 REGARDING: Conservation District Use Application (CDUA) HA-3863 for the Gregg Single Family Residence, Landscaping, and Associated Improvements.

APPLICANT/LANDOWNER: Fredrick W. Gregg, Jr.

AGENT: Roy A. Vitousek III, Esq. of Cades Schutte LLP

LOCATION: Ho’okena, South Kona, Hawai‘i

TAX MAP KEYS (TMKs): (3) 8-6-013:009

AREA OF PARCEL: 0.4289 acres

USE: Structures - 2,016 square feet (living area of 3,234 sq ft); Landscaping - 4,675 sq ft & Associated Improvements - ~6,691 square feet

SUBZONE: General

DESCRIPTION OF AREA/CURRENT USE

The subject property is a vacant parcel located in the General Subzone of the State Land Use Conservation District on the west side of the island of Hawai‘i in the village of Ho’okena, South Kona along Ho’okena Beach Road (see Exhibit 1). There are a number of residences in the area on nearby kuleana parcels as well as to the north at Kealia.

A stacked rock wall demarcates the boundaries of the parcel and the property is surrounded by privately owned properties. The property appears to have been graded in the past and it is unclear whether the rock wall predated the earthwork, or if the wall was modified or restacked at the time of the grading; or the wall was constructed after the grading. Additionally, the parcel is bordered by Ho’okena Beach Road to the north and east; a vacant parcel and a parcel with a residence are
to the south; and two vacant parcels to the west. The project site is located on the western flank of Mauna Loa in the District of South Kona and the ahupua’a of Ho’okena (see Exhibit 2).

The parcel is primarily covered with lava rock rubble of varying size and large trees that produce leaf detritus (see pages 5 to 8 of Exhibit 1). The 0.4289-acre property is on a gently sloping plain approximately 500 feet from the shoreline and Ho’okena Beach Park and sits at an elevation range of approximately 24 to 35 ft above mean sea level. Annual rainfall for the area and property ranges from 40 to 50 inches per year and experiences an average temperature around 80 degrees Fahrenheit.

The lava flows that underlie the parcel are the Ka’u Basalt series dated from 1,500 to 3,000 years before present. Soils in the area are classified as rough broken land which is a miscellaneous land type with very steep slopes of 35 to 75 percent. The soil material is highly variable with outcrops of soil deposits common. This soil type is usually used for pasture, woodland, wildlife habitat, and recreation areas.

Background/History

According to the applicant and his agent, Mr. Vitousek, Mr. Gregg bought the property approximately 25 years ago and was unaware that the parcel was located in the Limited Subzone of the Conservation District at the time of purchase. The applicant used the property for camping purposes for many years following the purchase of the parcel. Around 15 years ago, he was surprised to learn of the parcel’s Limited Subzone designation which prohibited him from applying for a Conservation District Use Permit to build a single-family residence on the land due to the property not being located in a flood zone or coastal high hazard area.

On behalf of the applicant, Mr. Vitousek submitted Rule Amendment HA 13-2 in 2013 to have the property taken out of the Limited Subzone. The Staff Report for Rule Amendment HA 13-2 noted that the property is characterized by land with slopes of less than 10%, is in Zone X which are areas determined to be outside the 0.2% annual chance of flood of the Federal Insurance Rate Maps, and is approximately 250 ft mauka (landward) of the VE Flood Zone – coastal flood zone with velocity hazard (wave action). Additionally, the Staff Report stated that tsunami flooding could potentially reach the property given the parcel’s proximity to the coastline, but tsunami flooding of the property would be an episodic event and that all communities along the coastline on volcanic islands are susceptible to these events.

The Staff Report further noted that the applicant’s property borders Agricultural designated land and that Ho’okena is a fishing village and not an “urban community”. The land uses in Ho’okena and the neighboring community of Kealia are low profile residential uses that retain the open space character of the vicinity. Based on the surrounding land uses and the lack of natural environmental constraints that would limit the parcel’s uses, Staff recommend that the Board grant the applicant’s request to amend Chapter 13-5 and have the property placed in the General Subzone of the Conservation District.

On August 22nd, 2014, the Board of Land and Natural Resources (Board) adopted the applicant’s proposed Rule Amendment HA 13-2 which moved the property with the TMK: (3) 8-6-013:009 from the Limited Subzone and designated it into the General Subzone of the Conservation District. Following the Board’s decision, the Governor approved the Rule Amendment and it was filed with
the Lieutenant Governor’s Office officially placing the parcel in the General Subzone on November 12th, 2014.

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 Mauna Loa being an active volcano. Zone 2 includes areas that have 15-25% of land area covered by lava flows or ash since the year 1800. Zone 2 areas are at a lower risk than Zone 1 areas because they are not directly active themselves but are found adjacent to and downslope of active rift zones. Although Zone 2 designation is relatively high for Lava Flow Hazards Zones, this risk is not unique to the property and is common to most residential areas in South Kona.

The island of Hawai‘i also experiences high seismic activity and structures that are poorly designed or built are at risk from major earthquake damage. The entire island of Hawai‘i is within the Earthquake Zone 4 according to the County Building Codes. The applicant understands that there are hazards associated with homes in this geologic setting and has made the decision that a residence in the subject area is not imprudent to construct or inhabit. The applicant also understands and accepts 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. No surface water features are located on the property and it does not appear to be affected by sources of non-coastal flooding. The parcel lies within a tsunami evacuation zone but does not appear to be located in the sea level rise exposure area. The applicant has stated that the design of the home will adhere to Chapter 27, Floodplain Management, of the Hawai‘i County Code and understands the potential risks associated with inhabiting a dwelling in close proximity to the coastline.

Flora and Fauna
There are no known endangered or candidate plant species on the project site. A letter obtained from the U.S. Fish and Wildlife Service for the Final Environmental Assessment for the Ho’okena Beach Park classifies the flora in the area as alien grassland and sparse to un-vegetated land. As mentioned above, the property appears to have been graded in the past and is primarily covered in kiawe scrub vegetation.

No native birds were identified during the flora and fauna survey of the property. Some of the birds that have been observed by the applicant that have utilized the property include Common Myna (*Acridotheres tristis*), Northern Cardinal (*Cardinalis cardinalis*), Yellow-billed Cardinal (*Paroaria capitata*), Yellow-fronted Canary (*Serinus mozambicus*), Spotted Dove (*Streptopelia chinensis*), Japanese White-eye (*Zosterops japonicus*), Gray Francolin (*Francolinus pondicerianus*), and House Finch (*Carpodacus mexicanus*). Two federally endangered species the Hawaiian hoary bat (*Lasiurus cinereus semotus*) and the Hawaiian petrel (*Pterodroma phaeopygia sandwichensis*) along with the Hawaiian hawk (*Buteo solitarius*) and Hawaiian short-eared owl...
(Asio flammeus sandwichensis) have been previously observed in the general area. Common shorebirds such as Kolea (Pluvialis fulva), Ruddy Turnstone (Arenaria interpres), and Wandering Tattler (Heteroscelus incanus) have been observed in the area on the basalt shelf fronting the coastline.

Aside from the Hawaiian hoary bat, various introduced mammals such as feral cats, mongooses, dogs, mice, and rats may also be present at the property or nearby areas. None are of conservation concern and all are deleterious to native flora and fauna. The project area is small as well as not heavily vegetated; and therefore, does not likely offer substantial habitat for these species.

**Historic/Cultural**

Ho’okena Village grew around the Kauhako landing on the shoreline. At one time, steamship travel to the village created a lively port town with food and merchandise retail stores, restaurants, and a hotel. There were more residents, a church, school and courthouse. High surf and storms destroyed the landing by the mid-1930’s. The majority of residents moved away from the village to be closer to the mauka government following the destruction of the Kauhako landing in the mid-1930’s.

Based upon written and oral testimony at the Public Hearing of April 22, 2014 for the applicant’s Rule Amendment HA 13-2, it was brought to staff’s attention that Ho’okena remains a native Hawaiian fishing village where many Hawaiian fishing traditions have evolved. Opelu fishing traditions are mentioned in mo‘olelo of Ho’ookena and many canoes are still housed in the village. There is a native Hawaiian presence in the area and the village has not been ‘abandoned.’

Further written testimony tells of the settlement of the area that included a general store called Hui Opi‘opi‘o with an Inn and a concrete soaking tank used to process coffee. The testimony notes Kauhako landing as ‘a bustling town with numerous residences,’ and the existence of a road that connects the town with the main mauka government road in 1883 well before the Highways Act of 1892. While Ho’okena Village holds a special place for many in terms of historical and cultural significance, it is not listed on the state or federal registry of historic places.

Regarding the subject parcel, rock walls border the property and other adjacent properties. The walls may be a historic feature however the walls have been restacked, and at some point, concrete was used to stabilize the structure. The property appears to have been graded in the past and according to historic maps of Kauhako/Ho’okena, at one time did contain a residence (see Exhibit 3).

The applicant had a Draft Archaeological Impact Statement (DAIS) prepared for the property. A Cultural Impact Assessment was not commissioned for the project site, but instead, the applicant and his agent sited the cultural studies of the Final Environmental Assessment of Ho’okena Park Pavilion for his petition. Based on these studies and documents, the petition states that no gathering of plant or animal material were noted from the subject property. Besides the rock wall which the applicant cannot determine was built before or after the property was graded, there are no archaeological or historical sites on the parcel. Although there are currently no structures on the property, the DAIS concluded that the entire project area once contained a historic era residence.
and was assessed as significant under Criterion “d”. Site 31025 has yielded information important for understanding historic habitation of the area. The DAIS also concluded that the mapping, written description, and photographs of Site 31025 adequately document it and no further work or preservation is recommended.

Part of the CDUA process requires that the applicant submit a Hawai‘i Revised Statutes (HRS), 6E form developed by the State Historic Preservation Division (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 November 9th, 2018, the applicant’s agent submitted the required HRS, 6E form and supplemental information including the DAIS to SHPD for review with an Effect Determination of “no historic properties affected” and noted as SHPD Log No. 2018.01129. On December 30th, 2019, OCCL resubmitted the required HRS, 6E form and supplemental information including the applicant’s CDUA as well as its DAIS to SHPD for review and noted as SHPD Log. No. 2020.00238. No response was received within the 30-45 day review period from SHPD.

PROPOSED USE

The applicant is proposing to construct a two story 3,234 sq. ft single-family residence (SFR), landscaping, and associated improvements on his parcel (See Exhibit 4). The building footprint of the proposed SFR will cover an approximate area of 2,016 sq. ft. The first floor of the proposed two story SFR will consist of a laundry room, bathroom, stairs, and storage area that is planned to house photovoltaic equipment and battery systems. The second floor will include the kitchen, living room, bedroom, a second bathroom, a walk-in closet as well as lanai and deck areas. The roof will reach an elevation of 25 ft as measured from the lowest point of the structure’s foundation to the highest point of its roof. Some of the existing trees and shrubs may need to be removed in the location where the home is planned. The applicant has stated that if trees that are more than 15 ft tall need to be removed, such tree removal will not occur during the bat-birthing and rearing season (June 1st through September 15th).

The Ho‘okena Village is not served by an existing public electrical utility, and therefore, the home will feature rooftop solar with photovoltaic equipment and batteries located entirely within the footprint of the planned home and its storage areas on the ground floor. The applicant plans to use cellular telephone service for telecommunications. An individual wastewater system consisting of a 1,000-gallon septic tank is proposed for the processing of wastewater from the proposed SFR. The property will be served by a private water source which also serves several other nearby homes and the County of Hawai‘i’s Ho‘okena Beach Park.

Access to the parcel is off the paved Ho’okena Beach Road. As previously stated, the lot has been previously graded. The driveway serving the home will not be paved, but the applicant may add permeable basaltic gavel to define and smooth the surface of the entrance.
In addition to the SFR, the applicant has prepared a landscaping plan for the property (see page 11 & 12 of Exhibit 4). Proposed landscaping plans for the parcel include the planting of fruit trees (mango, lychee, citrus, avocado, and ulu), flowering trees and shrubs, and a lawn around the home. The applicant will maintain and trim the existing trees on the property. The applicant may also develop a hedge around some or all of the perimeter of the parcel. The plants that will be used will be primarily native plants such as coconut palms, hau, milo, puakenikeni, and hala. The tree and shrub types used will be species found at Ho’okena and other Kona makai (coastal) areas which are adapted to low elevation and low rainfall. If irrigation is needed, the applicant proposes to use drip lines. No grading will be used for the planned landscaping.

The applicant is a long-term resident of Kona, has owned the property for approximately 25 years, and has developed personal relationships with many long-term Ho’okena residents. Several residents submitted written testimony and testified at the public hearing held on April 22, 2014 for the applicant’s Rule Amendment HA 13-2 in favor of his petition (see Exhibit 5). As the applicant approaches retirement, he hopes to build his retirement home on the property and occupy it as his personal residence.

OTHER ALTERNATIVES CONSIDERED:
Alternative 1: No Action. Under the No Action Alternative, the residence would not be built. The applicant’s Environmental Assessment considers the No Action Alternative as the baseline by which to compare environmental effects from the project. No other alternative uses for the property are desired by applicant, and thus none are addressed in the Environmental Assessment.

Alternative 2: The proposed project is described above, and its location and features are illustrated in Exhibit 4. The property appears to have been graded in the past and according to historic maps of Kauhako/Ho’okena, at one time did contain a residence. Although there are currently no existing buildings or structures on the property, the applicant desires to build his retirement home on the parcel and continue this residential use of 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 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, Division of Conservation and Resource Enforcement
DLNR, Division of Aquatic Resources
DLNR, Engineering
DLNR, Division of Forestry and Wildlife
DLNR, Hawai’i District Land Office
In addition, this application was also sent to the nearest public library, the Kealakekua Public 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

Engineering:
Comments: The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44 CFR), are in effect when development falls within a Special Flood Hazard Area (high risk areas). State projects are required to comply with 44 CFR regulations as stipulated in Section 60.12. Be advised that 44 CFR 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 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 Hazard Zones are designated on FEMA’s Flood Insurance Rate Maps (FIRM), which can be viewed on our Flood Hazard Assessment Tool (FHAT) (http://gis.hawaiinfip.org/FHAT).

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) 270-7253.
- Kauai: County of Kauai, Department of Public Works (808) 241-4896.

Applicant’s response: This is a response to your February 6, 2020, memorandum comments on the above-identified Conservation District Use Application and associated draft Environmental Assessment (EA). Please note that the subject property is in Flood Zone X of the Flood Insurance Rate Maps. Applicant will provide your letter to the architect designing the single-family
residence for adherence to the National Flood Insurance Program rules and regulations and any local flood ordinances.

Thank you for your participation in the CDUA and EA process. If you have questions or require additional information, please contact me.

_Hawai‘i District Land Office:_
*Comments:* No Comments.

_Applicant’s response:* Applicant hereby acknowledges receipt of the February 7, 2020, “No Comments” response by the Department of Land and Natural Resources, Hawaii District Branch Office, to the Department’s January 28, 2020, form Memorandum soliciting agency comments on the above-identified Conservation District Use Application and associated draft Environmental Assessment (EA).

Thank you for your participation in the CDUA and EA process. If you have questions or require additional information, please contact me.

_Na Ala Hele:_
*Comments:* No comments.

_Applicant’s response:* Applicant hereby acknowledges receipt of the "No Comments" response by the Na Ala Hele Trails and Access Program filed with the Office of Conservation and Coastal Lands on February 4, 2020, in response to the Department of Land and Natural Resources' January 28, 2020, form Memorandum soliciting agency comments on the above-identified Conservation District Use Application and associated draft Environmental Assessment (EA).

Thank you for your participation in the CDUA and EA process. If you have questions or require additional information, please contact me.

DEPARTMENT OF HEALTH

_Clean Air Branch:_
*Comments:* Thank you for the opportunity to provide comments on the subject project. Please see our standard comments at:


Please let me know if you have any questions.

Standard Comments for Land Use Reviews (DOH/Clean Air Branch):

If your proposed project:
Requires an Air Pollution Control Permit
You must obtain an air pollution control permit from the Clean Air Branch and comply with all applicable conditions and requirements. If you do not know if you need an air pollution control permit, please contact the Permitting Section of the Clean Air Branch.

Includes construction or demolition activities that involve asbestos
You must contact the Asbestos Abatement Office in the Indoor and Radiological Health Branch.

Has the potential to generate fugitive dust
You must control the generation of all airborne, visible fugitive dust. Note that construction activities that occur near to existing residences, business, public areas and major thoroughfares exacerbate potential dust concerns. It is recommended that a dust control management plan be developed which identifies and mitigates all activities that may generate airborne, visible fugitive dust. The plan, which does not require Department of Health approval, should help you recognize and minimize potential airborne, visible fugitive dust problems.

Construction activities must comply with the provisions of Hawaii Administrative Rules, §11-60.1-33 on Fugitive Dust. In addition, for cases involving mixed land use, we strongly recommend that buffer zones be established, wherever possible, in order to alleviate potential nuisance complaints.

You should provide reasonable measures to control airborne, visible fugitive dust from the road areas and during the various phases of construction. These measures include, but are not limited to, the following:

a) Planning the different phases of construction, focusing on minimizing the amount of airborne, visible fugitive dust-generating materials and activities, centralizing on-site vehicular traffic routes, and locating potential dust-generating equipment in areas of the least impact;
b) Providing an adequate water source at the site prior to start-up of construction activities;
c) Landscaping and providing rapid covering of bare areas, including slopes, starting from the initial grading phase;
d) Minimizing airborne, visible fugitive dust from shoulders and access roads;
e) Providing reasonable dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and
f) Controlling airborne, visible fugitive dust from debris being hauled away from the project site.

If you have questions about fugitive dust, please contact the Enforcement Section of the Clean Air Branch.

Applicant’s response:  This is a response to your March 10, 2020, submittal of the Clean Air Branch standard comments relative to the above-identified Conservation District Use Application and associated draft Environmental Assessment (EA). Applicant will provide the comments to the contractor responsible for the single-family residence project to assure that the Pollution Control
Permit is secured and that the required measures are in place to control airborne and visible fugitive dust.

Thank you for your participation in the CDUA and EA process. If you have questions or require additional information, please contact me.

COUNTY OF HAWAI‘I

HAWAI‘I FIRE DEPARTMENT

Comments: The Hawai‘i Fire Department’s comments have been attached as Exhibit 6. In summary, the Hawai‘i Fire Department would like the applicant to ensure that his project adheres to the relevant sections of the Hawai‘i State Fire Code, National Fire Protection Association 2006 version, with County of Hawai‘i amendments.

Applicant’s response: This is a response to your letter dated February 20, 2020, commenting on the above-identified Conservation District Use Application and associated draft Environmental Assessment (EA). Applicant will provide your letter to the architect designing the single-family residence. Applicant or his designer and/or contractor will review the design plans with your Department prior to submittal for building permit approval for adherence to the relevant sections of the Fire Code.

Thank you for your participation in the CDUA and EA process. If you have questions or require additional information, please contact me.

ANALYSIS

Following review and acceptance for processing, the Applicant was notified, by correspondence dated January 24, 2020 that:

1. The proposed uses are identified land uses in the General subzone of the Conservation District, pursuant to the Hawai‘i 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 materials 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 is within the Special Management Area (SMA). The applicant’s responsibility includes complying with the provisions of Hawai’i’s Coastal Zone Management law (Chapter 205A, HRS) that pertain to the SMA requirements administered by the various counties. Staff notes that on January 28th, 2018, the County of Hawai’i Planning Department determined the proposed construction of the 3,234 sq. ft SFR and related improvements, as presented in SAA 18-00, is exempt from the definition of “development” and shall not require further review against the SMA guidelines.

The Final EA/Finding of No Significant Impact (FONSI) was issued by the DLNR Chairperson and published in the May 8, 2020 edition of the Office of Environmental Quality Control’s “The Environmental Notice.”

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 development of the single-family residence is in conformance with the purpose of the Conservation District. It is an identified land use within the Conservation District and requires a Board Permit for such use. The landowner is committed to developing the property in a manner that preserves and protects the natural and cultural resources of the area. The project site is primarily unvegetated and does not appear to host any threatened or endangered plant or animal species. Due to the careful and limited nature of the proposed development, there likely would be no significant impacts to the natural or cultural resources of the area.

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 General subzone is to designate open space where specific conservations uses may not be defined, but where urban uses would be premature. A Single-Family Residence is an identified land use in the General Subzone 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. Landscaping is also an identified land use pursuant to HAR, §13-5-23 L-3 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 endemic or indigenous to Hawaii. The introduction of invasive plant species is prohibited.

The design and construction of the residence conforms to the design standards set forth in §13-5, HAR. The landscaping use is to help shield the proposed home from public view and mitigate some of the project’s potential visual impacts. The property owner is committed to managing his property in a manner that is protective of the natural and cultural resources present in the area. Staff believes the proposed land uses are 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.

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. The property is not a shoreline parcel but does fall within the SMA. As mentioned above, a SMA Assessment Application was prepared for the property and on January 28th, 2018, the County of Hawai‘i Planning Department determined the proposed construction of the 3,234 sq. ft SFR and related improvements, as presented in SAA 18-00, is exempt from the definition of “development” and shall not require further review against the SMA guidelines. Lateral access along the shoreline will not be impacted; no significant public views will be impacted; there will be minimal grading; and Best Management Practices (BMPs) will be implemented to minimize potential impacts to coastal ecosystems during construction.

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. Impacts to the island wide-ranging endangered Hawaiian hoary bat will be avoided through timing of vegetation removal. Tree removal will be limited to the area encompassing the applicant’s proposed home. All external lighting will be downward facing and shielded so as not to disrupt or disorient shorebird flight patterns. Only minimal grading to level the house pad is anticipated for the project and the applicant will take precautions to prevent soil and sediment runoff during construction to minimize any potential impacts to marine and coastal resources. The proposed action will also have little to no impact on the public’s current access to or use of Ho‘okena Beach Park and the shoreline area. The landscaping improvements have been planned to shield the home from public view and help mitigate the project’s visual impacts.
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.

Staff is of the opinion that the proposed project will be compatible with the locality and surrounding areas and is appropriate to the physical conditions and capability of the specified parcel. The parcel is bordered by Hoʻokena Beach Road to the north and east; a vacant parcel and a parcel with a residence are to the south; and two vacant parcels to the west. The surrounding area already hosts a handful of existing residences. According to the application and historic maps of the area, the property once had a residence on it. The proposed uses are consistent with single-family residential and landscaping uses in the area.

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 applicant is a longtime resident of the island and has stated that he recognizes the stewardship and responsibility that comes with owning property in the Conservation District. The building footprint of the applicant’s proposed residence will occupy approximately ten percent of the total lot area of the parcel, thus preserving ample open space on the parcel. The existing rock walls will not be damaged and the home will not materially impact or alter views to or from the coast. Staff believes the open space characteristics of the area will be preserved.

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. The property does not currently contain any structures or buildings. An
Archaeological Inventory Survey of the property identified one site consisting of a complex of historic features that extend through the entirety of the project area (Site 50-10-47-31025). The site is comprised of two terraces, an alignment, an excavation, a pavement, a series of three concrete postholes, and an enclosure (the rock wall) that extends around the perimeter of the project area. The Archaeological Inventory Survey did not find a Land Commission Award for the project area; however, historic maps of the area indicate that a house once existed on the parcel. The Archaeological Inventory Survey states that artifacts recovered from the site by the landowner indicate the historic use of the site likely occurred in the 19th to early 20th Century. The report for the property concluded that the mapping, written description, and photography of the Site 31025 complex adequately document it and no further work or preservation is recommended. Additionally, the Archaeological Inventory Survey noted that the applicant’s proposed project would have no effect on historic properties.

The applicant has not commissioned a Cultural Impact Assessment with respect to the project site. The applicant and their agent cited the cultural study that was conducted as part of the Environmental Assessment for the construction of the Ho’okena Beach Park pavilion that is less than a quarter mile away from the project site. This document and testimony from community members that were provided during the applicant’s public hearing for his boundary amendment noted that individuals and their families continue to use the Ho’okena area for traditional Hawaiian practices such as traditional subsistence fishing. The project site is primarily unvegetated and does not appear to contain native plant or animal species that may be subject to native gathering rights or other customary use.

The applicant has been a long-term resident of Kona for many years. The applicant has stated that he does not intend to and will not obstruct or interfere with any customary or traditional Native Hawaiian rights to be exercised on or near the property. During the public hearing for the applicant’s Rule Amendment HA 13-2 and request for a change in subzone, several Native Hawaiian long-term residents of Ho’okena came to the hearing to testify in favor of the applicant’s petition. The applicant’s current petition noted that several testifiers said they welcomed the applicant to the community.

No party reviewing the Draft EA supplied any cultural information. In the unlikely event that important archaeological, historical or cultural features are discovered, all work will stop, and immediate archaeological consultation will be sought with the State Historic Preservation Division in accordance with applicable regulations.

DISCUSSION

The proposed two story 3,234 sq. ft SFR consists of a laundry room, bathroom, stairs, and storage area that is planned to house photovoltaic equipment and battery systems on the first floor, and the second floor of the home will include the kitchen, living room, bedroom, a second bathroom, a walk-in closet as well as lanai and deck areas. For utilities, the SFR will feature solar photovoltaic electricity with battery storage and an individual wastewater system meeting or exceeding all regulatory requirements. The applicant has planned for the home to be served by a private water source that provides water to Ho’okena Beach Park and several nearby homes as
well as use cellular telephone services for telecommunications. 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. The proposed residence will be built as a single structure that will support the
efficient use of energy and materials and will be designed in a manner that will allow for use of
natural ventilation and lighting.

Landscaping and associated improvements include the planting of fruit trees (mango, lychee,
citrus, avocado, and ulu), flowering trees and shrubs, and a lawn around the home. The applicant
may develop a hedge around some or all of the perimeter of the property to shield the home from
public view planes. The applicant plans to use primarily native plants and species that are found
at Ho’okena and other Kona coastal areas that are adapted to low elevation and low rainfall.
Existing vegetation on the property will be trimmed and maintained except where a few existing
trees and shrubs will be removed for the proposed single-family residence. Drip irrigation will be
used as required for landscaping improvements. A rock wall of an undetermined age runs around
the perimeter of the property. The applicant plans to keep the rock wall intact. The driveway that
will serve the residence may have permeable basaltic gravel added to the smooth its surface.

The property appears to have been graded in the past. Grading for the project will be limited to
balancing the cut and fill materials under the house pad. During construction, BMPs will be
observed and implemented. Within the Environmental Assessment, the applicant has identified a
number of mitigative measures, conditions, and practices to ensure that the proposal will have
minimal effect on the natural resources that may be impacted by the proposed project. These
proposed measures, conditions, and practices are incorporated into the permit. In addition, the
proposed SFR is consistent with Chapter 13-5, Hawaii Administrative Rules, Exhibit 4, Single
Family Residential Standards.

The applicant has been a long-term resident of Kona and desires to build a home on his property
to spend his retirement years in as his primary residence. Ho’okena Village includes both
Agricultural and Conservation District lands that host a handful of similar existing residences. The
proposed structure is similar in scale to many of the neighboring homes and the structure has been
designed to comply with the Single Family Residential Standards as outline in HAR, Chapter 13-
5. The landscaping improvements are appropriate for the surrounding environment and similar to
the landscaping improvements found on nearby parcels. 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. In addition, the proposed development of the
property with one (1) single-family residence is similar to the use of other properties along
Ho’okena Beach Road and in Ho’okena Village for single-family residential use.

RECOMMENDATION

Based on the preceding analysis, staff recommends that the Board of Land and Natural Resources
APPROVE Conservation District Use Application HA-3863 for a Single Family Residence (SFR),
Landscaping, and Associated Improvements located at Ho’okena Beach Road, Ho’okena, South
Kona, island of Hawai‘i, TMK (3) 8-6-013:009, 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 this chapter;

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 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 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 (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
TMK: (3) 8-6-013:009    Gregg Parcel

Conservation Subzones

CONDIST

- General
- Resource
- Limited
- Protective
- Special
- Undesignated

Date: 6/15/2020

Exhibit 1

Page 1 of 11
Figure 3a: Aerial View in Relation to County Beach Park Parcels

Figure 3b: Photo of House Site

Exhibit 1
Figure 3c: Photo of View Towards Ocean

Figure 3d: Photo of View Towards Beach Park
Exhibit 2 Location Map
Gregg SFR, Landscaping & Associated Improvements
Ho'okena, South Kona, Hawai'i
Exhibit 3

Page 2 of 3
In 1905 a holua sled was reported as being found within a cave at an undisclosed location in Ho'okena. This account is printed in the Hoku Ka Loa Hawaiian language newspaper (www.nupepa-hawaii.com) and is presented in English below.

On the 6th of this November, found in a hidden cave in Hookena, South Kona, on the island of Hawaii, was a holua - sliding board of ancient times of Hawaii. This surfboard was found by our companion and good friend, Mr. N. K. Pukui, one of the young gentlemen travelling about for the group, “The Hawaiian Realty and Maturity Co.” When he found this board, the kamaaina of Hookena told him, this finding of the sled was new to them.

It is believed that this holua board was left in that cave for two-hundred years, from the time of Keawenuiaumi, the King of Hawaii.

According to the understanding of the oldsters of Hookena, they remember the words of their parents and grandparents, that it was a holua sliding board of a chiefess of Hookena from long ago, named Kaneamama, and her older sister was the kaukau ali‘i of Keauhou. These women, they were women who loved recreation. While Kaneamama was ruling Hookena, she declared to her people that they were to build a sledding course. This course was completed, and that chiefess rode upon this board. It is said that there is no sled equal to this one in any museum all over the world. This sled was made from breadfruit wood, and it is a thing of beauty to behold.
TYPICAL RESIDENTIAL TYPICAL DETAIL
STAIR DETAIL

ACCEPTABLE HANDRAIL

NOTE: ALL ENDS OF HANDRAIL TO RETURN TO WALL

UNACCEPTABLE

FRAMING

SHEAR WALL

PORTAL FRAME
Existing Landscaping

- Keawe
- Tamarind
- Kukui

Proposed Landscaping:

- Lawn
- Native Trees and Shrubs
- Fruit Trees
- Hedge Along Roadway

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Exhibit 4
Page 11 of 12
ENVIRONMENTAL ASSESSMENT
FREDERICK W. GREGG, JR., SINGLE-FAMILY DWELLING
AND ASSOCIATED IMPROVEMENTS IN THE
CONSERVATION DISTRICT

TMK No. (3) 8-6-013:009
Hoʻokena, South Kona District, County of Hawaiʻi, State of Hawaiʻi

APPENDIX 7

Gregg Application for Conservation Subzone Boundary Amendment
Testimony of Clarence A. Medeiros, Jr.
RE: Applicant, Frederick W. Gregg, Jr.'s Proposed Amendment to Chapter 13-5, Hawaii Administrative Rules, to Redesignate a Portion of Conservation District Land known as TMK (3) 8-6-013:009 located at Ho'okena, South Kona, Hawaii from the Limited Subzone into the General Subzone.

Aloha, Members of the Board of Land & Natural Resources:

My name is Clarence A. Medeiros, Jr. and I am the owner of TMK (3) 8-6-013:050, which neighbors the subject property to the north, across of the government road, and is identified by Photo 11 in Mr. Gregg's amendment application.

As a neighboring lot owner, I am in support of Mr. Gregg's application to redesignate his parcel, TMK (3) 8-6-013:009 from the Limited subzone into the General subzone.

My father, Clarence A. Medeiros, Sr. acquired the ownership of TMK (3) 8-6-013:050 by deed from the sole surviving Amalu heir in 1989 and my father in turn conveyed that property to me in 1991 (Exhibit A & Exhibit B). On May 17, 1999, Civil No. 97-01395 DAE, USA vs, 2,145 Hectares of Land & Nohea Marks Santimer, et al., as Successor Trustees of the Les Marks Revocable Living Trust Agreement was filed in the U.S. District Court. The proposed Findings of Fact and Conclusions of Law state that the Santimer, et al. Trustees have established "paper title to the Land Commission Award No. 9971, Apana 29 (the ahupua'a of Ho'okena), with the exception of the 1 ¼ acre parcel conveyed to T. K. R. Amalu".

This parcel was once owned by King Kalakaua who frequently visited the residence of T.K.R. Amalu who later acquired the property (Exhibit C). In addition to a house, the property also had a general store called Hui Opiopio, an inn, and numerous physical features that include a concrete platform and a concrete soaking tank used to process coffee for the Kona Coffee and Fruit Co (Exhibit D).
Mr. Gregg's application cites the map of Kauhako Landing and Vicinity surveyed by J. S. Emerson (Exhibit E). The map depicts my property and Mr. Gregg's property surrounded by a bustling town and numerous residences. The map also shows the existence of a road that connects the town and the residences with the main mauka government road in 1883, well before the Highways Act of 1892.

In 1895, Registered Map 1745, a Plan of Ho'okena Section, clearly identifies that dwellings existed on numerous properties, including Mr. Gregg's property (Exhibit F). Mr. Gregg's application to amend the subzone designation of his property is to enable him to seek approval to construct a residence which is consistent with how the property was used 131 years ago.

I support Mr. Gregg's application and request for your favorable consideration.

Mahalo,

Clarence A. Medeiros, Jr.

CAM:njm
Attachments
ENVIRONMENTAL ASSESSMENT
FREDERICK W. GREGG, JR., SINGLE-FAMILY DWELLING
AND ASSOCIATED IMPROVEMENTS IN THE
CONSERVATION DISTRICT

TMK No. (3) 8-6-013:009
Hoʻokena, South Kona District, County of Hawaiʻi, State of Hawaiʻi

APPENDIX 8
Gregg Application for Conservation Subzone Boundary Amendment
Testimony of Charles Young

Exhibit 5
Page 4 of 6
Good evening and welcome to Kona. My name is Charles Young, I reside in Kealia S. Kona. Thank you for allowing me this opportunity to comment on the Conservation Subzone Boundary Amendment for the above TMK. I am here to support Mr. Gregg. I have met him on two occasions and find him to be sincere, honest and hard-working and I believe that he would be a good addition to our community.

After reading through the application prepared by Cades Schutte I have more admiration for Mr. Gregg’s patience and sufferance through this process. Some in the community fear that this rezoning from Limited to General may be the precursor for an avalanche of rezoning and development at Ho’okena village and/or in our community. I don’t believe that to be the case but I do have concerns as to what precedence this may set for future land use boundary amendments or rezoning at all regulatory levels. And for that, our community must remain vigilant, voice our concerns and deal with the facts of the matter particularly as they are represented in this application.

In the June 2013 application Mr. Gregg states that he has an “interest in building a single family residence” however the staff report dated August 2013 states that “The petition notes that reclassification to the General subzone would render the property eligible for an application to construct a single family residence. However at this time no improvements or secondary improvements are being proposed with this proposed subzone boundary amendment”. I feel that staff could have conveyed the applicants “interests” for the record so the community and the Board are clear as to intention.

With respect to the Archaeological and Historical context. I believe that the statements in the application and recommendations from staff may imply that native Hawaiians have no interest and don’t retain any present day connection to the area. Statements like, “The majority of Ho’okena Native Hawaiian families had abandoned the village to move closer to the mauka government road by that time”. In the report from staff that changes to “The majority of residents abandoned the village to move closer to the mauka government road during that time also”. I realize that this is being quoted from another source but it does give the impression that Hawaiians are no longer there and perhaps should not matter. Nothing could be further from the truth. There is no mention of the many Hawaiian fishing traditions that evolved in Hookena and no mention of the many canoe still housed there or that the S. Kona fisherman, the majority of whom are Hawaiian account for the largest opelu catch on Hawaii Island. Opelu and Opelu fishing is mentioned is some of the earliest pre-contact mo’olelo of Ho’okena. I don’t know why this would not be an important consideration when reviewing a zoning change. Ho’okena village is a native Hawaiian fishing village.

Exhibit 5

Page 5 of 6
I also feel that it is important that the record note that the County of Hawaii “appropriated” much of the
land that is now Hookena Beach Park through eminent domain and condemnation. These lands rightfully
belonged to the native Hawaiian families as recently as the 1970’s. It is important that the record of
native Hawaiian presence in the area is not characterized as “abandoned”.

Lastly, the application notes that Friends of Ho’okena Beach Park (FOHBP) applied for the construction
of a pavilion at Ho’okena Beach Park with Pa’a Pono of Miloli’i. After final consultation with the
community the FOHBP are scaling down the footprint of the pavilion more in keeping with the villages’
desires.

In summary, I support Mr. Gregg’s application for a subzone boundary amendment and his intention to
build a single family dwelling. Provided he respects the community’s desire to perpetuate and to sustain
its’ culture and traditions I’m confident that Mr. Gregg will continue to receive my support.

Charles Young
PO Box 505
Honaunau, Hi. 96726
February 20, 2020

Mr. Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands
P.O. Box 621
Honolulu, Hawai‘i 96809

Dear Mr. Lemmo,

SUBJECT: Conservation District Use Application (CDUA) HA-3863 for a Single Family Residence; Landscaping and Related Improvements.
TMK: (3) 8-6-013:009

In regards to the above-referenced Conservation District Use Application, the following shall be in accordance:

**NFPA 1, UNIFORM FIRE CODE, 2006 EDITION**

*Note: Hawai‘i State Fire Code, National Fire Protection Association 2006 version, with County of Hawai‘i amendments. County amendments are identified with a preceding “C~” of the reference code.*

Chapter 18 Fire Department Access and Water Supply

18.1 General. Fire department access and water supplies shall comply with this chapter.

For occupancies of an especially hazardous nature, or where special hazards exist in addition to the normal hazard of the occupancy, or where access for fire apparatus is unduly difficult, or areas where there is an inadequate fire flow, or inadequate fire hydrant spacing, and the AHJ may require additional safeguards including, but not limited to, additional fire appliance units, more than one type of appliance, or special systems suitable for the protection of the hazard involved.

18.1.1 Plans.

18.1.1.1 Fire Apparatus Access. Plans for fire apparatus access roads shall be submitted to the fire department for review and approval prior to construction.
18.1.1.2 Fire Hydrant Systems. Plans and specifications for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction.

C- 18.1.1.2.1 Fire Hydrant use and Restrictions. No unauthorized person shall use or operate any fire hydrant unless such person first secures permission or a permit from the owner or representative of the department, or company that owns or governs that water supply or system. Exception: Fire Department personnel conducting firefighting operations, hydrant testing, and/or maintenance, and the flushing and acceptance of hydrants witnessed by Fire Prevention Bureau personnel.

18.2 Fire Department Access.

18.2.1 Fire department access and fire department access roads shall be provided and maintained in accordance with Section 18.2.

18.2.2 Access to Structures or Areas.

18.2.2.1 Access Box(es). The AHJ shall have the authority to require an access box(es) to be installed in an accessible location where access to or within a structure or area is difficult because of security.

18.2.2.2 Access to Gated Subdivisions or Developments. The AHJ shall have the authority to require fire department access be provided to gated subdivisions or developments through the use of an approved device or system.

18.2.2.3 Access Maintenance. The owner or occupant of a structure or area, with required fire department access as specified in 18.2.2.1 or 18.2.2.2, shall notify the AHJ when the access is modified in a manner that could prevent fire department access.

18.2.3 Fire Department Access Roads. (*may be referred as FDAR)

18.2.3.1 Required Access.

18.2.3.1.1 Approved fire department access roads shall be provided for every facility, building, or portion of a building hereafter constructed or relocated.

18.2.3.1.2 Fire Department access roads shall consist of roadways, fire lanes, parking lots lanes, or a combination thereof.
18.2.3.1.3* When not more than two one- and two-family dwellings or private garages, carports, sheds, agricultural buildings, and detached buildings or structures 400ft² (37 m²) or less are present, the requirements of 18.2.3.1 through 18.2.3.2.1 shall be permitted to be modified by the AHJ.

18.2.3.1.4 When fire department access roads cannot be installed due to location on property, topography, waterways, nonnegotiable grades, or other similar conditions, the AHJ shall be authorized to require additional fire protection features.

18.2.3.2 Access to Building.

18.2.3.2.1 A fire department access road shall extend to within in 50 ft (15 m) of at least one exterior door that can be opened from the outside that provides access to the interior of the building. Exception: 1 and 2 single-family dwellings.

18.2.3.2.1.1 When buildings are protected throughout with an approved automatic sprinkler system that is installed in accordance with NFPA 13, NFPA 13D, or NFPA 13R, the distance in 18.2.3.2.1 shall be permitted to be increased to 300 feet.

18.2.3.2.2 Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 ft (46 m) from fire department access roads as measured by an approved route around the exterior of the building or facility.

18.2.3.2.2.1 When buildings are protected throughout with an approved automatic sprinkler system that is installed in accordance with NFPA 13, NFPA 13D, or NFPA 13R, the distance in 18.2.3.2.2 shall be permitted to be increased to 450 ft (137 m).

18.2.3.3 Multiple Access Roads. More than one fire department access road shall be provided when it is determined by the AHJ that access by a single road could be impaired by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access.

18.2.3.4 Specifications.

18.2.3.4.1 Dimensions.

C- 18.2.3.4.1.1 FDAR shall have an unobstructed width of not less than 20ft with an approved turn around area if the FDAR exceeds 150 feet. Exception: FDAR for one and two family dwellings shall have an unobstructed width of not less than 15 feet, with an area of not less than 20 feet wide within 150 feet of the structure being protected. An approved turn around area shall be provided if the FDAR exceeds 250 feet.
C- 18.2.3.4.1.2 FDAR shall have an unobstructed vertical clearance of not less than 13ft 6 in.

C- 18.2.3.4.1.2.1 Vertical clearances may be increased or reduced by the AHJ, provided such increase or reduction does not impair access by the fire apparatus, and approved signs are installed and maintained indicating such approved changes.

18.2.3.4.1.2.2 Vertical clearances shall be increased when vertical clearances or widths are not adequate to accommodate fire apparatus.

C- 18.2.3.4.2 Surface. Fire department access roads and bridges shall be designed and maintained to support the imposed loads (25 Tons) of the fire apparatus. Such FDAR and shall be comprised of an all-weather driving surface.

18.2.3.4.3 Turning Radius.

C- 18.2.3.4.3.1 Fire department access roads shall have a minimum inside turning radius of 30 feet, and a minimum outside turning radius of 60 feet.

18.2.3.4.3.2 Turns in fire department access road shall maintain the minimum road width.

18.2.3.4.4 Dead Ends. Dead-end fire department access roads in excess of 150 ft (46 m) in length shall be provided with approved provisions for the fire apparatus to turn around.

18.2.3.4.5 Bridges.

18.2.3.4.5.1 When a bridge is required to be used as part of a fire department access road, it shall be constructed and maintained in accordance with county requirements.

18.2.3.4.5.2 The bridge shall be designed for a live load sufficient to carry the imposed loads of fire apparatus.

18.2.3.4.5.3 Vehicle load limits shall be posted at both entrances to bridges where required by the AHJ.

18.2.3.4.6 Grade.

C- 18.2.3.4.6.1 The maximum gradient of a Fire department access road shall not exceed 12 percent for unpaved surfaces and 15 percent for paved surfaces. In areas of the FDAR where a Fire apparatus would connect to a Fire hydrant or Fire Department Connection, the maximum gradient of such area(s) shall not exceed 10 percent.
18.2.3.4.6.2* The angle of approach and departure for any means of fire department access road shall not exceed 1 ft drop in 20 ft (0.3 m drop in 6 m) or the design limitations of the fire apparatus of the fire department, and shall be subject to approval by the AHJ.

18.2.3.4.6.3 Fire department access roads connecting to roadways shall be provided with curb cuts extending at least 2 ft (0.61 m) beyond each edge of the fire lane.

18.2.3.4.7 Traffic Calming Devices. The design and use of traffic calming devices shall be approved the AHJ.

18.2.3.5 Marking of Fire Apparatus Access Road.

18.2.3.5.1 Where required by the AHJ, approved signs or other approved notices shall be provided and maintained to identify fire department access roads or to prohibit the obstruction thereof of both.

18.2.3.5.2 A marked fire apparatus access road shall also be known as a fire lane.

18.2.4* Obstruction and Control of Fire Department Access Road.

18.2.4.1 General.

18.2.4.1.1 The required width of a fire department access road shall not be obstructed in any manner, including by the parking of vehicles.

18.2.4.1.2 Minimum required widths and clearances established under 18.2.3.4 shall be maintained at all times.

18.2.4.1.3* Facilities and structures shall be maintained in a manner that does not impair or impede accessibility for fire department operations.

18.2.4.1.4 Entrances to fire departments access roads that have been closed with gates and barriers in accordance with 18.2.4.2.1 shall not be obstructed by parked vehicles.

18.2.4.2 Closure of Accessways.

18.2.4.2.1 The AHJ shall be authorized to require the installation and maintenance of gates or other approved barricades across roads, trails, or other accessways not including public streets, alleys, or highways.

18.2.4.2.2 Where required, gates and barricades shall be secured in an approved manner.
18.2.4.2.3 Roads, trails, and other access ways that have been closed and obstructed in the manner prescribed by 18.2.4.2.1 shall not be trespassed upon or used unless authorized by the owner and the AHJ.

18.2.4.2.4 Public officers acting within their scope of duty shall be permitted to access restricted property identified in 18.2.4.2.1.

18.2.4.2.5 Locks, gates, doors, barricades, chains, enclosures, signs, tags, or seals that have been installed by the fire department or by its order or under its control shall not be removed, unlocked, destroyed, tampered with, or otherwise vandalized in any manner.

18.3 Water Supplies and Fire Hydrants

18.3.1* A water supply approved by the county, capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities or buildings, or portions thereof, are hereafter constructed, or moved into or within the county. When any portion of the facility or building is in excess of 150 feet (45 720 mm) from a water supply on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains capable of supplying the required fire flow shall be provided when required by the AHJ. For on-site fire hydrant requirements see section 18.3.3.

EXCEPTIONS:

1. When facilities or buildings, or portions thereof, are completely protected with an approved automatic fire sprinkler system the provisions of section 18.3.1 may be modified by the AHJ.

2. When water supply requirements cannot be installed due to topography or other conditions, the AHJ may require additional fire protection as specified in section 18.3.2 as amended in the code.

3. When there are not more than two dwellings, or two private garage, carports, sheds and agricultural. Occupancies, the requirements of section 18.3.1 may be modified by AHJ.

18.3.2* Where no adequate or reliable water distribution system exists, approved reservoirs, pressure tanks, elevated tanks, fire department tanker shuttles, or other approved systems capable of providing the required fire flow shall be permitted.

18.3.3* The location, number and type of fire hydrants connected to a water supply capable of delivering the required fire flow shall be provided on a fire apparatus access road on the site of the premises or both, in accordance with the appropriate county water requirements.
18.3.4 Fire Hydrants and connections to other approved water supplies shall be accessible to the fire department.

18.3.5 Private water supply systems shall be tested and maintained in accordance with NFPA 25 or county requirements as determined by the AHJ.

18.3.6 Where required by the AHJ, fire hydrants subject to vehicular damage shall be protected unless located within a public right of way.

18.3.7 The AHJ shall be notified whenever any fire hydrant is placed out of service or returned to service. Owners of private property required to have hydrants shall maintain hydrant records of approval, testing, and maintenance, in accordance with the respective county water requirements. Records shall be made available for review by the AHJ upon request.

C- 18.3.8 Minimum water supply for buildings that do not meet the minimum County water standards:

Buildings up to 2000 square feet, shall have a minimum of 3,000 gallons of water available for Firefighting.

Buildings 2001- 3000 square feet, shall have a minimum of 6,000 gallons of water available for Firefighting.

Buildings, 3001- 6000 square feet, shall have a minimum of 12,000 gallons of water available for Firefighting.

Buildings, greater than 6000 square feet, shall meet the minimum County water and fire flow requirements.

Multiple story buildings shall multiply the square feet by the amount of stories when determining the minimum water supply.

Commercial buildings requiring a minimum fire flow of 2000gpm per the Department of Water standards shall double the minimum water supply reserved for firefighting.

Fire Department Connections (FDC) to alternative water supplies shall comply with 18.3.8 (1)-(6) of this code.

NOTE: In that water catchment systems are being used as a means of water supply for firefighting, such systems shall meet the following requirements:
1) In that a single water tank is used for both domestic and firefighting water, the water for domestic use shall not be capable of being drawn from the water reserved for firefighting;

2) Minimum pipe diameter sizes from the water supply to the Fire Department Connection (FDC) shall be as follows:
   a) 4” for C900 PVC pipe;
   b) 4” for C906 PE pipe;
   c) 3” for ductile Iron;
   d) 3’ for galvanized steel.

3) The Fire Department Connection (FDC) shall:
   a) be made of galvanized steel;
   b) have a gated valve with 2-1/2 inch, National Standard Thread male fitting and cap;
   c) be located between 8 ft and 16 ft from the Fire department access. The location shall be approved by the AHJ;
   d) not be located less than 24 inches, and no higher than 36 inches from finish grade, as measured from the center of the FDC orifice;
   e) be secure and capable of withstanding drafting operations. Engineered stamped plans may be required;
   f) not be located more than 150 feet of the most remote part, but not less than 20 feet, of the structure being protected;
   g) also comply with section 13.1.3 and 13.2.3.4.6.1 of this code.

4) Commercial buildings requiring a fire flow of 2000gpm shall be provided with a second FDC. Each FDC shall be independent of each other, with each FDC being capable of flowing 500gpm by engineered design standards. The second FDC shall be located in an area approved by the AHJ with the idea of multiple Fire apparatus conducting drafting operations at once, in mind.

5) Inspection and maintenance shall be in accordance to NFPA 25.

6) The owner or lessee of the property shall be responsible for maintaining the water level, quality, and appurtenances of the system.

EXCEPTIONS TO SECTION 18.3.8:

1) Agricultural buildings, storage sheds, and shade houses with no combustible or equipment storage.

2) Buildings less than 800 square feet in size that meets the minimum Fire Department Access Road requirements.
3) For one and two family dwellings, agricultural buildings, storage sheds, and detached garages 800 to 2000 square feet in size, and meets the minimum Fire Department Access Road requirements, the distance to the Fire Department Connection may be increased to 1000 feet.

4) For one and two family dwellings, agricultural buildings, and storage sheds greater than 2000 square feet, but less than 3000 square feet and meets the minimum Fire Department Access Road requirements, the distance to the Fire Department Connection may be increased to 500 feet.

5) For buildings with an approved automatic sprinkler system, the minimum water supply required may be modified.

If there are any questions regarding these requirements, please contact the Fire Prevention Bureau at (808) 932-2911.

DARREN J. ROSARIO
Fire Chief

CB:ds