neither the landowner nor any agent of the landowner or its successors shall, at any time, impede or otherwise restrict lateral public access along the shoreline.

10. Any further development, including but not limited to, the construction of structures or improvements not included in this determination shall require further review and approval as provided under Chapter 205A, HRS, and Rule 9, Planning Commission Rules of Practice and Procedure.

11. That in issuing this determination, the Department has relied on the information and data that the applicant has provided in connection with this determination. If, subsequent to this determination, such information and data prove to be false, incomplete or inaccurate, this determination may be modified, suspended or revoked, in whole or in part, and/or the Department may, in addition, institute appropriate legal proceedings.

Exhibit 6
12. Should any of the conditions not be met or substantially complied with in a timely fashion, the Planning Director may initiate procedures to revoke this determination or require additional review against the Special Management Area rules and regulations.

If you have any questions, please contact Tracie-Lee Camero of this office at (808) 961-8166.

Sincerely,

Maija Jackson for
Maija Jackson for (Apr 7, 2022 08:42 HST)

ZENDO KERN
Planning Director

TC:jaa
\\COH6\planning\public\wpwin60\CZM\SMAA2\2022\PL-SAA-2022-000060L_Roebling_SFD.doc

cc: DLNR-OCCL