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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

CDUA: MA-3657
Acceptance Date: February 8, 2013
180 Day Expiration Date: August 7, 2013
SUSPENSE DATE: 21 Days from stamped date

FEB 2 0 2013

MEMORANDUM

To: Mr. Gary Gill, Deputy Director
Office of Environmental Quality Control

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

Subject: Draft Environmental Assessment (DEA) for Conservation District Use Application (CDUA) **MA-3657** for an After-the-Fact Seawall and Stairs, located at Alaeloa, Lahaina, Island of Maui – TMK: (2) 4-3-015:001

The Department of Land and Natural Resources has reviewed the Draft Environmental Assessment (DEA) for the proposed project and hereby transmits the DEA and Anticipated Finding of No Significant Impact (DEA-AFONSI) determination. Please publish notice of availability for this project in the next available issue of the *Environmental Notice*. We have enclosed the OEQC Bulletin publication form, a CD with a copy of the DEA (pdf) and Publication Form (MS Word) and two hardcopies of the DEA. Simultaneous with this memo, we have submitted the summary of the action in a text file by electronic mail to your office.

Should you wish to provide comments regarding this project please respond by the suspense date noted above. If no response is received by the suspense date, we will assume there are no comments. Please contact our Office of Conservation and Coastal Lands staff at (808) 587-0377 should you have any questions.

Enclosures: *One (1) CD with a copy of OEQC publication form, DEA*
OCCL Acceptance letter (hard copy)
OEQC Bulletin Publication Form (hard copy)
Two (2) DEA (Hard Copies)

APPLICANT ACTIONS
SECTION 343-5(C), HRS
PUBLICATION FORM (JANURARY 2013 REVISION)

Project Name Schweitzer Shoreline Erosion Control
Island: Maui
District: Lahaina
TMK: (2) 4-3-015:001
Permits: Conservation District Use
Approving Agency:
Office of Conservation and Coastal Lands, Department of Land and Natural Resources, Kalanimoku Building, 1151 Punchbowl Street, Room 131, Honolulu, Hawaii 96813, Contact: Samuel J. Lemmo, OCCL Administrator, Telephone: (808) 587-0377
Applicant:
Henry Schweitzer and Diane Schweitzer
1885 Lower Honoapiilani Road
Lahaina, Hawaii 96761
Contact: Paul R. Mancini, Esq., Telephone: (808) 874-8351
Consultant:
Chris Hart & Partners, Inc.
115 N. Market Street, Wailuku, Hawaii 96793
Contact: R. Raymond Cabebe, Land Planner, Telephone: (808) 242-1955
Status (check one only):

_x DEA-AFNSI	Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of DEA, a completed OEQC publication form, along with an electronic word processing summary and a PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov; a 30-day comment period ensues upon publication in the periodic bulletin.
__FEA-FONSI	Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and a PDF copy (send both summary and PDF to oeqchawaii@doh.hawaii.gov; no comment period ensues upon publication in the periodic bulletin.
__FEA-EISPN	Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov; a 30-day consultation period ensues upon publication in the periodic bulletin.
__Act 172-12 EISPN	Submit the approving agency notice of determination on agency letterhead, an OEQC publication form, and an electronic word processing summary (you may send the summary to oeqchawaii@doh.hawaii.gov. NO environmental assessment is required and a 30-day consultation period upon publication in the periodic bulletin.
__DEIS	The applicant simultaneously transmits to both the OEQC and the approving agency, a hard copy of the DEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the DEIS (you may send both the summary and PDF to oeqc@doh.hawaii.gov); a 45-day comment period ensues upon publication in the periodic bulletin.
__FEIS	The applicant simultaneously transmits to both the OEQC and the approving agency, a hard copy of the FEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the FEIS (you may send both the summary and PDF to oeqc@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.
__ Section 11-200-23 Determination	The approving agency simultaneous transmits its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS to both OEQC and the applicant. No comment period ensues upon publication in the periodic bulletin.
__Statutory hammer Acceptance	The approving agency simultaneously transmits its notice to both the applicant and the OEQC that it failed to timely make a determination on the acceptance or nonacceptance of the applicant's FEIS under Section 343-5(c), HRS, and that the applicant's FEIS is deemed accepted as a matter of law.
__Section 11-200-27 Determination	The approving agency simultaneously transmits its notice to both the applicant and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is not required. No EA is required and no comment period ensues upon publication in the periodic bulletin.
__Withdrawal (explain)	

Summary (Provide proposed action and purpose/need in less than 200 words. Please keep the summary brief and on this one page)**:**

The property owner proposes to retain a seawall and stair structure that was constructed by a contractor on the subject property in 1980 on what was then understood to be private property and pursuant to permits applied for and issued by the County of Maui. It was discovered in 2012 that the contractor built the structure makai of a certified shoreline boundary that was obtained in 1980 for the purposes of obtaining the County of Maui permits.

The Board of Land and Natural Resources considered the circumstances under which the structure was constructed in 1980 and authorized the property owner to file for a Conservation District Use Permit in order to obtain an easement on the State of Hawaii property.

The seawall and stairs are consistent with the existing walls to the north and south of the property and will protect the upland portion of the property from erosion due to storm waves and will also protect the beach and nearshore waters from impacts related to eroded soils transported by wave action and/or inland runoff. Removal of the structure would result in erosion of the subject property and turbidity in nearshore coastal waters.

DRAFT
HRS CHAPTER 343 ENVIRONMENTAL ASSESSMENT
In Support Of
CONSERVATION DISTRICT
USE APPLICATION
for

SCHWEITZER SHORELINE EROSION CONTROL

4885 Lower Honoapiilani Road
Lahaina, Maui, Hawaii
Tax Map Key: (2) 4-3-015:001

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JANUARY 2013

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APPENDICES

Appendix A	Certified Shoreline Map (February 4, 1980)
Appendix B	Survey of Lot 44-B-1 (July 31, 2012)
Appendix C	BLNR Report (September 17, 2012)
Appendix D	Coastal Engineering Site Visit Memorandum (December 26, 2012)

I. PROJECT INFORMATION

A. PREFACE

The Schweitzer property is a residential shoreline development on a 15,756 square foot site along the coast of West Maui. The site consists of two residential structures which, according to Maui County Real Property Tax records, were originally built in 1966 and 1980. The site is double terraced with two landscape retaining walls and a seawall and stair structure along the shoreline.

B. PURPOSE OF THE REQUEST

The purpose of this Draft Environmental Assessment (EA) is to analyze the impacts related to the existing seawall and stairs *makai* of the shoreline boundary of the subject property which provides shoreline erosion control. Preparation of a Draft EA is required in compliance with the provisions of HRS Chapter 343, since the existing structure involves an action within the Conservation District. This Draft EA is submitted in support of an After-the-Fact Conservation District Use Application (CDUA) for the existing seawall and stair structure.

C. PROJECT PROFILE

Project:	Shoreline Erosion Control
Project Address:	4885 Lower Honoapiilani Road Lahaina, Maui, Hawaii 96761
Project TMK:	(2) 4-3-015:001
Parcel Size:	15,756 square feet
Existing Land Use:	Single Family Residential
Access:	Lower Honoapiilani Road

D. IDENTIFICATION OF THE APPLICANT/OWNER

Land Owner:	Henry H. Schweitzer, Diane A. Schweitzer, & Matthew H. Schweitzer
Address:	4885 Lower Honoapiilani Road Lahaina, Maui, Hawaii 96761

Contact:	Mr. Paul R. Mancini, Esq. Mancini Welch & Geiger 305 E. Wakea Avenue, Suite 200 Kahului, Hawaii 96732 Phone: (808) 871-8351 Facsimile: (808) 871-0732
Email:	prm@mrwlaw.com

E. CONSULTANTS

Land Use Environmental Planner:	Chris Hart & Partners, Inc. 115 N. Market Street Wailuku, Maui, Hawaii 96793
Phone:	Voice: (808) 242-1955 Facsimile: (808) 242-1956
Contact:	Mr. R. Raymond Cabebe
Email:	rcabebe@chpmaui.com
Coastal Engineer:	Sea Engineering, Inc. 41-305 Kalanianaole Highway Waimanalo, Hawaii 96795-1820
Phone:	Voice: (808) 259-7966 Facsimile: (808) 259-8143
Contact:	Mr. Jim Barry
Email:	sei@seaengineering.com

F. ACCEPTING AGENCY

Agency:	Office of Conservation and Coastal Lands State of Hawaii Department of Land & Natural Resources P.O. Box 621 Honolulu, Hawaii 96809
Phone:	Voice: (808) 587-0382 Facsimile: (808) 270-7634
Contact:	Mr. Samuel J. Lemmo

G. MAJOR LAND USE, DEVELOPMENT AND CONSTRUCTION APPROVALS

1. Conservation District Use Permit from the State Department of Land and Natural Resources.
2. Building Permit from the Department of Public Works.

H. PRE-CONSULTED AGENCIES& PRIVATE INTERESTS

COUNTY OF MAUI

1. Department of Planning

STATE OF HAWAII

1. Department of Land & Natural Resources, Office of Coastal Conservation Lands (OCCL)
2. Board of Land & Natural Resources

II. DESCRIPTION OF THE PROPERTY AND PROPOSED ACTION

A. PROPERTY LOCATION AND DESCRIPTION

The subject property is located at 4885 Lower Honoapiilani Road, Island of Maui, Hawaii, Tax Map Key (2) 4-3-015:001 (**See:** Figures No. 1 "Regional Location Map", No. 2 "Aerial Map", and No. 3 "Tax Map"). The property is located on the northwest coast of West Maui, approximately 7 miles north of central Lahaina Town and approximately 1.5 miles south of the resort community of Kapalua. The project site is situated along Keonenui Bay, between Haukoe and Alaeloa Points, in an area collectively referred to as Alaeloa. Access to the property is via Lower Honoapiilani Road.

The 15,756 square foot parcel is located on Keonenui Bay, approximately midway between Haukoe and Alaeloa Points. The property ranges in elevation from sea level at its *makai* boundary to approximately 45 feet above mean sea level (AMSL) at the *mauka* boundary with Lower Honoapiilani Road. Erosion has been ongoing along this entire shoreline area for a considerable length of time.

B. EXISTING LAND USE

Existing structures on the parcel include two single family dwellings (1,381 sq. ft. – 1966 and 500 sq. ft. - 1980). The properties fronting the entirety of the shoreline between Haukoe and Alaeloa Points are armored by individual seawalls or similar protection that together form a nearly contiguous structure along the shoreline.

C. LAND USE DESIGNATIONS

The project site lies in the State *Urban* District, is proposed for *Single-Family* use by the West Maui Community Plan and is zoned *R-3 Residential District* by Maui County. The site is located within the *Special Management Area* (SMA), the area of jurisdiction of the Hawaii Coastal Zone Management (CZM) program. The subject seawall and stairs are located *makai* of the most recent certified shoreline; therefore, it lies within the State *Conservation District*.

State Land Use Classification:	Urban & Conservation (**See**: Figure No. 4, "State Land Use Boundary Map")
West Maui Community Plan:	SF Single Family (**See**: Figure No. 5, "West Maui Community Plan ")
County Zoning:	R-3 Residential (**See**: Figure No. 6, "County Zoning Map")
Flood Zone Designation:	X: Outside 0.2% annual chance floodplain; AE: 100-year floodplain (BFE: 17 ft.) (**See**: Figure No. 7, "Flood Insurance Rate Map")
Special Designations:	Special Management Area (*mauka* of shoreline); Resource Conservation Subzone (*makai* of shoreline)

D. PROJECT BACKGROUND AND NEED

The existing seawall and stair structure was constructed in the early 1980s (**See**: Figure No. 8, "Photographs"). Footing reinforcement and a stair extension were added on later. The shoreline fronting the parcel was last certified on February 4, 1980 based on a survey prepared by George F. Newcomer Land Surveyor (**See**: Appendix "A", "Shoreline Survey Map"). A current survey locates the seawall and the stairs, except for the two topmost treads, *makai* of this shoreline (**See**: Appendix "B", "Survey of Lot 44-B-1"). On September 28, 2012, the Board of Land and Natural Resources (BLNR) reviewed the Conservation District Enforcement File MA 09-54 "Alleged Unauthorized Seawall and Stairs by Henry and Diane Schweitzer" along with a report prepared by the Office of Conservation and Coastal Lands (OCCL) (**See**: Appendix "C"). The report contains a chronology of events pertaining to the existing seawall and stairs. At its September 28, 2012 meeting, the BLNR levied a fine and set a deadline of 120 days to either remove the seawall and stairs or apply for an after-the-fact permit. The land owners have filed the CDUA and this Draft EA in compliance with the BLNR's decision .

Most of the shoreline at Keonenui Bay is either naturally hardened or artificially armored with vertical reinforced concrete stone masonry seawalls. Due to the hardened shoreline, the natural wave action in the area is magnified and continues to erode the clay and ash substrate below the base of the unprotected natural walls

of Keonenui Bay, threatening public safety and adding silt to the adjacent coastal waters.

Allowing the seawall and stairs to remain enhances public safety and create a long-term solution that will stabilizes the shoreline of Keonenui Bay in order to:

- Prevent future erosion of the property and potential undermining of neighboring shoreline protection structures; and
- Prevent earthen soils from eroding and causing siltation of the coastal waters.

E. ALTERNATIVES

A Memorandum pertaining to a "Coastal Engineering Site Visit at Keonenui Bay" was prepared by Mr. Jim Barry of Sea Engineering, Inc. (**See**: Appendix "D"). The following alternatives include Mr. Barry's evaluation of shoreline conditions and conclusions. There was only one alternative considered in determining the preferred option:

Removal of Seawall and Stairs: This alternative would remove the seawall and stair structure.

Positive Impacts: The Sea Engineering Memorandum (J. Barry, December 2012, p. 13) states that:

Removal of the Schweitzer structures would result in:

- *Minor increase in beach width;*

Negative Impacts: The Sea Engineering Memorandum (J. Barry, December 2012, p. 13) states that:

Removal of the Schweitzer structures would result in:

- *Exposure and potential damage due to flanking of the Kahana Sunset and Lusardi seawalls;*
- *Likely exposure of a mudstone escarpment buried behind the existing wall, however there is great uncertainty as to the buried terrain;*
- *Increased substrate erosion and consequent turbidity of nearshore waters;*
- *Erosion of a floodway during extreme floods;*
- *Potential loss of at least one Schweitzer landscape wall*

The Sea Engineering Memorandum concludes its analysis of the seawall and stair removal with: "Changes in overall beach morphology due to structure removal are likely to be minor, however the potential flanking of structures on the neighboring properties is a major concern." (p. 13) For this reason, this alternative was deemed infeasible and dropped from consideration.

F. DESCRIPTION OF PROPOSED ACTION (PREFERRED ALTERNATIVE)

The Applicant proposes to allow the existing seawall and stair structure, sited *makai* of the shoreline certified by the State on February 4, 1980, to remain. The seawall and stairs were structurally engineered as a shoreline armoring system in order to stabilize the shoreline. A detailed description of the seawall and stairs are contained in the Sea Engineering Memorandum (J. Barry, December 2012, pp. 5-8) in Appendix "D". At the same time, other properties along Keonenui Bay were beginning to also armor their properties against erosion. The Sea Engineering Memorandum (J. Barry, December 2012, p. 6) states that "[the seawall] is in generally good condition, with most of the rock facing intact." The memorandum goes on to say "Some remedial action will likely need to be taken to maintain the integrity of the seawall and stairs. The critical need for this repair is some years away, and it would likely take the form of replacing the existing footing protection with a deeper excavation and cut-off wall." (p. 11) The memorandum summarizes the "No Action" analysis as follows (pp. 12-13):

No Action would result in:

- *No change in existing morphology, except for slow erosion of the mudstone substrate similar to that occurring at present and along the remainder of the beach;*
- *Continuity and mutual protection of the Kahana Sunset/Schweitzer/Lusardi seawalls;*
- *Hardened floodway during extreme flood conditions;*
- *No change in shoreline position.*

In its analysis of the effect of the seawall, the report states:

> *During high wave events, the seawall and stairs present a reflecting surface to incoming waves that is likely detrimental to beach sand deposition. However, this is a temporary effect that is relieved during milder conditions, and it is not clear that the native shoreline would be a substantial improvement due to its high relief and propensity to form steep escarpments. The Kahana Sunset/Schweitzer/Lusardi sequence of seawalls*

presents an integrated shoreline defense against coastal erosion, and is helpful in the prevention of turbidity caused by erosion of the mudstone substrate.

Keonenui Bay is also a pathway for upland drainage areas. There are retainage and settling basins associate with the drainage, but apparently the design conditions are sometimes exceeded. Photographs held by the property owners and taken during flood events show that a floodway exists along the northeast property line, with egress onto the beach via the stairs. The concrete pathways and stairs serve to protect this area from erosion and entrenchment during these events.

III. DESCRIPTION OF THE EXISTING ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES

A. PHYSICAL ENVIRONMENT

1. Land Use

Existing Conditions. The subject property is located in an area known as Alaeloa, at TMK: (2) 4-3-015:001 (**See**: Figures No. 1 "Regional Location Map", No. 2 "Aerial Map", and No. 3 "Tax Map"). The parcel is located along Keonenui Bay, situated on the northwest coast of West Maui, seven miles north of Lahaina Town and 1.5 miles south of Kapalua. The parcel and surrounding parcels are zoned for residential use.

The following is a description of zoning, community plan designations, and existing land uses adjacent and in close proximity to the subject property:

North:	Zoning: R-3 Residential Community Plan: Single Family State Land Use: Urban **Existing uses**: Apartment-Condominium.
South:	Zoning: R-3 Residential Community Plan: Single Family State Land Use: Urban **Existing uses**: Single-Family Residence.
East:	Zoning: R-3 Residential Community Plan: Single Family State Land Use: Urban **Existing uses**: Lower Honoapiilani Rd.; Single-Family.
West:	Zoning: N/A Community Plan: N/A State Land Use: Conservation **Existing uses**: Intermittent beach, Pacific Ocean.

Potential Impacts and Mitigation Measures. The site of the existing seawall and stair structure is located within an area that is designated conservation and adjacent to lands zoned for residential use and community planned for single family residential uses.

2. Shoreline Conditions and Processes

Existing Conditions. The subject property is located along Keonenui Bay, between Alaeloa Point and Haukoe Point, approximately 3500 feet south of Napili Bay. The beach in the project vicinity is a pocket beach typical of this stretch of coastline, about 500 - 600 feet long and nestled between the two headlands, which protrude 400 to 500 feet seaward. The property north the subject property is a condominium hotel complex and to the south are single family residences. Vertical rock and concrete walls protect the properties along the entire bay. A reef system, approximately 400 meters (1,300 feet) offshore, has a significant influence on wave energy as it approaches the shoreline.

A University of Hawaii Coastal Geology Group study showed an approximately one (1) foot average yearly erosion rate between 1912 and 1997 and an average decrease in beach width of 42% between 1949 and 1997 (**See**: Figure No. 9, "Annual Erosion Hazard Rate Map"). The Sea Engineering Memorandum (J. Barry, 2012, p. 3) references a 2000 analysis that "indicated that the beach is dynamic, with large seasonal shifts in the beach toe position."

Along the bay, the sandy beach has its greatest width fronting the Kahana Sunset to the north, along approximately 180 feet of its *makai* boundary. Farther north, the substrate at the base of the cliff is a volcanic conglomerate of variable hardness, with remnants of CRM facing in some areas.To the south, the beach narrows dramatically, transitioning to an irregular, rough, rocky shore.

Potential Impacts and Mitigation Measures. The approximately 59-foot long seawall and stairs tie into adjoining shoreline hardening structures to the north and south. As noted, the rest of the shoreline fronting Keonenui Bay is already armored with vertical walls. Therefore, the existing seawall and stair structure is not anticipated to significantly impact existing coastal processes, and should not aggravate or contribute to further erosion.

3. Marine Resources

Existing Conditions. The nearshore seafloor in Keonenui Bay consists primarily of sand in the central part of the bay, and coral, limestone and rock along the perimeter

and beyond about 400 feet offshore. There is a reef system, approximately 400 meters (1,300 feet) offshore.

Potential Impacts and Mitigation Measures. The existing seawall and stairs on the subject property has an elevation of approximately 15 feet AMSL at its highest point, and as such is expected to have no direct impact on marine resources or the nearshore environment. In the long term, the structure may serve to improve turbidity conditions in the bay, given that it will mitigate further erosion of the silty clay substrate.

4. Topography and Soils

Existing Conditions. The elevation on the project site ranges from approximately 45 feet above mean sea level (AMSL) along Lower Honoapiilani Road to approximately 6 feet AMSL at the base of the existing seawall along the intermittent sandy beach. The ground is generally sloping approximately 14% downward in a westerly direction toward the ocean.

According to the "Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii (August 1972)," prepared by the United States Department of Agriculture Soil Conservation Service, the soils within the project site are classified as Kahana Silty Clay, 7 to 15 percent slopes, and (KbC) and Rough Broken and Stony Land (rRS). KbC is characterized by slow runoff, slight to moderate erosion hazard, and moderately rapid permeability. The rRS series consists of very steep, stony areas where runoff is rapid.

Potential Impacts and Mitigation Measures. The existing seawall prevents erosion and loss of property. There are no impacts to the existing topography and soil conditions.

5. Flood and Tsunami Zone

According to the United States Federal Emergency Management Agency (FEMA) FIRM Panel No. 1500030264E, dated September 25, 2009, the project site is situated in flood zones AE and X. Description as follows:

Zone	Definition
AE	1% annual chance flood (100-year flood). Base Flood Elevation (BFE) determined.
X	Areas determined to be outside the 0.2% annual chance floodplain.

The BFE for the AE zone is 17 feet (**See**: Figure No. 7, "Flood Insurance Rate Map").

The Coastal Engineering Memorandum, prepared by Mr. Jim Barry of Sea Engineering, Inc. (**See**: Appendix "D"), states the following:

> *Keonenui Bay is also a pathway for upland drainage areas. There are retainage and settling basins associate with the drainage, but apparently the design conditions are sometimes exceeded. Photographs held by the property owners and taken during flood events show that a floodway exists along the northeast property line, with egress onto the beach via the stairs.* (p. 11)

Potential Impacts and Mitigation Measures. The site of the existing seawall and stairs appears to be located in Flood AE, with a BFE of 17 feet. The proposed actions are not anticipated to have any adverse effects with respect to flooding since the structure is not habitable. The structure should not be affected by or have adverse impacts upon its neighbors with regards to flood hazard potential since drainage patterns are not expected to change. The Coastal Engineering Memorandum (J. Barry, December 2012) concludes its assessment of drainage conditions with:

> *The concrete pathways and stairs serve to protect this area from erosion and entrenchment during these* [flood] *events.* (p. 11)

6. Terrestrial Biota (Flora and Fauna)

Existing Conditions. No wetlands are present on or around the subject property. Existing vegetation on the property is primarily grasses and native and non-native trees and shrubs, largely consisting of landscape planting typical of residential properties in the area. Avifauna typically found in the area includes the common mynah, several species of dove, cardinal, house finch, and house sparrow. Mammals common to this area include cats, dogs, rats, mice, and mongoose. No known rare, endangered, or threatened species of flora or fauna were observed on the subject property. The waters around all of the Hawaiian islands are known habitats for the Hawaiian monk seal and the green and hawksbill turtles (endangered species); however, there are no officially designated "critical habitats" for these species in the waters surrounding Maui at this time.

Potential Impacts and Mitigation Measures. There are no known significant habitats of rare, endangered or threatened species of flora and fauna located on the subject property. Since this action does not involve any construction activities, no procedures are necessary for the protection of endangered species. Thus, rare, endangered, or threatened species of flora and fauna will not be impacted by the proposed project.

7. Air Quality

Existing Conditions. Air quality refers to the presence or absence of pollutants in the atmosphere. It is the combined result of the natural background and emissions from many pollution sources. The impact of land development activities on air quality in a proposed development's locale differs by project phase (site preparation, construction, occupancy) and project type. In general, air quality in West Maui is considered relatively good. Non-point source emissions (automobile) are not significant to generate a high concentration of pollutants. The relatively high quality of air can also be attributed to the region's exposure to wind, which quickly disperses concentrations of emissions. West Maui is currently in attainment of all pollutant criteria established by the Clean Air Act, as well as the State of Hawaii Air Quality Standards.

Potential Impacts and Mitigation Measures. No construction is proposed; therefore, no impacts to air quality are anticipated. In the long term, the proposed project is not expected to significantly increase the volume of traffic in the region, which would increase vehicular emissions such as carbon monoxide. Thus, the proposed project is not expected to be detrimental to local air quality.

8. Noise Characteristics

Existing Conditions. The noise level is an important indicator of environmental quality. In an urban environment, noise is due primarily to vehicular traffic, air traffic, heavy machinery, and heating, ventilation, and air-conditioning equipment. Ramifications of various sound levels and types may impact health conditions and an area's aesthetic appeal. Noise levels in the vicinity of the project area are generally low. Traffic noise from Lower Honoapiilani Road and noise associated with the residential uses nearby are the predominant sources of background noise in the vicinity of the subject property.

Potential Impacts and Mitigation Measures. The proposed project is not expected to impact existing noise conditions in the area.

9. Archaeological/Historical Resources

Existing Conditions. This parcel has been in residential use for the past 47 years. Historical evidence indicates that the area was sparsely populated.

Potential Impacts and Mitigation Measures. There are no ground disturbing activities associated with this action; therefore, there are no impacts to significant cultural and historic properties.

10. Visual Resources

Existing Conditions. The subject property is situated along the *makai* side of Lower Honoapiilani Road within a residential area of Napili. The parcel maintains a total of approximately 92 feet of frontage along Lower Honoapiilani Road and has an average lot depth of approximately 214 feet. The approximately 59 foot *makai* boundary of the property abuts the shoreline certified on February 4, 1980.

Napili offers sweeping views of the Pacific Ocean, Lanai, and Molokai. Public views of these resources exist in various locations from Lower Honoapiilani Road and Honoapiilani Highway. The ocean is not visible from Lower Honoapiilani Road fronting the subject property.

Potential Impacts and Mitigation Measures. Since the existing seawall stairs are at about 15 feet AMSL and there is no new construction associated with this action, the view through the subject property remains unchanged. As such, the proposed project is not anticipated to significantly impact public view corridors, or the visual character of the site and its immediate environs.

B. SOCIO-ECONOMIC ENVIRONMENT

Potential Impacts and Mitigation Measures. Due to its location within an existing developed area, and limited scope, the existing seawall and stair structure will not have any effect on the socio-economic environment (population, housing, economy, and cultural resources).

C. PUBLIC SERVICES

Potential Impacts and Mitigation Measures. Due to its location within an existing developed area, and limited scope, the existing seawall and stair structure will not extend the limits of existing public services (recreational facilities, police and fire protection, schools, medical facilities and solid waste); therefore, the impact on public services will be minimal.

D. INFRASTRUCTURE

Potential Impacts and Mitigation Measures. The existing seawall and stair structure does not use any energy or water, nor does it directly generate wastewater, storm water runoff, or traffic. Therefore, there are no impacts on infrastructure.

IV. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS

A. STATE LAND USE LAW

Chapter 205, Hawaii Revised Statutes, relating to the Land Use Commission, establishes four major land use districts into which all lands in the State are placed. These districts are designated Urban, Rural, Agricultural, and Conservation. The existing seawall and stair structure is located within the Conservation District. The purpose of this Environmental Assessment is to address any impacts of the existing seawall and stair structure on the Resource Subzone and support the after-the-fact Conservation District Use Application (CDUA).

B. COUNTYWIDE POLICY PLAN

The Countywide Policy Plan was adopted by the Maui County Council on March 19, 2010 and provides a long-term vision, principles, goals, policies, and objectives directed toward improving living conditions in the County. The following Themes, Objectives and Policies are applicable to the proposed project:

A. Protect the Natural Environment

Goal:	***Maui County's natural environment and distinctive open spaces will be preserved, managed, and cared for in perpetuity.***
Objective:	
3.	***Improve the stewardship of the natural environment.***
Policies:	
c.	*Evaluate development to assess potential short-term and long-term impacts on land, air, aquatic, and marine environments.*

Analysis. This environmental assessment analyzes the proposed actions in the context of the natural environment. Since the existing structure was constructed in the early 1980s, there has not been any notable negative short-term or long-term impacts on land, air, aquatic, or marine environments attributable to the structure.

J. Promote Sustainable Land Use and Growth Management

Goal:	***Community character, lifestyles, economies, and natural assets will be preserved by managing growth and using land in a sustainable manner.***
Objective:	
1.	***Improve land use management and implement a directed-growth strategy.***
Policies:	
b.	*Direct urban and rural growth to designated areas.*
Objective:	
4.	***Improve and increase efficiency in land use planning and management.***
Policies:	
b.	*Ensure that new development projects requiring discretionary permits demonstrate a community need, show consistency with the General Plan, and provide an analysis of impacts.*

Analysis: This parcel has been in residential use since at least 1966. The area is within the Urban Growth Boundary of the *Maui Island Plan* (December 2012) of the County's *2030 General Plan Update* (May 2010). This report provides an analysis of the potential impacts of the subject project.

C. MAUI ISLAND PLAN

The 2030 update to the General Plan of the County of Maui was approved by the Maui County Council and signed into law by the Mayor on December 28, 2012. The Maui Island Plan determines the appropriateness of discretionary development proposals. The following Goals, Objectives and Policies of the Maui Island Plan are applicable to the proposed project:

HERITAGE RESOURCES

Shoreline, Reefs, and Nearshore Waters Issues

Goal:	
2.2	***An intact, ecologically functional system of reef, shoreline, and nearshore waters that are protected in perpetuity.***
Objective:	
2.2.2	***Improved reef health, coastal water quality, and marine life.***
Policies:	
2.2.2.e	***Strictly regulate shoreline armoring in accordance with adopted Shoreline Rules, with an intent to protect the coastal and marine ecosystem.***

Analysis. The existing seawall and stair structure helps protect the quality of nearshore waters and reef health by aiding in the prevention of earthen soils from being eroded and transported to the coastal waters via wave action and runoff from *mauka* portions of the site. Since all of the properties along Keonenui Bar are armored, the existing structure does not uniquely impact the coastal and marine ecosystem.

D. WEST MAUI COMMUNITY PLAN

Nine community plan regions have been established in Maui County. Each region's growth and development is guided by a community plan, which contains objectives and policies in accordance with the Maui County General Plan. The purpose of the community plan is to outline a relatively detailed agenda for carrying out these objectives.

The subject property is located within the West Maui Community Plan area and has a SF Single Family designation (**See**: No. 5, "West Maui Community Plan"). The West Maui Community Plan was adopted by ordinance No. 2476 on February 27, 1996.

The following West Maui Community Plan goals, objectives, and policies are applicable to the proposed action:

Goal: ***Land Use.*** *An attractive, well-planned community with a mixture of compatible land uses in appropriate areas to accommodate the future needs of residents and visitors in a manner that provides for the stable social and economic well-being of residents and the preservation and enhancement of the region's open space.*

Analysis. The project site is community planned for single family residential use. The Applicant does not intend to introduce new uses on the property. Infrastructure in the area is adequate and the existing use is consistent with land use objectives.

Goal: ***Environment.*** *A clean and attractive physical, natural and marine environment in which man-made developments on or alterations to the natural and marine environment are based on sound environmental and ecological practices, and important scenic and open space resources are preserved and protected for public use and enjoyment.*

Objectives and Policies:

1. *Protect the quality of nearshore and offshore waters. Monitor outfall systems, streams and drainage ways and maintain water quality standards. Continue to investigate, and implement appropriate measures to mitigate, excessive growth and proliferation of algae in nearshore and offshore waters.*

11. *Prohibit the construction of vertical seawalls and revetments except as may be permitted by rules adopted by the Maui Planning Commission governing the issuance of Shoreline Area Management (SMA) emergency permits, and encourage beach nourishment by building dunes and adding sand as a sustainable alternative.*

Planning Standards:

6. Environmental Aspects

c. Prohibit the construction of vertical seawalls, except as approved by the Planning Commission of the County of Maui

Analysis: In consideration of the alternatives, the proposed action (allowing the seawall and stairs to remain) was judged to be the most practical alternative. As described in Sections II and III of this report, the seawall and stair structure is a long-term solution to address a potential public safety hazard as well as a physical hazard to adjacent properties. The existing structure also helps protect the quality of nearshore waters as recommended by the West Maui Community Plan by aiding in the prevention of earthen soils from being eroded and transported to the coastal waters via wave action and runoff from *mauka* portions of the site.

E. MAUI COUNTY ZONING

The subject property is situated within the County of Maui's R-3 Residential District (**See**: Figure No. 6, "County Zoning Map"). The existing seawall and stairs lie within the State Conservation District, which is the jurisdiction of the State of Hawaii.

F. MAUI COUNTY SHORELINE RULES

Chapter 205A, Hawaii Revised Statutes (HRS), and Title MC-12, Subtitle 02, Chapter 203, *Shoreline Rules for the Maui Planning Commission*, sets forth the requirements for

structures and activities taking place within the Shoreline Setback Area (SSA). the Shoreline Setback Area is defined in Subchapter 1, §12-203-4, thusly:

> *… means "shoreline area" as defined in HRS chapter 205A, as amended, which includes all of the land area between the shoreline and the shoreline setback line, …*

Since the existing seawall and stairs are *makai* of the "shoreline", it is not within the "shoreline area" and, therefore, not within the jurisdiction of Maui County.

V. SPECIAL MANAGEMENT AREA OBJECTIVES AND POLICIES

The Special Management Area (SMA) is defined in Section 22 of Chapter 205A, HRS as:

> *… the land extending inland from the shoreline as delineated on the maps filed with the authority as of June 8, 1977, or as amended pursuant to section 205A-23.*

The existing seawall and stair structure is located *makai* of the shoreline as certified on February 4, 1980; therefore, it lies outside of SMA. However, in compliance with the Conservation District Permit Application (CDUA) criteria requirements, the existing structure is evaluated with respect to SMA objectives, policies, and guidelines. This section addresses the project's relationship to applicable coastal zone management considerations, as set forth in Chapter 205A and the Rules and Regulations of the Planning Commission.

A. RECREATIONAL RESOURCES

Objective: Provide coastal recreational resources accessible to the public.

Policies:

(A) Improve coordination and funding of coastal recreation planning and management; and

(B) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:

- *(i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;*
- *(ii) Requiring placement of coastal resources having significant recreational value, including but not limited to surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or require reasonable monetary compensation to the state for recreation when replacement is not feasible or desirable;*
- *(iii) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;*

(iv) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;

(v) Ensuring public recreational use of county, state, and federally owned or controlled shoreline lands and waters having standards and conservation of natural resources;

(vi) Adopting water quality standards and regulating point and non-point sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;

(vii) Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing;

(viii) Encourage reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, county planning commissions; and crediting such dedication against the requirements of Section 46-6, HRS.

Analysis. The project site abuts the shoreline; however, the existing seawall and stair structure will not have a direct impact on the public's use or access to the shoreline area. Public beach access exists at Hui Road E, approximately 500 feet to the south of the project site.

The subject parcel abuts Keonenui Bay, a small bay located between two rocky headlands. The entire length of the shoreline along the bay is armored with vertical seawalls or similar protection. The structure enhances safety in the shoreline area immediately beneath the subject property and aids in protection of nearshore waters from erosion-borne sediment. Therefore, the structure does not narrow the usable section of the beach nor does it inhibit lateral access along the shoreline.

B. HISTORICAL/CULTURAL RESOURCES

Objective: Protect, preserve and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Policies:

(a) Identify and analyze significant archeological resources;

(b) Maximize information retention through preservation of remains and artifacts or salvage operations; and

(c) Support state goals for protection, restoration, interpretation, and display of historic structures.

Analysis. As discussed in Section III.A.9 above, there are no construction activities proposed; therefore, there are no impacts on historical or cultural resources.

C. SCENIC AND OPEN SPACE RESOURCES

Objective: Protect, preserve and, where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:

(a) Identify valued scenic resources in the coastal zone management area;

(b) Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;

(c) Preserve, maintain, and where desirable, improve and restore shoreline open space and scenic resources; and

(c) *Encourage those developments that are not coastal dependent to locate in inland areas.*

Analysis. As discussed in Section III.A.10 of this report, there are no public views through the subject property. Since the existing seawall and stair structure will not be altered, no public views toward the ocean are impacted.

D. COASTAL ECOSYSTEMS

Objective: Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

Policies:

(a) Improve the technical basis for natural resource management;

(b) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;

(c) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and

(d) Promote water quantity and quality planning and management practices which reflect the tolerance of fresh water and marine ecosystems and prohibit land and water uses which violate state water quality standards.

Analysis. The existing seawall and stair structure protects the quality of the nearshore marine environment by preventing siltation from erosion of earthen soils.

Based upon existing development within the project area, the existing seawall and stair structure does not uniquely impact coastal ecosystems.

E. ECONOMIC USES

Objective: Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

(a) Concentrate coastal dependent development in appropriate areas;

(b) Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area;

(c) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such development and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:

- *(i) Use of presently designated locations is not feasible;*
- *(ii) Adverse environmental impacts are minimized; and*
- *(iii) The development is important to the State's economy.*

Analysis. The existing seawall and stair structure stabilizes the erosion prone shoreline at the subject property, leading to both public benefits and private benefits to the applicant and neighboring landowners. Public benefits will include the removal of a safety hazard, and prevention of soils entering coastal waters. Private benefits include greater site safety and the prevention of loss of property and structures.

F. COASTAL HAZARDS

Objective: Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence and pollution.

Policies:

(a) Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and non-point source pollution hazards;

(b) Control development in areas subject to storm wave, tsunami, flood, erosion, subsidence, and point and non-point pollution hazards;

(c) Ensure that developments comply with requirements of the Federal Flood Insurance Program;
(d) Prevent coastal flooding from inland projects; and
(e) Develop a coastal point and nonpoint source pollution control program.

Analysis. The proposed action will protect the landward portion of the property and associated structures from erosion due to storm waves. Stabilization of the shoreline will provide greater site safety to other residents living along the shoreline and will also protect the beach and nearshore waters from impacts related to eroded soils transported by wave action or inland runoff.

G. MANAGING DEVELOPMENT

Objective: Improve the development review process, communication, and public participation in the management of coastal resources hazards.

Policies:
(a) Use, implement, and enforce existing laws effectively to the maximum extent possible in managing present and future coastal zone development;
(b) Facilitate timely processing of applications for development permits and resolve overlapping of conflicting permit requirements; and
(c) Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life-cycle and in terms understandable to the public to facilitate public participation in the planning process and review process.

Analysis. Acquiring an after-the-fact permit is being conducted in accordance with applicable State and County requirements. Opportunity for review of the proposed action is provided through the State's Environmental Assessment (EA) review process.

H. PUBLIC PARTICIPATION

Objective: Stimulate public awareness, education, and participation in coastal management.

Policies:
(a) Maintain a public advisory body to identify coastal management problems and to provide policy advise and assistance to the coastal zone management program.
(b) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and

organizations concerned with coastal-related issues, developments, and government activities; and

(c) Organize workshops, policy dialogues, and site-specific medications to respond to coastal issues and conflicts.

Analysis. Early Consultation was conducted with applicable government agencies, as part of the preparation of this Draft EA. Copies of this Draft EA will be circulated to various agencies and the HRS Chapter 343 Environmental Review process also provides an opportunity for public comment.

I. BEACH PROTECTION

Objective: Protect beaches for public use and recreation.

Policies:

(a) Locate new structures inland from the shoreline setback to conserve open space and to minimize loss of improvements due to erosion;

(b) Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and

(c) Minimize the construction of public erosion-protection structures seaward of the shoreline.

Analysis. The existing seawall and stair structure is an aesthetic and engineered solution which improves public safety and does not interfere with the public's use of the beach.

J. MARINE RESOURCES

Objective: Implement the State's ocean resources management plan.

Policies:

(a) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;

(b) Assure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;

(c) Coordinate the management of marine and coastal resources and activities management to improve effectiveness and efficiency;

(d) Assert and articulate the interest of the state as a partner with federal agencies in the sound management of the ocean resources within the United States exclusive economic zone;

(e) Promote research, study, and understanding of ocean processes, marine life, and other ocean development activities relate to and impact upon the ocean and coastal resources; and

(f) Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.

Analysis. The proposed action does not involve the direct use or development of marine resources. In addition, since no construction activities are involved, there will be no significant adverse impacts to coastal or marine resources.

VI. ENVIRONMENTAL ASSESSMENT SIGNIFICANCE CRITERIA

Since the proposed project involves an action within the State Conservation District, an Environmental Assessment is required by Chapter 343, Hawaii Revised Statutes (HRS). A finding of no significant impact (FONSI) is anticipated and therefore an Environmental Impact Statement (EIS) will not be required for the proposed action. In accordance with Title 11, Department of Health, Chapter 200 and Subchapter 6, §11-200-12, Environmental Impact Statement Rules, and based on the detailed analysis contained within this document, the following conclusions are supported:

1. **The proposed action will *not* result in an irrevocable commitment to loss or destruction of natural or cultural resources.**

   Analysis. As documented in this report, the existing seawall and stair structure does not contribute to the loss or destruction of any natural or cultural resource (**See**: Section III).

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

   Analysis. The existing seawall and stair structure lies within the State Conservation District where the beneficial uses of the shoreline environment are recreational in nature. The structure does not hinder any recreational uses and there are no plans to expand the structure; therefore, there are no significant impacts to environmental or natural resources on the property.

3. **The proposed action will *not* conflict with State or County long-term environmental policies and goals as expressed in Chapter 344, HRS, and those which are more specifically outlined in the Conservation District Rules.**

   Analysis. The existing seawall and stair structure complies with the State's long-term environmental goals. As documented in this report, there are minimal chances for the potential for negative impacts to the environment, including near and off-shore coastal waters. The project will not have any impact on flora and fauna, and is not expected to have a negative impact on archaeological or cultural resources.

4. **The proposed action will *not* substantially affect the economic or social welfare and activities of the community, county or state.**

   Analysis. Because of the limited scope of this action and that it is an existing seawall and stair structure, there are no impacts on the socio-economic environment.

5. **The proposed action will *not* substantially affect public health.**

   Analysis. There are no special or unique aspects of the project that will have a direct impact on public health.

6. **The proposed action will *not* result in substantial secondary impacts.**

   Analysis. The action is not a population generator, it does not trigger any housing requirements, it does not cause an increase in traffic, it does not increase energy or water demand, nor does it generate waste water or solid waste. Based on existing development in the project vicinity, the action does not cause any secondary effects that would significantly impact the coastal area.

7. **The proposed action will *not* involve substantial degradation of environmental quality.**

   Analysis. Allowing the existing seawall and stair structure to remain does not impact nearshore water quality since no additional runoff is generated. The existing structure prevents the erosion of earthen, silty soils and associated degradation of coastal waters. Other environmental resources such as endangered species of flora and fauna, air and water quality, and archeological resources will not be impacted by the subject action.

8. **The proposed action will not produce cumulative impacts and does *not* have considerable effect upon the environment or involve a commitment for larger actions.**

   Analysis. The action does not involve a commitment for larger action on behalf of the applicant or any public agency. As described in this report, the action will not impact public infrastructure and services including roadways, drainage facilities, water systems, sewers and educational facilities. In addition, the action is not anticipated to induce an overall significant increase in population growth and will therefore not produce considerable effect on the environment nor require a commitment for larger actions by governmental agencies.

Armoring of a shoreline area is known to lead to successive armoring of adjacent shoreline areas, which creates a larger (cumulative) structure that can have greater impacts. As discussed above, all of the shoreline at Keonenui Bay is either naturally hardened or artificially armored with vertical reinforced seawalls. The natural wave action in the area is magnified, however given that total shoreline armoring exists, the existing seawall and stairs do not encourage additional development or require a commitment for larger actions.

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

   Analysis. As described in Section III.A.6 of this report, there are no rare, threatened, or endangered species of flora and fauna at the project site.

10. **The proposed action will *not* substantially or adversely affect air and water quality or ambient noise levels.**

    Analysis. As described in Section III of this report, there is no potential for negative impacts to air or water quality and ambient noise levels.

11. **The proposed action will *not* substantially affect or be subject to damage by being located in an environmentally sensitive area, such as flood plain, shoreline, tsunami zone, erosion-prone areas, estuary, fresh waters, geologically hazardous land or coastal waters.**

    Analysis. According to Panel No. 15003-0264E of the Flood Insurance Rate Map, September 25, 2009, prepared by the United States Federal Emergency Management Agency (FEMA), the project site is situated primarily in flood zone X, with portions of the subject property along the shoreline lying within Zone AE. Zone AE represents areas of 100-year flood, with base flood elevations and flood hazard factors determined. The existing seawall and stair structure is sited in Flood Zone AE and does not substantially affect an environmentally sensitive area.

12. **The proposed action will *not* substantially affect scenic vistas or view planes identified in county or state plans or studies.**

    Analysis. As described in Section III.A.10 of this report, there will be no significant change in the action's overall effect on *mauka* or *makai* views from what exists currently, therefore the existing seawall and stairs structure does not have any adverse effects on visual resources.

13. The proposed action will not require substantial energy consumption

Analysis. The existing seawall and stair structure does not require any energy consumption.

VII. FINDINGS AND CONCLUSIONS

This Draft Environmental Assessment (EA) examines the environmental and socio-economic impacts associated with the applicant's proposal to allow the existing seawall and stair structure, that spans approximately 59 feet across the subject property's shoreline frontage, to remain in order to continue to stabilize the shoreline, prevent eroded underlying earthen soils from entering the ocean, and, in the long term, protect existing habitable structures. The project site has an area of 15,756 square feet and is located in Alaeloa, Maui, Hawaii.

As analyzed in this EA and in the Coastal Engineering Memorandum (J. Barry, December 2012), allowing the existing seawall and stair structure to remain is not anticipated to result in significant environmental impacts to surrounding properties, nearshore waters, natural resources, and/or archaeological and historic resources on the site or in the immediate area. Public infrastructure and services, including roadways, sewer and water systems, medical facilities, police and fire protection, parks, and schools are not needed by the action and are therefore not impacted. Public view corridors are not impacted and no adverse impacts upon the visual character of the site and its immediate environs are produced.

The subject property is situated within the State's Urban District and is County R-3 Residential and Community planned for Single-Family Residential. The existing seawall and stair structure lies *makai* of the shoreline, within the State Conservation District, Resource Sub-Zone.

Based on the foregoing analysis and conclusion, the proposed project will not result in significant impacts to the environment, is consistent with the requirements of HRS Chapter 343, and a Finding of No Significant Impact (FONSI) is anticipated.

VIII. REFERENCES

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FIGURES

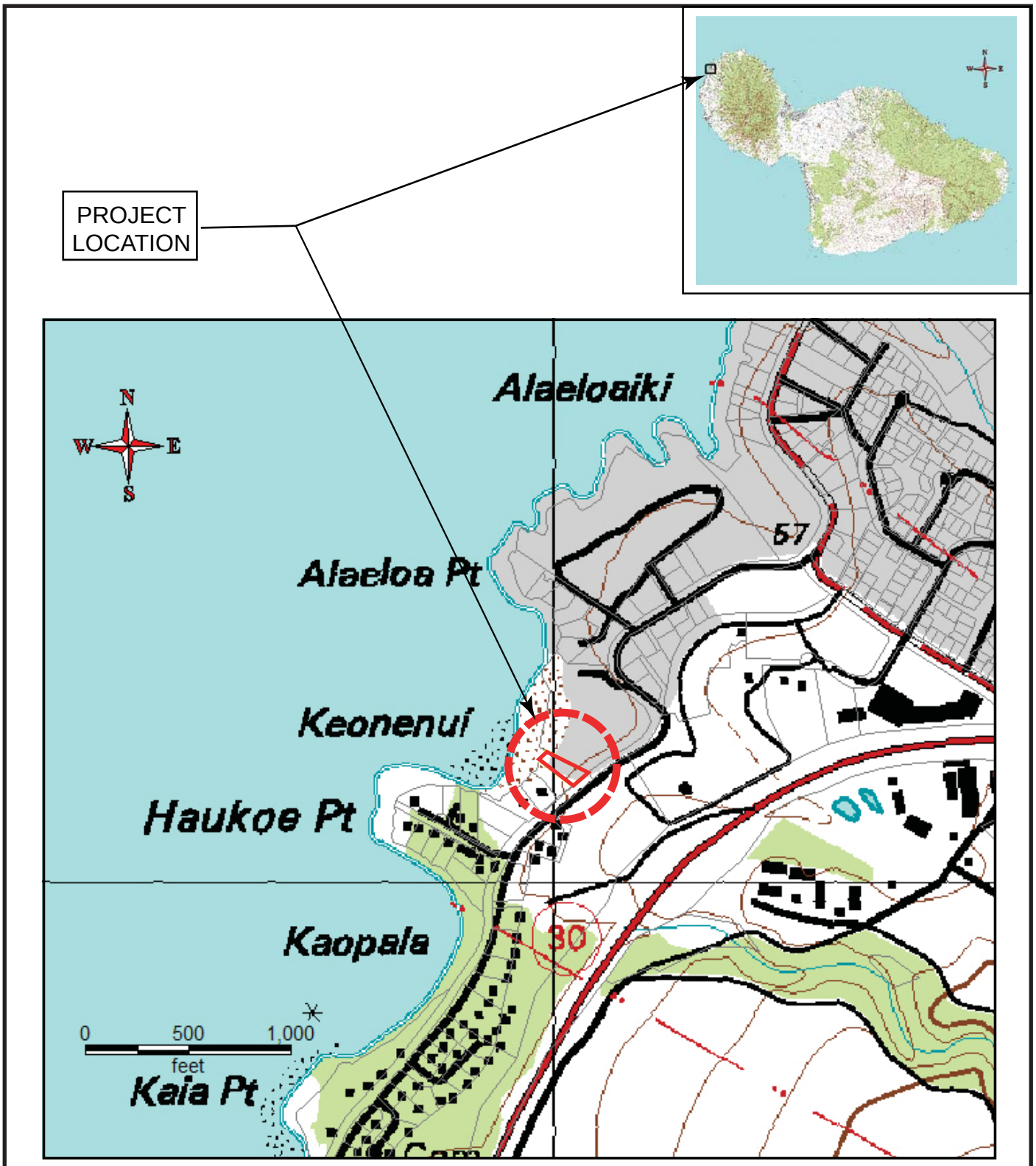


FIGURE 1

Not to Scale

JANUARY 2013

REGIONAL LOCATION

SCHWEITZER SHORELINE EROSION CONTROL

CHRIS HART & PARTNERS, INC.

FIGURE 2

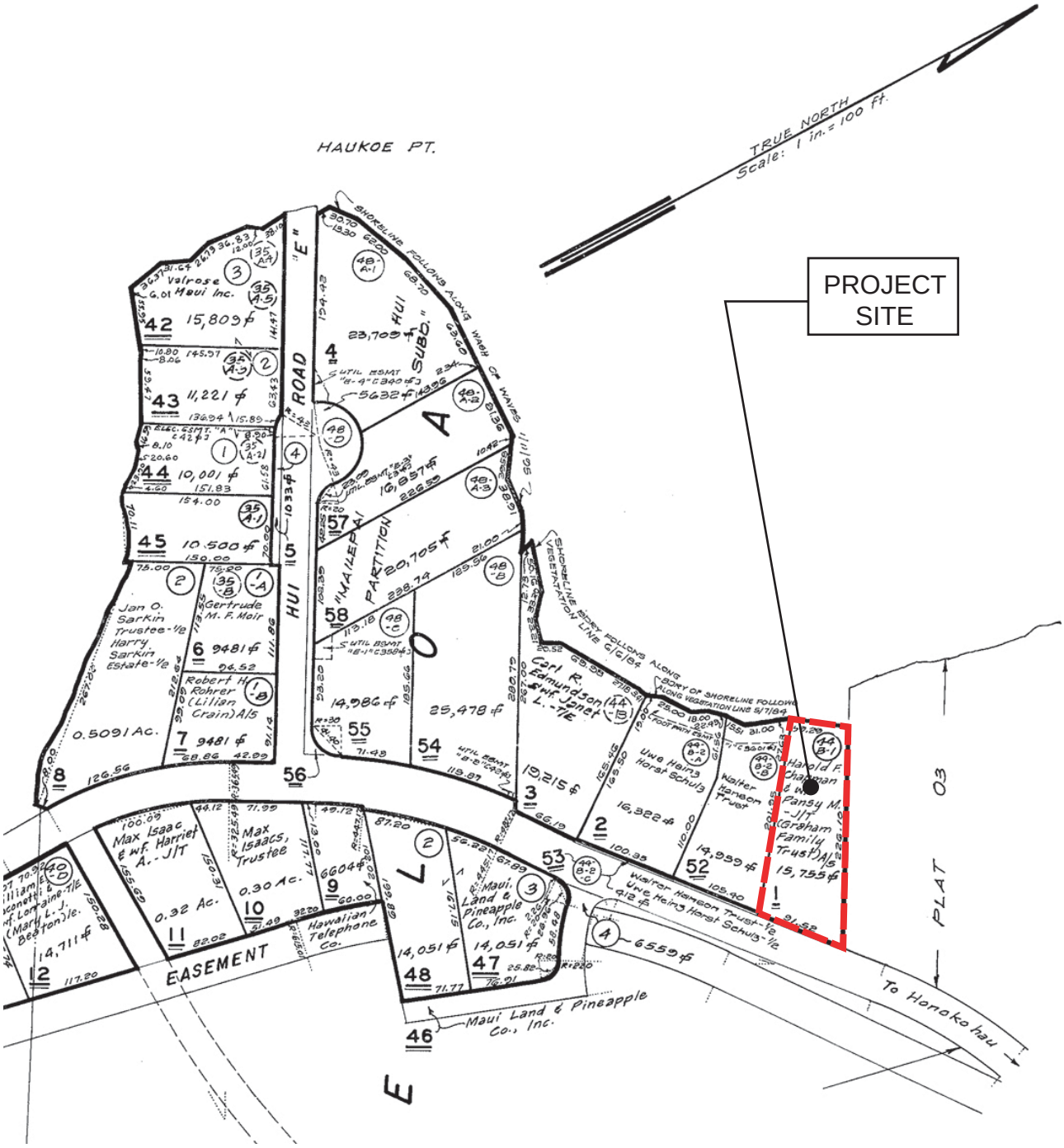
JANUARY 2013

AERIAL MAP

SCHWEITZER SHORELINE EROSION CONTROL

CHRIS HART & PARTNERS, INC.

Source: Google Earth, December 2012



DEPARTMENT OF TAXATION PROPERTY TECHNICAL OFFICE TAX MAPS BRANCH STATE OF HAWAII TAX MAP		
2ND TAXATION DISTRICT		
ZONE	SEC.	PLAT
4	3	15

FIGURE 3

Parcel 1
Not to Scale

JANUARY
2013

TAX MAP

SCHWEITZER SHORELINE EROSION CONTROL

CHRIS HART & PARTNERS, INC.

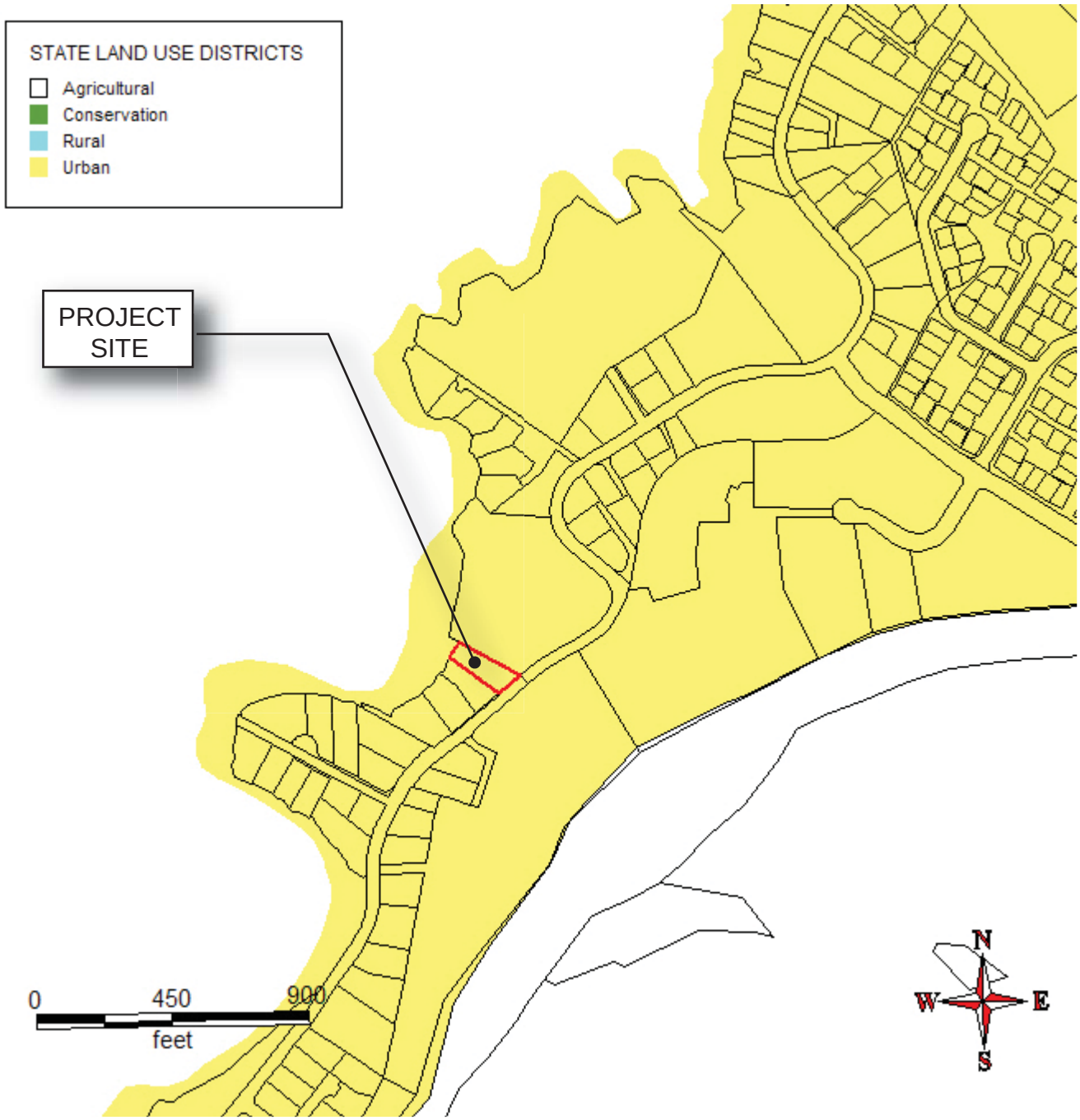


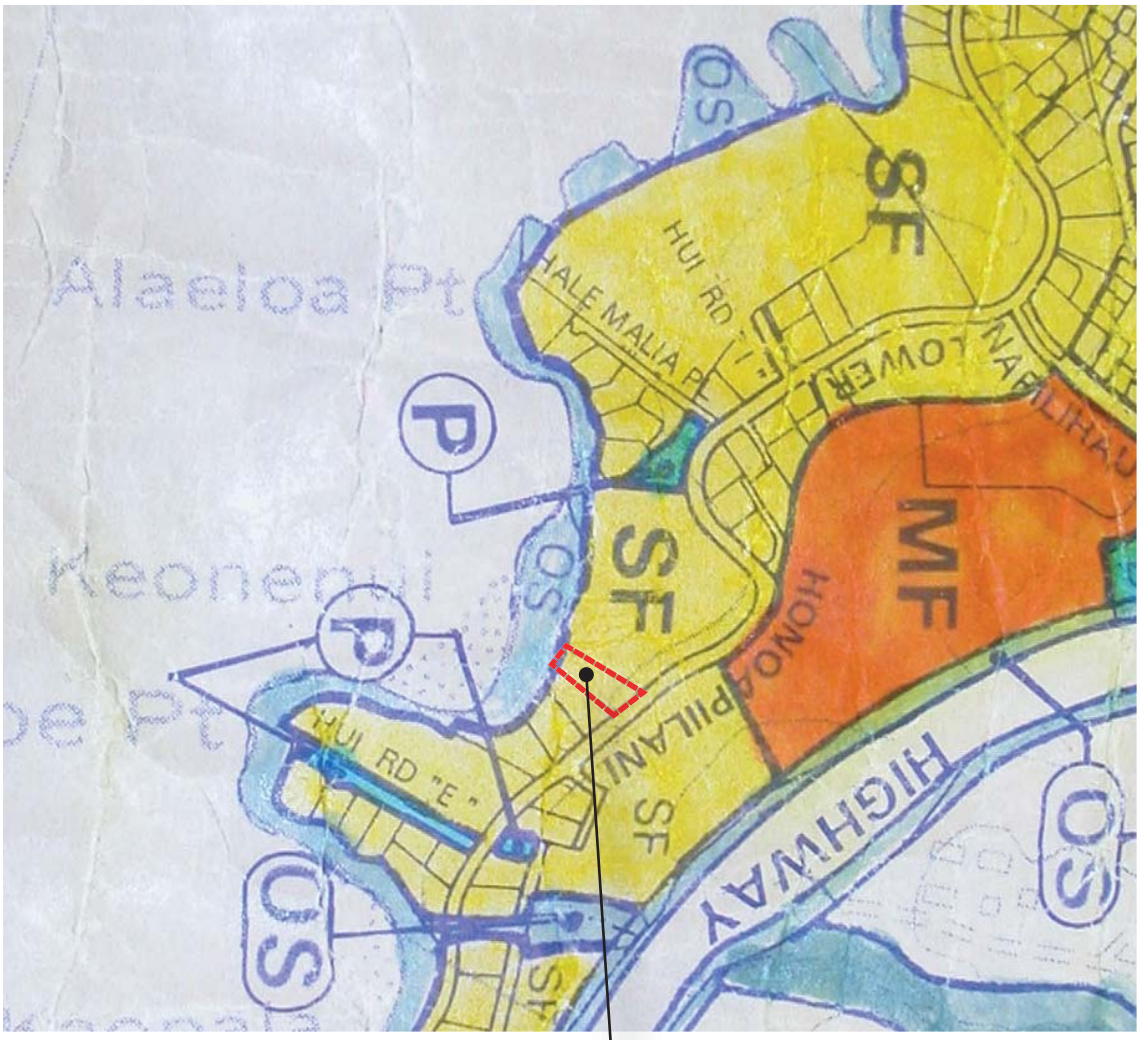
FIGURE 4

Not to Scale

JANUARY 2013

STATE LAND USE BOUNDARY MAP
SCHWEITZER SHORELINE EROSION CONTROL

CHRIS HART & PARTNERS, INC.



PROJECT SITE

NORTH

LEGEND

SF	Single Family Residential
MF	Multi-Family Residential
B	Business/Commercial
SBR	Service Business/Residential
BMF	Business/Multi-Family
HI	Heavy Industrial
LI	Light Industrial
H	Hotel
P	Public/Quasi-Public
PK	Park (GC) Golf Course
OS	Open Space
PD	Project District
AP	Airport
AG	Agricultural
R	Rural
C	Conservation
—60—	Airport Special Control District

NOTE: Rural minimum lot size one acre for parcels 4 3 4 11,17,19,20,21,27 76 per Ordinance 2476 of 2/27/96

FIGURE 5

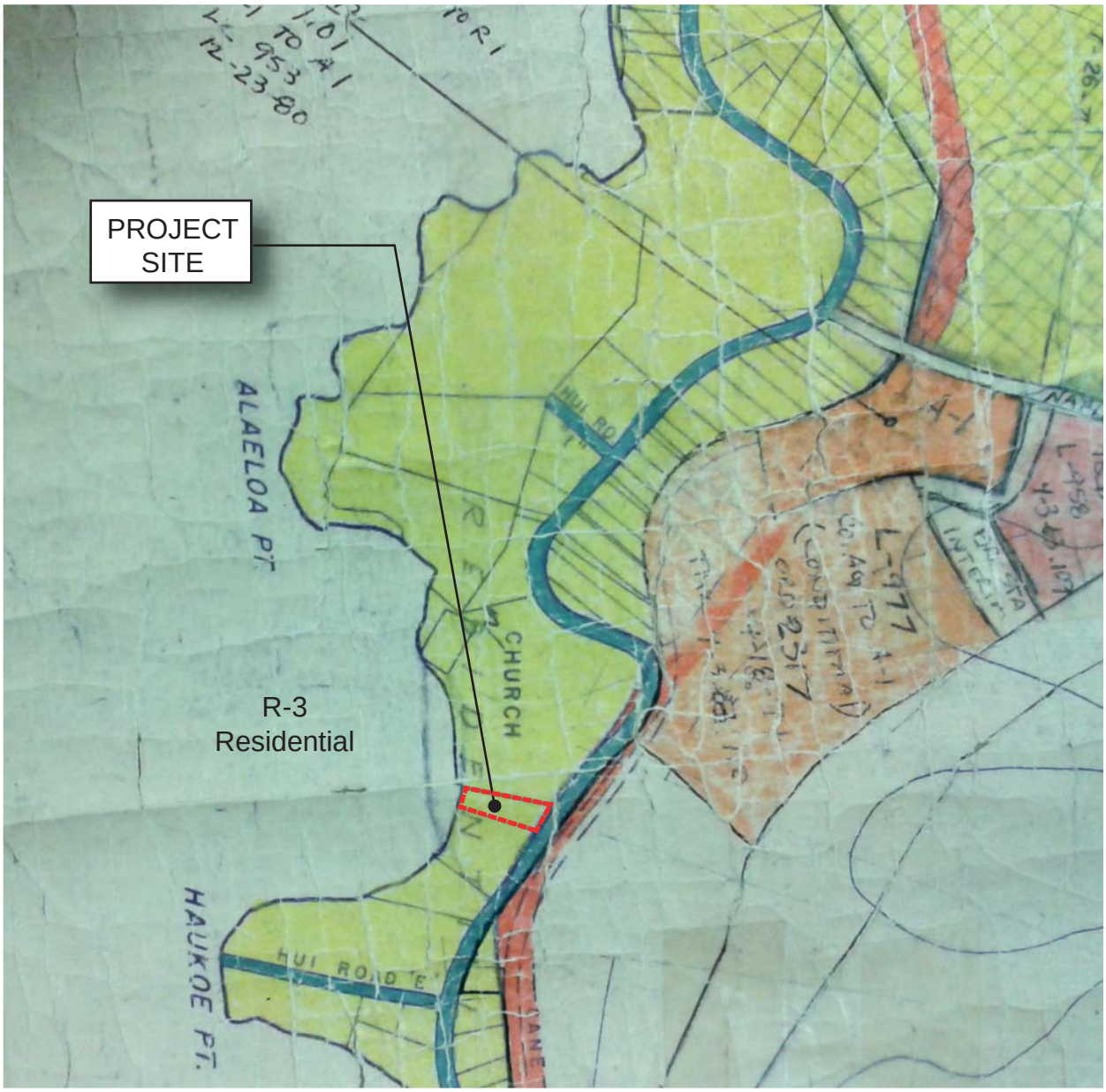
Not to Scale

JANUARY 2013

WEST MAUI COMMUNITY PLAN

SCHWEITZER SHORELINE EROSION CONTROL

CHRIS HART & PARTNERS, INC.



NORTH

FIGURE 6

Not to Scale

JANUARY 2013

COUNTY ZONING MAP

SCHWEITZER SHORELINE EROSION CONTROL

CHRIS HART & PARTNERS, INC.

State of Hawaii

FLOOD HAZARD ASSESSMENT REPORT

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD ZONE DEFINITIONS

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

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

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

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

OTHER FLOOD AREAS

- Zone D: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

PROPERTY INFORMATION

COUNTY:	MAUI
TMK NO:	(2) 4-3-015-001
PARCEL ADDRESS:	4885 LOWER HONOAPIILANI RD LAHAINA, HI 96761
FIRM INDEX DATE:	SEPTEMBER 19, 2012
LETTER OF MAP CHANGE(S):	NONE
FEMA FIRM PANEL(S):	1500030264F
PANEL EFFECTIVE DATE:	SEPTEMBER 19, 2012

PARCEL DATA FROM:	MAY 2012
IMAGERY DATA FROM:	MAY 2005

IMPORTANT PHONE NUMBERS

County NFIP Coordinator	
County of Maui	
Francis Cerizo, CFM	(808) 270-7771
State NFIP Coordinator	
Carol Tyau-Beam, P.E., CFM	(808) 587-0267

Disclaimer: The Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use of the information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the DLNR from any liability, which may arise from its use.

If this map has been identified as 'PRELIMINARY' or 'UNOFFICIAL', please note that it is being provided for informational purposes and is not to be used for official/legal decisions, regulatory compliance, or flood insurance rating. Contact your county NFIP coordinator for flood zone determinations to be used for compliance with local floodplain management regulations.

FIGURE 7

Not to Scale
FEMA Flood Insurance Map

JANUARY 2013

FLOOD INSURANCE RATE MAP
SCHWEITZER SHORELINE EROSION CONTROL

CHRIS HART & PARTNERS, INC.

Photo 1: Looking west from top of existing concrete stairs towards Haukoe Point.

Photo 2 Looking southwest along front of existing CRM seawall with cemented rock facing. South section of Keonenui Bay beyond.

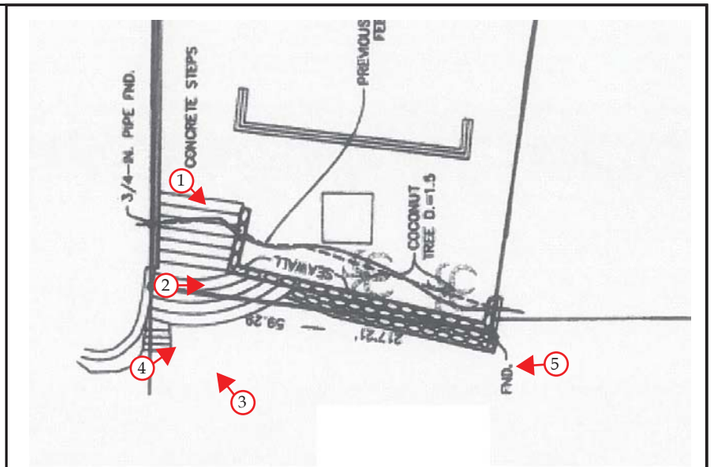


PHOTO KEY

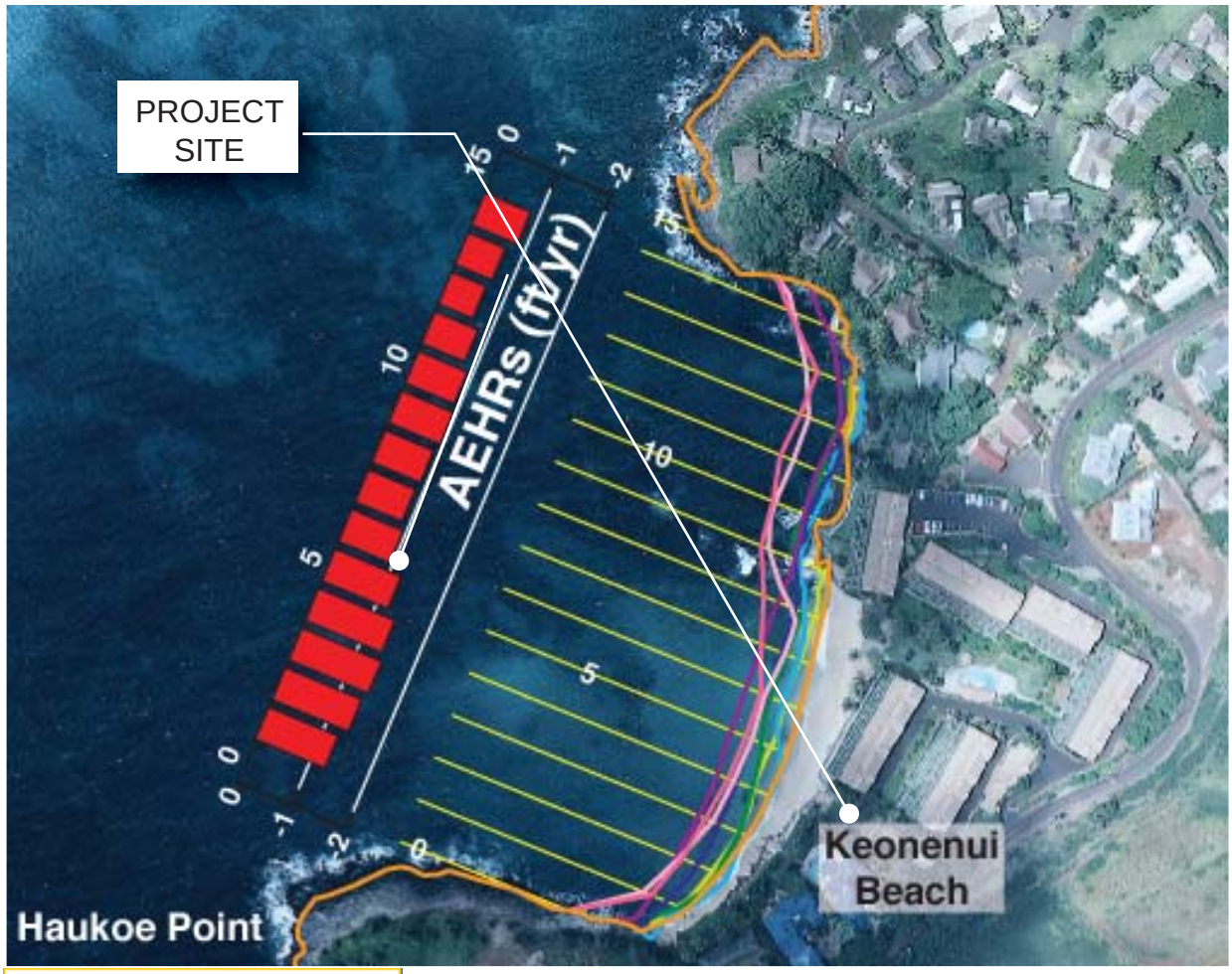
Photo 3: Looking east at stairs where it meets the Kahana Sunset seawall fronting condominium-apartment building.

Photo 4: Looking south along base of stairs and seawall.

Photo 5: Looking northeast from south end of existing seawall. Sandy beach and Kahana Sunset seawall visible in the distance.

FIGURE 8

Photos taken on December 12, 2012	JANUARY 2013
SITE PHOTOGRAPHS **SCHWEITZER SHORELINE EROSION CONTROL**	CHRIS HART & PARTNERS, INC.



HISTORICAL SHORELINES

- 1912
- Nov 1949
- 1960
- Mar 1975
- Aug 1987
- Mar 1988
- Nov 1992
- May 1997
- Erosion rate measurement locations (shore normal transects)

Historical beach positions, color coded by year, are determined using ortho-rectified and georeferenced aerial photographs and National Ocean Survey (NOS) topographic survey charts. The low water mark is used as the historical shoreline, or shoreline change reference feature (SCRF).

For situations in which there is coastal armoring or rocky shoreline seaward of any vegetation, the vegetation line is drawn along the seaward side of the rock or armoring. If there is no sandy beach in these areas, both the vegetation line and the SCRF are delineated along the mean high water line.

Movement of the SCRF is used to calculate erosion rates along shore-normal transects spaced every 20 m (66 ft) along the shoreline. The 1987 SCRF is not used in the calculation of the AEHR, however it provides a gauge of seasonal uncertainty.

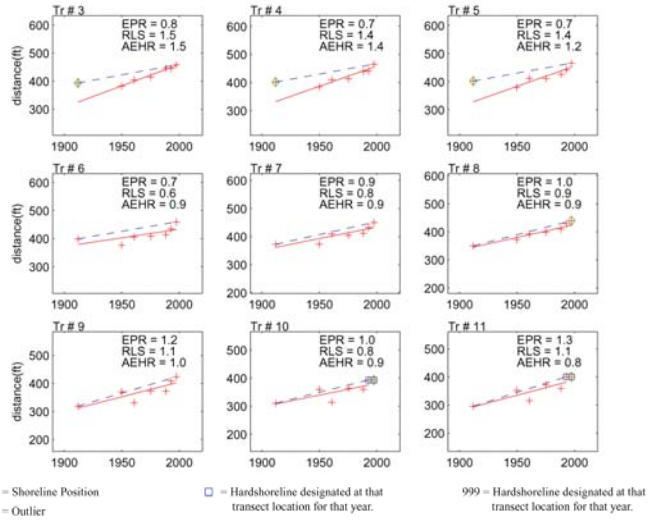


FIGURE 9

Not to Scale

JANUARY 2013

ANNUAL EROSION HAZARD RATE MAP

SCHWEITZER SHORELINE EROSION CONTROL

CHRIS HART & PARTNERS, INC.

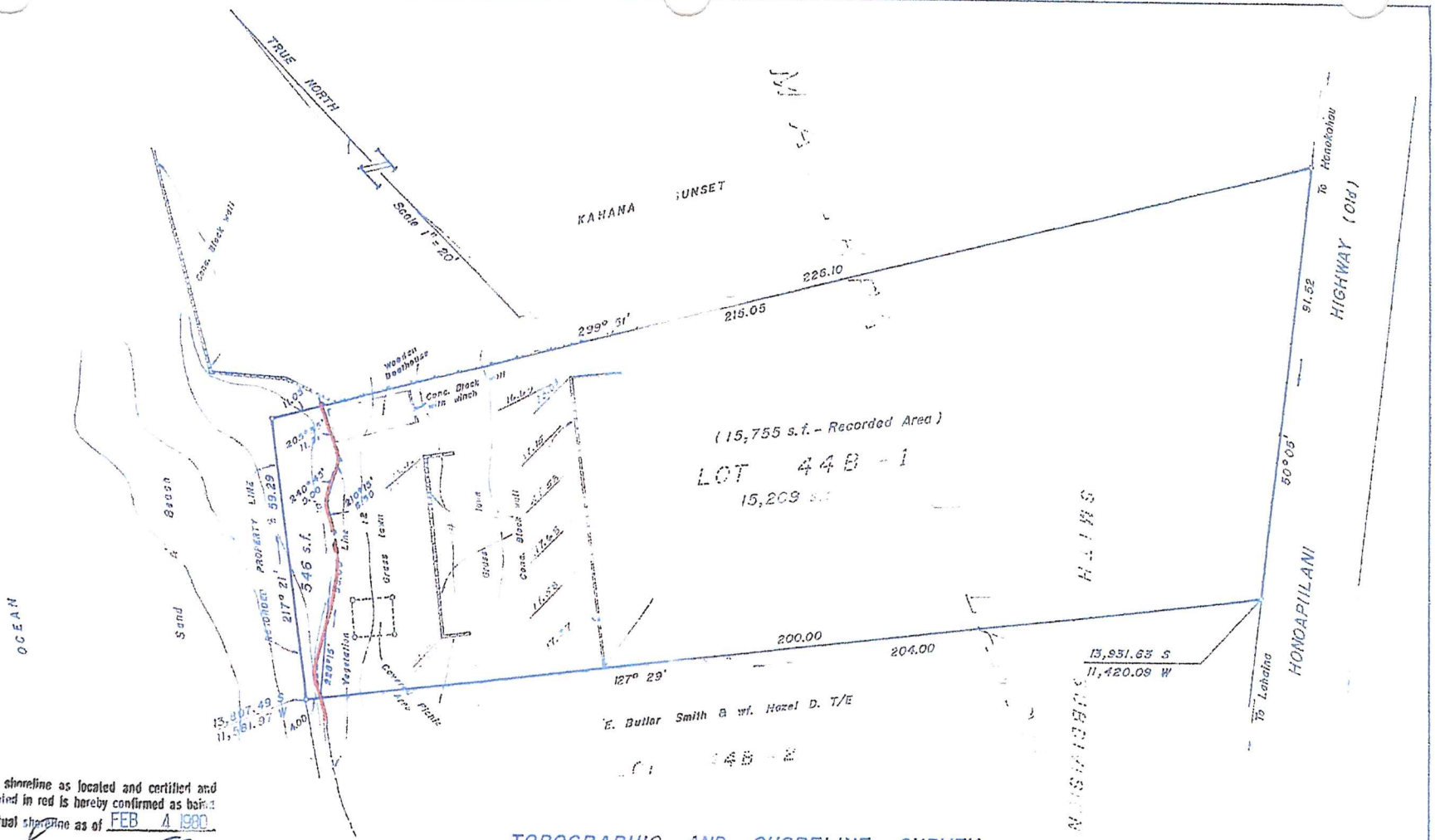
Alaeloa, Maui, Hawaii Smoothed Erosion Rates

Coastal Geology Group, University of Hawaii

APPENDICES

APPENDIX A
Certified Shoreline Map (February 4, 1980)

EXHIBIT 7



The shoreline as located and certified and delineated in red is hereby confirmed as being the actual shoreline as of FEB 4 1980

Chairman, Board of Land and Natural Resources

TOPOGRAPHIC AND SHORELINE SURVEY

OF

LOT 44B-1 OF THE SMITH SUBDIVISION, MAILEPAI HUI LANDS
PORTION OF R.P. 1663, L.C. Aw. 5524 TO L. KONIA

AT ALAELOA, KAANAPALI, MAUI, HAWAII

SCALE 1 inch = 20 feet

FEBRUARY 11, 1979
REVISED - MARCH 8, 1979
Resubmitted - JANUARY 23, 1980

PREPARED AT REQUESTED OF:

William Taylor
1853 Anapa Place
Kihei, Maui, Hawaii 96753

PREPARED BY
GEORGE E. NEWCOMER
LAND SURVEYOR
Kahului Building, Suite 350
Kahului, Maui, Hawaii
This work done by me or under my direction.

REGISTERED PROFESSIONAL LAND SURVEYOR
CERTIFICATE No. 2715 - S

NOTES

1. Adjoining owners from Tax Map Records.
2. Coordinates referred to "MALO △"
3. Actual field survey done January 4, 1979 at 11:00 A.M.
4. Pipes set at all corners.
5. Shoreline field inspected January 21, 1980, no appreciable change.

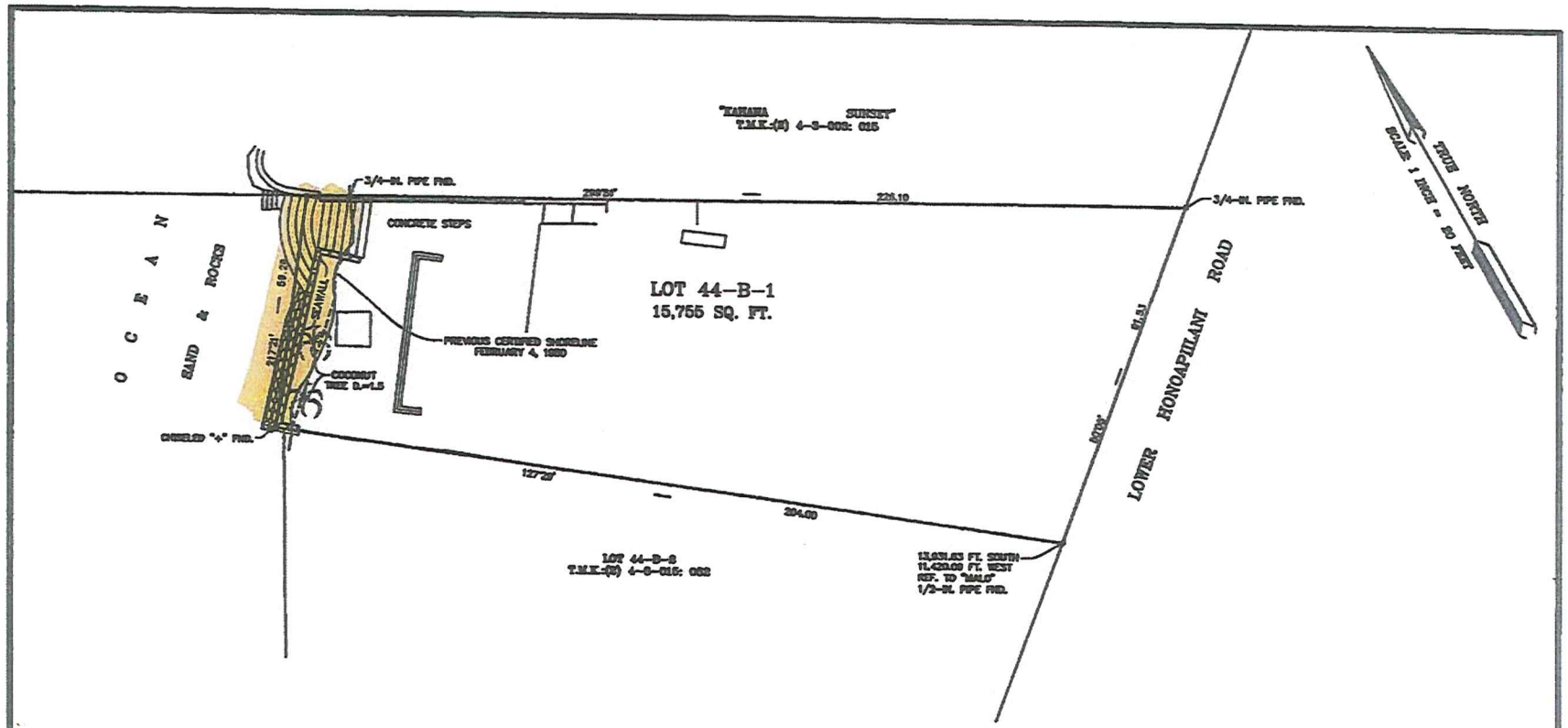
Previously approved 3/19/79
See Folder 597-9(4)

TAX MAP KEY: 4-3-15:1

SURVEY OFFICE COPY

78-95

APPENDIX B
Survey of Lot 44-B-1 (July 31, 2012)



PLAT OF SURVEY

LOT 44-B-1 OF THE SMITH SUBDIVISION

Being a portion of Royal Patent 1663, Land Commission Award 5324 to L. Konia

SITUATED AT ALAELOA, KAANAPALI, MAUI, HAWAI'I

Prepared for:
Munekiyo, Teich & Geiger
33 Lono Ave., Suite 470
Kahului, HI 96732

Scale: 1 Inch = 20 Feet
Date: July 31, 2012

BRUCE R. LEE
LICENSED PROFESSIONAL LAND SURVEYOR
No. 5053-LS
HAWAII, U.S.A.

This plat was prepared from a survey on the ground performed by me or under my supervision.

BRUCE R. LEE
Licensed Professional Land Surveyor Certificate No. 5053-LS

0 10 20 40 60 80 100
SCALE IN FEET

TMK:(2) 4-3-015: 001

25" X 36" = 2.2 SQ. FT.

NEWCOMER – LEE LAND SURVEYORS, INC. 1498 LOWER MAIN STREET, SUITE E, WAILUKU, MAUI, HAWAII 96793

DWG NO. 5054-SL JOB NO. 12-5054

EXHIBIT 1

APPENDIX C
BLNR Report (September 17, 2012)

SEP 13 2012

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

PAUL J. CONRY
INTERIM FIRST DEPUTY

WILLIAM M. TAM
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
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

SEP 17 2012

File No.: ENF MA-09-54

Paul Mancini
Mancini, Welch & Geiger, LLP
33 Lono Avenue, Suite 470
Kahului, Hawaii 96732-1681

Dear Mr. Mancini:

SUBJECT: NOTICE OF BOARD HEARING

This is to inform you that the Board of Land and Natural Resources (Board) will be asked to consider an alleged violation within the conservation district in regards to an erosion protection structure at Keonenui Beach, West Maui, TMK (2) 4-3-015:001

This item will be placed on the Land Board's agenda as Item K-1, at the September 28, 2012 meeting in Room 132 of the Kalanimoku Building, 1151 Punchbowl Street, Honolulu, Hawai`i 96813. You are invited to appear and testify.

A copy of the Board Report is attached. You can contact Sam Lemmo at 587-0377 should you have any questions on this matter.

Sincerely,

Sam Lemmo, Administrator
Office of Conservation and Coastal Lands

STATE OF HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
Honolulu, Hawai'i

September 28, 2012

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

REGARDING:	Conservation District Enforcement File MA 09-54 Alleged Unauthorized Seawall and Stairs
BY:	Henry and Diane Schweitzer 4885 Lower Honoapi'ilani Road Lahaina, Hawai'i 96761
LOCATION/ Tax Map Key:	Keonenui Beach, 'Alaeloa, Island of Maui (2) 4-3-015:001
SUBZONE:	Resource

This item was deferred by the Board of Land and Natural Resources at its May 25, 2012 meeting.

DESCRIPTION OF AREA:

The subject area is located on the shore of Keonenui Beach, 'Alaeloa, West Maui, TMK: (2) 4-3-015:001 (**Exhibits 1, 2 & 3**). This is a northwest-facing coastline just south of Kapalua Resort. The property is located in the State Land Use Urban District up to the highest wash of the waves. Lands seaward of the shoreline are located in the Conservation District, Resource subzone.

The U.S. Geological Survey's *Atlas of Natural Hazards in the Hawaiian Coastal Zone* publication describes this area as a Rocky Beach Embayed Coast and notes the subject area has an overall high hazard assessment rating of 5 on a scale of 1 to 7 (**Exhibit 4**). Erosion and tsunami potential are within the highest hazard assessment rating.

Keonenui Beach has a narrow, wet beach with a low slope in the middle section of the bay. The beach shows signs of long-term erosion and has disappeared at the north end of the bay. The shoreline has eroded at a rate of around 1.15 feet per year in front of the subject parcel (**Exhibit 5**). The middle and south end of the bay has a transient, wet beach, which is submerged at high tide (**Exhibit 6**).

Coastal armoring has fixed the shoreline location along much of the bay. Upland substrate is generally a basalt base with overlying clay bank. The basalt base has numerous wave cut notches and caves, where coastal armoring has not covered them. There is no significant sandy resource mauka of the shoreline such as dune systems.

Though the coastal armoring is not impounding any significant sand resource, it is nonetheless serving as a wave reflective surface. Reflective surfaces tend to have a negative impact on sandy beaches. Additionally, the beach area is a known turtle haul out location, with numerous turtles found in the bay on most days.

CHRONOLOGY:

March 19, 1979 & February 4, 1980 – Shoreline certified and re-certified for subject property. There was no evidence of a seawall or stairs. The photographs and shoreline survey show that the only structures near the shoreline at that time are a wooden bathhouse and a covered picnic area (**Exhibit 7**).

1987 – An aerial photograph of the subject shoreline documents the existence of a seawall (**Exhibit 8**).

November 21, 2003 – Maui Planning Department issued the Landowner, Henry Schweitzer, a Notice of Warning (NOW) for building a seawall without a permit. The NOW has not been resolved.

March 2, 2009 – The Maui District Land Office (MDLO) received a complaint regarding a concrete and rock wall with stairway fronting the subject property that appears to be extending out beyond the property's seaward boundary and onto the sand shoreline. MDLO conducted a site inspection, but was unable to find the subject property's seaward boundary pins (**Exhibit 9**).

April 14, May 26, and June 30, 2009 – The Landowner was sent letters requesting their response to provide authorizing documentation for the seawall and stairs (**Exhibit 10**). There had been no response to our letter for several years.

July 14, 2009 – MDLO conducted another site inspection and attempted to locate the owner; however, there was no response at the doorbell. MDLO noted additional observations: 1) Concrete stairway leading to a smaller concrete and rock stairs, which leads down to the shoreline; 2) Terraced rock walls within the SMA area; and 3) A construction gazebo within the first terraced area that has also been filled with sand (**Exhibit 11**).

July 23, 2009 – Maui Planning Department issued another two (2) NOWs for noncompliance with SMA rules and shoreline rules for the Maui Planning Commission (**Exhibit 12**).

On April 17, 2012 the OCCL received a letter from Paul Mancini (his legal counsel), which chronicles events between April 1979 and November 1984 (**Exhibit 13**). In his chronology, he alleges that the seawall was permitted. There is a document from the Maui County Board of Realtors (April, 1979) that makes a reference to a "permit obtained for the construction of a retaining wall." Staff is unsure what this documents means (from the perspective of land use entitlements), but the County of Maui continues to believe that the structure is not permitted.

On August 29, 2012, the County of Maui issued Notice of Violations to the Schweitzers for the seawall and stairs (**Exhibit 14**).

ALLEGED UNAUTHORIZED LAND USE:

Survey, photographic, and documented evidence of the shoreline provides evidence that the construction of the subject seawall and stairs may have occurred between 1980 and 1984.

The highest wash of the waves currently washes against the seawall and stairs. We know of no State or County approvals for the seawall/stairway.

The current owner, Henry Schweitzer, purchased the property in 1984[1], although it is clear from Mr. Mancini's chronology that he was involved to some extent in the efforts to build the seawall and stairs, as far back as 1979.

The Department and Board of Land and Natural Resources has jurisdiction over land lying makai of the shoreline as evidenced by the upper reaches of the wash of the waves other than storm and seismic waves, at high tide during the season of the year in which the highest wash of the waves occurs, usually evidenced by the edge of vegetation growth, or the upper limits of debris left by the wash of the waves, pursuant to §205A-1, Hawai'i Revised Statutes (HRS).

Staff believes that the unauthorized land uses occurred within the Conservation District based upon the wave run up and historic photographs, and also based on the location of the 1980 shoreline as evidenced by a 1980 shoreline certification (See **Exhibit 7**). The OCCL believes there is sufficient cause to bring this matter to the Board since it is evident that the unauthorized land uses are within the Conservation District pursuant to the Hawai'i Administrative Rules (HAR), §15-15-20 Standards for determining "C" conservation district boundaries:

> *It shall include lands having an elevation below the shoreline as stated by §205A-1, HRS, marine waters, fishponds, and tidepools of the State, and accreted portions of lands pursuant to §501-33, HRS, unless otherwise designated on the district maps. All offshore and outlying islands of the State are classified conservation unless otherwise designated on the land use district maps.*

Chapter 13-5, HAR and Chapter 183C, HRS, regulate land uses in the Conservation District by identifying a list of uses that may be allowed by a Conservation District Use Permit (CDUP). The chapters also provide for penalties, collection of administrative costs and damages to state land for uses that are not allowed or for which no permit has been obtained. HAR §13-5-2 defines "land use" as follows:

> *The placement or erection of any solid material on land if that material remains on the land more than fourteen days, or which causes a permanent change in the land area on which it occurs.*

Hawai'i Coastal Erosion Management Plan

On August 27, 1999, the Board adopted the Hawai'i Coastal Erosion Management Plan (COEMAP) as an internal policy for managing shoreline issues including erosion and coastal development in Hawai'i. COEMAP still serves as the primary shoreline policy for the DLNR and recommends a number of strategies to improve our State's management of coastal erosion and beach resources.

However, COEMAP's scope is of a general nature, more focused on broader government policy than erosion management practice. The COEMAP effort is guided by the doctrine of sustainability,

[1] According to Maui County Property Tax Department

promoting the conservation, sustainability, and restoration of Hawai'i's beaches for future generations. When assessing cases involving unauthorized shoreline structures that affect the shoreline that are constructed after the 1999, there is a "no tolerance" policy and the customary policy is to remove the structure before other actions are considered[2].

DISCUSSION:

Coastal erosion occurs as a result of the following phenomena: 1) Seasonal changes in waves and currents that shift sand within the system; 2) Long-term (chronic) erosion due to natural deficits in sand supply or oceanographic processes such as sea level rise; and 3) Human impacts to sand availability through sand impoundment and supply disruption as a result of shoreline modifications including seawalls.

Development on beaches and dunes has contributed to serious erosion of these areas, resulting in loss of recreational areas, habitat, and the storm protection that 'healthy' beaches and dunes provide. Beach narrowing and loss, and shoreline hardening (the construction of vertical seawalls or sloping stone revetments along a shoreline to protect coastal lands from marine erosion), also severely restrict public access to State Conservation land and the natural resources. In heavily armored sectors, sand impoundment mauka of walls can lead to reduction in sand supply increasing regional erosion trends[3].

Unfortunately, many of Hawai'i's beaches have been degraded or lost from a combination of natural erosion and inappropriate coastal development including shoreline armoring, shallow beachfront lot subdivisions, and development too close to the shoreline.

In a 2012 study published by Romine/Fletcher in the Journal of Coastal Research, 70 percent of all beaches measured in the Hawaiian Islands (244 km) indicated an erosion trend. More than 21 km or 9 percent of the total length of the beaches studied were lost to erosion. In nearly all cases, the beaches were replaced with seawalls or other coastal structures.

In this case as in many, but not in all cases, the delineation between the State Land Use Conservation/Urban District is the shoreline. The shoreline for the Schweitzer property was certified in 1979 and 1980 when there was no seawall present, and it appears that the wall was constructed seaward of the shoreline in the early 1980s. The attorney for the landowner submitted a recent survey map that clearly shows the improvements seaward of the 1980 shoreline certification **(Exhibit 15)**. Since the seawall and stairway qualify as a land use under the Conservation District definition (HAR §13-5-2), some type of permit or approval should have been obtained by the alleged.

Under the Penalty Guideline Framework **(Exhibit 16)** this action is considered "Major" since the identified land use would require a Board Permit under the permit prefix "D". This violation follows a penalty range of $10,000 to $15,000. The comparable identified use in the Hawaii Administrative Rules (HAR-13-5) would be "Shoreline Erosion Control" for which a Board Permit is normally required.

---

[2] Because the structure was established prior to the BLNR's "No Tolerance" policy, the landowner may apply for an after-the-fact CDUP, or alternatively, remove the structure.

[3] In some cases, sandy beaches in Hawaii are located in areas of predominant basalt or clay substrate. With rising sea levels, beaches found in these types of settings will eventually disappear if there is no significant sand resource in the backshore area. This is because the beach has no place to recede to.

Therefore under the Penalty Guideline Framework this unauthorized land use is considered:

1. a *Major* harm to resource or potential harm to resource; and
2. a *Major* comparable harm to resource.

Based on the information including pre-project photographs taken for the shoreline certification, more recent photographs and information provided by Mr. Mancini, we believe that the seawall is within the Conservation Distinct. In addition, the portions of the stairs that extend beyond the wall are also within the Conservation District.

Staff believes that the landowner should be fined one time for the unauthorized land use. Staff will recommend a fine of $10,000 (maximum is $15,000/violation) because the violation occurred over 30 years ago and the attorney for the landowner has been very cooperative. He provided OCCL with a copy of the survey map that clearly delineates the extent of the violation, which greatly facilitates this matter. Staff will also recommend administrative penalties.

This submittal and notice of the Board's meeting shall be sent to the property's landowners by certified mail to the address on record.

AS SUCH, STAFF RECOMMENDS:

That pursuant to Chapter 183C, HRS, the Board finds the Landowner of TMK: (2) 4-3-015:001 at Keonenui Beach, 'Alaeloa, Maui, in violation of Chapter 183C-7, HRS and Chapter 13-5-6, HAR, subject to the following:

1. The Landowner is fined $10,000.00 for the Conservation District violation, pursuant to Chapter 183C, HRS;

2. The Landowner is fined an additional $1,000.00 for administrative costs associated with the subject violation;

3. The Landowner shall pay all fines (total $11,000.00) within sixty (60) days of the date of the Board's action;

4. The Landowner shall either remove the wall and stairs within three (3) months of the date of the Board's decision on this matter, or alternatively, apply for an after-the-fact permit for the seawall;

5. That in the event of failure of the landowners to comply with any order herein, the landowner shall be fined an additional $11,000.00 per day until the order is complied with; and

6. That in the event of failure of the landowners to comply with any order herein, the matter shall be turned over to the Attorney General for disposition, including all administrative costs.

Respectfully submitted,

Sam Lemmo, Administrator
Office of Conservation and Coastal Lands

Approved for submittal:

William J. Aila, Jr., Chairperson
Board of Land and Natural Resources

Subject Property

MAUI

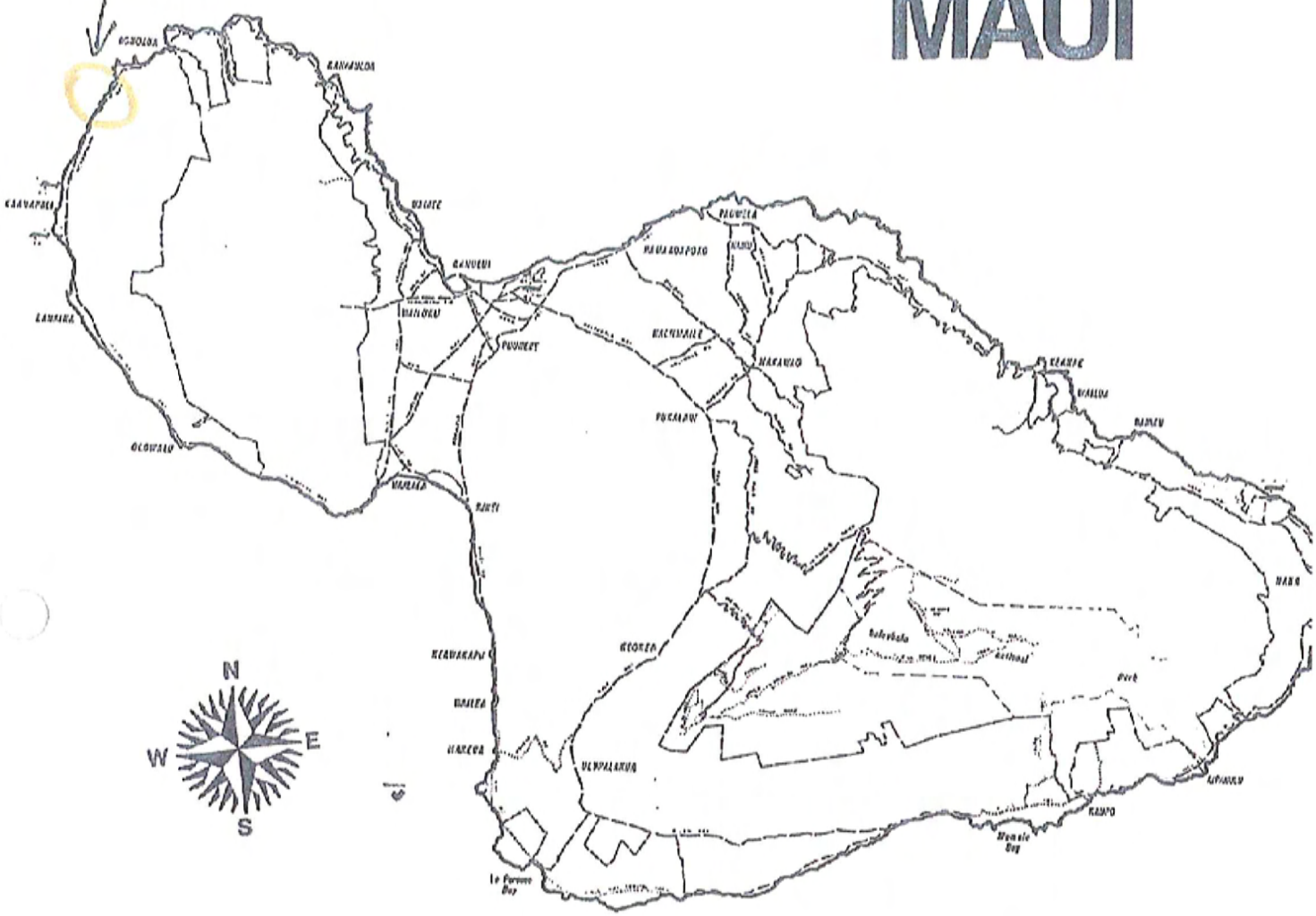
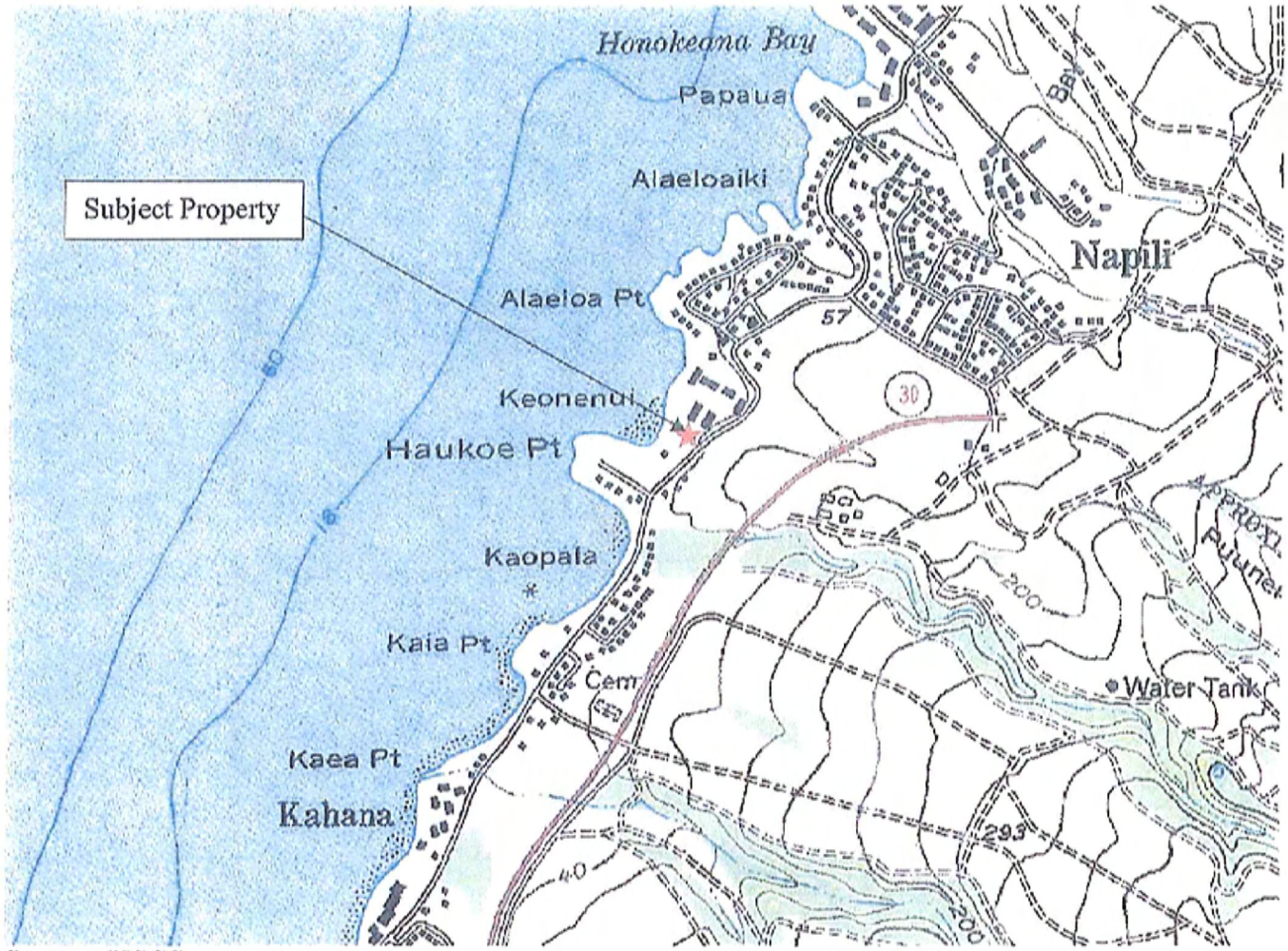


EXHIBIT 1

LOCATION MAP



Source: USGS

EXHIBIT 2

TAX MAP KEY (2) 4-3-015:001

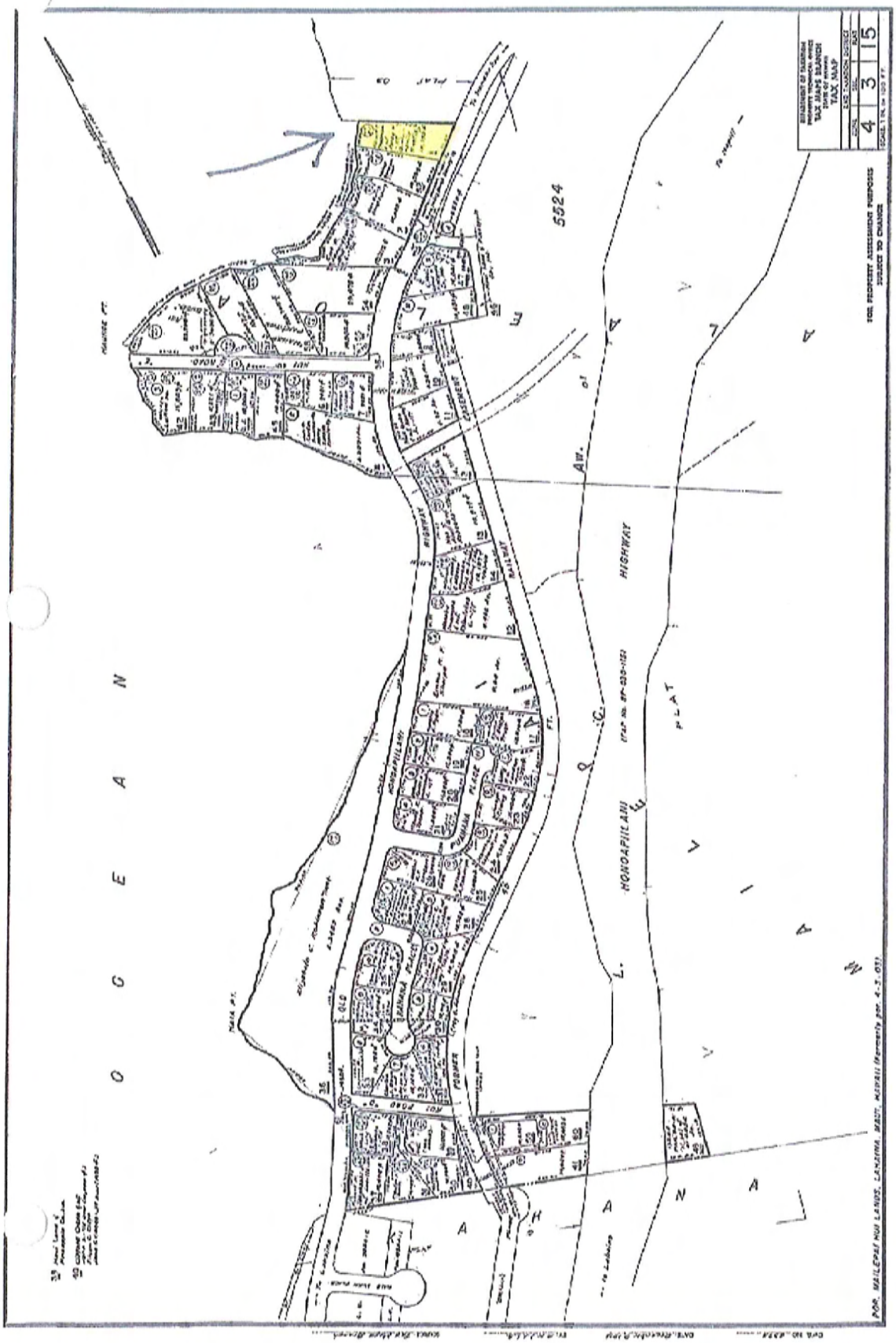
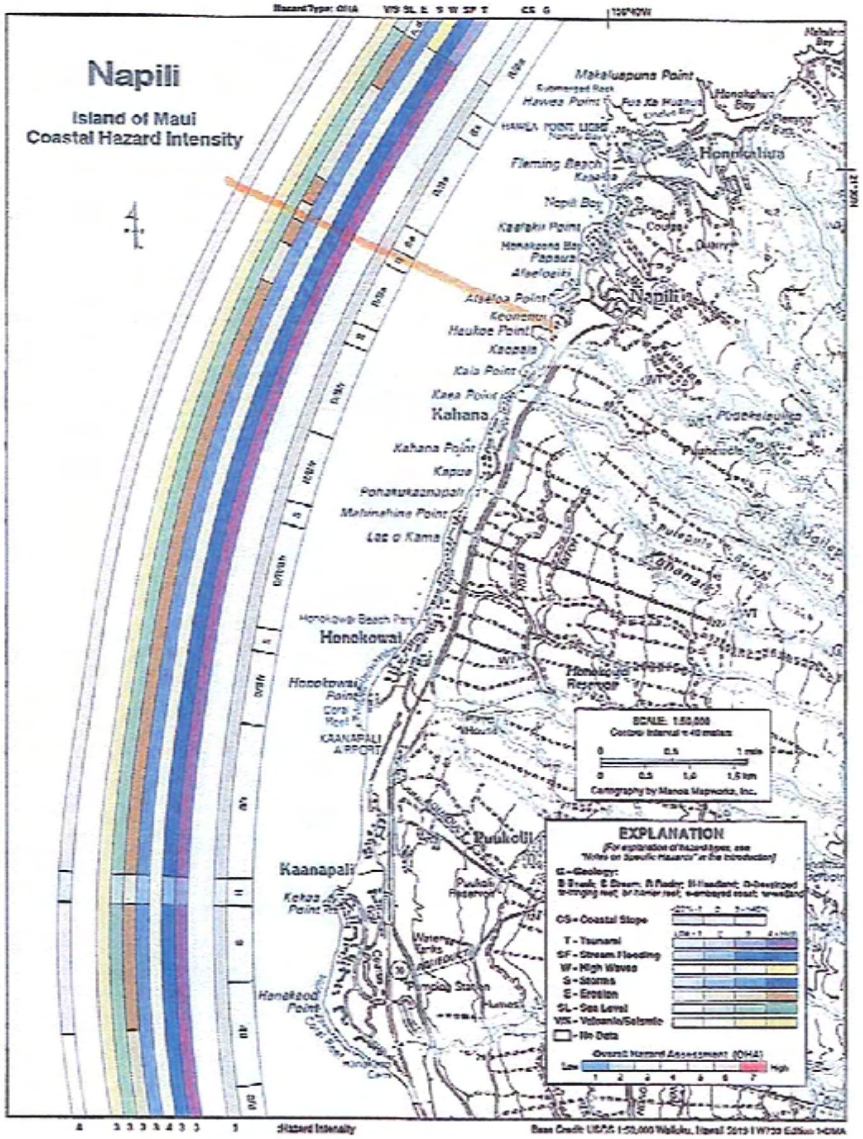


EXHIBIT 3

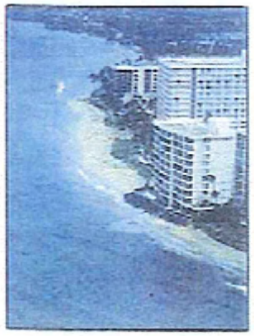
EXHIBIT 4



Napili

The highly developed coast of Napili is famous for its luxurious resorts, hotels, and golf courses that are built directly alongside one of Hawaii's most scenic shorelines. The relatively low coastal plain rises only slightly near Napili and Honokahua, where isolated coves are partly protected from refracting trade wind waves and northerly winter swell by steep rocky outcrops and points. Offshore, a fringing reef partly dissipates wave energy, acting as a buffer for the beaches that extend along south Kaanapali and within the bays of Kahana, Napili, and Honokahua. Numerous small streams originating in the West Maui Mountains flow across this gently sloping coastal terrace.

The Overall Hazard Assessment (OHA) for the Napili coast is moderate to high (>) and is largely influenced by high tsunami, stream flooding, and erosion hazards and moderately high storm, sea-level rise, and seismicity threats on this Maui coastline. Historically, there have been few tsunamis recorded at Kaanapali. However, a 15 ft tsunami that made landfall there in 1946 supports the high tsunami hazard ranking in this region, except at Kekaa Point, where it is reduced to moderately high. Flash floods and heavy rains, such as in March of 1968, when 24 inches fell in 48 hours, support a high stream flooding hazard ranking, except at Kekaa Point, where it is moderately low. The threat from high waves is moderately low along the Napili coast, which is partly sheltered from approaching northwest swell by the island of Molokai. Storm and sea-level rise hazards are ranked moderately high, except at the steep Kekaa Point headland, where they are reduced to moderately low. High rates of erosion have recently led to the proliferation of seawalls and revetments to protect coastal property which in turn has exacerbated beach loss. As a result, the erosion hazard is ranked high except at the rocky headlands at Kekaa, Haukoe, Alaeloa, and Kaelekii Points, where it is moderately low. The volcanic/seismic hazard is ranked moderately high along the Napili coast due to its location in seismic hazard zone 2. The OHA is reduced to moderate to low (3) at Kekaa Point, while south of Hanakaoo Point it is increased to moderate (4), reflecting the greater hazards associated with the lower coastal slope there.



Extensive development has occurred along the small and narrow beaches of the Napili coast, while fossil beachrock ridges near Honokowai, marking the position of the former shoreline, lie submerged offshore as evidence of rapid sea-level rise and erosion.

Alaeloa, Maui, Hawaii

Smoothed Erosion Rates

Scale 1:3000

100 0 100 200 300 400 Meters

300 0 300 600 900 1200 Feet

Alaeloa

Maui

0 10 km

0 10 miles

The Alaeloa study area extends from Haukea Point in the south to Namalu Bay in the north. This area is a series of bays and coves with small white sand and cobble pocket beaches interspersed. Offshore is basaltic hard bottom and sand.

As a whole, the area has experienced moderate to High erosion since 1912 with an average AEHR of -0.9 ft/yr. Keonenui Beach (transects 1 - 14) is partially backed by a revetment constructed prior to 1960 to protect private property. The beach has experienced moderate erosion over time with an average AEHR of -1.0 ft/yr. To the north, Alaeloa Beach (transects 17 and 18) occupies a small cove and has experienced moderate erosion with an average AEHR of -1.0 ft/yr. Honokeana Bay (transects 25 - 29) is comprised primarily of cobble beach. It has experienced moderate erosion with an average AEHR of -0.8 ft/yr. Napili Bay (transects 32 - 47) has experienced moderate erosion over time with an average AEHR of -0.9 ft/yr. Kapalua Bay (transects 53 - 62) has experienced moderate erosion since 1912 with an average AEHR of -1.2 ft/yr.

Trends identified in this study generally agree with those found by Sea Engineering, 1991*. At Kapalua Bay, Sea Engineering found this beach to be relatively stable. Rate differences may be attributed to methodology, specifically this study's inclusion of the 1912 and 1960 T-sheet shorelines.

Average beach width, the average horizontal distance from the vegetation line to the low water mark, within the Alaeloa area has decreased 35% between 1949 and 1997. At Keonenui Beach, average beach width has decreased 43% between 1949 and 1997, while average beach width at Alaeloa Beach has decreased 42% for the same time period. Average beach width at both Honokeana and Napili Bays has decreased 33% between 1949 and 1997. Average beach width at Kapalua Bay has decreased 44% between 1949 and 1997.

* Makai Ocean Engineering and Sea Engineering, 1991. Aerial Photograph Analysis of Coastal Erosion on the Islands of Kauai, Molokai, Lanai, Maui and Hawaii. State of Hawaii Office of Planning Coastal Zone Management Program.

HISTORICAL SHORELINES

- 1912
- Nov 1949
- 1960
- Mar 1975
- Aug 1987
- Mar 1993
- Nov 1992
- May 1997
- Erosion rate measurement locations (where normal transects)

Historical beach positions, color coded by year, are determined using ortho-rectified and georeferenced aerial photographs and National Ocean Survey (NOS) topographic survey charts. The low water mark is used as the historical shoreline, or shoreline change reference feature (SCRF).

For situations in which there is coastal armoring or rocky shorelines seaward of any vegetation, the vegetation line is drawn along the seaward side of the rock or armoring. If there is no sandy beach in these areas, both the vegetation line and the SCRF are delineated along the mean High water line.

Movement of the SCRF is used to calculate erosion rates along shore-normal transects spaced every 20 m(66 ft) along the shoreline. The 1987 SCRF is not used in the calculation of the AEHR, however it provides a gauge of seasonal uncertainty.

EROSION RATES

Annual Erosion Hazard Rates (AEHR)

Erosion rates are measured every 20 m along the shoreline. These sites are denoted by yellow shore normal transects. The Annual Erosion Hazard Rate (red), is a spatially smoothed center weighted average of calculated erosion rates. Five contiguous transects are incorporated in the smoothing process. The transects are weighted: 1-3-5-3-1 with the smoothed rate assigned to the center transect. The AEHRs are shown on the shore-parallel histogram graph. Colored bars on the graph correspond to shore-normal transects; approximately every fifth transect and bar are numbered. Where necessary, some transects have been purposely deleted during data processing; as a result, transect numbering is not consecutive everywhere. Where complete beach loss has occurred, erosion rate calculations apply only to the time period when a beach existed.

AEHRs for the Alaeloa area were calculated using all data available between 1912 and 1997. Despite some earlier, shore lines between 1912 and 1997 show a reasonably consistent trend and are used to calculate AEHRs for this area.

741300m E UTM coordinates

156°40'40" W latitude/longitude coordinates

Published under Contract No. C0505

Produced for the County of Maui by:
Coastal Geology Group
Department of Geology and Geophysics
School of Ocean and Earth Science and Technology
University of Hawaii at Manoa
1680 East - West Road
Honolulu, Hawaii 96822

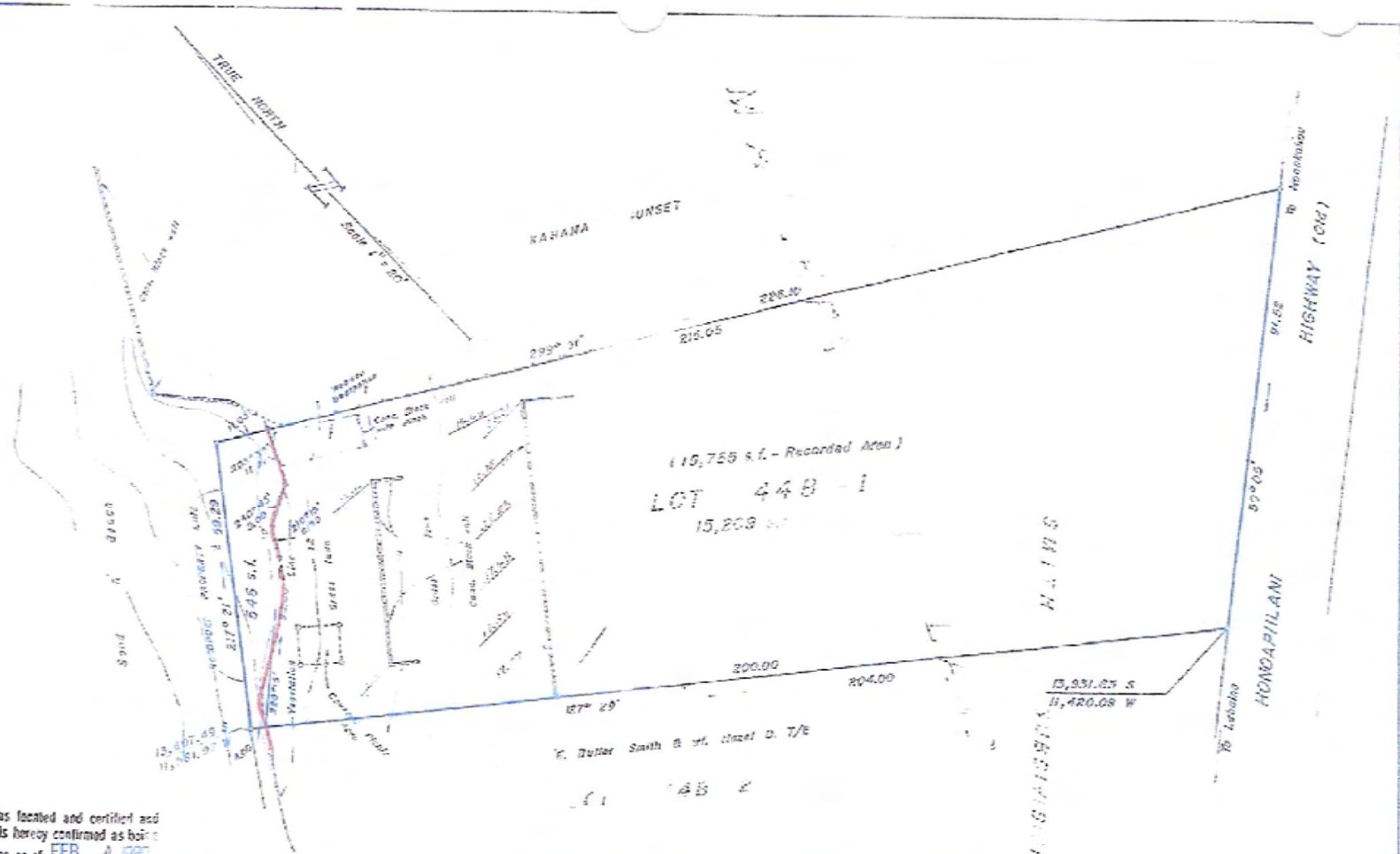
EXHIBIT 5

2003 Oblique Photo

11-29-03

EXHIBIT 6

EXHIBIT 7



The shoreline as located and certified and delineated in red is hereby confirmed as being the actual shoreline as of FEB 4 1980

Chairman, Board of Land and Natural Resources

TOPOGRAPHIC AND SHORELINE SURVEY

OF

LOT 44B-1 OF THE SMITH SUBDIVISION, MAILEPAI HUI LANDS
PORTION OF R.P. 1663, L.C. Aw. 5524 TO L. KONIA

AT ALAELOA, KAANAPALI, MAUI, HAWAII

SCALE 1 inch = 20 feet

FEBRUARY 11, 1979
Revised - MARCH 6, 1979
Resubmitted - JANUARY 23, 1980

PREPARED AT REQUESTED OF:

William Taylor
1853 Anapa Place
Kihei, Maui, Hawaii 96753

PREPARED BY
GEORGE F. NEWCOMER
LAND SURVEYOR
Kalalai Building, Suite 200
Kahului, Maui, Hawaii
This work done by me or under my direction

Registered Professional Land Surveyor
Certificate No. 5916

NOTES

1. Adjoining owners from Tax Map Records.
2. Coordinates referred to "KALO △".
3. Actual field survey done January 4, 1979 at 11:00 A.M.
4. Pipes set at all corners.
5. Shoreline field located January 21, 1980, no appreciable change.

Previously approved 2/19/79
See Folder 597-9(a)

TAX MAP KEY 4-3-15:1

SURVEY OFFICE COPY

78-95

1979

N.W. Corner
Taken at edge wall - Looking S.

S.W. Corner
Taken at edge [illegible] line

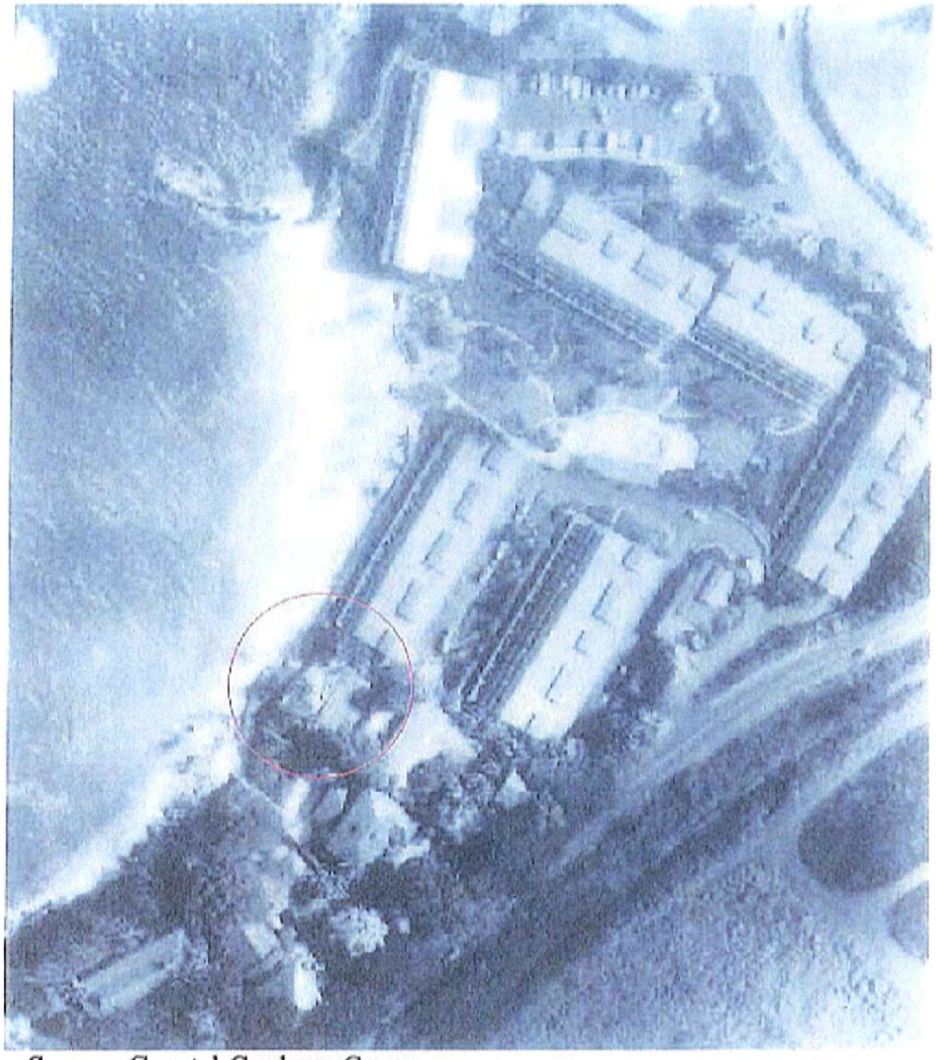
[illegible] Corner
[illegible]

[illegible] Corner looking [illegible]

1979

N.W. Corner - looking S.W. only
Taken at concrete wall (Sunset)

AERIAL PHOTOGAPH: 1987



Source: Coastal Geology Group

EXHIBIT 8

Photos taken: 3/2/09

Henry & Diane Schweitzer, TMK: (2) 4-3-015:001

Shoreline area fronting the Schweizer property at TMK: (2) 4-3-015:001. Possible encroaching stairway onto the sand shoreline.

EXHIBIT 9

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com®
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Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here
APR 14 2009
dh

Sent To: Henry H. Schweitzer
Street, Apt. No.; or PO Box No.: 4885 Lower Honoapiilani Rd.
City, State, ZIP+4: Lahaina, HI. 96761
PS Form 3800, August 2006 See Reverse for Instructions

7008 1140 0001 0730 7403

Henry H. Schweitzer
4885 Lower Honoapi'ilani Road
Lahaina, Hawai'i 96761

'TATE OF HAWAII
)F LAND AND NATURAL RESOURCES
ONSERVATION AND COASTAL LAND
POST OFFICE BOX 621
ONOLULU, HAWAII 96809

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

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
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CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

ENF: MA 09-25

APR 14 2009

SUBJECT: ALLEGED UNAUTHORIZED SHORELINE USE WITHIN THE CONSERVATION DISTRICT LOCATED AT TMK: (2) 4-3-015:001

Dear Mr. Schweitzer:

The Office of Conservation and Coastal Lands (OCCL) has received a complaint regarding a concrete and rock stairway extending from the seawall down into the ocean waters fronting the condominium complex. It also appears that a portion of the stairs may be encroaching on land within the Conservation District, under the jurisdiction of the State of Hawai'i.

According to the Maui Planning Department, there was a Notice of Warning issued in 2003 to the property regarding a seawall construction without a permit. OCCL also has no records of approval for the seawall or the stairway.

Please provide authorizing documentation and construction date for the seawall and stairways Should there be no authorization for the improvements located within the Conservation District, the OCCL may initiate enforcement proceedings. Please respond within 30 days. Should you have any questions regarding this correspondence, contact Audrey Barker of our State Office of Conservation and Coastal Lands at (808) 587-0316.

Sincerely,

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

C: Chairperson
MDLO
County of Maui, Department of Planning

EXHIBIT 10

APPENDIX D

Coastal Engineering Site Visit Memorandum (December 21, 2012)

Sea Engineering, Inc.
Makai Research Pier 41-305 Kalanianaole Hwy.
Waimanalo, Hawaii 96795-1820
Ph: (808) 259-7966 Fax: (808) 259-8143
Email: sei@seaengineering.com
Website: www.seaengineering.com

Memorandum

DATE: December 26, 2012

TO: Mr. Hoyle and Dianne Schweitzer

FROM: Jim Barry

SUBJECT: Coastal engineering site visit at Keonenui Bay

1. INTRODUCTION

Sea Engineering (SEI) was contacted and asked to evaluate shoreline conditions at the Schweitzer Property at 4885 Lower Honoapiilani Road, a property in the middle of Keonenui Bay in the Napili area of Maui (Figure 1). A site visit was conducted on December 12, 2012. The property is fronted by a seawall and stairway that were originally built in 1980. The legal status of the structures is the subject of dispute between the property owners and both County and State agencies.

The purpose of the SEI visit was to determine the potential effects of removing the disputed structures versus leaving them in place.

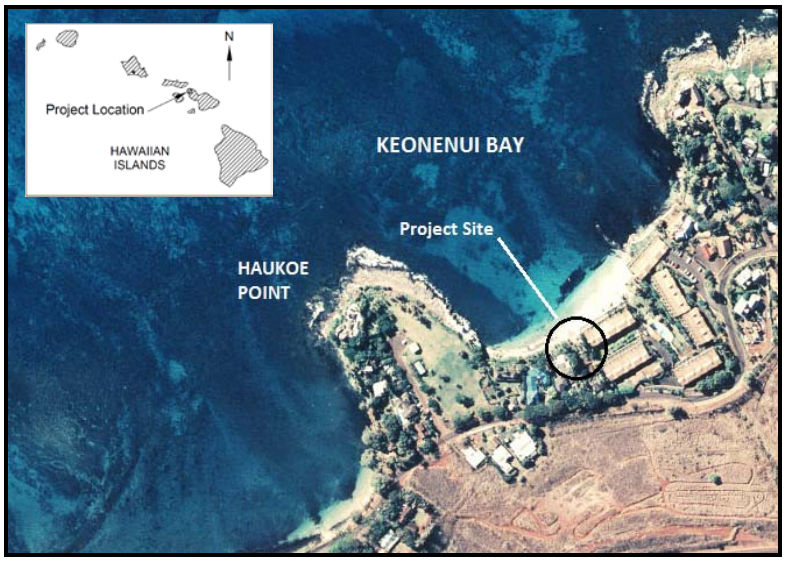

Figure 1. Project site location at Keonenui Bay

2. SITE CONDITIONS

Site Description and Coastal Morphology

The project site is on the northwest coast of the island at the foot of the West Maui Mountains. The site is protected from prevailing tradewinds by the mountains, and is somewhat sheltered from waves by the surrounding islands of Molokai, Lanai, and Kahoolawe. Keonenui Bay lies between Haukoe Point and Alaeloa Point on the northwest coast of Maui (see Figure 1). The beach is a pocket beach typical of this stretch of coastline. It trends northeast – southwest, is about 500 feet long and contained between the headlands, which protrude about 400 to 500 feet seaward.

The shorelines within the study area are protected by a central location in the Maui Nui island complex formed by the islands of Maui, Molokai, Lanai, and Kahoolawe, but are exposed to deepwater waves from the south through southwest, and also from the north and northeast and approximately due west. The study area is protected from the northeast tradewind waves by the island of Maui itself.

The shoreline along the Kahana-Napili coast is tied to the underlying volcanic rock formations. The coastal processes along the shoreline within the study area are complicated by the bay and headland morphology, the presence of offshore fringing reefs, and a seasonal wave climate with two opposing wave approach directions.

A soft mudstone formation underlies much of the sand at Keonenui Bay, and forms the foundation substrate for the coastal structures (Figure 2). The mudstone appears to be the product of *in-situ* weathering and alteration of a brecciated volcanic ash flow tuff. Differential hardness within the formation causes irregular weathering and produces a generally uneven surface. The color of the substrate material varies from grey to red, with red material predominate at the southwest corner of the bay. The softer areas of the mudstone will slowly erode due to wave uprush and attack, and can result in highly turbid conditions (Figure 3).

Shoreline Erosion Studies

Keonenui Beach is dynamic in nature, with periods of both beach erosion and accretion. It is a pocket beach protected by prominent headlands, and beach sand is essentially trapped between these headlands during periods with moderate wave conditions. However, extreme conditions may result in sand moving farther offshore.

The University of Hawaii Coastal Geology Group (HCGG) conducted an island-wide study of coastal erosion as determined from aerial photographs. The study used the beach toe as a reference line. The beach toe is the change in slope at the transition between the nearshore and foreshore regions of the beach, and is a good indicator of shoreline erosion or accretion

because it marks the seaward edge of beach face. It appears as a change in color or tone in aerial photographs. However, the beach toe can also vary with seasonal or short term erosion or accretion, or changes in beach slope and width, and thus may also indicate the dynamic nature of a beach, rather than long term erosion or accretion trends.

The HCGG results for Keonenui Beach show approximately 1 ft average yearly erosion between 1912 and 1997, and an average decrease in beach width of 42% between 1949 and 1997.

An analysis by SEI in 2000 indicated that the beach is dynamic, with large seasonal shifts in the beach toe position. The seasonal shifts dominated the data, and an average rate of erosion or accretion was not determined. Figure 4 shows the digitized beach toe position on five aerial photographs between 1949 and 1997. Although the 1987 data indicated 78 ft of landward movement of the beach toe in Transect 29A, the 1988 data show 68 ft of accretion, or seaward movement.

Despite the shoreline erosion problems at many properties in Keonenui Bay, photographs taken in 2001 (Figure 5) and 2012 (Figure 6) show qualitatively similar beach morphology, with similar sand resources.

Figure 2. Weathered and altered mudstone conglomerate substrate

Figure 3. Erosion of the soft red mudstone substrate at Keonenui Bay

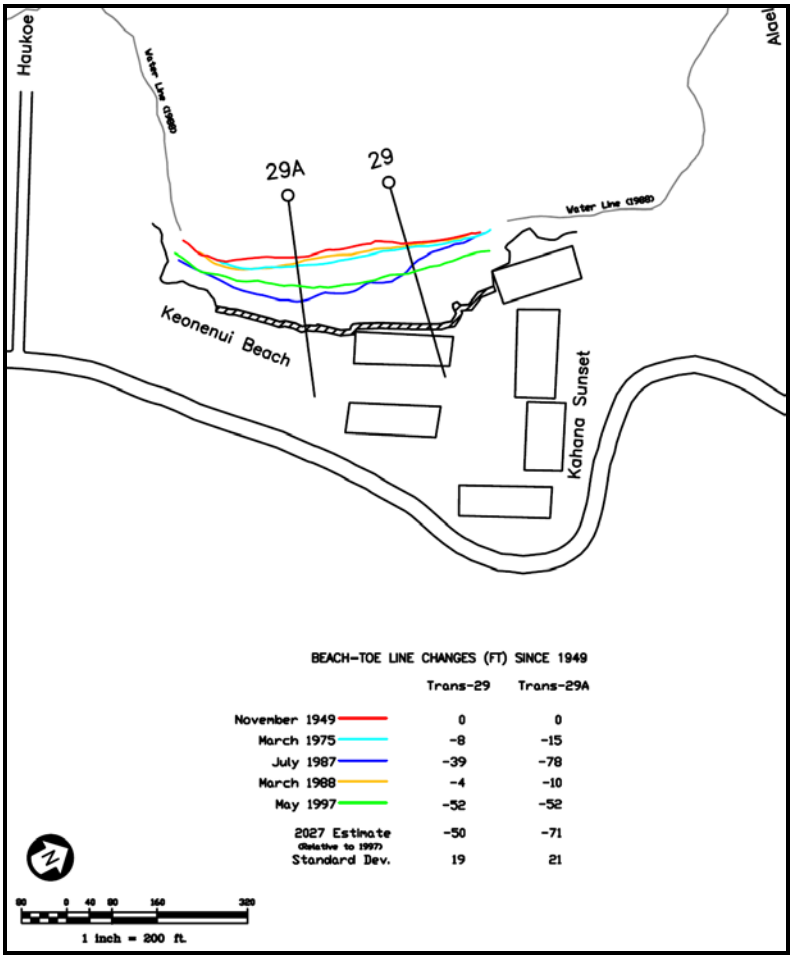

Figure 4. SEI beach change study (2000) at Keonenui Bay

Figure 5. Northeast section of Keonenui Bay (11/6/2001)

Figure 6. Northeast Keonenui Bay (12/11/2012) showing morphology similar to 2001

3. SEAWALL CONFIGURATION

Wall Layout

A layout of the wall and other features on the Schweitzer property is shown in Figure 7. The property is bordered by the Kahana Sunset condominiums to the northeast, and the Lusardi property, a single family home, to the southwest. The wall extends across approximately 75% of the property, starting at the Lusardi property and ending at a set of concrete steps that abut the Kahana Sunset property. A 90-degree bend at each end, known as a "return", is used to end the wall. The return at the northeast end abuts the stairway (Figure 8), and the return at the southwest end is butted into by the adjacent Lusardi seawall (Figure 9). A series of two landscape walls form a double terrace behind the seawall (Figure 7), with the single family

dwelling perched on the higher terrace.

Wall Section

The seawall at the Schweitzer property is a Cemented Masonry Unit (CMU) wall with a cemented rock facing. It was constructed on a concrete footing embedded 30” (min) into the substrate (see Figure 10). It is in generally good condition, with most of the rock facing intact. However, erosion of the substrate in front of the wall caused undermining of the footing, and reinforcement was placed for additional protection of the footing (Figure 8). Additional substrate erosion has also undermined this reinforcement. Much of the combined wall and stairs structure exhibits some undermining, with the maximum undermining of approximately 3 ft occurring at the mid-section of the wall (Figure 11).

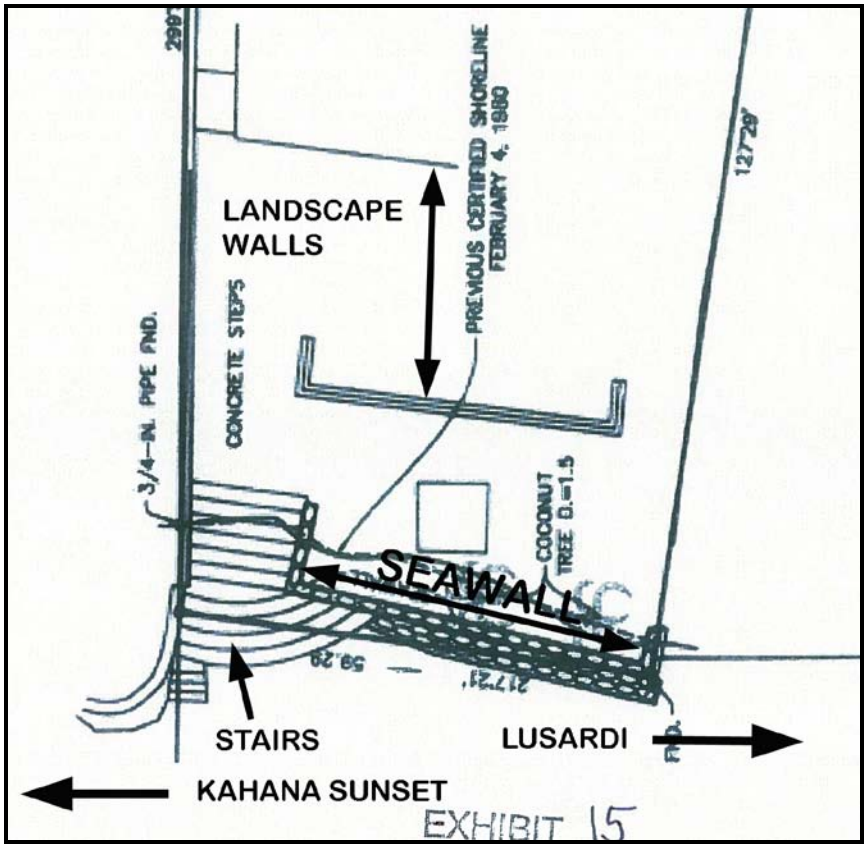

Figure 7. Layout of structures on the Schweitzer property

Figure 8. Steps and seawall structures showing footing protection and return

Figure 9. Southwest end of seawall, abutting the Lusardi wall

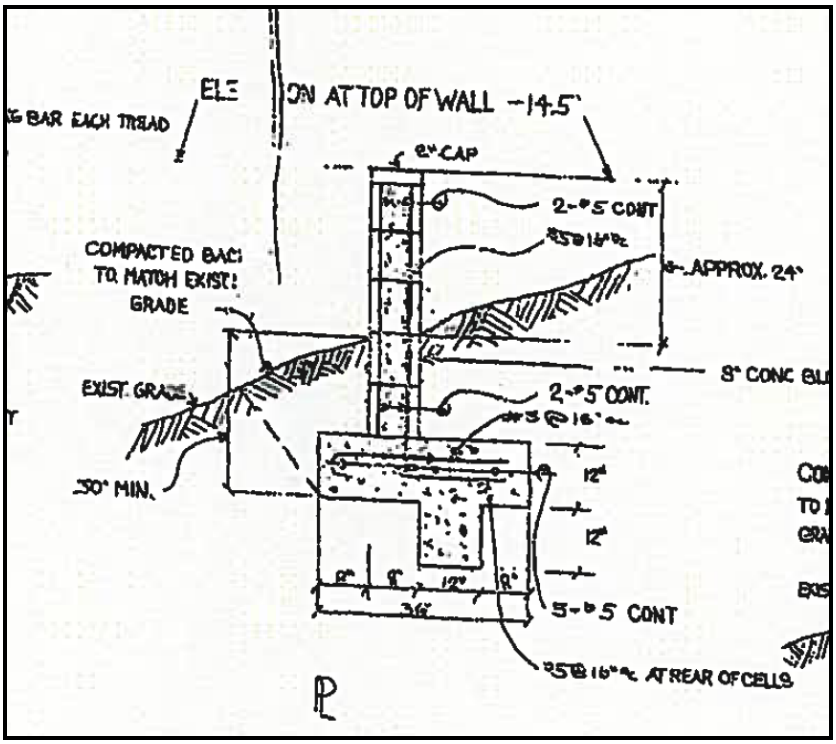

Figure 10. Wall section from original plans (note buried footing)

Figure 11. Undermining of footing protection

Northeast Property Boundary

Structural elements of the northeast property boundary with the Kahana Sunset condominiums consist of the stair section abutting the Kahana Sunset condominium, and a boundary wall that divides the properties and is nearly continuous with the Kahana Sunset seawall return (Figure 12). There is a slight separation between the boundary wall and the Kahana Sunset seawall (Figure 13). The owners have photographs showing a much larger gap between these two structures due to undermining and rotation of the Kahana Sunset seawall. Apparently some major repairs have taken place since that time to restore the Kahana Sunset seawall near to its original position. The corner of the Kahana Sunset seawall is still significantly under-mined, although the extent could not be determined due to sand build-up.

Figure 12. Northeast boundary with the Kahana Sunset

Figure 13. Contact between Kahana Sunset seawall and Schweitzer boundary wall and stairs

Southwest Property Boundary

The southwest property boundary abuts the Lusardi property. The Lusardi seawall is butted into the Schweitzer wall approximately in the middle of the return (see Figure 9). Both the Lusardi and Schweitzer properties have Cemented Rock Masonry (CRM) boundary walls behind the seawalls, perpendicular to the shoreline and separated by a distance of approximately 3 ft. Figure 14 shows the contact between the Schweitzer seawall return and the CRM wall.

Figure 14. Contact between Schweitzer seawall and CRM boundary wall at southwest property line

4. CONSEQUENCES OF NO/ACTION AND SEAWALL REMOVAL

Of the five properties fronting the Keonenui Bay shoreline, four are fronted by seawalls. The single remaining property without a seawall is at the southwest corner of the bay (the Hester property), where the shoreline consists of a vertical mudstone escarpment. The Hester property is currently processing an Environmental Assessment for the construction of a new seawall. In effect, a network of seawalls seals off most of the Keonenui Bay shoreline.

It is difficult to say with absolute certainty what the effects of keeping or removing the Schweitzer seawall will be. However, the following are best estimates of these consequences.

No Action

The No Action alternative is leave the wall and stairs in place. Coastal processes and beach morphology will continue as at present. Slow erosion of the mudstone substrate is inevitable and will continue to undermine the structures. Some remedial action will likely need to be taken to maintain the integrity of the seawall and stairs. The critical need for this repair is some years away, and it would likely take the form of replacing the existing footing protection with a deeper excavation and cut-off wall.

During high wave events, the seawall and stairs present a reflecting surface to incoming waves that is likely detrimental to beach sand deposition. However, this is a temporary effect that is relieved during milder conditions, and it is not clear that the native shoreline would be a substantial improvement due to its high relief and propensity to form steep escarpments. The Kahana Sunset/Schweitzer/Lusardi sequence of seawalls presents an integrated shoreline defense against coastal erosion, and is helpful in the prevention of turbidity caused by erosion of the mudstone substrate.

Keonenui Bay is also a pathway for upland drainage areas. There are retainage and settling basins associate with the drainage, but apparently the design conditions are sometimes exceeded. Photographs held by the property owners and taken during flood events show that a floodway exists along the northeast property line, with egress onto the beach via the stairs. The concrete pathways and stairs serve to protect this area from erosion and entrenchment during these events.

Removal of Seawall and Stairs

Removal of the Schweitzer structures – the seawall and stairs – would have consequences that include exposure of existing native material underneath the structures, and exposure of the flanks of the seawalls and adjacent properties. It is unclear if there would be beneficial effects such as an improvement in the retention of sand on the beach.

The native material under the Schweitzer structures would be composed of the same mudstone existing elsewhere in the bay. However, it would have been excavated in order to place the seawall (see Figure 10), and probably exists as a more or less vertical escarpment that is presently buried behind the wall. Some of the material behind the wall is probably fill, and would also need to be removed if it is not composed of beach compatible sand. It is likely that at least the most seaward landscape wall (see Figure 7) would also need to be removed, or would soon be lost to erosion and undermining as a consequence of seawall removal. Long-term erosion effects may potentially threaten the Schweitzer residence.

The Kahana Sunset wall has a return element that will help prevent flanking of the structure upon removal of the Schweitzer stairs. Its extent is limited, however, and the integrity of the footing is not known, although the front of the structure is visibly undermined. The boundary wall that it abuts likely does not have an extensive footing and will probably be undermined if exposed. Flanking and damage to the Kahana Sunset seawall is likely to occur if the Schweitzer stairs and wall are removed.

On the southwest side, the Lusardi wall butts into the return of the Schweitzer wall. Removal of the Schweitzer wall would leave the end of the Lusardi wall exposed, and allow it to eventually be flanked and eroded.

Removal of the structures will eliminate the footprint of the structures on the beach, adding some width to the exposed mudstone substrate or the sand beach. Based on measurements of the footing protection and the section showing the footing in Figure 10, the footprint is likely to be on the order of a few feet at the wall. The added width will likely not cause substantial changes to coastal processes elsewhere in the bay. If substantial erosion were to occur as a result of removal of the structures such that a minor incursion were formed into the Schweitzer property, this formation may fill with sand. However, these morphological changes are conjectural as it is not possible to determine precisely what would be exposed upon removal of the structures, and what the consequential shoreline response would be.

5. ACTION SUMMARY

Following are summary points for the No Action and Removal actions:

No Action

No Action would result in:

- No change in existing morphology, except for slow erosion of the mudstone substrate similar to that occurring at present and along the remainder of the beach;
- Continuity and mutual protection of the Kahana Sunset/Schweitzer/Lusardi seawalls;

- Hardened floodway during extreme flood conditions;
- No change in shoreline position.

Seawall and Stair Removal

Removal of the Schweitzer structures would result in:

- Exposure and potential damage due to flanking of the Kahana Sunset and Lusardi seawalls;
- Likely exposure of a mudstone escarpment buried behind the existing wall, however there is great uncertainty as to the buried terrain;
- Increased substrate erosion and consequent turbidity of nearshore waters;
- Erosion of a floodway during extreme floods;
- Potential loss of at least one Schweitzer landscape wall;
- Minor increase in beach width;
- Uncertain change in beach morphology dependant upon the presently buried substrate.

Changes in overall beach morphology due to structure removal are likely to be minor, however the potential flanking of structures on the neighboring properties is a major concern.