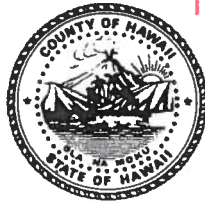


William P. Kenoi
Mayor

FILE COPY

FEB 08 2012



BJ Leithead Todd
Director

Margaret K. Masunaga
Deputy

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County of Hawai'i
PLANNING DEPARTMENT

East Hawai'i Office
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Hilo, Hawai'i 96720
Phone (808) 961-8288
Fax (808) 961-8742

January 23, 2012

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

RECEIVED
12 JAN 25 PM 2:41
OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

Dear Mr. Hooser:

SUBJECT: Final Environmental Assessment (FEA)
Applicant: Doris M. Scharpf Trust
Request: After-the-Fact Approval of Existing Wall within the Shoreline Area
TMK: (3) 6-9-005:001; Lālāmilo, South Kohala, Hawai'i

The County of Hawai'i Planning Department has reviewed the comments received during the 30-day comment period on the draft environmental assessment that ended on December 22, 2011. We have determined that the project will not have significant environmental effects and have issued a Finding of No Significant Impact (FONSI).

Please publish notice of availability for this project in the next available OEQC Environmental Notice. We have enclosed the following:

- One copy of the Final EA
- A CD containing the .pdf files for the EA and .doc file with the OEQC transmittal documents, including project summary
- A completed OEQC Environmental Notice Publication Form and associated material.

**OEQC Publication Form
The Environmental Notice**

Name of Project: After-the-Fact Permit for Wall in Shoreline Setback at Doris Scharpf Residence in Puakō

Applicable Law: Chapter 343, HRS

Type of Document: Final EA

Island: Hawai'i

District: South Kohala

TMK: (3rd) 6-9-005:001

Permits Required: Special Management Area Minor Permit, Shoreline Setback Variance

Name of Applicant: Doris M. Scharpf Trust
Address c/o Roy A. Vitousek III
City, State, Zip Cades Schutte LLP
75-170 Hualalai Rd., Ste. B-303
Kailua-Kona, Hawaii 96740

Contact and Phone: Roy A. Vitousek III 329-5811

Approving Agency: Hawai'i County Planning Department
Address 101 Pauahi Street, Suite 3
City, State, Zip Hilo HI 96720
Contact and Phone Bethany Morrison 961-8288

Consultant: Geometrician Associates
Address PO Box 396
City, State, Zip Hilo HI 96721
Contact and Phone Ron Terry 969-7090

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

12 JAN 25 PM 12:42

RECEIVED

Project Summary The Doris M. Scharpf Trust is requesting the County of Hawai'i for after-the-fact permits for an existing 82.4-foot long, 2 to 4-foot high wall along the makai portion of a property containing a single-family home occupied by Doris Scharpf in Puakō. The request is pursuant to a settlement of an appeal from a County enforcement action relative to the wall. The wall was in place in 1999 when Doris Scharpf and her (now deceased) husband purchased the Property. The Settlement and Mutual Release Agreement, dated January 15, 2009, between the Doris M. Scharpf Trust and the County of Hawai'i, provided that the Trust could apply for permits necessary to modify a portion of the wall where it abutted a County-owned public access way and retain the remaining section of the wall. The wall is fully contained within the State Land Use Urban District and is mauka of the certified shoreline. No additional construction is proposed and no construction-related impacts would occur. Retention of the wall would not adversely affect archaeological sites, cultural practices, vegetation or habitat, or shoreline processes. Public access would be maintained. Removal of the wall (which also functions as a retaining wall) would induce the shoreline to move about 30 feet mauka of the existing waterline, removing much of Ms. Scharpf's backyard. This unprotected shoreline would also be susceptible to future shoreline erosion, and the adjacent walls surrounding and protecting the mauka-makai public pedestrian access would be subject to flanking damage, meaning that waves could surge around them unprotected end and erode the ground from the mauka side. This could affect both the public access way walls and possibly an adjacent property currently protected by a legal, non-conforming wall.

OEQC Publication Form The Environmental Notice

Instructions to Applicant or Agency:

1. Fill out this Publication Form and email to: oeqc@doh.hawaii.gov
2. Send a pdf copy of the EA / EIS and 2 hardcopies to OEQC. Mahalo.

Name of Project: Keaukaha Elementary School Cafeteria Draft EA
Applicable Law: Chapter 343, Hawai'i Revised Statutes
Type of Document: Draft Environmental Assessment
Island: Hawai'i
District: Waiākea
3rd Division, 2-1-020: 001

Permits Required: Plan Approval; Grubbing, Grading, Excavation, and Stockpiling; Building, Electrical, and Plumbing; NPDES; Variance from Pollution Controls; Chapter 6E Clearance

Name of Applicant or Proposing Agency: Department of Education, State of Hawai'i, Facilities Development Branch
1151 Punchbowl Street, Room 501, Honolulu, Hawaii 96813. Contact: Ryan Yamamoto, (808) 586-0966
Address
City, State, Zip
Contact and Phone

Approving Agency: Department of Education, State of Hawai'i
Facilities Development Branch
1151 Punchbowl Street, Room 501
Honolulu, Hawai'i 96813
Contact and Phone Ryan Yamamoto, Project Coordinator @ 586-0966

Consultant: Gerald Park Urban Planner, 95-595 Kaname'e Street, #324, Mililani, Hawai'i
96789. (808) 625-9626
Address
City, State, Zip
Contact and Phone

Project Summary:

Short-term construction impacts include raising fugitive dust, mechanical and equipment noise, potential for construction related runoff, grubbing vegetation, land alteration, potential impacts on traffic circulation, and loss of open space used for outdoor recreation and school functions. There are no streams or historic features on the ground surface to be affected.

A new and larger cafeteria will benefit students, faculty, Keaukaha School as a whole, parents of students, and the Keaukaha community. The existing cafeteria will be renovated into classrooms adding to the classroom stock with benefits for students and faculty.

The cafeteria *per se* will neither affect ambient air quality nor generate noise and use of the facility is not expected to adversely affect surrounding areas. No significant increase in vehicle traffic is anticipated as a result of this project. The new cafeteria will serve the same function and uses as the existing cafeteria but at a different location. There should be no significant increase in domestic water usage and wastewater flow compared to existing conditions. Storm water runoff will increase but will be retained on-site.

Designed as a sustainable building, the cafeteria will have lower operating costs, conserve energy and water, provide for the health and comfort of its users, and demonstrate a State commitment to sustainable building design and energy conservation. At one-story in height, it will be the same height as many campus buildings thus promoting the low-rise character of the school.

Open space currently used for outdoor recreation and school functions will be affected and this impact cannot be avoided. The Department of Education will confer with the Department of Parks and Recreation County of Hawai'i about using a section of Hualani Park during normal school hours for outdoor activities.

FINAL ENVIRONMENTAL ASSESSMENT

**AFTER-THE-FACT PERMIT FOR WALL IN
SHORELINE SETBACK AT DORIS SCHARPF
RESIDENCE IN PUAKŌ**

**TMK (3rd): 6-9-005:001
Lalamilo, South Kohala, Island of Hawai‘i, State of Hawai‘i**

February 2012

**Prepared for:
County of Hawai‘i
Planning Department
101 Pauahi Street, Suite 3
Hilo, Hawai‘i 96720**

FINAL ENVIRONMENTAL ASSESSMENT
AFTER-THE-FACT PERMIT FOR WALL IN SHORELINE SETBACK AT
DORIS SCHARPF RESIDENCE IN PUAKŌ

TMK (3rd): 6-9-005:001
Lalamilo, South Kohala, Island of Hawai'i, State of Hawai'i

APPLICANT:

Doris M. Scharpf Trust
c/o Roy A. Vitousek III
Cades Schutte LLP
75-170 Hualalai Rd., Ste. B-303
Kailua-Kona, Hawaii 96740

**ACCEPTING
AUTHORITY:**

Hawai'i County Planning Department
101 Pauahi Street, Suite 3
Hilo, Hawai'i 96720

CONSULTANT:

Geometrician Associates
Ron Terry, Ph.D.
PO Box 396
Hilo, Hawai'i 96721

CLASS OF ACTION:

Action in Shoreline Setback Area

This document is prepared pursuant to:

The Hawai'i Environmental Protection Act,
Chapter 343, Hawai'i Revised Statutes (HRS), and
Title 11, Chapter 200, Hawai'i Department of Health Administrative Rules (HAR).

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SUMMARY OF PROPOSED ACTION, ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The Doris M. Scharpf Trust is requesting the County of Hawai‘i for after-the-fact permits for an existing 82.4-foot long, 2 to 4-foot high wall along the *makai* portion of a property containing a single-family home occupied by Doris Scharpf in Puakō. The request is pursuant to a settlement of an appeal from a County enforcement action relative to the wall. The wall was in place in 1999 when Doris Scharpf and her (now deceased) husband purchased the Property. The Settlement and Mutual Release Agreement, dated January 15, 2009, between the Doris M. Scharpf Trust and the County of Hawai‘i, provided that the Trust could apply for permits necessary to modify a portion of the wall where it abutted a County-owned public access way and retain the remaining section of the wall. The wall is fully contained within the State Land Use Urban District and is *mauka* of the certified shoreline. No additional construction is proposed and no construction-related impacts would occur. Retention of the wall would not adversely affect archaeological sites, cultural practices, vegetation or habitat, or shoreline processes. Public access would be maintained. Removal of the wall (which also functions as a retaining wall) would induce the shoreline to move about 30 feet *mauka* of the existing waterline, removing much of Ms. Scharpf’s backyard. This unprotected shoreline would also be susceptible to future shoreline erosion, and the adjacent walls surrounding and protecting the *mauka-makai* public pedestrian access would be subject to flanking damage, meaning that waves could surge around them unprotected end and erode the ground from the *mauka* side. This could affect both the public access way walls and possibly an adjacent property currently protected by a legal, non-conforming wall.

PART 1: PROPOSED ACTION AND E.A. PROCESS

1.1 Proposed Action and Location

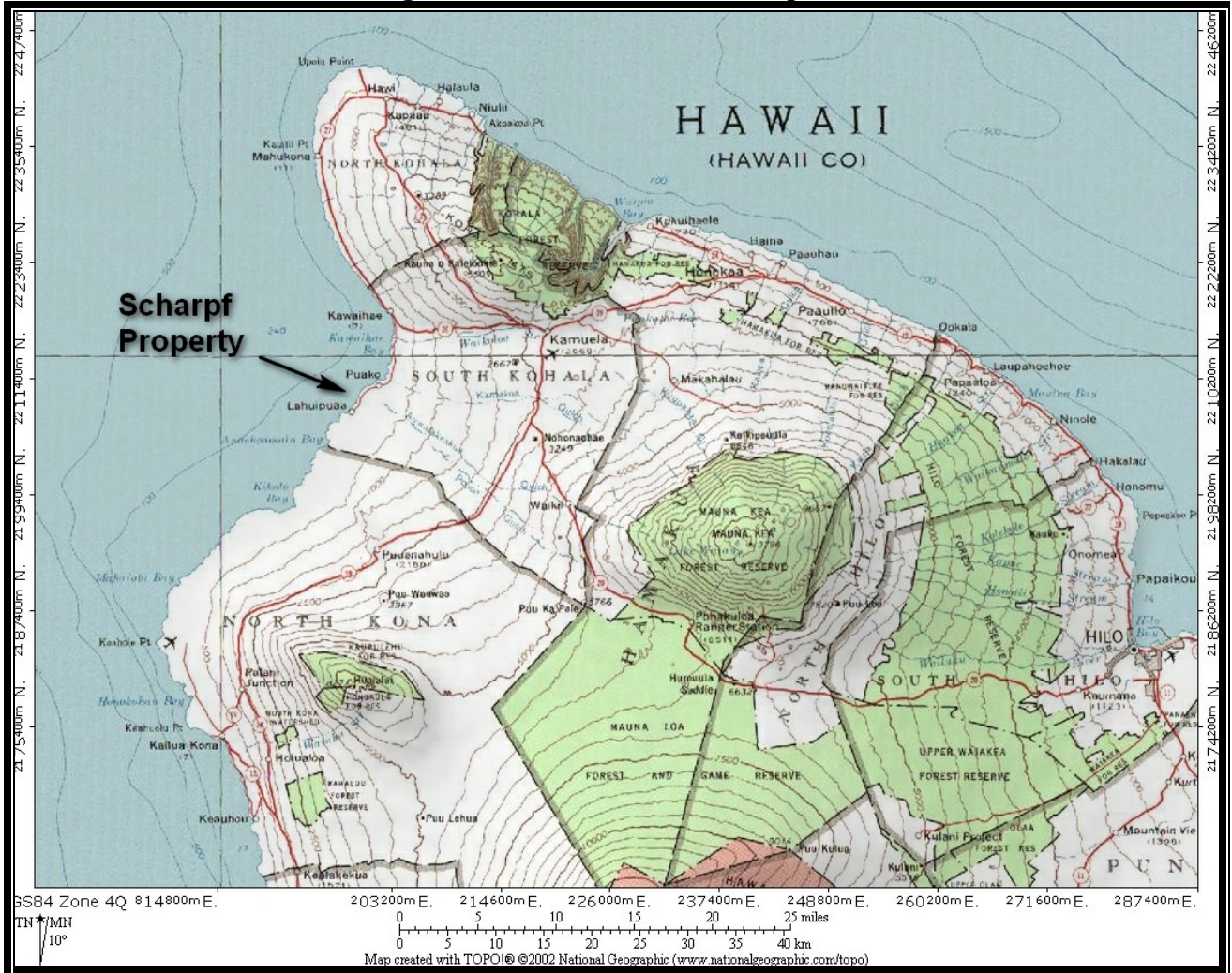
The Doris M. Scharpf Trust is requesting that the County of Hawai‘i approve after-the-fact permits for an existing 82.4-foot long, 2 to 4-foot high wall along the *makai* portion of a 19,401-square-foot (0.4454 acre) property containing a single-family home occupied by Doris Scharpf in the village of Puakō, TMK 6-9-005:001 (Figures 1-4). The request is pursuant to a settlement of an appeal from a County enforcement action relative to the wall. The wall was in place at the time the owners, Trustee Doris Scharpf and her (now deceased) husband, purchased the Property. The Settlement and Mutual Release Agreement, dated January 15, 2009, between the Doris M. Scharpf Trust and the County of Hawai‘i, provided that the Trust could apply for permits necessary to realign and legalize the wall. The wall is fully contained within the State Land Use Urban District. The *makai* face of the northeastern 20-foot portion of the wall is the certified shoreline, and the remainder of the wall is three to four feet *mauka* of the certified shoreline. The entire wall is thus *mauka* of the shoreline but within the shoreline setback.

For purposes of clarity, it is important to note that when the current permit process was begun in 2010, the Proposed Action also included a related action within and directly adjacent to the public access way. The wall and partially detached stairs fronting the access way, along with the wall fronting the southwestern portion of the property, were to be removed and new flanking *mauka-makai* walls roughly 30 feet in length were to be built along the boundaries of the adjacent properties to prevent erosion of these properties. In the meantime, heavy surf in December of 2010 and January of 2011 further damaged this portion, prompting the County of Hawai‘i to close this access way for reasons of public safety. In the interest of opening the access way as soon as possible for the convenience of the public, Ms. Scharpf requested the County to be allowed to repair this section as an emergency action (see letters of January 18 and February 24, 2011 in Appendix 1b). By letter of March 28, 2011 (see Appendix 1b), the County of Hawai‘i authorized the Ms. Scharpf to remove the damaged wall and stairs, construct the flanking walls, and relocate a 22.3-foot length of wall on the Scharpf property up to 5 feet *mauka* (see Figures 3c and 5). The portion of the work that was the responsibility of Ms. Scharpf has been completed and acknowledged by the County of Hawai‘i. Ms. Scharpf believed that the emergency permits also legalized the balance of the wall because the wall is a single, unitary structure. The County of Hawai‘i has taken the position that the County emergency authorization did not include the existing portion of the wall fronting the Scharpf property, which is therefore the subject of the permit application and this EA. The Proposed Action is now limited to the after-the-fact permitting for the 82.4-foot section of wall to remain in place. All work is being paid for by Ms. Scharpf and no public funds are involved.

1.2 Environmental Assessment Process

This Environmental Assessment (EA) process is being conducted in accordance with Chapter 343 of the Hawai‘i Revised Statutes (HRS). This law, along with its implementing regulations,

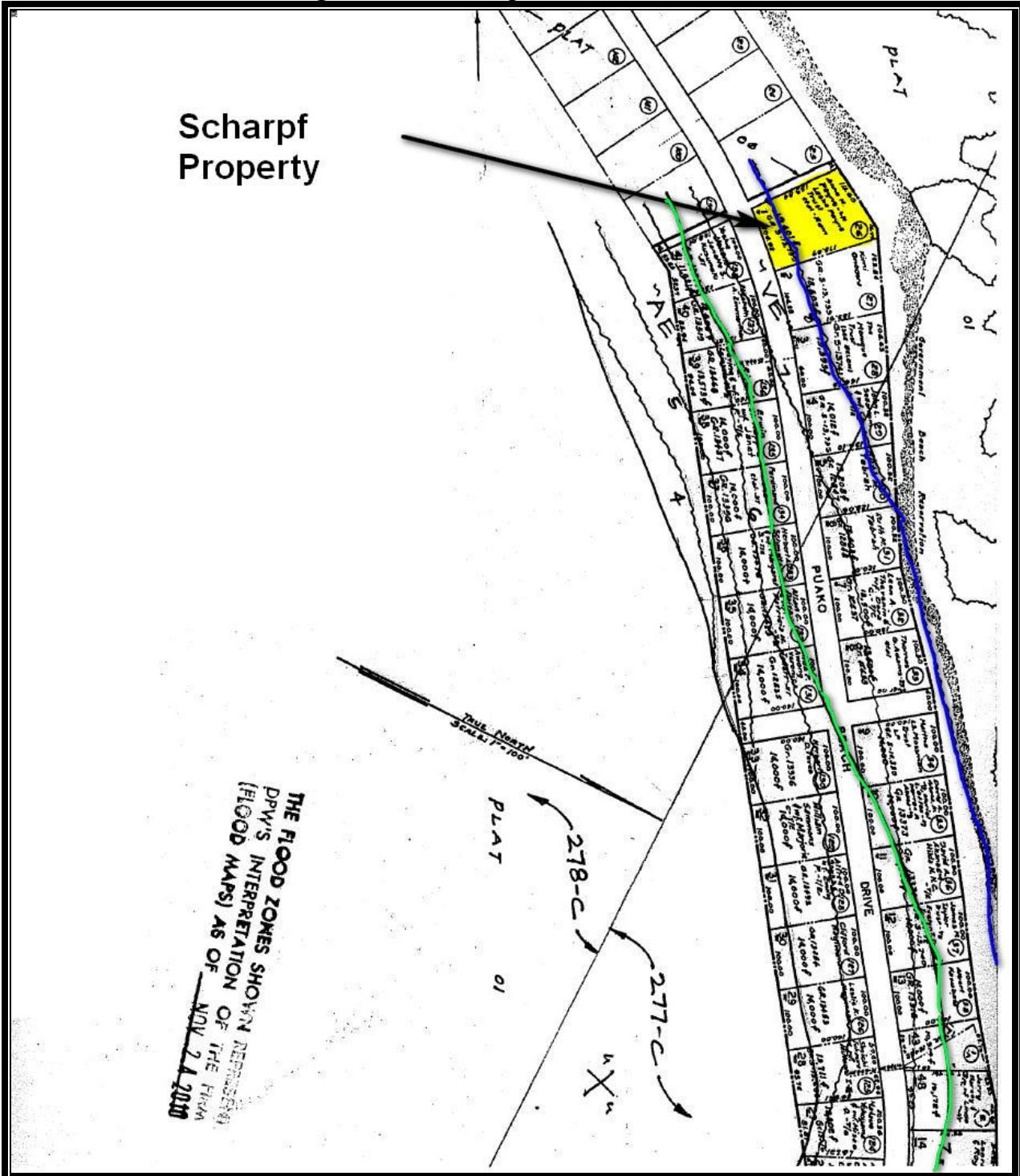
Figure 1 General Location Map



Title 11, Chapter 200, of the Hawai‘i Administrative Rules (HAR), is the basis for the EA process in the State of Hawai‘i. An EA is necessary because the existing wall was built without authorization within the Shoreline Setback area and the County Planning Department does not consider the Proposed Action of retaining the wall an exempt activity.

According to Chapter 343, an EA is prepared to determine impacts associated with an action, to develop mitigation measures for adverse impacts, and to determine whether any of the impacts are significant according to thirteen specific criteria. If a study concludes that no significant impacts would occur from implementation of the Proposed Action, a Finding of No Significant Impact (FONSI) is prepared and an action is permitted to occur. If a study finds that significant impacts are expected to occur as a result of a Proposed Action, then an Environmental Impact Statement (EIS) is prepared with wider investigation of impacts and public involvement. Section 2 considers alternatives to the Proposed Action, and Section 3 discusses the existing

Figure 2 TMK Map and Flood Zones



Figures 3a-b Photos



Airphoto ▲ ▼ Wall and Public Access Way in 2009



Figures 3c-d Photos



Access Way and Wall Portion After Emergency Work ▲ ▼ Shoreline *Makai* of Wall



Figure 4 Site Plan Showing Wall to be Retained

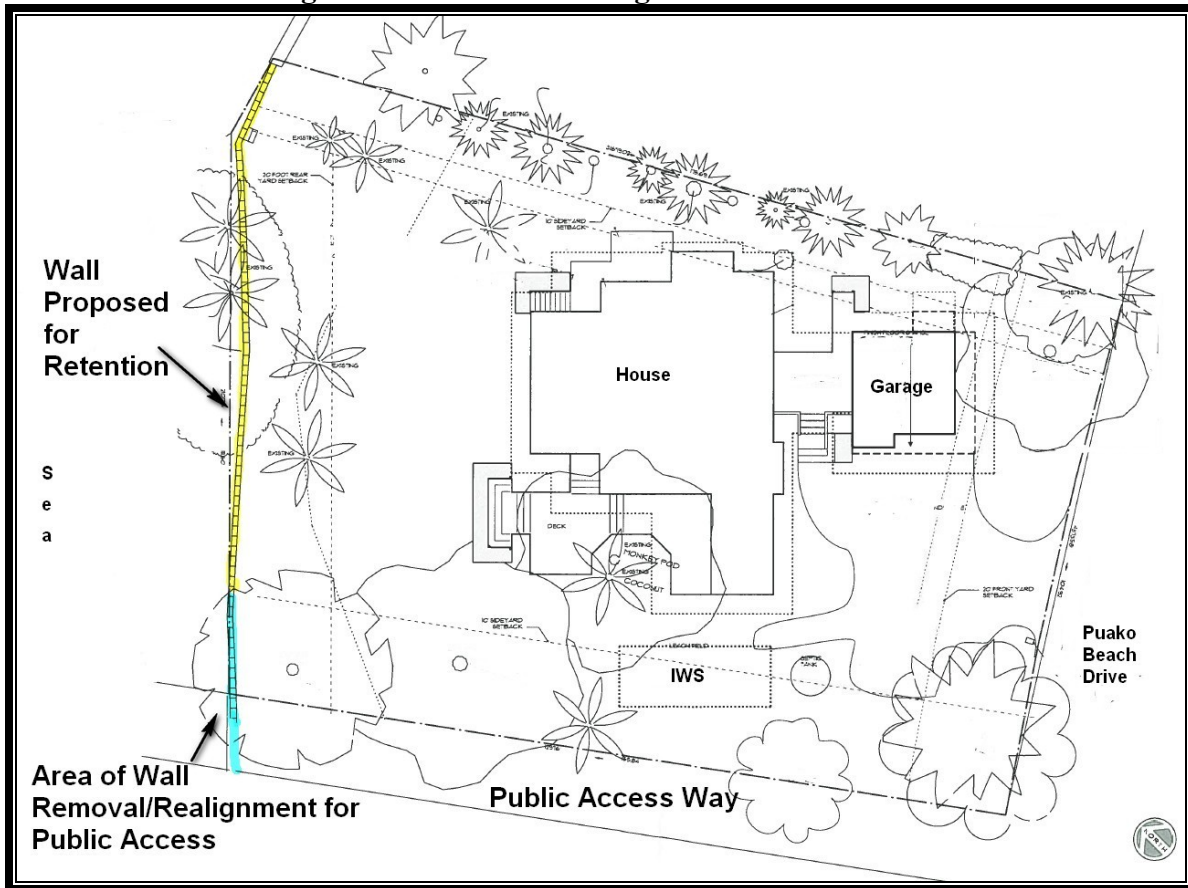
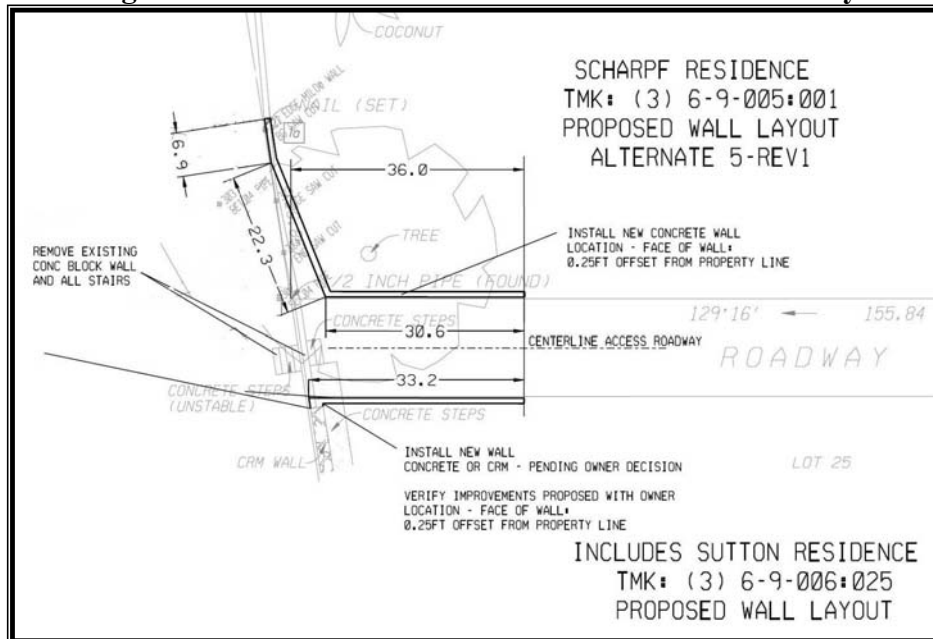


Figure 5 Site Plan for Work in/Near Public Access Way



environment and impacts associated with this action. Section 4 issues the determination (anticipated determination in the Draft EA), and Section 5 lists the criteria and the findings made by the applicant in consultation with the Planning Department for this action.

1.3 Public Involvement and Agency Coordination

The following agencies, organizations and individuals have been consulted during the Environmental Assessment process:

County:

Planning Department
County Council
Fire Department
Police Department

State:

Department of Land and Natural Resources, Office of Chairman
Department of Land and Natural Resources, State Historic Preservation Division
Office of Hawaiian Affairs, Honolulu and West Hawai'i
Department of Health

Private:

Puakō Community Association
Sierra Club
E Mau Na Ala Hele
Neighboring Land Owners

Copies of communications received during early consultation are contained in Appendix 1a. It should be noted that because the details of the Proposed Action changed after the damage to the public access way from the storm waves of the winter of 2010-11 (see Section 1.1 for discussion), some comments apply mainly to the public access way section and may no longer be relevant.

Appendix 1c contains written comments on the Draft EA and the responses to these comments. Various places in the EA have been modified to reflect input received in the comment letters; additional or modified non-procedural text is denoted by double underlines, as in this paragraph.

PART 2: ALTERNATIVES

2.1 Proposed Action

The Proposed Action, which would simply retain the wall as-is, is described in Section 1.1 above and its locations and features are illustrated in Figures 1-4.

2.2 Wall Removal Alternative

Under this alternative, the wall fronting the Scharpf property would be removed. The impacts of this alternative are explicitly discussed in this EA only where a difference exists relative to the Proposed Action, particularly with regard to shoreline erosion and public access.

2.3 Other Alternatives

Neither Ms. Scharpf nor the County of Hawai'i has devised any other alternatives that could accomplish the goal of maintaining shoreline resources and access while protecting and public property from erosion at this location, and thus none are addressed in this EA.

PART 3: ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION

3.1 Basic Geographic Setting

The property on which the project site is situated contains a two-story single-family residence. It is bounded on the northwest or *makai* side by State land (the Government Beach Reservation), on the southeast or *mauka* side by Puakō Beach Drive, on the southwest by a public access way (beyond which is a private property), and on the northeast by a privately owned property. The elevation is about 5 feet above sea level on the *mauka* side of the wall. The climate in the area is generally hot and dry, averaging about 10 inches of rain annually, with a mean annual temperature of approximately 76 degrees Fahrenheit.

3.2 Physical Environment

3.2.1 Geology and Geologic Hazards

Environmental Setting

The surface geology consists of lava flows from Mauna Loa volcano dated between 3,000 and 5,000 years ago (Wolfe and Morris 1996). Soil on the project site consists primarily of Kamakoa very fine sandy loam (KGC) on slopes of up to 10 percent. The Kamakoa series consists of deep, well-drained soils formed from weathered volcanic ash. The ground is highly permeable, and runoff and soil erosion hazard are minimal. There is also an area of beach sand (BH) along the shoreline of the project site consisting of coarse sand (U.S. Soil Conservation Service 1973).

The entire Big Island is subject to geologic hazards, especially lava flows and earthquakes. The United States Geological Survey (USGS) classifies this part of South Kohala, which is on the slopes of Mauna Loa volcano, as Lava Flow Hazard Zone 3, on a scale of ascending risk 9 to 1 (Heliker 1990). The hazard risk is based on the fact that Mauna Loa is an active volcano which has erupted 15 times since 1900, most recently in 1984. Forty percent of the surface of Mauna Loa is covered by lava flows less than 1,000 years old.

In terms of seismic risk, the entire Island of Hawai'i is rated Zone 4 Seismic Hazard (*Uniform Building Code, 1997 Edition, Figure 16-2*). Zone 4 areas are at risk from major earthquake damage, especially to structures that are poorly designed or built, as demonstrated by the 6.7-magnitude quake of October 15, 2006. The project site is not subject to landslides or other forms of mass wasting.

Impacts and Mitigation Measures

Geologic conditions impose no substantial constraints on the Proposed Action. Although the general area is exposed to a certain amount of hazard from lava flows and earthquake, neither the Proposed Action nor the wall removal alternative would present additional volcanic or seismic

hazard to the public. Landowners and residents of high-hazard lava inundation parts of the island have been made aware of the potential and accept the risk when they purchase, inhabit, or utilize such areas.

3.2.2 Flood Zones and Beach Erosion

Environmental Setting

Floodplain status for most coastal areas of the island of Hawai‘i has been determined by the Federal Emergency Management Agency (FEMA), which produces the National Flood Insurance Program’s Flood Insurance Rate Maps (FIRM). The area of the subject property contains a Zone VE designation (Coastal High Hazard Area) on the FIRM maps, with a base flood elevation of 8 feet (see Figure 2). The project site lies adjacent to a basalt shoreline shelf with white sand pocket beaches (see Figure 3). The shoreline is strewn with rocks and pieces of coral that have been deposited at the base of the seawall by large waves. A small spit of coarse sand is trapped behind an emergent rock outcropping fronting the Scharpf property. Although exceptionally high waves do overtop the wall in this area (the area experienced high water during Hurricane Iniki in 1992), the land behind the rock wall on this and adjoining properties does not appear to have suffered any noticeable damage from wave activity in the recent past, even during high waves of the winter of 2010-11 and the tsunami of March 11, 2011. The former event did heavily damage the portion of the wall in the public access area.

In order to determine the potential for erosion, the shoreline area was surveyed by coastal geologist Elaine K. Tamaye, who provided a coastal engineering assessment opinion for the Proposed Action as originally planned prior to the storm waves of the winter of 2010-11 – i.e., removal of structures in public access area, construction of wing walls, and retention/minor realignment of the wall fronting the Scharpf property. After the wave damage and the decision of the County to immediately authorize removal of the damaged structures in the public access and construction of wing walls to prevent erosion, Ms. Tamaye provided another assessment about the action that is currently proposed, i.e., retention of the wall fronting the Scharpf property. In order to provide a complete picture of these analyses, both reports are provided in Appendix 2. This section, however, only summarizes the analysis relevant to the Proposed Action and the wall removal alternative.

Impacts and Mitigation Measures: Proposed Action

The retention of the existing wall in front of the Scharpf property, which has been in place for at least 12 years, would not change existing wave and current patterns. There is currently no dry sand beach fronting the Sutton property. A small spit of dry sand fronts the Scharpf property, which has accumulated as a tombolo because of the emergent rock outcrop situated directly offshore. This rock outcrop causes waves to refract/diffract around the outcrop, causing littoral transport in the northeasterly direction fronting the Sutton property. Through time, the gap in the walls at the public access will develop a wider beach segment.

Impacts and Mitigation Measures: Wall Removal Alternative

Under this alternative, the entire wall fronting the Scharpf property would be removed. The irregular rocky shoreline fronting this coastal area is mostly emergent northeast of the Scharpf property, but is mostly submerged southwest of the Scharpf property. This is the reason that properties northeast of the Scharpf property are not as susceptible to shoreline erosion damage, compared to the properties southwest of the Scharpf property (which have built seawalls to prevent shoreline erosion damage). Removal of the Scharpf wall (which also functions as a retaining wall) would induce the shoreline to immediately achieve a flatter profile. Assuming a natural beach slope of about 1 Vertical:6 Horizontal, the top of the shoreline escarpment could move about 30 feet *mauka* of the existing waterline, removing much of Ms. Scharpf's backyard. The position of the shoreline would not be fully natural because of the influence of existing walls at the Sutton property and also the wing walls around the public access. This unprotected shoreline would also be susceptible to future shoreline erosion.

Removing any section of this wall would also subject the remaining adjacent walls to flanking damage, meaning that waves could surge around them unprotected end and erode the ground from the *mauka* side. This could affect both the public access way wing walls and possibly the Sutton property immediately to the southwest of the Scharpf property. As the unprotected shoreline continued to erode, ultimately the adjacent shoreline would move landward of the seawall, further increasing the flanking damage to the walls and the *mauka* property.

Issue of Sea Level Rise

Of increasing importance to land use approvals in coastal regions throughout the world is the issue of sea level rise. The Earth is warming because of increases in human-produced greenhouse gases such as carbon dioxide and methane, which in turn has led to a rise in global sea level (<http://www.ncdc.noaa.gov/oa/climate/globalwarming.html>). According to the National Climate Data Center of the National Oceanic and Atmospheric Administration (NOAA), global mean sea level has been rising at an average rate of 1.7 mm/year (plus or minus 0.5 mm) over the past century, a rate which has increased over the last 10 years to 3.1 mm/year (Bindoff et al 2007). NOAA forecasts an expected range of sea level rise over the next century of between 0.18 and 0.59 m, due mainly to thermal expansion and contributions from melting alpine glaciers. However, potential contributions from melting ice sheets in Greenland or Antarctica may yield much larger increases. Dr. Charles Fletcher of the University of Hawai'i at Manoa estimates that sea level may rise up to 1.0 m by the end of the next century.

In Hawai'i, beach erosion, reef overtopping and consequent higher wave run-up, more devastating tsunami, and full-time submergence of critical coastal areas are likely to occur (<http://www.soest.hawaii.edu/coasts/sealevel/>). It is particularly important to evaluate the location of new infrastructure, and the State and counties must consider how to adjust zoning and setbacks so that large, expensive public infrastructure is not put in the path of inevitable damage

and private structures do not pose undue hazards. On the Big Island, eustatic (global) sea level rise is coupled with local effects of subsidence. Since 1946, sea level at Hilo on the Big Island has risen an average of 1.8 ± 0.4 mm/yr faster than at Honolulu on the island of O‘ahu, a figure that has recently decreased. The degree to which this reflects subsidence versus variations in upper ocean temperature is currently not known (Caccamise et al 2005).

A scenario of modest sea level rise might not markedly affect the integrity of the existing wall or the public access under the Proposed Action, but could substantially affect the Scharpf property through increasing erosion if the wall were removed. If large sea level rises occur, regardless of the alternative implemented, Puakō will be among countless areas in Hawai‘i and throughout the world that would be impacted.

3.2.3 Flora and Fauna

Environmental Setting

The project area exhibits the non-sensitive vegetation typical of leeward urban shorelines, with a mixture of common indigenous and introduced plants. In the immediate vicinity of the wall and the public access way are various natural shrubs and trees including the introduced octopus tree (*Schefflera actinophylla*), sea grape (*Coccoloba uvifera*), and tree heliotrope (*Tournefortia argentea*); the native *milo* (*Thespesia populnea*); and the Polynesian introductions *hau* (*Hibiscus tiliaceus*) and coconut (*Cocos nucifera*). There are also several species used as landscaping including natal plum (*Carissa macrocarpa*), spider lily (*Crinum* sp.), and tiare (*Gardenia taitensis*). On the lava flats and beach in front of the wall the vegetation is sparse and consists of ‘aki ‘aki grass (*Sporobolus virginicus*) and the low succulent herb *akulikuli* (*Sesuvium portulacastrum*), two common natives.

Animals likely to be on the site are the alien mammal mongoose (*Herpestes auropunctatus*) and alien birds such as Japanese White-eye (*Zosterops japonicus*) and Mynah (*Acridotheres tristis*). Migratory shorebirds such as *ulili* (*Heteroscelus incanus*) and *kolea* (*Pluvialis fulva*) utilize the beach, rocky shelf and tidepools *makai* of the wall. The only native Hawaiian land mammal, the Hawaiian hoary bat (*Lasiurus cinereus semotus*), may also forage in the area, as it is present in many areas on the island of Hawai‘i, and there is at least some possibility that it could roost in the taller shrubs and trees in the landscape.

No streams, wetlands or special aquatic sites (e.g., anchialine ponds) are present on the property. However, South Kohala coastal waters have excellent marine biota, including healthy coral-based ecosystems. The tidepools present on the flats *makai* of the homes in Puakō support native algae, invertebrates, and juvenile fish, and are used for fishing, gathering and tidepool observation. The waters off Puakō are used by boaters, swimmers, divers, and fishermen, and maintenance of water quality is essential for preservation of natural ecosystems that they utilize.

Impacts and Mitigation Measures: Proposed Action

Because of the lack of native threatened or endangered plant species and the relatively minor nature of the Proposed Action, which involves retention of an existing wall, it is unlikely to cause adverse biological impacts.

Impacts and Mitigation Measures: Wall Removal Alternative

If the wall is removed, the contractor must implement Best Management Practices to avoid allowing any fuel or lubricants from heavy equipment to enter the water and adversely affect the tidepool and reef ecosystems *makai*. Through gradual erosion, sediment from the Scharpf property would enter the coastal waters but at rates and in quantities that would not be likely to adversely affect the reef or tidepool ecosystem.

3.2.4 Air Quality, Noise, and Scenic Resources

Environmental Setting

Air quality in Puakō is generally excellent but is periodically affected by volcanic emissions of sulfur dioxide, which convert into particulate sulfate and produce a volcanic haze (“vog”). Drier areas experience blowing dust, especially during construction in high wind episodes. Rare but intense wildfires may also deteriorate air quality.

The low to moderate noise at the project site derives from natural sources such as surf and wind as well as traffic on Puakō Beach Road and residential activities.

Puakō Bay, and specifically the shoreline area including TMKs 6-9-002:007, 008, and 002 that is located approximately 1.2 miles northeast of the project site, is noted as being of particular beauty in the County of Hawai‘i General Plan (County of Hawai‘i 2005).

Impacts and Mitigation Measures: Proposed Action

The Proposed Action of retention of the existing wall would not affect air quality, noise levels or scenery in any way.

Impacts and Mitigation Measures: Wall Removal Alternative

Brief and minor adverse effects to noise and scenery would occur during demolition. The visual appearance of the area would change slightly. Initially, there would be a more natural appearing shoreline in the 80-foot gap between walls; however, these areas would also be subject to erosion and flanking damage. Without remediation, these walls may be damaged and become unsightly.

3.2.5 Hazardous Substances, Toxic Waste and Hazardous Conditions

Based on onsite inspection, it appears that the site contains no hazardous or toxic substances and exhibits no manmade hazardous conditions. Other than the precautions listed in Section 3.2.2, above, no mitigation for such conditions is necessary.

3.3 Socioeconomic and Cultural

3.3.1 Land Ownership and Land Use, Designations and Controls

The State Land Use District for the property is Urban, and the zoning is RS-10 (Single-Family Residential, minimum lot size 10,000 square feet). The project site is within the Special Management Area. The subject wall is located within the Shoreline Setback Area, which is the reason for this Environmental Assessment.

The wall is not prohibited within these land use designations, conditional upon a Special Management Area Use Permit, or exemption therefrom, and a Shoreline Setback Variance. The Hawai'i County Planning Department is requiring a Shoreline Setback Variance and an SMA Assessment (and perhaps an SMA Minor Permit), through which Shoreline Setback and SMA issues are expressly dealt with. The consistency of the Proposed Action with the regulations and policies of the Special Management Area and Shoreline Setback are summarized in Section 3.7.

3.3.2 Socioeconomic Characteristics and Recreation

Existing Environment

The project site is within the *ahupua'a* of Lalamilo in the South Kohala District on the west side of the Island and County of Hawai'i. The town of Puakō is isolated from other communities, but recreational and resort uses are present nearby.

Table 1 provides information on the socioeconomic characteristics of the project area – the Puakō Census Designated Place (CDP) – along with those of Hawai'i County as a whole for comparison, from the United States 2010 census. It should be noted that the Puakō CDP includes much of the Mauna Lani resort area as well as the village of Puakō.

In thirty years, the County's population has almost tripled, from 63,468 in 1970 to 185,070 in 2010. The population of Hawai'i County, which is leading the State in percentage growth in the 21st century, is expected to expand by another 100,000+ residents by 2035 (DBEDT 2035 Series 2008). Much of the population growth has been and will continue to be focused in West Hawai'i. In addition, visitors made up a significant 16% (28,011 individuals) of the County's de facto population each day in 2008.

Table 1. Selected Socioeconomic Characteristics

Characteristic	Island Of Hawai‘i	Puakō CDP
Total Population	185,070	772
Percent Caucasian	33.7	73.2
Percent Asian	22.2	11.1
Percent Hawaiian/Pacific Islander	12.1	1.2
Percent Two or More Races	29.5	12.7
Percent Under 18 Years	22.8	11.5
Housing Units	67,096	2,229
Percent Housing Vacant	18.5	82.4

Source: U. S. Bureau of the Census. 2010 Census of Population

Despite being increasingly visited by the growing resident and visitor population, the town of Puakō has retained a distinctly rural character. The shoreline fronting the project site consists of a lava shelf with sand pockets that are formed and reworked during large wave episodes, although the beach is lacking in part of the area southwest of the Scharpf property. The public access way encourages the use of this area by residents and visitors to Puakō for fishing, swimming, diving, gathering, hiking and sunbathing. Based on current population and demographic trends, recreational use of the Puakō shoreline can be expected to continue to increase in the future, and maintenance of adequate public accesses is important.

Impacts and Mitigation Measures

No adverse socioeconomic impacts would be expected to result from the Proposed Action, which would maintain the existing public shoreline access to this particular portion of Puakō Beach. The wall removal alternative could induce erosion of the walls currently protecting the public access way and neighboring properties. This could force the County of Hawai‘i to design and build alternative structures that would avoid erosion on the access way and the neighboring property.

3.3.3 Cultural Resources

Cultural and Historical Background

The first inhabitants of Hawai‘i were believed to be settlers who had undertaken difficult voyages across the open ocean. For many years, researchers have proposed that early Polynesian settlement voyages between Kahiki (the ancestral homelands of the Hawaiian gods and people) and Hawai‘i were underway by A.D. 300, with long-distance voyages occurring fairly regularly through at least the thirteenth century. It has been generally reported that the sources of the early Hawaiian population – the Hawaiian Kahiki – were the Marquesas and Society Islands (Kirch 1985; Pogue 1978).

Over a period of several centuries, areas with the richest natural resources became populated and perhaps crowded, and by about A.D. 900 to 1100, the population began expanding to the *kona* (leeward side) and more remote regions of the island (Cordy 2000:130). In the sixteenth century, the population stabilized and the *ahupua'a* land management system was established as a socioeconomic unit (Kirch 1985).

Ahupua'a were ruled by *ali'i 'ai ahupua'a* or lesser chiefs and managed by a *konohiki*. *Ali'i* and *maka'ainana*, or commoners, were not confined to the boundaries of *ahupua'a* as resources were shared when a need was identified. *Ahupua'a* were further divided into smaller sections such as *'ili*, *mo'o'aina*, *pauku'aina*, *kihapai*, *koele*, *hakuone* and *kuakua*. The chiefs of these land units have their allegiance to a territorial chief or *mo'i* (literally translated as king) (Hommon 1986).

The name Puakō literally translates as “sugarcane blossom” (Pukui et al. 1974). Early land use in the coastal Puakō area focused primarily on marine resources with an emphasis on salt production. Prior to the *Māhele*, present-day Lālāmilo Ahupua'a was referred to as Waikōloa Iki. Dunn (1992) elaborates on the place names of the area:

Early references refer to the area of Lalamilo as “Puakō”; the name of Puakō today refers to a small village on the coast of Lalamilo. Land Index records of the mid-1800s reveal that Lalamilo was the name of an *'ili* in Puakō, but a 1928 Territory of Hawaii map and later references show the *ahupua'a* is named Lalamilo. Whether the *ahupua'a* of Puakō got absorbed into other *ahupua'a* and the *'ili* of Lalamilo became an *ahupua'a* itself, or the names just got switched around is unclear (Dunn 1992, Appendix B:B-1).

In Kohala, as in other leeward areas where there were no regularly flowing streams to the coast, access to potable water (*wai*), was of great importance and played a role in determining the areas of settlement. Water was found in springs and caves (located from shore to the mountain lands), or procured from rain catchments and dewfall. Traditional and historic narratives abound with descriptions and names of water sources, and also record that the forests were more extensive and extended much further seaward than they do today. These forests not only attracted rains from the clouds and provided shelter for cultivated crops, but also in dry times drew the *kēhau* and *kēwai* (mists and dew) from the upper mountain slopes to the lowlands.

Kamehameha I, the first ruler to unite the Hawaiian Islands, was born in the adjacent district of North Kohala. Kawaihae, which is located approximately four miles north of the project site, eventually became one of the royal centers of the island at which Kamehameha resided, and one where he could make use of trade with foreign ships to acquire guns and ammunition. It was also the site of Pu'ukohola Heiau, dedicated to the war god Ku'ka'ilimoku, which Kamehameha built on the advice of a soothsayer. Subjects came from across Kamehameha's lands by the thousands to help him build the heiau. When in Kawaihae, Kamehameha stayed at Pelekane, located below Pu'ukohola. After his death in 1819, the royal residence consisted of multiple houses occupied by his successor, Liholiho, also known as Kamehameha II. The missionary William Ellis observed 100 houses at Kawaihae in 1823, although it was unlikely that the area's dry climate

supported enough agriculture to sustain the court and its entourage as well as the commoners living there. Kawaihae literally translates as “the water [of] wrath (people are said to have fought for water from a pool in this arid area)” (Pukui et al 1974:97).

The *Journal of a Trading Voyage Around the World* gave the following account of the Kawaihae area ca. 1806:

This bay of Toeigh is very open; an extensive reef runs near it nearly level with the water, and altogether it is no inviting place to anchor at. The country around it looks like a hilly barren desert; nothing grows within ten miles of it, except a few cocoanut trees, of which a fine grove stands near the beach. The inhabitants and huts are thinly scattered along the shore, far less numerous than about [Kealakekua], and seem more indigent, indeed, having to go so far for their subsistence, they are not seldom in want of the supports of life.

This part of Kohala was described by Handy and Handy as surrounded by an arid countryside:

The terrain immediately around [Kawaihae] is dry and barren but formerly much dry taro was grown beyond in the lower forest zone, which formerly extended from the Kohala Mountains much farther seaward over what is now open pasture land. Wet taro was grown also in small pockets of land wherever streams, even intermittent ones, flowed down from the mountains in the wet seasons.

The historian John Papa I‘i noted that fishermen traded their wares for poi in this area:

Soon the fishing canoes from Kawaihae, the Kana lands, and Ooma, drew close to the ship to trade for the pa‘i‘ai (hard poi) carried on board, and shortly a great quantity of aku lay silvery-hued on the deck. The fishes were cut into pieces and mashed; and all those aboard fell to and ate, the women by themselves.

According to Ellis, the district was known for its salt production:

The natives of this district manufacture large quantities of salt, by evaporating the sea water. We saw a number of their pans, in the disposition of which they display great ingenuity.

During this period there was a continuation of the trend toward intensification of agriculture, *ali‘i*-controlled aquaculture, settling of upland areas and development of traditional of oral history. The Ku cult, *luakini heiau* and *kapu* system were at their peaks, but the influence of western civilization was being felt in the introduction of trade for profit and a market-system economy. By 1810, the sandalwood trade established by Europeans and Americans twenty years earlier was flourishing. That contributed to the breakdown of the traditional subsistence system as

farmers and fishermen were required to toil at logging which resulted in food shortages and a decline in population. Ellis noted:

About eleven at night we reached Towaihae [Kawaihae], where we were kindly received by Mr. Young. ... Before daylight on the 22nd, we were roused by vast multitudes of people passing through the district from Waimea with sandal-wood, which had been cut in the adjacent mountains for Karaimoku, by the people of Waimea, and which the people of Kohala, as far as the north point, had been ordered to bring down to his storehouse on the beach, for the purpose of its being shipped to Oahu. There were between two and three thousand men, carrying each from one to six pieces of sandal-wood, according to their size and weight. It was generally tied on their backs by bands of ti leaves, passed over the shoulders and under the arms, and fastened across their breasts.

The rampant sandalwood trade resulted in the first Hawaiian national debt, as promissory notes and levies granted by American traders were enforced by American warships. The assimilation of western ways continued with the short-lived whaling industry to the production of sugarcane, which was more lucrative but carried a heavy environmental price.

Following the death of Kamehameha I in 1819, the customary relaxing of *kapu* took place. But with the introduction of Christianity shortly thereafter, his successor, Kamehameha II, renounced the traditional religion and ordered that heiau structures either be destroyed or left to deteriorate. The family worship of *'aumakua* images was allowed to continue.

The *Mahele 'Aina* took place in 1848, placing all land in Hawai'i into three categories: Crown Lands, Government Lands and Konohiki Lands. Ownership rights were "subject to the rights of the native tenants," or those individuals who lived on the land and worked it for their subsistence and for their chiefs.

The remainder of the 19th century saw significant changes in Kawaihae as the practice of trade led many to abandon traditional lifestyles. The result was a loss of population and resources, leaving one observer to describe the town as a "small dreary village" entirely lacking foliage except for "a few sickly cocoa-nit trees."

The economy of coastal Kohala received a boost from the introduction of cattle ranching in Waimea, which was well underway by 1850. Cattle raised there was brought to Kawaihae via a road built in 1830, and held in pens for the trip to Oahu on cattle boats. The trade in hides and meat also helped turn Kawaihae into a major port. The Pacific Commercial Advertiser reported up to 50 whaling ships making a port call in Kawaihae in 1857.

Many of the early historical accounts of Puakō came from Lorenzo Lyons, who arrived in Kawaihae in 1832. Lyons established Hokuloa Church in 1858. The church, the name of which means "evening star," remains in regular use to this day (Puakō Historical Society, 2000).

In 1895, Robert and John Hind established the Puakō Sugar Plantation on roughly 1,500 acres of land where the present kiawe forest is located. The plantation included a sugar mill, wharf and a one-mile-long railroad track connecting the two. However, difficult growing factors, including strong coastal winds which blew down crops and scattered salt into the soils, forced the closure of the plantation early in the twentieth century.

The land just south of Puakō was acquired by Francis Hyde I‘I Brown in the early 1930s. Brown planted several hundred coconut palms and restored some of the area’s fishponds. He eventually sold the property to the Mauna Lani Resort in 1972.

Other modern-day settlers of Puakō included Annabelle Nako‘olaniohakau Low-Ruddle and her husband, Albert, who in 1937 traded some of their Hilo lands for roughly 7.5 acres of government land south of the project site. The Ruddles cleared portions of the property and built two houses near the shore (Puakō Historical Society 2000). Initial access to the area was by boat, but during World War II, the U. S. Marine Corps bulldozed a coastal road through Puakō. The Ruddle family purchased an army jeep after the war and they were the first family to travel the roads by vehicle (Puakō Historical Society 2000).

Puakō was among the coastal communities of South Kohala impacted by the 1946 tsunami. Long-time resident Ichiro Goto described the eight-foot high wave:

“Puakō Bay was empty for just a minute or two before another wave comes in like some unearthly monster. Roaring like a group of heavy bombers, the wave comes in like some wild thing. Pushing rocks, fish, debris, everything and filling every space, and after the spaces are filled looks like some giant hand is pushing the wave up and above to a greater height.” (Puakō Historical Society, 2000)

Puakō Beach Road was paved in 1964, and the completion of Queen Ka‘ahumanu Highway in 1975 provided greater access to the community. Prior to that, visitors to Puakō were required to travel through Waimea.

A petroglyph field near the Mauna Lani Resort south of the project site has been designated the Puakō Petroglyph Archaeological District (SIHP Site No. 4713) and was nominated to the National Register of Historic Places by Myra Tomonari-Tuggle and David Tuggle on behalf of the Waimea Hawaiian Civic Club and Mauna Lani Resort (Dunn 1992, Appendix B:B-6). The site was listed on the State of Hawaii Register of Historic Places in 1982, and in April of 1983 it was listed on the National Register. The site area was formally recorded by the Bishop Museum in 1964 (Kennedy 1980) and was noted as “being one of the largest fields of its kind in the Hawaiian Islands” (Dunn 1992, Appendix B:B-4); the petroglyph area consists of three major groupings of more than 3,000 incised figures and represents some of the oldest images in the Hawaiian Islands.

Archaeological and Cultural Impacts and Mitigation Measures: Proposed Action

The Proposed Action as originally envisioned included demolition of the wall and stairway in front of the public access way that were heavily damaged in the storm waves of the winter of 2010-11 and the construction of wing walls to stabilize adjacent properties. This removal has already been completed as part of an emergency action authorized by the County of Hawai‘i. No historic remains were encountered during this work. The current Proposed Action – retention of the existing wall – does not have the potential to affect historic sites. The State Historic Preservation Division was contacted by mail on September 10, 2010 with general information about the project and again on February 10, 2011 with the specific request to determine that the action would have no effect on historic sites; to date, no response has been received.

Archaeological and Cultural Impacts and Mitigation Measures: Wall Removal Alternative

Based on work undertaken to date at this highly disturbed site and the very limited activity area for wall removal, it is likely no archaeological resources would be found during wall removal. If the wall is removed, the contractor must be made aware that if archaeological resources are encountered during wall modification activities, work in the immediate area of the discovery will be halted and SHPD contacted as outlined in Hawai‘i Administrative Rules 13§13-275-12.

Consultation

The State Historic Preservation Division (SHPD) Honolulu and West Hawai‘i offices Office of Hawaiian Affairs, neighbors, and the Puakō Community Association (PCA) were consulted during preparation of this EA. There was no indication that sensitive cultural resources were present or practices were ongoing that could be adversely affected. The Draft EA was supplied to SHPD, OHA and the PCA to confirm this finding. No party reviewing the Draft EA supplied any cultural information.

3.4 Public Facilities and Utilities

Environmental Setting, Impacts and Mitigation Measures

Modest levels of electricity supplied by the Hawai‘i Electric Light Company and water supplied by the Hawai‘i County Department of Water Supply to the Scharpf residence may be utilized if the wall is removed. No other utilities are present or required, and there will be no potential to disrupt utility lines through construction or trenching. The very minor action will have no impacts to public facilities such as roads, hospitals or schools.

3.5 Secondary and Cumulative Impacts

Due to its small scale, neither the Proposed Action nor the wall removal alternative would produce any major secondary impacts, such as population changes or effects on public facilities.

However, removal of the wall could adversely impact public shoreline access.

Cumulative impacts result when implementation of several projects that individually have limited impacts combine to produce more severe impacts or conflicts in mitigation measures. A few single-family homes are in usually in construction or renovation at any given time in the Puakō area; no substantial construction appears to be ongoing near the project site currently. The Proposed Action would induce no cumulative impacts. Wall removal would involve traffic for workers, equipment transport and material removal, but at a small enough scale such that there would be no adverse interaction with traffic from other construction.

3.6 Required Permits and Approvals

County of Hawai‘i:

Special Management Area Minor Permit
Shoreline Setback Variance

3.7 Consistency With Government Plans and Policies

3.7.1 Hawai‘i County General Plan

The *General Plan* for the County of Hawai‘i is a policy document expressing the broad goals and policies for the long-range development of the Island of Hawai‘i. The plan was adopted by ordinance in 1989 and revised in 2004 (Hawai‘i County Department of Planning 2005). The *General Plan* itself is organized into thirteen elements, with policies, objectives, standards, and principles for each. There are also discussions of the specific applicability of each element to the nine judicial districts comprising the County of Hawai‘i. Most relevant to the Proposed Action are the following Goal and Policies, and Courses of Action:

ENVIRONMENTAL QUALITY GOALS

Define the most desirable use of land within the County that achieves an ecological balance providing residents and visitors the quality of life and an environment in which the natural resources of the island are viable and sustainable.

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

ENVIRONMENTAL QUALITY POLICIES

Take positive action to further maintain the quality of the environment.

ENVIRONMENTAL QUALITY STANDARDS

Pollution shall be prevented, abated, and controlled at levels that will protect and preserve the public health and well being, through the enforcement of appropriate Federal, State and County standards.

Incorporate environmental quality controls [are to be incorporated] either as standards in appropriate ordinances or as conditions of approval.

Discussion: The Proposed Action would not have a substantial adverse effect on the environment and would not diminish the valuable natural resources of the region. The wall is compatible with the preservation of and appropriate access to recreational and historic site uses in the area.

FLOOD CONTROL AND DRAINAGE GOALS

Conserve scenic and natural resources.

Protect human life.

Prevent damage to man-made improvements.

Control pollution.

Prevent damage from inundation.

Reduce surface water and sediment runoff.

FLOOD CONTROL AND DRAINAGE POLICIES

Enact restrictive land use and building structure regulations in areas vulnerable to severe damage due to the impact of wave action. Only uses that cannot be located elsewhere due to public necessity and character, such as maritime activities and the necessary public facilities and utilities, shall be allowed in these areas.

Development-generated runoff shall be disposed of in a manner acceptable to the Department of Public Works in compliance with all State and Federal laws.

FLOOD CONTROL AND DRAINAGE STANDARDS

Applicable standards and regulations of Chapter 27, "Flood Control," of the Hawaii County Code.

Applicable standards and regulations of the Federal Emergency Management Agency (FEMA).

Applicable standards and regulations of Chapter 10, “Erosion and Sedimentation Control” of the Hawaii County Code.

Applicable standards and regulations of the Natural Resources Conservation Service and the Soil and Water Conservation Districts.

Discussion: The property is within Zone VE designations (Coastal High Hazard Area), according to the Flood Insurance Rate Maps (FIRM). As discussed above in Section 3.2.2, coastal geologist Elaine K. Tamaye stated that removing the wall on the subject property would not be a prudent action, as the property would be subject to wave and erosion damage.

NATURAL BEAUTY GOALS

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

Protect scenic vistas and view planes from becoming obstructed.

Maximize opportunities for present and future generations to appreciate and enjoy natural and scenic beauty.

NATURAL BEAUTY POLICIES

Increase public pedestrian access opportunities to scenic places and vistas.

Protect the views of areas endowed with natural beauty by carefully considering the effects of proposed construction during all land use reviews.

Do not allow incompatible construction in areas of natural beauty.

Discussion: The wall is an existing extension of walls in an area with existing residences with similar structures and is not incongruous with its surroundings. It is not noticeable from Puakō Beach Road, and no significant visual impact upon the shoreline is expected.

NATURAL RESOURCES AND SHORELINES GOALS

Protect and conserve the natural resources of the County of Hawaii from undue exploitation, encroachment and damage.

Provide opportunities for the public to fulfill recreational, economic, and educational needs without despoiling or endangering natural resources.

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

Ensure that alterations to existing landforms and vegetation, except crops, and construction of structures cause minimum adverse effect to water resources, and scenic and recreational amenities and minimum danger of floods, landslides, erosion, siltation, or failure in the event of earthquake.

NATURAL RESOURCES AND SHORELINES POLICIES

The County of Hawaii should require users of natural resources to conduct their activities in a manner that avoids or minimizes adverse effects on the environment.

Encourage the use of native plants for screening and landscaping.

Discussion: No new impacts to existing natural landforms and vegetation would occur.

LAND USE GOALS

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

LAND USE POLICIES

Allocate appropriate requested zoning in accordance with the existing or projected needs of neighborhood, community, region and County.

LAND USE, OPEN SPACE GOALS

Provide and protect open space for the social, environmental, and economic well-being of the County of Hawaii and its residents.

Protect designated natural areas.

LAND USE, OPEN SPACE POLICIES

Open space shall reflect and be in keeping with the goals, policies, and standards set forth in the other elements of the General Plan.

Discussion: The wall does not detract from the open space in the area.

3.7.2 Special Management Area

The proposed land use complies with provisions and guidelines contained in Chapter 205A, Hawai‘i Revised Statutes (HRS), entitled *Coastal Zone Management*. The proposed use would be consistent because it would not affect public access to recreational areas, historic resources, scenic and open space resources, coastal ecosystems, economic uses or coastal hazards.

Retention of the existing wall would not result in any substantial adverse impact on the surrounding environment. It does not restrict any shoreline uses such as hiking, fishing or water sports. Lateral pedestrian use of the shoreline area is not impacted and there will be no effect on the public’s access to or enjoyment of this shoreline area.

Furthermore, the viewplanes towards the property will not be adversely impacted, as the wall is similar in nature to the adjacent walls and is relatively distant from Puakō Beach Road and is separated by intervening structures and vegetation. The wall is not unduly visually imposing or out of character. No historic properties or cultural uses appear to be present or affected. The Proposed Action will not result in any impact on the biological or economic aspects of the coastal ecosystem. The project site is not situated over any major natural drainage system or water feature that would flow into the nearby coastal system. The property contains few native plants and none that are not extremely common. Areas with native ecosystems will not be affected by the Proposed Action. Flood Insurance Rate Maps (FIRM) delineate the project site as Zone VE (Coastal High Hazard Area), but no adverse effects to drainage, flooding or shoreline processes will occur. No effects on marine waters, groundwater or marine resources will occur.

3.7.3 State Land Use Law

The Proposed Action is an allowed use in the State Land Use Urban District.

3.7.4 Shoreline Setback Rules

Rule 11 (Shoreline Setback) of the Hawai‘i County Planning Department Rules Of Practice And Procedure governs uses with the Shoreline Setback Area. Pursuant to Rule 11-6(b), all structures and activities that do not qualify under section 11-7(a) through (c) are prohibited in the shoreline setback area, unless the applicant obtains a Shoreline Setback Variance or the Planning Director determines that it is a “minor activity” “that does not adversely affect the shoreline” in the context of the rules and is thus exempt. The shoreline has been certified at the wall and the Proposed Action will require a Shoreline Setback Variance, which is the trigger for this EA.

Rule 8, Shoreline Setback, provides for the variance process in section 8-4 and defines the criteria for approving a variance in section 8-11. Section 8-11 (b) (3) states:

- (b) A variance may also be granted upon a finding that, based upon the record, the proposed structure or activity meets one of the following standards of this subsection:

(3) Hardship Standard.

(A) A structure or activity may be granted a variance upon the grounds of hardship only if:

- (i) The applicant would be deprived of reasonable use of the land if required to comply fully with this rule; and
- (ii) The request is due to unique circumstances and does not draw into question the reasonableness of this rule; and
- (iii) The request is the practicable alternative which best conforms to the purpose of this rule.

Discussion:

(i) Should Ms. Scharpf be denied this variance she would be denied a reasonable use of the subject property enjoyed by other ocean front lots within this subdivision, because her use of the property would be at risk of severe erosion. The Settlement and Mutual Release Agreement, dated January 15, 2009, between the Doris M. Scharpf Trust and the County of Hawai‘i, provided that the Trust could apply for permits necessary to retain the wall.

(ii) This situation is unique, in that the wall was existing when the Scharpf Trust acquired the property. The fact that the County has entered into the Settlement Agreement with the Scharpf Trust to allow the retention of the wall pending the applications for appropriate permits (along with its partial removal/realignment on and near the public access way) is further indication that this is a unique situation which does not draw into question the reasonableness of the rule.

(iii) The request for permission to retain the wall is the best practicable alternative that best conforms to the purpose of rule 8, section 8-2. The Proposed Action will protect the *mauka-makai* public pedestrian access way and will further the public’s ability to access and enjoy the coastal resources here. The proposed action, for which the applicants are authorized to apply by the Settlement Agreement, will allow the owners protection of their property as well.

(B) Before granting a hardship variance, the Commission must determine that the request is a reasonable use of the land. The determination of the reasonableness of the use of land shall consider factors such as shoreline conditions, erosion, surf and flood condition, and the geography of the lot as it relates to health and safety.

(C) If a structure is proposed to artificially fix the shoreline, the Commission must also determine that shoreline erosion is likely to cause hardship if the structure is not allowed within the shoreline area.

Discussion:

The Proposed Action is reasonable and common for the area. The wall connects to others along this stretch of Puakō and is the most common method of protecting structures from the impact of

storm surf. As discussed in Section 3.2.2, above, coastal geologist Elaine K. Tamaye stated that removing the wall on the subject property would not be a prudent action, as the property would be subject to wave and erosion damage. The top of the shoreline escarpment could move about 30 feet *mauka* of the base of the existing wall at the north and south sides of the property. Removing the wall on the subject property would also subject the neighboring property walls to flanking damage.

(D) Hardship shall not be determined as a result of a rezoning amendments, planned unit development (PUD) permits, cluster plan development (CDP) permits, or subdivision approvals after June 16, 1989.

Discussion:

The owners are not requesting a change of zone, planned unit development (PUD), cluster plan development (CDP) or subdivision.

- (c) No variance shall be granted unless appropriate conditions are imposed as applicable:
- (1) To comply with Chapters 10 and 27 of the Hawai‘i County Code relating to Erosion and Sedimentation Control and Flood Control respectively;
 - (2) To maintain safe lateral access along the shoreline or adequately substitute for its loss;
 - (3) To minimize risk of adverse impacts on beach processes;
 - (4) To minimize risk of structures failing and becoming loose rocks or rubble on public property; and
 - (5) To minimize adverse impacts on public views to, from and along the shoreline.

Discussion:

- (1.) The applicant will comply with all provisions of Chapters 10 and 27.
- (2.) Retention of the wall not negatively impact the lateral access along the shoreline which is located on in front of the existing wall on State owned property. Retention of the wall will facilitate public access by protecting the public access way from erosion.
- (3.) As discussed in Section 3.2.2, retaining the wall will not negatively impact beach processes.
- (4.) The wall improvements were designed and constructed to withstand coastal processes.
- (5.) Retention of the wall will not significantly impact the existing scenic and open space resources. The wall is similar in nature to the surrounding properties.

3.7.5 South Kohala Community Development Plan

The South Kohala Community Development Plan (CDP) encompasses the judicial district of South Kohala, and was developed under the framework of the February 2005 County of Hawai‘i General Plan. Community Development Plans are intended to translate broad General Plan Goals, Policies, and Standards into implementation actions as they apply to specific geographical regions around the County. CDPs are also intended to serve as a forum for community input into

land-use, delivery of government services and any other matters relating to the planning area. The General Plan now requires that a Community Development Plan shall be adopted by the County Council as an “ordinance,” giving the CDP the force of law. This is in contrast to plans created over past years, adopted by “resolution” that served only as guidelines or reference documents to decision-makers. In November 2008, the South Kohala CDP was adopted by the County Council. The version referenced in this Environmental Assessment is at: <http://hawaii-county-cdp.info/south-kohala-cdp>.

The Plan has many elements and wide-ranging implications, but there are several major strategies that embody the guiding principles related to land use, housing, public facilities, infrastructure and services, and transportation.

The Proposed Action is in keeping with Policy 1 of the CDP’s Puakō Community Plan, Manage the Effects of Growth and Development. The policy calls for the County government to work closely with the Puakō community manage the effects of growth and development in a responsible manner. More specifically, it conforms with a section of Policy 1. Strategy 1.3 – “Mitigate the impacts of development in the surrounding area,” states:

- The County of Hawai‘i should actively manage the designated pedestrian and vehicle access corridors within the community to ensure that they remain accessible, clear of vegetation, and be kept in sanitary condition.

The Proposed Action is also consistent and/or not inconsistent with other goals, objectives and policies of the South Kohala CDP including policies calling for the mitigation of the risks of natural disasters and for environmental stewardship, respectively.

PART 4: DETERMINATION, FINDINGS AND REASONS

4.1 Determination

Based on the findings below, and upon consideration of comments to the Draft EA, the applicant expects that the Hawai‘i County Planning Department will determine that the Proposed Action will not significantly alter the environment, as impacts will be minimal, and will accordingly issue a Finding of No Significant Impact (FONSI).

4.2 Findings and Reasons

Chapter 11-200-12, Hawai‘i Administrative Rules, outlines those factors agencies must consider when determining whether a project has significant effects:

1. *The proposed project will not involve an irrevocable commitment or loss or destruction of any natural or cultural resources.* The affected area is non-sensitive vegetation common in leeward urban shoreline areas. The shoreline area will not be degraded. No natural or cultural

resources will be adversely affected. The Proposed Action will maintain public access to natural resources in the area, namely the shoreline.

2. *The proposed project will not curtail the range of beneficial uses of the environment.* No restriction of beneficial uses would occur.

3. *The proposed project will not conflict with the State's long-term environmental policies.* The State's long-term environmental policies are set forth in Chapter 344, HRS. The broad goals of this policy are to conserve natural resources and enhance the quality of life. The Proposed Action is minor and environmentally benign and positive, and it is thus consistent with all elements of the State's long-term environmental policies.

4. *The proposed project will not substantially affect the economic or social welfare of the community or State.* The Proposed Action will not have any substantial effect on the economic or social welfare of the South Kohala community or the State of Hawai'i.

5. *The proposed project does not substantially affect public health in any detrimental way.* The Proposed Action will not affect public health and safety in any way.

6. *The proposed project will not involve substantial secondary impacts, such as population changes or effects on public facilities.* The small scale of the Proposed Action will not produce any major secondary impacts, such as population changes or effects on public facilities. The character of the project area would not be affected by retaining the wall.

7. *The proposed project will not involve a substantial degradation of environmental quality.* The Proposed Action is minor and environmentally benign and positive, and thus would not contribute to environmental degradation.

8. *The proposed project will not substantially affect any rare, threatened or endangered species of flora or fauna or habitat.* The site supports mostly alien vegetation and represents poor habitat for native animals. No rare, threatened or endangered species of flora or fauna are known to exist on the project site, and none would be affected by the Proposed Action.

9. *The proposed project is not one which is individually limited but cumulatively may have considerable effect upon the environment or involves a commitment for larger actions.* A few single-family homes are in usually in construction or renovation at any given time in the Puakō area; no substantial construction appears to be ongoing near the project site currently. The Proposed Action would induce no cumulative impacts. Wall removal would involve traffic for workers, equipment transport and material removal, but at a small enough scale such that there would be no adverse interaction with traffic from other construction.

10. *The proposed project will not detrimentally affect air or water quality or ambient noise levels.* No substantial effects to air, water, or ambient noise would occur. Brief, temporary effects

could occur if the wall was removed but could be mitigated.

11. *The project does not affect nor would it likely to be damaged as a result of being located in environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal area.* The project site is inside the flood zone, according to FIRM maps, but retention of the wall would not increase flood hazard. Although the project site is located in a zone exposed to earthquake and volcanic hazard, there are no reasonable alternatives that would avoid such exposure, and retention of the wall and use of the space behind it presents no additional hazard to the public and are not imprudent for the landowner.

12. *The project will not substantially affect scenic vistas and viewplanes identified in county or state plans or studies.* Because of its low profile and intervening structures and vegetation, there is no visual impact upon coastal areas. The design of the wall is in character with the neighborhood, which includes a number of single-family residences with stone walls.

13. *The project will not require substantial energy consumption.* No energy would be required to retain the existing wall; a negligible amount of energy input would be required to remove the wall.

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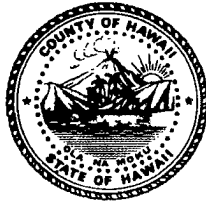
ENVIRONMENTAL ASSESSMENT

AFTER-THE-FACT PERMIT FOR WALL IN SHORELINE SETBACK AT DORIS SCHARPF RESIDENCE IN PUAKŌ

APPENDIX 1a Early Consultation Comment Letters

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William P. Kenoi
Mayor



BJ Leithead Todd
Director

Margaret K. Masunaga
Deputy

County of Hawai'i

PLANNING DEPARTMENT

Aupuni Center • 101 Pauahi Street, Suite 3 • Hilo, Hawai'i 96720
Phone (808) 961-8288 • Fax (808) 961-8742

September 27, 2010

Mr. Ron Terry
Geometrician Associates, LLC
P.O. Box 396
Hilo, Hawaii 96721

Dear Mr. Terry:

**Subject: Environmental Assessment for Proposed Modification of Wall in Shoreline
Setback Area**
Owner: Doris M. Scharpf Trust
Tax Map Key: 6-9-005:001, Puako, South Kohala

We are in receipt of your letter, dated September 10, 2010, requesting comments from the Planning Department regarding your preparation of a Draft Environmental Assessment (EA) for the referenced proposal by the subject landowner to realign and legalize the illegally constructed seawall along the makai property line of the subject property and across the County right-of-way between the subject property and the next house lot to the southwest. The proposal include removal of the 15-foot section of seawall across the County right-of-way and of the concrete stairs on both sides of the wall, and the extension of the seawall from the makai property line along the southwest property line of the subject property for a distance of approximately 36 feet.

The subject 19,401-square foot parcel is zoned Residential-Single Family (RS-10) by the County of Hawaii and is situated in the State Land Use Urban district. The property is in the Special Management Area and abuts the shoreline. According the General Plan's Land Use Pattern Allocation Guide Map, the property is designated for low density urban uses.

With regards to any special environmental conditions or impacts related to the existing seawall constructed without the required prior approvals and the alterations being proposed, we suggest that the EA should include:

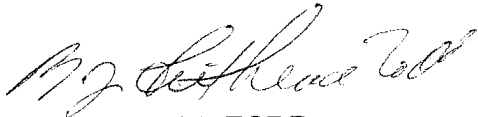
1. A discussion on the possible adverse impacts to neighboring properties from erosive wave action. Said discussion should include, but not necessarily be limited to, alternative alterations to those being currently proposed and measures to mitigate any identified adverse impacts;

Mr. Ron Terry
Geometrician Associates, LLC
Page 2
September 27, 2010

2. Specific reference to the concerns and suggestions submitted to Ms. Scharpf via her attorney, Mr. Randy Vitousek, by letter dated November 10, 2008 from Elaine E. Tamaye of EKNA Services, Inc. should also be discussed; and
3. An analysis of the already realized and expected impacts on public access along the shoreline in the vicinity of the subject property as a result of the existing seawall and its anticipated realignment.

Thank you for the opportunity to provide these pre-consultation comments. Should you have questions, please feel welcome to contact Larry Brown of my staff at 961-8135.

Sincerely,



BJ LEITHEAD TODD
Planning Director

LMB: cs

P:\wpwin60\Larry\EA-EIS Comments\Geometrician 6-9-5-1 Scharpf seawall.doc

cc: Director, Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu HI 96813

William P. Kenoi
Mayor



Darryl J. Oliveira
Fire Chief

Glen P. I. Honda
Deputy Fire Chief

County of Hawai'i
HAWAII FIRE DEPARTMENT
25 Aupuni Street • Suite 2501 • Hilo, Hawai'i 96720
(808) 932-2900 • Fax (808) 932-2928

September 28, 2010

Mr. Ron Terry
Geometrician Associates
PO Box 396
Hilo, HI 96721

Dear Mr. Terry,

**SUBJECT: MODIFICATION OF WALL IN SHORELINE SETBACK AT
DORIS SCHARPF RESIDENCE IN PUAKO, SOUTH KOHALA
TMK: 6-9-005:001**

The Hawai'i Fire Department does not have any comments to offer at this time regarding the above-referenced early consultation on Environmental Assessment.

Thank you for the opportunity to comment. A copy or Notice of Availability of Environmental Assessment is not needed when completed.

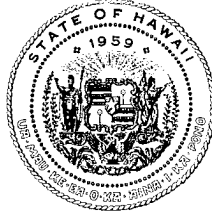
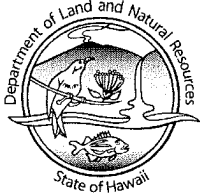
Sincerely,


DARRYL OLIVEIRA
Fire Chief

RP:lc



LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

OFFICE OF CONSERVATION AND COASTAL LANDS
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
ACTING FIRST DEPUTY

LENORE N. OHYE
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAIHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

REF:OCCL:DH

Correspondence: HA-11-54

Ron Terry
Geometrician Associates LLC
P.O. Box 396
Hilo, Hawaii 96721

OCT - 1 2010

Dear Mr. Terry,

SUBJECT: Regarding Modification of Wall in Shoreline Setback at Doris Scharpf Residence, Puako, South Kohala, Island of Hawaii Subject parcel TMK: (3) 6-9-005:001

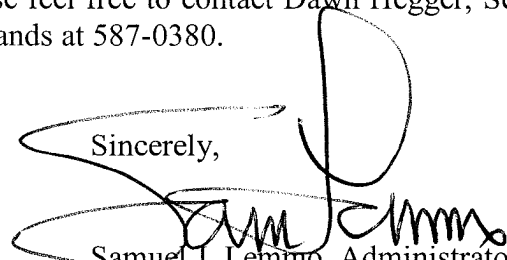
The Department of Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) is in receipt of your letter, dated September 10, 2010, regarding the proposed modifications of a wall in the shoreline setback at Doris Scharpf Residence, Puako, South Kohala, Island of Hawaii Subject parcel TMK: (3) 6-9-005:001.

According to your information, a 15 foot portion of the wall located along the stairs (located within the public access corridor) will be removed. A new wall (approximately the same height) will be constructed and will run mauka-makai for 36 feet in length; it will separate the public access area and from future erosion.

The OCCL notes it appears that the proposed project area is located in the State Land Use Commission (LUC) Urban District; the OCCL has no comment.

Should you have any questions, please feel free to contact Dawn Hegger, Senior Planner of our Office of Conservation and Coastal Lands at 587-0380.

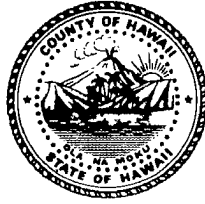
Sincerely,



Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands

c: HDLO
Hawaii County Planning Department

William P. Kenoi
Mayor



Harry S. Kubojiri
Police Chief

Paul K. Ferreira
Deputy Police Chief

County of Hawai'i

POLICE DEPARTMENT

349 Kapi'olani Street • Hilo, Hawai'i 96720-3998
(808) 935-3311 • Fax (808) 961-2389

September 25, 2010

Mr. Ron Terry
Geometrician Associates, LLC
P.O. Box 396
Hilo, Hawaii 96721

Dear Mr. Terry:

RE: Modifications of Wall in Shoreline Setback at Doris Scharf Residence
In Puako, South Kohala, TMK 6-9-005:001

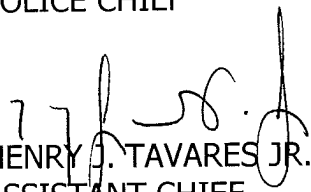
This responds to your letter dated September 10, 2010, requesting comments on any special environmental conditions or impacts relating to the above-mentioned modification request.

After completing a physical check of the area, there are no comments to offer at this time.

Should you have any questions, please contact Captain James Sanborn, Commander of the South Kohala District, at 887-3080.

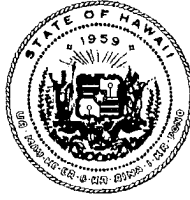
Sincerely,

HARRY S. KUBOJIRI
POLICE CHIEF



HENRY J. TAVARES JR.
ASSISTANT CHIEF
AREA II OPERATIONS

JNS
RS100733



STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
EMD / CWB

09066PJF.10

September 28, 2010

Mr. Ron Terry
Principal
Geometrician Associates, LLC
PO Box 396
Hilo, Hawaii 96721

Dear Mr. Terry:

**SUBJECT: Environmental Assessment (EA) for
Modification of Wall in Shoreline Setback
at Doris Scharpf Residence in Puako
South Kahala, Island of Hawaii, Hawaii
TMK: (3) 6-9-005:001**

The Department of Health, Clean Water Branch (CWB), has reviewed the subject document and offers these comments on your project. Please note that our review is based solely on the information provided in the subject document and its compliance with the Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at:

<http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf>.

1. Any project and its potential impacts to State waters must meet the following criteria:
 - a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.
 - b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.
 - c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

2. You may be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). For the following types of discharges into Class A or Class 2 State waters, you may apply for an NPDES general permit coverage by submitting a Notice of Intent (NOI) form:

- a. Storm water associated with construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. An NPDES permit is required before the start of the construction activities.
- b. Construction dewatering effluent.

You must submit a separate NOI form for each type of discharge at least 30 calendar days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 calendar days before to the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at:

<http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html>.

3. For types of wastewater not listed in Item No. 2 above or wastewater discharging into Class 1 or Class AA waters, you may need an NPDES individual permit. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. The NPDES application forms may be picked up at our office or downloaded from our website at:

<http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html>.

4. Please contact the Army Corps of Engineers, Regulatory Branch (Tel. No.: 438-9258) to determine if this project requires a Section 404 Permit. Pursuant to Federal Water Pollution Control Act (commonly known as the "Clean Water Act" (CWA)), Paragraph 401(a)(1), a Section 401 Water Quality Certification (WQC) is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may **result** in any discharge into the navigable waters..." (Emphasis added). The term "discharge" is defined in CWA, Subsections 502(16), 502(12), and 502(6); Title 40, Code of Federal Regulations, Section 122.2; and HAR, Chapter 11-54.

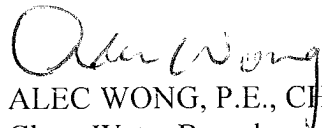
5. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or section 401 WQC are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of \$25,000 per day per violation.

Mr. Ron Terry
September 27, 2010
Page 3

09066PJF.10

If you have any questions, please visit our website at:
<http://www.hawaii.gov/health/environmental/water/cleanwater/index.html>, or contact the
Engineering Section, CWB, at (808) 586-4309.

Sincerely,


ALEC WONG, P.E., CHIEF
Clean Water Branch

JF:ml

c: DOH-EPO #I-3341 [via email only]

----- Original Message -----

From: [Deborah Chang](#)

To: [Ron Terry](#)

Sent: Tuesday, October 26, 2010 8:57 AM

Subject: Re: early consultation on Scharpf wall EA in Puako

Good morning Ron,

Another thought has occurred to me re: the Scharpf EA. This may have already been settled in the course of discussions & settlement between the County and the Scharpfs, but that paved right-of-way invites motorized vehicles to park in the ROW, not a safe situation. How is that going to be controlled, or is it?

Please send me a copy of the Draft EA when it is done.

Mahalo,

Debbie

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ENVIRONMENTAL ASSESSMENT

AFTER-THE-FACT PERMIT FOR WALL IN SHORELINE SETBACK AT DORIS SCHARPF RESIDENCE IN PUAKŌ

APPENDIX 1b Correspondence to/from Planning Department

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Roy A. Vitousek III
Direct Line: (808) 329-5811
Direct Fax: (808) 326-1175
E-mail: rvitousek@cades.com

January 18, 2011

B.J. Leithead-Todd, Director
Planning Department
County of Hawaii
101 Pauahi Street, Suite 3
Hilo, Hawaii 96720

Warren H. W. Lee, Director
Department of Public Works
County of Hawaii
101 Pauahi Street, Suite 7
Hilo, Hawaii 96720-4224

Re: Special Management Area Violation (SMA/V 2008-013W)
Shoreline Setback Violation (SSV 2008-013W)
Construction of Seawall in County Right of Way and Shoreline Setback
TMK No. (3) 6-9-005:001, Puako, South Kohala, Hawaii
Owner: Doris M. Scharpf Trust

Dear Ms. Leithead-Todd and Mr. Lee:

This office represents the Doris M. Scharpf Trust. The purpose of this letter is to follow up on the status of the above-referenced matter.

Our office has been working with Christopher Bennett, counsel for the adjoining property owner (Sutton Residential Trust (TMK 6-9-006: 025)) to the south of the County right of way, with Ron Terry, Ph.D. (environmental consultant), with Elaine Tamaye, P.E. (coastal engineer) to finalize the proposed alternative designs for remediation of the wall which runs from the Scharpf Trust property, across the County right of way, and to wall along the makai boundary of the Sutton Residential Trust property. Mr. Terry is in the process of finalizing the Draft Environmental Assessment.

As you are no doubt aware, there has been a run of very high surf on the west shore of our island on January 15–18, 2011. The high surf has caused damage to the County right of way. The wall appears to be undermined and there appears to be erosion of the County right of way mauka of the wall. This appears to create a potentially dangerous situation for persons using the right of way and the County appears to have taken some basic measures to close public access.

B. J. Leithead-Todd
Warren H. W. Lee
January 18, 2011
Page 2

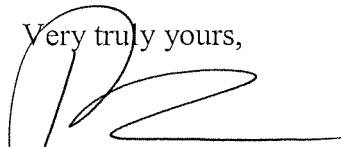
On behalf of our client, we have to request that the County take more definitive and effective measures to prevent the public from using this accessway until the potential damages are mitigated. More effective barriers and signs clearly articulating the danger and prohibiting use of the right of way should be placed. These are measures only the County is authorized to take.

It may be appropriate for the Planning Department to consider issuing emergency permits to allow the remediation work to occur. It appears that emergency permits are authorized under the relevant statutes and rules. The County could initiate these emergency permit applications and the work could be done by individual landowners as part of the above-referenced settlement agreement.

Could we arrange a site visit as soon as possible to see the surf damage and to evaluate how best to proceed?

If you have any questions or require additional information, please contact me.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Roy A. Vitousek III', with a long horizontal flourish extending to the right.

Roy A. Vitousek III

for

CADES SCHUTTE

A Limited Liability Law Partnership

RAV/bah

cc: Amy G. Self, Esq.
Doris M. Scharpf, Trustee
Christopher Bennett



MOOERS
ENTERPRISES, LLC
Land Use Alternatives

Post Office Box 1101
Kamuela, Hawaii 96743
Phone (808) 880-1455
Fax (808) 880-1456
gmooers@hawaii.rr.com

February 24, 2011

Ms. Leithead Todd
Director
Planning Department
County of Hawaii
101 Pauahi Street, Suite 3
Hilo, Hawaii 96720

**Re: SPECIAL MANAGEMENT AREA ASSESSMENT APPLICATION
SHORELINE SETBACK VARIANCE APPLICATION
APPLICANT: GREGORY R. MOOERS
REQUEST: MODIFICATION OF AN EXISTING WALL WITHIN THE
SPECIAL MANAGEMENT AREA AND SHORELINE SETBACK AREA
TMK: (3) 6-9-005:001 AND (3) 6-9-006:025**

Dear Ms. Leithead Todd:

Please find enclosed two (2) copies of a completed Special Management Area Assessment Application for the proposed action and the original and twenty (20) copies of the completed Shoreline Setback Variance application. I have also enclosed a list of neighbors within 300-feet of the subject properties, Real Property Tax Clearances for both properties and a check in the amount of \$500.00 as required.

On February 29, 2008 the Planning Department issued a SMA Violation (SMA/V 2008-013W) and Shoreline Setback Violation (SSV 2008-013W) for the construction of a wall and stairs within the County Right-of-Way and within the Shoreline Setback Area. On March 28, 2008 the Appellant filed an appeal with the Planning Board of Appeals. The parties reached a settlement on January 15, 2009, when the parties signed the Settlement and Mutual Release Agreement. A copy of that agreement is included in the Exhibits of both applications transmitted with this cover.

Since this agreement was signed the appellant and her agents have worked with the Planning Department and the Department of Public Works to develop a design for the reconfigured wall that is acceptable to all parties. The approved design is enclosed as an Exhibit in each application and identified as Alternate 5 – Rev. 1.

Recent storm events have damaged the existing wall fronting and within the County right-of-way making the mauka-makai public pedestrian access way a hazard and unusable for the public. The County has barricaded the right-of-way to prevent the use by the public. Please see the photographs included as Exhibits in each application.

The appellant wishes to immediately remove portions of the existing wall and stairs located within the County right-of-way per the Settlement Agreement. The appellant further wishes to construct a new wall consistent with the design agreed to by the parties to the Settlement Agreement. Because of the damage caused by the recent storm the Appellant would like to make these improvements as soon as possible to eliminate the hazards to the public and re-open the mauka-makai public pedestrian access to the shoreline.

In order to comply with the terms of the Settlement Agreement and reconfigure the wall the following permits or determinations are required:

- 1) Determine the existing Shoreline Certification (12/2/09) is still valid based on HRS Section 13-222-11(a) and Planning Department Rules 11-4(a):

Validity of certified shoreline. (a) Certification of the shoreline shall be valid for a period no longer than twelve months from the date of certification, except where the shoreline is fixed by artificial structures which have been approved by appropriate government agencies and for which engineering drawings exist to locate the interface between the shoreline and the structure in which case the shoreline certification shall be valid so long as the artificial structure remains intact and unaltered.

The shoreline in this area is fixed by the current wall and a new Shoreline Certification would not change this location.

- 2) Special Management Area Emergency Permit: issued by the Planning Director per Hawaii Planning Commission Rule 9-14 A:
9-14 Special Management Area Emergency Permits

(a) A Special Management Area Emergency Permit may be issued for emergency repairs to existing public utilities including but not limited to water, sewer, gas and electric transmission lines and highways, or similar emergencies which may otherwise not be exempt from the Special Management Area permit requirements. Upon finding that an emergency exists and requires immediate action, the Director shall issue a Special Management Area Emergency Permit subject to reasonable terms and conditions including an expiration date. Such permits shall be filed with the Commission in writing.

- 3) Waiver of Public Hearing and Action by the Director for the Shoreline Setback Variance based on Planning Commission Rule 8-10 and Planning Department Rule 11-11:

11-11 Waiver of Public Hearing and Action.

(a) The Planning Department may waive a public hearing and take action on a variance application for:

- (1) Stabilization of shoreline erosion by moving sand entirely on public lands;*
- (2) Protection of a structure determined by the Planning Department to be legally constructed, which costs more than \$20,000; provided the structure is at risk of immediate danger from shoreline erosion as determined by the*

February 24, 2011
Page Three

Planning Department, in consultation with appropriate agencies (i.e. U.S. Army Corps of Engineers, Department of Public Works); or (3) Maintenance, repair, reconstruction, and minor additions or alterations of legal boating, maritime, or water sports recreational facilities, which result in little or no interference with natural shoreline processes.

You have visited the site with Mr. Randy Vitousek, Mrs. Scharpf's representative, and Director of the Department of Public Works, Warren Lee. You and I have also met to discuss this project and the process we should follow to address the settlement agreement and the emergency situation that now exists. We are hopeful that the SMA Assessment Application and Shoreline Setback Variance Application are sufficient for you to make the required determinations that will allow the immediate reconfiguration of the existing wall and allow the public access to be re-opened.

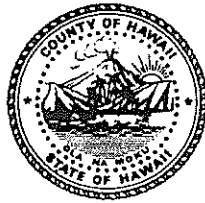
Should you or your staff have any questions, or require any additional information, please contact me directly.

Sincerely,

Gregory R. Mooers
President

GRM:jy
enclosures

William P. Kenoi
Mayor



BJ Leithead Todd
Director

Margaret K. Masunaga
Deputy

County of Hawai'i

PLANNING DEPARTMENT

Aupuni Center • 101 Pauahi Street, Suite 3 • Hilo, Hawai'i 96720
Phone (808) 961-8288 • Fax (808) 961-8742

March 28, 2011

Mr. Gregory R. Mooers
Mooers Enterprises, LLC
P.O. Box 1101
Kamuela, HI 96743

Dear Mr. Mooers:

**SUBJECT: Special Management Area Use Permit Assessment Application
(SAA 11-000634)
Shoreline Setback Variance Application (SSV 11-000007)
Applicant: Gregory R. Mooers
Land Owner: Doris M. Scharpf Trust and Sutton Residential Trust
Request: Modification of an Existing Wall within the Special
Management Area and Shoreline Setback Area
TMK: (3) 6-9-005:001 and 6-9-006:025; Lālāmilo, South Kohala,
Hawai'i**

This is to acknowledge receipt on February 25, 2011 of two applications related to the modification of an existing wall within the Special Management Area and Shoreline Setback Area on the subject parcels: a Special Management Area Use Permit Assessment Application (SAA), including a request for a Special Management Area Emergency Permit, and a Shoreline Setback Variance (SSV) Application, including the \$500.00 filing and processing fee. Enclosed is your receipt.

The Scharpf property (subject parcel 001, TMK: 6-9-005:001) consists of 19,401 square feet, and the Sutton property (subject parcel 025, TMK: 6-9-006:025) consists of 16,401 square feet. Both parcels are zoned RS-10 (Single-Family Residential) by the County of Hawai'i and designated Urban by the State Land Use Commission. The Hawai'i County General Plan Land Use Pattern Allocation Guide (LUPAG) Map designates the parcels as Low Density Urban. The properties are located entirely within the Special Management Area and have frontage along the coastline.

Mr. Gregory R. Mooers
March 28, 2011
Page 2

Violation, Appeal, and Mutual Release Agreement

On February 29, 2008, we issued a Notice of Violation (NOV) for the unpermitted construction of a wall within the shoreline setback on the Scharpf property (subject parcel 001) and the unpermitted construction of a wall and two sets of stairs within both the County right-of-way (ROW) and shoreline setback. Corrective actions required of the landowner in the NOV included removal of the wall on their property and of the wall and stairs within the County ROW.

The landowner filed an appeal with the County of Hawai'i Board of Appeals on March 28, 2008 relating to the NOV. On January 15, 2009, the County entered into a settlement and mutual release agreement ("Agreement") with the landowner to close the NOV and Appeals complaint processes, allowing the landowner to attempt to obtain permits for the structures.

To allow the landowner to protect the properties, the subject applications seek to permit, first, the demolition of the wall and two sets of stairs within the County right-of-way (ROW) and the shoreline setback and, second, the construction of a new wall along either side of the County roadway on the subject properties within the shoreline setback.

Time Extension

Please note that the subject applications do not include the remaining unpermitted wall located on the Scharpf property (subject parcel 001). Per the Terms of the Settlement Agreement, the "Appellant" shall file two applications for the wall with the Planning Commission: a Shoreline Setback Variance, pursuant to Planning Department Rule 11-9 and Planning Commission Rule 8-4, and an SMA permit application. In a letter dated October 21, 2010, the Planning Director granted a final time extension to January 15, 2011 to submit the applications.

Due to the emergency nature of this request and the landowner's commitment of time and resources to the project, we will grant one further time extension to submit the Shoreline Setback Variance and the Special Management Area Use Permit applications for the unpermitted construction of the wall on the Scharpf property (subject parcel 001) by July 15, 2011. ***We will enforce the Settlement Terms under Part 6 of the Settlement and Mutual Release Agreement if the landowner fails to comply with all conditions of the Agreement by July 15, 2011.***

Special Management Area Determination

According to Chapter 205A-22, Hawai'i Revised Statutes (HRS), and Planning Commission Rule 9-4(e)(2)(G) relating to Special Management Area, "development" does not include "*Demolition or removal of structures, except those structures located on any historic site as designated in national or state registers or those listed in the Historic*

Mr. Gregory R. Mooers
March 28, 2011
Page 3

Sites Element of the General Plan.” Therefore, ***the proposed demolition of the subject walls and stairs are exempt from Special Management Area permit requirements.***

However, Planning Commission Rule 9-4(e)(1)(A) states that “development” does include “*Placement or erection of any solid material or any gaseous, liquid, solid, or thermal waste.*” Therefore, the proposed the construction of a new wall along either side of the County roadway on the subject properties is considered “development” and requires a Special Management Area Permit.

Pursuant to Planning Commission Rule 9-14(a), “*a Special Management Area Emergency Permit may be issued for emergency repairs to existing public utilities including but not limited to water, sewer, gas, and electric transmission lines and highways, or similar emergencies which may otherwise not be exempt from the Special Management Area permit requirements.*” Recent storm events have damaged the existing wall fronting and within the County ROW making the mauka-makai public pedestrian access way a hazard and unusable for the public. The County has barricaded the ROW to prevent use by the public.

Therefore, in order to promptly eliminate the hazards within the ROW, a Special Management Area Emergency Permit is hereby granted for the proposed construction of a new wall along either side of the County roadway on the subject properties. The Special Management Area Emergency Permit shall expire within sixty (60) days of the date of this decision.

Compliance with Environmental Impact Statement Regulations (Chapter 343, HRS):

The shoreline was certified on December 2, 2009 and is fixed by the existing wall. Therefore, the work will occur well within the shoreline setback area. According to Hawai‘i Revised Statutes (HRS) Chapter 343-5, an Environmental Assessment (EA) shall be required for actions that propose any use within a shoreline area. However, Hawai‘i Administrative Rules (HAR), Chapter 200, Environmental Impact Statement Rules, provides a list of classes of action that may be exempt from the preparation of an EA, including:

- *11-200-8(A)(8) Demolition of structures, except those structures located on any historic site as designated in the national register or Hawaii register as provided for in the National Historic Preservation Act of 1966, Public Law 89-665, 16 U.S.C. §470, as amended, or chapter 6E, HRS.*
- *11-200-8(A)(2) Replacement or reconstruction of existing structures and facilities where the new structure will be located generally on the same site and will have*

Mr. Gregory R. Mooers
March 28, 2011
Page 4

substantially the same purpose, capacity, density, height, and dimensions as the structure replaced;

- *11-200-8(A)(6) Construction or placement of minor structures accessory to existing facilities.*

We consulted with the Department of Public Works (DPW) regarding the Planning Director's "Declaration of Exemption" from the preparation of an EA for the subject project. The enclosed Department of Public Works, Engineering Division memorandum dated March 24, 2011, states the following:

"We reviewed the subject application and concur with the Planning Director's Declaration of Exemption from Chapter 343-5 for the subject request on the basis of the exemptions listed in HAR Chapter 200 and the subject applications. We assume the Planning Director will make any necessary inspections following the removal and reconstruction as we understand from the plan entitled Alternate 5 REV 1, all wall reconstruction will occur on private property. No permit for work within a county right-of-way is required for the proposed project. We have no further comments on or objections to the subject requests."

Based on the above, ***we determine that the proposed demolition and construction activity will likely have minimal or no significant effect on the environment and hereby exempt the applicant from the preparation of an EA.*** No uses, activities, or development, other than those described in the application, shall be exempt from environmental review under Chapter 343.

Shoreline Setback Waiver of Public Hearing and Action

The Shoreline Setback Variance Application included a request for Waiver of Public Hearing and Action.

In accordance with Section 205A-46(a)(7) of the Hawai'i Revised Statutes, and Section 8-10 of the Planning Commission's Rule 8, relating to Shoreline Setback, the Planning Commission may grant variances from the shoreline setback regulations. Pursuant to Planning Commission Rule 8-10(a), the Commission delegates to the Department the authority to waive a public hearing and to take action on a variance application for:

(2) Protection of a structure determined by the Department to be legally constructed, which costs more than \$20,000; provided the structure is at risk of immediate danger from shoreline erosion as determined by the Department, in consultation with appropriate agencies.

According to the Coastal Assessment provided by Elaine E. Tamaye, President of EKNA Services, "if the seawall fronting the R/W is removed, then the Scharpf and Sutton properties would be susceptible to increased flooding damage due to wave runup/overtopping of the shoreline through the opening between the two walls". The Assessment also specifies that "Removing any section of seawall would also subject the remaining adjacent wall to flanking damage."

We concur with Ms. Tamaye's Assessment, which supports the emergency nature of the proposed repairs and confirms the potential for wave and erosion damage to the subject properties. Moreover, the seawall located on the Sutton property (subject parcel 025) is considered to be a legally constructed wall with a value of more than \$20,000. The proposed demolition of the wall and two sets of stairs within the ROW and the construction of a new wall along either side of the County roadway on the subject properties will protect the existing rock wall on the Sutton property from the risk of immediate danger from shoreline erosion. Therefore, ***the request for shoreline setback waiver of the public hearing and action is hereby granted, and the Planning Department will act on the variance application.***

Shoreline Setback Variance

The Shoreline Setback Variance shall be processed in accordance with Planning Commission Rule 8-11(b)(3), which states: "*A variance may also be granted upon a finding that, based upon the record, the proposed structure or activity meets one of the following standards of this subsections:*

- (3) *Hardship Standard.*
 - (A) *A structure or activity may be granted a variance upon the grounds of hardship only if:*
 - (i) *The applicant would be deprived of reasonable use of the land if required to comply fully with this rule; and*
 - (ii) *The request is due to unique circumstances and does not draw into question the reasonableness of this rule; and*
 - (iii) *The request is the practicable alternative which best conforms to the purpose of this rule.*
 - (B) *Before granting a hardship variance, the Commission must determine that the request is a reasonable use of the land. The*

determination of the reasonableness of the use of land shall consider factors such as shoreline conditions, erosion, surf and flood conditions, and the geography of the lot as it relates to health and safety.

- (C) *If a structure is proposed to artificially fix the shoreline, the Commission must also determine that shoreline erosion is likely to cause hardship if the structure is not allowed within the shoreline setback area.*
- (D) *Hardship shall not be determined as a result of zoning amendments, planned unit development (PUD) permits, cluster plan development (CPD) permits, or subdivision approvals after June 16, 1989."*

The existing wall on the subject properties connects to adjacent legally constructed seawalls on neighboring properties. As stated within Ms. Tamaye's Coastal Assessment, "Removing any section of seawall would also subject the remaining adjacent wall to flanking damage, meaning that waves can surge around the unprotected end and erode the ground from the mauka side." As the unprotected shoreline continues to erode, ultimately the adjacent shoreline will move landward. Therefore, in accordance with Planning Commission Rule 8-11(b)(3)(A)(i), the landowner would be deprived of reasonable use of the land if required to comply fully with the shoreline setback rule.

The existing wall was built prior to when the Scharpf Trust acquired the property, and a portion of the wall was built within the County ROW and affects the public beach access. Therefore, in accordance with Planning Commission Rule 8-11(b)(3)(A)(ii), circumstances are unique and do not draw into questions the reasonableness of the shoreline setback rule.

The existing wall and stairs within the County ROW have been damaged by the recent storm activities. The proposed actions, which were designed in consultation with the County Departments of Planning and Public Works, will eliminate the hazardous situation, allow the County to reopen the mauka-makai public pedestrian access, and protect the landowner's property. Therefore, in accordance with Planning Commission Rule 8-11(b)(3)(A)(iii), the request is the practicable alternative which best conforms to the purpose of the shoreline setback rule.

The wall connects to adjacent properties and is the most common method of protecting structures from the impacts of storm surf. Shoreline erosion has already affected the existing wall causing damage within the County ROW. Therefore, in accordance with

Planning Commission Rule 8-11(b)(3)(B), the proposed use is a reasonable use of the land.

According to Ms. Tamaye's Coastal Assessment, "Removing any of the existing seawalls would allow the shoreline to immediately achieve a flatter profile. Assuming a natural beach slope of about 1V:6H, the top of the shoreline escarpment could move about 30 feet mauka of the existing waterline. The unprotected shoreline would also be susceptible to future shoreline erosion. Therefore, in accordance with Planning Commission Rule 8-11(b)(3)(C), shoreline erosion is likely to cause hardship if the structure is not allowed within the shoreline setback area.

The subject parcels were created in September 1950 as part of the Puako Beach Lots subdivision. Therefore, in accordance with Planning Commission Rule 8-11(b)(3)(D), hardship has not been determined as a result of zoning amendments, planned unit development (PUD) permits, cluster plan development (CPD) permits, or subdivision approvals after June 16, 1989.

Therefore, as the proposed activity meets the hardship standard in Planning Commission Rule 8-11(b)(3), *a Shoreline Setback variance is hereby granted.*

Applicable Conditions

Additionally, Planning Commission Rule 8-11(c) states, "*No variance shall be granted unless appropriate conditions are imposed as applicable:*

- (1) *To comply with Chapters 10 and 27 of the Hawai'i County Code (HCC) relating to Erosion and Sedimentation Control and Flood Control, respectively;*
- (2) *To maintain safe lateral access along the shoreline or adequately substitute for its loss;*
- (3) *To minimize risk of adverse impacts on beach processes;*
- (4) *To minimize risk of structures failing and becoming loose rocks or rubble on public property; and*
- (5) *To minimize adverse impacts on public views to, from, and along the shoreline."*

According to the Department of Public Works, Flood Zone "VE" affects the subject property. The proposed project will not hinder lateral access along the shoreline and will not have an adverse impact on beach processes or on public views. Moreover, the demolition and removal of the existing wall and stairs within the County ROW will enable the County to reopen the mauka-makai public pedestrian access and, by removing the damaged wall and stairs fronting and within the County, will minimize the risk of the structure failing on public property.

In light of the above, *the Special Management Area exemption, the Special Management Area Emergency Permit, the exemption from preparation of an EA, the waiver of public hearing and action, and the Shoreline Setback Variance are subject to compliance with the following conditions:*

1. The applicant, its successors or assigns shall be responsible for complying with all stated conditions of approval.
2. The applicants, their successors or assigns shall indemnify and hold the County of Hawai'i harmless from and against any loss, liability, claim or demand for the property damage, personal injury and death arising out of any act or omission of the applicants, their successors or assigns, officers, employees, contractors and agents under this variance or relating to or connected with the granting of this variance.
3. 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.
4. Per the terms of the Settlement and Mutual Release Agreement, the owners shall remove the portion of the wall and stairs within the County Right-of-way within sixty (60) days of the date of this decision.
5. The applicant shall comply with Hawai'i County Code, Chapter 10, Erosion and Sedimentation Control as required by DPW.
6. The applicant shall comply with Chapter 27, Floodplain Management, of the Hawai'i County Code.
7. The applicant shall comply with Chapter 11-55, Water Pollution Control, Hawai'i Administrative Rules, Department of Health, which requires NPDES permit for certain construction activities.
8. A construction barrier, meeting with the approval of the Planning Director, shall be erected along the entire length of the subject existing wall prior to the commencement of demolition activities and shall remain in place until the final inspection has been performed by the Planning Department.
9. The area makai of the 40-foot shoreline setback line shall be kept clear of any rubbish or debris resulting from the demolition and construction activities at all times. Any rubbish or debris must be removed from the shoreline setback area at the end of work each day.

10. The disposal of waste material is subject to the requirements of Chapter 20 - Refuse, of the Hawai'i County Code and may require a Landfill Disposal Permit from the Department of Environmental Management, Solid Waste Division. Their office may be reached at 961-8339.
11. During construction, measures shall be taken to minimize the potential of both fugitive dust and runoff sedimentation. Such measures shall be in compliance with construction industry standards and practices utilized during construction projects of the State of Hawai'i.
12. Should any remains of historic sites, such as rock walls, terraces, platforms, marine shell concentrations or human burials, be encountered, work in the immediate area shall cease and the Department of Land and Natural Resources-Historic Preservation Division (DLNR-HPD) shall be immediately notified. Subsequent work shall proceed upon an archaeological clearance from the DLNR-HPD when it finds that sufficient mitigative measures have been taken.
13. An extension of time for the performance of the conditions contained herein may be granted by the Planning Director upon the following circumstances:
 - a) The non-performance is the result of conditions that could not have been foreseen or are beyond the control of the applicant, successors or assigns, and that are not the result of their fault or negligence;
 - b) Granting of the time extension would not be contrary to the original reasons for the granting of the determination; and
 - c) The time extension granted shall be for a period of not to exceed the period originally granted for performance (i.e., a condition to be performed within one year may be extended up to one additional year).

Should any of the conditions not be met or substantially complied with in a timely manner, the Planning Director may revoke the exemptions, waiver, variance, and permit. Moreover, these exemptions, permit, waiver, and variance do not sanction the specific plans submitted with the application as they may be subject to change given specific code and regulatory requirements of the affected agencies.

If you have questions or require further information, please feel free to contact Bethany Morrison of this office at 961-8138.

Mr. Gregory R. Mooers
March 28, 2011
Page 10

Sincerely,



BJ LEITHEAD TODD
Planning Director

BJM:

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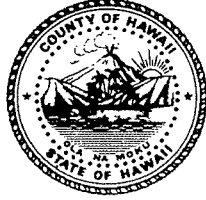
Enclosure: Receipt No. 152634
DPW Memo dated March 24, 2011
HRS Chapter 343 Declaration of Exemption

xc w/ Enc: Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

xc ltr only: Long Range Planning
Planning Department- Kona Office

Department of Public Works
Warren H.W. Lee, P.E., Director
101 Pauahi Street, Suite 7
Hilo, Hawai'i 96720-4224

William P. Kenoi
Mayor



BJ Leithead Todd
Planning Director

Margaret K. Masunaga
Deputy

County of Hawai'i

PLANNING DEPARTMENT

Aupuni Center • 101 Pauahi Street, Suite 3 • Hilo, Hawai'i 96720
Phone (808) 961-8288 • Fax (808) 961-8742

May 2, 2011

Mr. Roy A. Vitousek III
Cades Schutte
75-170 Hualālai Road, Suite B-303
Kailua Kona, HI 96740

Dear Mr. Vitousek:

**SUBJECT: Special Management Area Use Permit Assessment Application
(SAA 11-000634)
Shoreline Setback Variance Application (SSV 11-000007)
Land Owner: Doris M. Scharpf Trust and Sutton Residential Trust
TMK: (3) 6-9-005:001 and 6-9-006:025; Lālāmilo, South Kohala,
Hawai'i**

We are writing in response to your letter dated April 18, 2011, requesting confirmation of the substance of our April 13, 2011 meeting at the Planning Department office.

On February 29, 2008, we issued a Notice of Violation (NOV) for the unpermitted construction of a wall within the shoreline setback on the Scharpf property (subject parcel 001) and the unpermitted construction of a wall and two sets of stairs within both the County right-of-way (ROW) and shoreline setback. Corrective actions required of the landowner in the NOV included removal of the wall on their property and of the wall and stairs within the County ROW.

The landowner filed an appeal with the County of Hawai'i Board of Appeals on March 28, 2008 relating to the NOV. On January 15, 2009, the County entered into a settlement and mutual release agreement ("Agreement") with the landowner to close the NOV and Appeals complaint processes, allowing the landowner to attempt to obtain permits for the structures.

Mr. Roy A. Vitousek III
Cades Schutte
May 2, 2011
Page 2

On March 28, 2011, in order to promptly eliminate the hazards within the County right-of-way (ROW) created by storm events, a Special Management Area Emergency Permit and a Shoreline Setback variance were issued to allow the demolition of the wall and two sets of stairs within the ROW and construction of a new wall along either side of the County roadway on the subject properties. The subject applications and subsequent permit approvals did not include the remaining unpermitted wall located on the Scharpf property (subject parcel 001).

As stated within the previously submitted Coastal Assessment, "Removing any section of seawall would also subject the remaining adjacent wall to flanking damage, meaning that waves can surge around the unprotected end and erode the ground from the mauka side." As the unprotected shoreline continues to erode, the adjacent shoreline will move landward.

It is understood that Ms. Scharpf is not able to proceed with the emergency repairs approved by the subject applications if there is a risk that she would subsequently be required to remove the remaining unpermitted wall thereby exposing this newly permitted wall along the County roadway and her property to erosion.

Your letter requests confirmation of the following:

1. support of Ms. Scharpf's application for an SMA permit and shoreline setback variance (as well as any other necessary permits) to legalize the existing wall along the makai portion of Ms Scharpf's property;
2. confirm that based on HRS 205A, HAR 13-222-11, Planning Department Rules 11-4 (a), and Planning Commission Rule 9-11 (b)(1)(I), the Planning Department will accept the December 2, 2009 certified shoreline for the purposes of above-referenced applications (the December 2, 2009, shoreline certification locates the shoreline either unequivocally makai of the subject wall or fixed by the subject wall); and
3. remove any "deadline" to apply for these permits and/or comply with the terms of the settlement agreement and will work with Ms. Scharpf and her consultants in facilitating applications to the Hawai'i County Planning Commission, including the above-referenced permits.

Mr. Roy A. Vitousek III
Cades Schutte
May 2, 2011
Page 3

Although the Planning Commission has the authority to approve the Shoreline Setback Variance, the Planning Director forwards a recommendation to the Commission for their consideration. ***In this case, the Director will be supporting the application by means of forwarding a positive recommendation with the complete application to the Planning Commission. In addition, the Planning Director will support the SMA permit application and any other Planning Department permits that may be required for the wall.***

The shoreline was certified on December 2, 2009. According to the survey, the shoreline follows along the seaward face of the CMU wall and along the upper reaches of the wash of the waves as evidenced by the debris line, makai of the existing CMU wall. As part of the shoreline is fixed by the wall and the portion not fixed by the wall is located makai of the wall, ***the Planning Department will accept the shoreline certified on December 2, 2009 for the processing of a Shoreline Setback Variance and SMA permit application.***

With regard to the request to remove any deadline to apply for these permits and/or comply with the terms of the settlement agreement, it would be irresponsible to remove all time conditions for performance of the Settlement Terms. However, the Planning Director desires that this issue, which has continued since February 29, 2008, be resolved as quickly as possible. ***Therefore, the time conditions in the Settlement Agreement will be waived provided the Appellant submit quarterly progress reports with the first one becoming due on July 15, 2011.*** As long as the Appellant continues to make progress toward the completion of the Settlement Terms, the Planning Department will work with Ms. Scharpf toward that end.

If you have questions or require further information, please feel free to contact Bethany Morrison of this office at 961-8138.

Sincerely,



BJ LEITHEAD TODD
Planning Director

BJM:cs

cc: Long Range Planning
Planning Department- Kona Office

ENVIRONMENTAL ASSESSMENT

AFTER-THE-FACT PERMIT FOR WALL IN SHORELINE SETBACK AT DORIS SCHARPF RESIDENCE IN PUAKŌ

APPENDIX 1c Comments to Draft EA and Reponses

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William P. Kenoi
Mayor



Darren J. Rosario
Fire Chief

Renwick J. Victorino
Deputy Fire Chief

County of Hawai'i
HAWAI'I FIRE DEPARTMENT
25 Aupuni Street • Room 2501 • Hilo, Hawai'i 96720
(808) 932-2900 • Fax (808) 932-2928

November 30, 2011

Mr. Ron Terry
Geometrician Associates
PO Box 396
Hilo, HI 96721

**SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR AFTER-THE-FACT
PERMIT FOR WALL IN SHORELINE SETBACK AT DORIS SCHRAPP**

We have no comments to offer at this time in reference to the above-mentioned Draft Environmental Assessment.

A handwritten signature in black ink, appearing to read "Darren J. Rosario".

DARREN J. ROSARIO
Fire Chief

RP:lpc



geometrician

ASSOCIATES, LLC

integrating geographic science and planning

phone: (808) 969-7090 PO Box 396 Hilo Hawaii 96721 rterry@hawaii.rr.com

January 13, 2012

Darren J. Rosario, Chief
Hawai'i County Fire Department
25 Aupuni Street
Hilo HI 96720

Dear Chief Rosario:

Subject: Comment on Draft Environmental Assessment for After-The-Fact Permit for Wall in Shoreline Setback at Doris Scharpf Residence in Puakō, South Kohala TMK 6-9-005:001

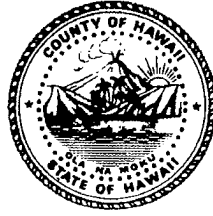
Thank you for your comment letter on the Draft EA dated November 30, 2011, in which you stated that your agency had no further comments at this time. We very much appreciate your review of the document. If you have any questions about the EA, please contact me at (808) 969-7090.

Sincerely,



Ron Terry, Principal
Geometrician Associates

Cc: Bethany Morrison, Hawaii County Planning Department



William P. Kenoi
Mayor

William T. Takaba
Managing Director

Warren H. W. Lee
Director

Brandon A. K. Gonzalez
Deputy Director

County of Hawai'i
DEPARTMENT OF PUBLIC WORKS
Aupuni Center
101 Pauahi Street, Suite 7 · Hilo, Hawai'i 96720-4224
(808) 961-8321 · Fax (808) 961-8630
www.co.hawaii.hi.us

November 30, 2011

Mr. Ron Terry
Geometrician Associates
P.O. Box 396
Hilo, HI. 96721

Subject: Draft Environmental Assessment (DEA)
After-the-Fact Permit for Wall in Shoreline Setback at
Doris Scharpf Residence in Puako
TMK: 6-9-005:001, South Kohala, Hawaii

We reviewed the subject draft environmental assessment and have no comments on or objections to the proposed action. If you have any questions, please feel free to contact Kiran Emler of our Kona office at 323-4850.

Ben Ishii, Division Chief
Engineering Division

KE

cc: Doris M. Scharpf Trust
Planning Department-Hilo, Atten: Bethany Morrison
ENG-HILO/KONA

geometrician

ASSOCIATES, LLC

integrating geographic science and planning

phone: (808) 969-7090 PO Box 396 Hilo Hawaii 96721 rterry@hawaii.rr.com

January 13, 2012

Ben Ishii, Eng. Div. Chief
Hawai'i County Department of Public Works
101 Pauahi Street, Suite 7
Hilo HI 96720

Dear Mr. Ishii:

Subject: Comment on Draft Environmental Assessment for After-The-Fact Permit for Wall in Shoreline Setback at Doris Scharpf Residence in Puakō, South Kohala TMK 6-9-005:001

Thank you for your comment letter on the Draft EA dated November 30, 2011, in which you stated that your agency had no further comments at this time. We very much appreciate your review of the document. If you have any questions about the EA, please contact me at (808) 969-7090.

Sincerely,



Ron Terry, Principal
Geometrician Associates

Cc: Bethany Morrison, Hawaii County Planning Department



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

HRD11/5253B

December 5, 2011

Ron Terry
Geometrician Associates
P.O. Box 396
Hilo, Hawai'i 96721

Re: Draft Environmental Assessment
After-the-Fact approvals
Puakō, Kohala, Island of Hawai'i

Aloha e Ron Terry,

The Office of Hawaiian Affairs (OHA) is in receipt of your November, 2011 request for comments on a draft environmental assessment (DEA) which has been prepared to support certain "after-the-fact" approvals from the County of Hawai'i. The Doris M Scharpf Trust (the applicant) is seeking an "after-the fact" special management area use permit and shoreline setback variance for an existing 82.4-foot long 2 to 4 foot high wall (wall) which was constructed along the makai portion of a 0.44 acre property (property) in Puakō on the Island of Hawai'i. The DEA describes that the wall was in place when Ms. Doris Scharpf and her husband purchased the property in 1999. A January 15, 2009 Settlement and Mutual Release Agreement between the applicant and the County of Hawai'i (County) provides that the applicant can apply for the necessary permits to realign a segment of and "legalize" the entire wall, which is within the County special management area and shoreline setback, and immediately adjacent to a County owned public shoreline access.

OHA has no objections to the anticipated "finding of no significant impact" determination within the DEA at this time and we look forward to seeing the applicant receiving the necessary approvals. Our review of the DEA indicates that public access to the shoreline will be maintained. OHA recognizes that following a series of high surf events in December 2010 and January 2011, the applicant took the necessary actions to remove portions of the wall which were damaged and impaired public access to the shoreline. Thank you for the opportunity to provide comments. Should you have any questions or concerns, please contact Keola Lindsey at 594-0244 or keolal@oha.org.

'O wau iho nō me ka 'oia'i'o,

A handwritten signature in black ink, appearing to read "Clyde W. Nāmu'o".

Clyde W. Nāmu'o
Chief Executive Officer

CWN:kl

C: Bethany Morrison- Hawai'i County Planning Department
OHA- West Hawai'i COC

geometrician

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integrating geographic science and planning

phone: (808) 969-7090 PO Box 396 Hilo Hawaii 96721 rterry@hawaii.rr.com

January 13, 2012

Clyde Nāmu‘o, Administrator
Office of Hawaiian Affairs
711 Kapiolani Blvd., Suite 1250
Honolulu HI 96813

Dear Nāmu‘o:

Subject: Comment on Draft Environmental Assessment for After-The-Fact Permit for Wall in Shoreline Setback at Doris Scharpf Residence in Puakō, South Kohala TMK 6-9-005:001

Thank you for the comment letter dated December 5, 2011, indicating OHA’s lack of objections to a FONSI for Ms. Scharpf’s wall retention. We appreciate your recognition of the efforts that Ms. Scharpf took on her own to maintain and improve public access after the storms.

We very much appreciate your review of the document. If you have any questions about the EA, please contact me at (808) 969-7090.

Sincerely,



Ron Terry, Principal
Geometrician Associates

Cc: Bethany Morrison, Hawaii County Planning Department

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
DOH/CWB

12024PDCL.11

December 23, 2011

Mr. Ron Terry
Geometrician Associates
P.O. Box 396
Hilo, Hawaii 96721

Dear Mr. Terry:

SUBJECT: Comments on Draft Environmental Assessment (DEA) for the After-the-Fact Permit for Wall in Shoreline Setback at Doris Scharpf Residence in Puako South Kohala, Hawaii

The Department of Health (DOH), Clean Water Branch (CWB), has reviewed the subject document and has no comments at this time. The DOH-CWB provided early consultation comments for this project (DOH-CWB Letter No. 09066PJF.10, dated September 28, 2010).

Please note that our review is based solely on the information provided in the subject document and its compliance with Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you read our standard comments on our website at:
<http://hawaii.gov/health/environmental/env-planning/wqm/landuse/landuse.html/CWB-standardcomment.pdf>.

If you have any questions, please visit our website at:
<http://www.hawaii.gov/health/environmental/water/cleanwater/index.html>, or contact the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

 TA FOR
ALEC WONG, P.E., CHIEF
Clean Water Branch

DCL:ml

c: DOH-EPO # 11-251 [via e-mail only]
Mr. Roy Vitousek III, Roy A. Vitousek III Cades Schutte LLP
Ms. Bethany Morrison, Hawaii County Planning Department

geometrician

ASSOCIATES, LLC

integrating geographic science and planning

phone: (808) 969-7090 PO Box 396 Hilo Hawaii 96721 rterry@hawaii.rr.com

January 13, 2012

Alec Wong, P.E., Chief
Clean Water Branch
Hawai'i State Dept. of Health
P.O. Box 3378
Honolulu HI 96801-3378

Dear Mr. Wong:

Subject: Comment on Draft Environmental Assessment for After-The-Fact Permit for Wall in Shoreline Setback at Doris Scharpf Residence in Puakō, South Kohala TMK 6-9-005:001

Thank you for the comment letter dated December 23, 2011, indicating that your agency had provided comments in response to early consultation and providing links to standard comments. We very much appreciate your review of the document. If you have any questions about the EA, please contact me at (808) 969-7090.

Sincerely,



Ron Terry, Principal
Geometrician Associates

Cc: Bethany Morrison, Hawaii County Planning Department

ENVIRONMENTAL ASSESSMENT

AFTER-THE-FACT PERMIT FOR WALL IN SHORELINE SETBACK AT DORIS SCHARPF RESIDENCE IN PUAKŌ

APPENDIX 2 Coastal Geology Letter Reports

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NOTE: THE JANUARY 4, 2011 REPORT PRESENTED FIRST WAS BASED ON ANALYSIS OF ALTERNATIVES THAT WERE CONCEPTUALIZED PREVIOUS TO THE EMERGENCY SITUATION BROUGHT ON BY HIGH WAVES, AND THE SUBSEQUENT REMOVAL OF THE STAIRS AND REMOVAL/REALIGNMENT OF PORTIONS OF THE WALL. THE SECOND REPORT FROM JUNE 29, 2011, EVALUATED THE SPECIFIC ACTION EXAMINED IN THIS ENVIRONMENTAL ASSESSMENT; I.E., RETENTION OF THE EXISTING REMAINING 82.4' OF WALL.

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CN 2657-01R#

January 4, 2011

Cades Schutte LLC
75-170 Hualalai Road, Suite 303B
Kailua Kona, Hawaii 96740

Attn: Randy Vitousek

Subject: Scharpf Property Coastal Assessment
TMK:(3)6-9-005:001, Puako, Hawaii
Proposed Work in the Shoreline Setback Area

Dear Mr. Vitousek:

This letter responds to your request for a coastal engineering assessment of alternatives addressing improvements within the shoreline setback area affecting the Scharpf property (TMK:(3)6-9-005:001), the County right-of-way (R/W), and the Sutton property (TMK:(3)6-9-006:025). The proposed alternatives were developed to address the requirement to remove an existing seawall and concrete steps situated within the R/W that were constructed without the requisite permits/approvals. The Scharpf property seawall presently connects to and extends across the adjacent R/W, and connects to the Sutton property seawall.

This coastal engineering assessment is based on the undersigned's knowledge of the ocean characteristics affecting this West Hawaii coast, a site visit on October 14, 2008 to assess the condition of the shoreline, and alternative plans developed by your structural engineer. The attached table summarizes and compares the alternative plans with respect to the following criteria:

- The potential for future shoreline erosion damage.
- The potential for storm wave flooding of the properties.
- Whether there are any adverse affects on existing littoral processes.

Summary of coastal characteristics:

Although this portion of the coast is protected by an irregular shallow rocky shelf that is partly emergent at high tide, it is evident that large winter swell waves and infrequent storm-generated waves (Kona storms and hurricanes) can result in high water levels and wave energy at the property shoreline. The shoreline is strewn with rocks and pieces of coral that have been deposited at the base of the seawall by large waves. A small spit of coarse sand is trapped behind an emergent rock outcropping fronting the Scharpf property.

The attached aerial photograph shows the irregular rocky shelf fronting this portion of the coast. The seawall that extends from the Sutton property across five properties south of the R/W is clearly visible in the aerial photo. The rocky shelf fronting this section of shoreline is at lower elevation than the outcropping in front of the Scharpf property, and it appears that the seawall is founded on this rock shelf south of the R/W, except for a short section adjacent to the R/W that is presently scoured at the base. For much of the wall farther south, the base was below the waterline at the time of the site visit conducted in October 2008 (estimated tide at the time was +1.3' MLLW).

The seawall fronting the Scharpf property connects to the seawall fronting the property on the north side of the Scharpf property, as well as to the seawall protecting the R/W on the south side. The existing grade on the mauka side of the seawall is approximately +5' MLLW, while the elevation on the makai side of the seawall varies from about +2' to +5' MLLW fronting the Scharpf property, with lower elevations fronting the Sutton property.

The potential for future shoreline erosion damage:

The irregular rocky shoreline fronting this coastal area is mostly emergent north of the Scharpf property, but is mostly submerged south of the Scharpf property, as can be seen on the attached aerial photo. This is the reason that properties north of the Scharpf property are not as susceptible to shoreline erosion damage, compared to the properties south of the Scharpf property (which have been forced to construct seawalls to prevent shoreline erosion damage). Removing any of the existing seawalls (which also function as retaining walls) would allow the shoreline to immediately achieve a flatter profile. Assuming a natural beach slope of about 1V:6H, the top of the shoreline escarpment could move about 30 feet mauka of the existing waterline. The unprotected shoreline would also be susceptible to future shoreline erosion.

Removing any section of seawall would also subject the remaining adjacent wall to flanking damage, meaning that waves can surge around the unprotected end and erode the ground from the mauka side. As the unprotected shoreline continues to erode, ultimately the adjacent shoreline will move landward of the seawall, further increasing the flanking damage to the seawall and the mauka property. This is the reason that seawalls which cannot connect to an adjacent wall or structure are typically constructed with a sidewall that is perpendicular to the seaward face to prevent flanking damage. If the seawall fronting the R/W is removed, then the Scharpf and Sutton properties would be susceptible to flanking damage.

The potential for storm wave flooding of the properties:

Large storm waves breaking at the edge of the shallow rocky shelf can cause a rise in nearshore stillwater level due to wave setup. In general, the larger the deepwater wave height, the higher the rise in water level at the shore due to wave setup. Wave setup can range from about 2 feet for a typical Kona storm to about 4 feet for hurricane-generated waves. If storm waves impact the shore

during high tide, the rise in water level can be on the order of 4 feet or higher. This higher water level will allow waves to attack the shore at higher elevations, causing wave overtopping of the shoreline and flooding of the mauka areas. The existing seawalls fronting the subject properties are about 2-3 feet higher than the mauka ground elevation. The seawalls may sustain minor overtopping during seasonal storm wave attack, but serve to mitigate flooding damage to the properties. If the seawall fronting the R/W is removed, then the Scharpf and Sutton properties would be susceptible to increased flooding damage due to wave runup/overtopping of the shoreline through the opening between the two walls. Sidewalls connected to the seawalls on both properties would mitigate the flooding and flanking damage.

Increased water levels during attack from hurricane waves could easily rise above the shoreline elevations, causing inundation mauka of Puako Beach Drive. Such area-wide flooding would occur regardless of the shoreline structures on this section of coastline.

Adverse effects on existing littoral processes:

None of the proposed alternatives will change existing wave and current patterns provided that the work is situated mauka of the existing seawalls. There is no dry sand beach fronting the Sutton property. A small spit of dry sand fronts the Scharpf property, which has accumulated as a tombolo because of the emergent rock outcrop situated directly offshore. This rock outcrop causes waves to refract/diffract around the outcrop, causing littoral transport in the northerly direction fronting the Sutton property. There is sufficient space on the Scharpf property to realign the southern section of wall to be parallel with the beach contours. This will help to stabilize a wider beach segment fronting the R/W and the Scharpf property.

I trust this addresses your concern with respect to the comparative impacts of the various alternatives. Please contact me if you have any questions concerning the above.

Very truly yours,

EKNA Services, Inc.

Elaine E. Tamaye
President

enc: Comparison Table of Alternatives
Aerial photo



Wave approach direction



Puako Beach Dr

Scharpf
TMK:(3)6-9-005:001

Public Right-of-way

Sutton
TMK:(3)6-9-006:025



352 ft

© 2008 Tele Atlas
Image © 2008 TerraMetrics

Image © 2008 DigitalGlobe

© 2007 Google™

Pointer 19°57'53.07" N 155°51'16.02" W elev 31 ft Streaming 100%

Eye alt 1245 ft

Alternative	Future Shoreline Erosion Damage?	Storm Wave Flooding Potential?	Adverse Affect on Existing Littoral Processes?
<p>Alternative 1: <u>Scharpf property:</u> Replace 28 LF exst seawall New 36 LF sidewall at edge of public R/W <u>Public R/W:</u> Remove exst stairs and seawall Grade shoreline to match beach slope <u>Sutton property:</u> No work.</p>	<p><u>Scharpf:</u> NO - sidewall will prevent flanking. <u>Public R/W:</u> YES - possible erosion escarpment <u>Sutton:</u> YES - from flanking of exst seawall</p>	<p><u>Scharpf:</u> Minor with 36 LF sidewall. <u>Public R/W:</u> YES - from wave runup <u>Sutton:</u> YES - from flanking of exst seawall</p>	<p><u>Scharpf:</u> NO <u>Public R/W:</u> NO <u>Sutton:</u> NO</p> <p>No change to wave and current patterns provided all new work is situated mauka of exst seawalls.</p>
<p>Alternative 1A: <u>Scharpf property:</u> Same as Alternative 1 <u>Public R/W:</u> Same as Alternative 1 <u>Sutton property:</u> Replace approx. 30 LF exst seawall New 33 LF sidewall at edge of public R/W</p>	<p><u>Scharpf:</u> NO - same as Alt.1 <u>Public R/W:</u> YES - same as Alt.1 <u>Sutton:</u> NO - sidewall will prevent flanking</p>	<p><u>Scharpf:</u> Minor - same as Alt.1 <u>Public R/W:</u> YES - same as Alt.1 <u>Sutton:</u> Minor with 33 LF sidewall.</p>	<p><u>Scharpf:</u> NO <u>Public R/W:</u> NO <u>Sutton:</u> NO</p> <p>Same as Alt.1</p>
<p>Alternative 2: <u>Scharpf property:</u> Replace/extend 32 LF exst seawall <u>Public R/W:</u> Remove exst stairs and seawall New 30 LF ADA ramp (5' wide) w/sidewalls <u>Sutton property:</u> Extend seawall 2 LF to connect to ADA ramp</p>	<p><u>Scharpf:</u> NO - same as Alt.1 <u>Public R/W:</u> NO - concrete ramp will prevent erosion escarpment <u>Sutton:</u> NO - same as Alt.1A</p>	<p><u>Scharpf:</u> Minor - same as Alt.1 <u>Public R/W:</u> Minor with narrow concrete ramp. <u>Sutton:</u> Minor - same as Alt.1A</p>	<p><u>Scharpf:</u> NO <u>Public R/W:</u> NO <u>Sutton:</u> NO</p> <p>Same as Alt.1</p>
<p>Alternative 3: <u>Scharpf property:</u> Same as Alternative 2 <u>Public R/W:</u> Same ADA ramp as Alternative 2 New 89 LF concrete walkway New paved ADA parking stall <u>Sutton property:</u> Same as Alternative 2</p>	<p><u>Scharpf:</u> NO - same as Alt.1 <u>Public R/W:</u> NO - same as Alt.2 <u>Sutton:</u> NO - same as Alt.1A</p>	<p><u>Scharpf:</u> Minor - same as Alt.1 <u>Public R/W:</u> Minor - same as Alt.2 <u>Sutton:</u> Minor - same as Alt.1A</p>	<p><u>Scharpf:</u> NO <u>Public R/W:</u> NO <u>Sutton:</u> NO</p> <p>Same as Alt.1</p>
<p>Alternative 4: <u>Scharpf property:</u> Replace/extend 35 LF exst seawall with realigned seawall <u>Public R/W:</u> Remove exst stairs and seawall Replace with new recessed stairs w/sidewalls <u>Sutton property:</u> Replace/extend approx. 30 LF exst seawall with realigned seawall</p>	<p><u>Scharpf:</u> NO <u>Public R/W:</u> NO <u>Sutton:</u> NO</p>	<p>Scharpf: Minor Public R/W: Minor Sutton: Minor</p> <p>Provided seawalls are the same height as existing.</p>	<p><u>Scharpf:</u> NO <u>Public R/W:</u> NO <u>Sutton:</u> NO</p> <p>Same as Alt.1</p> <p>Realigned seawall more conducive to stabilizing exst beach.</p>

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EKNA Services, Inc.

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and
Environmental
Consultants

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Computer
Modeling

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(808) 593-8551

CN 2657-01R#

June 29, 2011

Cades Schutte LLC
75-170 Hualalai Road, Suite 303B
Kailua Kona, Hawaii 96740

Attn: Randy Vitousek

Subject: Scharpf Property
TMK:(3)6-9-005:001, Puako, Hawaii
Seawall in the Shoreline Setback

Dear Mr. Vitousek:

This letter is a follow-up to our previous assessment letters concerning the need for an existing seawall/retaining wall at the subject property in Puako, South Kohala. Apparently, the wall was constructed within the shoreline setback without the requisite permits/approvals. The wall on the property connects to the seawall fronting the neighboring property on the north side, and extends across the adjacent public right-of-way (R/W) on the south side.

Although this portion of the coast is protected by an irregular shallow rocky shelf that is partly emergent at high tide, it is evident that large winter swell waves and infrequent storm-generated waves (Kona storms and hurricanes) can result in high water levels and wave energy at the property shoreline. As noted in my previous assessment letter, the shoreline is strewn with rocks and pieces of coral that have been deposited at the base of the seawall by large waves. A small spit of coarse sand is trapped behind an emergent rock outcropping fronting the subject parcel. The subject property seawall follows a nearly linear alignment mauka of the sand spit and large tree, thereby allowing public access to this recreation spot.

As noted in my previous assessment, removing the wall on the subject property is not a prudent action, as the property will be subject to wave and erosion damage. The existing grade is approximately +5 MLLW, therefore, removing the wall on the subject property (which functions as a retaining wall on the north and south side of the property) would allow the shoreline to immediately achieve a flatter profile. Assuming a natural beach slope of about 1V:6H, the top of the shoreline escarpment could move about 30 feet mauka of the existing waterline (i.e. mauka of the base of the existing seawall at the north and south sides of the property).

I understand that the landowner has received permits from the County of Hawaii to remove the southern portion of the wall. These are portions of the wall that are located just mauka of the certified shoreline in the southern portion of the Scharpf property and fronting the County R/W. I understand that the wall along the southern portion of the Scharpf property will be



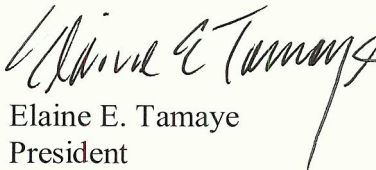
reconstructed mauka of the current wall location, that new mauka-makai walls will be built along both the northern and southern boundaries of the County R/W, and that there will be no wall along the makai boundary of the County R/W.

Removing the remaining portions of the wall on the Scharpf property would subject these permitted improvements and the neighboring property walls to flanking damage, meaning that waves can surge around the unprotected end and erode the ground from the mauka side. As the unprotected shoreline continues to erode, ultimately the adjacent shoreline will move landward of the seawall, further increasing the flanking damage to the adjacent seawalls and the mauka properties.

The subject property seawall does not have detrimental impacts to the littoral processes affecting this coastal area. There is no dry sand beach fronting the adjacent properties on the south side and north side. The small spit of dry sand fronting the Scharpf property has accumulated as a tombolo because of the emergent rock outcrop situated directly offshore. This rock outcrop causes waves to refract/diffract around the outcrop, and the existing seawall on the property does not alter this pattern of wave approach.

I trust this addresses your question concerning the need for the existing wall on the subject property. Please contact me if you have any questions concerning the above.

Very truly yours,
EKNA Services, Inc.



Elaine E. Tamaye
President