LINDA LINGLE GOVERNOR

Revised
May, 2005

SSBN Cat II
General Application

Category II General Application
Small-Scale Beach Nourishment Projects (SSBN)

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

Before completing this form, read the Guidelines and Instructions for SSBN application.

DLNR USE ONLY
Permit No.: _____ Planner: _____
Date Received: _____

Start date of proposed work: Winter 2015.

PROJECT NAME: SBRF, Inc. Proposed Volume 3,500yds^3 over 5 years

For Category II beach nourishment projects less than 10,000 yd^3 total volume.
Attach additional sheets as necessary.

1) **Property Owner(s) Information** (see Guidelines for SSBN Application - Note 1)

Is this a community association or partnership project? Yes x No ___
Attach additional owners information as needed.

Neighborhood Association (applicant):
Legal Name: Spreckelsville Beach Restoration Foundation, Inc. (aka SBRF, Inc.)

Street Address: Laulea Place

City, State and Zip+4 Code: Paia, HI 96779

Mailing Address: c/o Cadiz 2406 Waipua Street

City, State and Zip+4 Code: Paia, HI 96779-9748

Contact Person & Title: Patricia Cadiz, President SBRF, Inc.

Phone No.: (808)283-5070 Fax No.: ( )

Property Owner:
Legal Name: Barbara D and Robert J. Woods Trust

Street Address: 461 Laulea Place

City, State and Zip+4 Code: Paia, HI 96779

Mailing Address: same

City, State and Zip+4 Code: same

Contact Person & Title: Barbara Woods, Secretary, Spreckelsville Beach Restoration Foundation, Inc.

2) **Primary Contractor Information** (see Guidelines - Note 2)

Name: Tavares Trucking

Scope of Work: Delivery and distribution of sand

Street Address: P.O. Box 1862, Kahului, HI 96733-1862

Contact Person & Position Title: David Tavares, President

Phone No.: (808) 357-0066 Fax No.: (808) 878-2133

Name: _____

Scope of Work: _____

Street Address: _____

Contact Person & Position Title: _____

Phone No.: ( ) _____ Fax No.: ( ) _____

Name: _____

Scope of Work: _____

Street Address: _____

Contact Person & Position Title: _____

Phone No.: ( ) _____ Fax No.: ( ) _____

Name: _____

Scope of Work: _____

Street Address: _____

City, State and Zip+4 Code: _____

Phone No.: ( ) _____ Fax No.: ( ) _____

3) Emergency Contact Information (see Guidelines - Note 3)

Company/Organization Name: Spreckelsville Beach Restoration Foundation, Inc.

Contact Person & Title: Patricia B Cadiz, President

Phone No.: (808) 283-5070 Phone No.: (808) 283-5070 Cell

Company/Organization Name: Spreckelsville Beach Restoration Foundation, Inc.

Contact Person & Title: Lynn Keller, member, Board of Directors of SBRF

Phone No.: (808) 877-5859 Phone No.: (415) 990-0778 Cell

4) Project Site Information (see Guidelines - Note 4)

Project or community association name: Spreckelsville Beach Restoration Foundation, Inc.

Government Project/Job No. (as applicable):

State/County Zoning. (as applicable): Residential

Street Address: 461 Laulea Place

City, State and Zip+4 Code: Paia, HI 96779

Contact Person & Title: Patricia B Cadiz, President

Phone No.: (808) 283-5070 Fax No.: ( )

The first TMK is the lot mauka of the project area. The second TMK is the ingress/egress point for accessing the beach.

Tax Map Key Number(s)							
Zone	**Section**	**Plat**	**Parcel(s)**	**Ownership**	**Total Area (sq. ft)**	**Eroded Area (sq. ft)**	**Zoning**
3	8	2	006	Woods	22695	5400	Residential
3	8	2	007	Nelson	36689	2500	Residential

5) **Location Map and Shoreline Survey** (see Guidelines - Note 5)

Provide and attach a regional, vicinity and parcel map of project area and include recent photograph(s) of relevant coast and shoreline:

a. Maps submitted: see Item 5 a attached

b. Photos submitted: see Item 5 b attached

c. Shoreline Survey: (Date & Contractor)

Shoreline Delineation: see Item 5 c attached

State Certification Map (If Applicable) : _____

d. Other surveys (Specify): see Item 5 c attached

6) **Receiving State Water Information** (see Guidelines - Note 6)

a. Regional Name: Kahului Bay, Maui

b. Classification: (check and explain appropriately)

1.Marine Waters: Class A ____x____ Type: Open Coastal

2. Marine Bottom Ecosystem: Class II ____x____ Type: sand & ruble

3. Water-Quality-Limited Segment:: Yes _____ No ____x____

c. Explain any "other" classifications: _____

7) **Project Description** (see Guidelines - Note 7)

Project Classification (Category I or II)

Note: Category II projects may require a seal from a certified civil engineer.

(Attach separate sheets as needed):

Primary Contractor and Type: Tavares Trucking, trucking company

Attached Documents (If Applicable):

a. Project Category (I or II): Category II

b. *Extraction* Site Street Address: Maui Lani Parkway

City, State and Zip+4 Code: Wailuku, HI 96793

Tax Map Key (TMK): (2)3-8-007:153

Terrestrial extraction site is a permitted commercial quarry Company Ameron

Offshore Coordinates: Lat: ° ' " Lon: ° ' "

UTM: North: East:

c. *Nourishment* Site Street Address: 461 Laulea Place

City, State and Zip+4 Code: Spreckelsville, Maui, HI 96779

Tax Map Key (TMK): (2)3-8-02:006-0000

d. Describe the overall project scope and purpose and evidence of need for proposed activities. (Attach separate sheets as needed)

This is a continuation of a planned regional beach and dune nourishment and restoration project at the beach fronting Laulea Place, also known as Coconut Cove or Laulea Beach, for the benefit of all beachgoers including swimmers, recreational canoe paddlers, divers, fishermen, windsurfers, boogie-boarders, snorkelers, and walkers. The beach has suffered long-term erosion as evidenced by the State of Hawaii historical beach profiles for this bay. (See Exhibit 7d.) The long-term goal of the residents is to reverse the erosion trend and restore the beach to a healthy, sandy beach. The goal of this phase, however, is more toward dune restoration and maintenance.

The residents recognize the need and benefit, both to the neighborhood and the public, of restoring and protecting the sandy beach for its many positive attributes. Restoration efforts began at this beach in 2007 with a Category 1 SSBN combined with a County SMA for simultaneous dune restoration. That was followed by a Category 2 SSBN, and then a County SMA for 5 years of dune replenishment. Most recently the average placement has been approximately 300 cubic yards and only twice per year. Even at this slight pace, the effort had successfully forestalled erosional forces in the cove and produced modest positive gains in nearshore sand cover until just recently when a early season, warning-level high-surf event from an unusual NNW direction coincided with an exceptionally high tide. This singular event depleted the dune significantly more than any other surf or tide event since we began our

restoration efforts in 2007. It is a known fact that beaches will migrate inland if there is insufficient sand volume to mitigate events like this. Additionally sea level rise may be a contributing factor to the ongoing erosion pressure on this shoreline. The members strongly feel that the restoration efforts have been successful and that maintenance efforts must continue (at least at a similar pace) while investigation into corrective measures to mitigate long-term erosional forces is conducted.

e. Provide a brief assessment of the primary causes of beach erosion or sand loss for the project site and describe the ability of the proposed project to correct or mitigate the problem. Provide an estimate of the designed residence time of the nourishment project and any anticipated follow up nourishment(s).

The primary cause of beach erosion and sand loss in this bay may be attributed to 100 years of sand mining operations at the Paia Lime Kiln. Sand mining for sugar plantations began in the late 1800s and continued through the early 1970s. Scientists acknowledge that the sand mining could be a contributing factor to annual losses along all of Maui's north shore beaches. Before restoration began, rail from the sand train was found at this beach.

There is also a perpetual movement of sand westward in the summer and eastward in the winter, due to wind and long shore currents. Wind transport is a significant factor with regular trade winds over 20mph which accelerate down this coastline due to the venturi effect of Maui's two mountains. The next bay/beach westward (downwind) of Laulea has seen ever increasing dune heights due to wind transport effects. In the late 1980s those dunes were typically only 5-20 feet high but now soar over four stories and vent inland well out of reach of the active dune system. Summer trades also build long shore currents that transport nearshore and swash zone sand westward. Only in the winter when the predominate swells are from the northwest does the trend reverse and some sand is transported eastward. The net effect due to these natural forces is an annual net loss westward.

With replenishment, however, we have seen no further shoreline erosion at Laulea Cove since project inception. Sand replenishment began in 2007 with a Category 1 SSBN for beach nourishment and a matching SMA for dune nourishment. Subsequently a Category 2 SSBN and SMA permitted another 6500 yds^3. More recently a five-year County dune restoration permit has allowed us to continue with small maintenance placements averaging approximately 300 yds^3 per year and only two times per year. Even at this modest pace of approximately 600 yds^3 per year, the project has successfully forestalled shoreline erosion and maintained a walk-able beach. The previously described event on October 27 depleted our placed sand but successfully mitigated any land or property loss.

It is recognized by the financial contributors that this will be a multi-year, multi-phase project. They understand and accept that dunes and beaches need maintenance just like roads and lawns. The success of beach nourishment and restoration as a long-term, ongoing project has been well demonstrated by our recent efforts. With the threat of sea level rise and larger more frequent storms there is interest in investigation of other potential measures

to mitigate erosional forces, however, we seek this permit so that we can continue our maintenance pace during the study and potential permitting processes if additional measures beyond sand feeding are recommended.

f. Describe the method of sediment extraction and delivery, type of equipment to be utilized and construction methods.

Approved beach quality sand will be purchased from Ameron and delivered by Tavares Trucking semi-trailer end dump trucks to the project site in Spreckelsville. The trucks will dump the material into the approved nourishment area. A bulldozer will push the material eastward along the shore front of TMK (2)3-8-02:006. Best management practices will be adhered to minimize episodic turbidity or any other negative impacts (see Item 10 for more details), the most important of which are timing placements during low tides and low surf and using only approved beach quality sand. No sand will ever be placed directly into the water.

g. Provide scale drawings or photographs (with scale bar) of area to be excavated and filled. Include an estimate of the area (ft^2) to be nourished. Delineate property boundaries, certified shoreline (if available), location and cross-section of beach profiles, existing and proposed temporary structures with cross-sectional views of any proposed temporary structures. Provide an estimate of the elevations and dimensions of the project area and a range of water depths of proposed activities.

Reference Diagram: See Exhibit 7g

There will not be any excavation at the project site, nor any structures. Total area to be filled is approximately 600 cubic yards in the combined SMA and conservation districts. The initial phase will need to fully restore the dune and will total approximately 600 cubic yards. It is anticipated that the majority will remain intact and subsequent maintenance phases will total 200-300 cubic yards approximately 2 times per year. It is estimated that 4 to 500 cubic yards of Phase 1 will be placed in the conservation district (the balance is placed in the SMA zone). Subsequent maintenance phases will be placed in the eroded scallops, which would likely be in the conservation district. Overall lot width is 108'. Fill area varies in width (mauka to makai). Please see Exhibit 7g. Planned average fill depth is approximately 5'. No in water work is planned. Applicant plans approximately two placements per year over 5 years, which would equal approximately 500 yds^3 in the conservation district per year except for the first year, which is estimated at approximately 750 yds^3 (500 + 250). We are applying for 3500 yds^3 to have permissions in place in case of other extreme events or severe seasons that would require additional placements to maintain the healthy dune status and protect from land losses.

h. Provide photographs of area to be excavated and filled before, during and after the nourishment project.

Dates of photos submitted with this application: 8/26/2015, 10/7/2015, 11/18/2015&12/13/15.

Additional survey work scheduled: Pre-project, during project and post project photos will be taken as part of our ongoing historical photo surveys and submitted at a frequency to be determined by DLNR-OCCL.

i. Provide a description and engineering design of any proposed temporary structures including all retention or offshore structures. Include a design analysis of any offshore sand extraction.

No structures or sand retention devices are proposed.

No offshore extraction is involved or planned.

j. Provide a temporary construction plan. If temporary retention structures are proposed provide the following:

1. Describe the potential effects to the marine substrate and local littoral processes.
2. Location, type and dimensions of proposed structure(s) (noted on drawings in section 7g).
3. Length of time retention structures will remain in place including a timeline of installation and removal efforts.
4. Proof of general liability insurance ($1,000,000 minimum).

Sand will be delivered via semi tractor-trailer trucks. Access is along the east border of TMK 2-3-8-002:007 and will be dumped in the dune area of that parcel. A bulldozer will push the sand eastward along the makai border of TMK 2-3-8-002:006. Placement amounts will vary depending upon erosional degradation to previous placements, tide and surf height on placement day and permit limitations. Each placement will be completed in one day. Material will not be placed directly into the water.

No temporary retention structures are proposed.

See attached Item 7j for proof of general liability insurance.

k. Describe existing physical, chemical and biological environment of project site and any other pertinent characteristics of site. Include a description of major topographic/hydrographic features such as slope, ledges, holes, reefs. Provide a relevant hydrographic chart with site highlighted.

Chart Provided: United States, Department of the Interior, Geological Survey, Paia Quadrangle Exhibit 7k

The beach nourishment site is historically a carbonate sand beach and coral ruble over clay substrate with basalt boulders. The eastern promontory of Laulea Cove is characterized by many naturally occurring basalt rocks embedded in volcanic red clay with a thin layer of sand. The western promontory has a major natural beach rock offshore-detached reef approximately 50 yards from shore. This area also has naturally occurring basalt rocks in the sand between the reef and the point. As the UH Erosion Hazard Rates map shows, in 1912 there was enough sand in the system that the sandy shoreline connected to the beach rock reef forming a tombolo. Long time residents tell of being able to walk out to the reef to collect shells in the 1940s. (see Erosion Hazard rates map Item 7k)

l. Describe the existing bottom type of the extraction and nourishment site. Include percent coverage and type.

Please see four detailed Marine Site Assessments (Item 7 l) and NOAA Benthic Habitat Biology Map showing uncolonized sandy substrate or pavement area nearshore and turf algae 10-50%, further out.

m. Describe potential adverse environmental effects of proposed activity.

No adverse environmental impacts are anticipated. Proposed project seeks only to restore the natural dune environment for the conservation and well being of the physical, chemical and biological environment. Strict adherence to the established sand quality standards is the most important mitigation policy.

n. Describe the current recreational use of the project site and describe the potential impacts the proposed project might have. (ie. Impacts on swimming, surfing, canoe clubs, diving, fishing, tourism, ect.) Briefly identify the development style and land use of the project area, (undeveloped, urban, residential, condominium, agricultural, commercial, etc..)

Recreational uses include Stand-Up-Paddle surfing on the reef fronting this bay, as well as regular prone surfing, surf ski (kayaking), canoe paddling, windsurfing, shore fishing, diving, snorkeling, swimming, beach walking, shell collecting, sun bathing, and general beach enjoyment activities. The proposed project should enhance the enjoyment of all of these activities as well as continue the restoration of lateral access for the general public. This is a developed residential area. All eleven shorefront properties have residential structures.

o. Identify and describe any known historic properties within or near the proposed project area and any mitigation commitments made to protect, restore, or data recover any of the identified properties. This could include properties such as stone features, fishponds, burial sites, cultural deposits, and traditional places.

There are no known historic properties in the area.

p. Check Yes or No for the following items. Provide a detailed explanation for any "yes" answers. (see Instructional Guidelines)

	Yes	No	Contacted?
Is any proposed work within the shoreline setback area?[1]	X		
Is any portion of this project within a Special Management Area?[1]	X		
Is any portion of this project within an endangered species habitat?[2,3]		X	
Is any portion of this project within a wetlands or estuary?[2,3]		X	
Is any portion of this project within a Marine Life Conservation District?[4]		X	
Is any portion of this project within a historical or cultural site?[5]		X	
Letter of Public Notice of Proposed Action submitted to the Office of Environmental Quality Control (OEQC)?[6]		X	
Date OEQC Contacted: * Authorizations attached:	*		

* Draft letter attached for submission to OEQC.

Explanation: An SMA Assessment Application is under review with the County of Maui, Department of Planning. Contact personnel: James Buika or Tara Owens-Miller

Agencies Contacted: County of Maui, Department of Planning

8) **Description of the Existing Sedimentary Environment and Compatibility of Proposed Nourishment Sediment.** (see Guidelines - Note 8)

a. Describe the **existing** sediment type including size, composition and quality. Include grain size distribution, percent fines and color.

Existing sediment is a mixture of native and approximately 10,000 cubic yards of previously approved fill material from previous Category I and II and SMA permits. Composition is mostly carbonate with small terrigenous sediment component. Color is light tan with variation from off-white to dark tan. Sieve analysis of the existing upper beach sand shows average grain size at about 0.2mm. Please see Sand Samples Sieve Analysis chart and graph Exhibit 8a.

b. Describe the ***proposed fill*** sediment type including size, composition and quality. Include grain size distribution, percent fines and color.

Proposed fill sediment is from Ameron's new pit on Maui Lani Parkway. Average grain size is approximately 0.24mm, which is slightly larger than the existing fill. It appears slightly darker than the existing sediment. Please see Sand Samples Sieve Analysis chart and graph Exhibit 8a.

c. Give an estimate of compatibility to fill site and evidence that proposed fill sediment meets the requirements for grain size ranges as specified in the Guidelines Section 8c. Indicate an overfill ratio and method of calculation (if applicable).

Proposed fill sand is dominantly composed of naturally occurring carbonate beach sand is has 1.97% fine sediment as defined by the percentage passing through the #200 sieve. This is well under the policy maximum of 6%. Average grain size is approximately two times the minimum limit of 0.125mm. Proposed fill does not exceed 10% course sediment as defined by material passing through the #4 sieve. The sieve analysis comparison reveals that the proposed fill is slightly larger in grain size than the upper beach sample as shown by the smaller percentage passing through the sieves in every case except the #200 sieve. The proposed fill does not fit entirely within the +/-20% brackets but it is ever so slightly larger which is the desirable trait for retention. Since the existing sediment is predominantly composed of naturally sorted previous fill mixed with native sand from pre-project, it is conclusive that the proposed fill will be compatible match.

d. Provide one separate, bagged and labeled (~0.5 lb) sediment sample of both the extraction site and nourishment site to the DLNR Lands Division. (see Guidelines Note 8)

Sample sent or delivered (Date):

e. List name and contact numbers for laboratory to be used for sediment analysis:

Lab name, contact name and phone number.

Ameron Hawaii, Quality Assurance Laboratory, Jonah Abreu, (808) 357-9187

9) Project Schedule (see Guidelines - Note 9)

a. Provide the estimated date or dates on which the activity will begin and end:[1]

[1] See Article V.22 TERMS of the Guidelines

Project start date will depend on permit approvals. Winter 2015 would be the proposed start date for the project continuation under this application. Schedule for berm maintenance activities will be provided no later than 2 days prior to initiation of work.

b. Provide the date or dates that the excavation and or nourishment(s) will take place:

Placement dates will be scheduled as needed and as tides, surf and weather permit. Approximately two placements are planned per year.

10) Site-Specific Best Management Practices (BMP) Plan (see Guidelines - Note 10)

a. Separate maps are attached ____Yes Using existing map: See Exhibits 7g&h

b. Project monitoring and oversight responsibility (If different than Section 3 Emergency Contact).

(same)
Contact Person: Patricia Cadiz

Title: President, Spreckelsville Beach Restoration Foundation, Inc.

Contact number(s): 808-283-5070

c. Construction sequence and duration.

The construction schedule has always and will continue to be determined by choosing appropriate low surf and low tide dates. If an unforeseen surf event occurs on the placement day, a postponement will occur until the next suitable low tide and low surf opportunity. Sand will be placed and all work will be done landward of the High Water Line (HWL). The HWL varies with beach volume and tidal cycle. Sand will not be placed directly in the water. Placements will be one-day projects. The bulldozer will be delivered to the ingress/egress gated area of TMK 2-3-8-002:007 the evening before the placement date. Any fueling or refueling or maintenance will be conducted at the mauka area of the property, as far from the dune and beach area as physically possible (minimum 100' from the shoreline).Before the trucks arrive, the existing vegetation (Puhuehue) will be carefully pulled back to a safe area on the mauka side of the dune. Trucks will begin delivering material to the site early the next morning (usually around 8 am) and unload by backing up to the makai area of TMK 2-3-8-002:007 and unloading there. The bulldozer will then spread the material eastward along the designated area fronting TMK 2-3-8-002:006.Each placement will be graded and smoothed by hand raking and replanted with the existing Puhuehue (Beach Morning Glory) to minimize wind transport and stabilize the placement. Equipment and trucks will be removed from the construction site upon placement completion and the ingress/egress area will be cleaned and cleared of any project related sand or debris.

d. Construction or nourishment materials and equipment to be used and the anticipated dates of installation/mobilization and removal.

Equipment to be used will be a bulldozer similar to a D4 or smaller to distribute the material, and semi-tractor trailer trucks to deliver the material. The nourishment material will only be approved beach quality sand. No temporary silt containment devices or geotextile bags are proposed. Dates will be set according to need caused by erosional stresses and with respect to the need for low tide and mild surf conditions to minimize any risk of construction caused turbidity.

e. Characteristics of potential pollutants associated with the proposed nourishment or construction activity.

Source	Composition	Potential Pollutant	Quantity	Duration
Trucks and bulldozer		Diesel fuel leak (Not into state waters)	Limited	1 day
Trucks and bulldozer		Hydraulic fuel leak (Not into state waters)	Limited	1 day
Trucks and bulldozer		Oil leak (Not into state waters)	Limited	1 day

f. Proposed pollution control measures and/or treatment(s).

All equipment will be checked to ensure there are no leaks of any pollutants (i.e. fuels or oils). A preconstruction meeting will be conducted with the trucking and bulldozer operators to review BMPs, construction sequence and safety measures. In order to mitigate the potential for toxic or chemical spills into the coastal environment, all fueling and servicing of heavy machinery and equipment will be completed offsite or at the farthest mauka area of the ingress/egress lot (at least 100 feet away from the sensitive dune area).
In addition, best management practices will be utilized during the sand application activities in order to mitigate the potential for adverse effects to air quality, noise levels, including use of emission control devices and noise attenuating devices.
Material will be watered as it is added and moved to minimize airborne dust; machinery will not be allowed to idle while not in use; and machinery will be prohibited from entering coastal waters and shall not go beyond the mean high water mark.
Strict adherence to sand quality parameters and close attention to tide and surf conditions shall be the primary forms of silt control. Please see attached Item 10-BEST MANAGEMENT PRACTICES PLAN for more details.

g. Describe the onsite public safety measures (i.e. Warning signs, barriers, cordon off area, safety personnel, etc..)

Every effort will be made to notify residents and neighbors of the date of work. Notification signs will be posted during the activity. Lateral beach access will be maintained. The project manager or applicant's agent will be onsite during all activities.
The project shall be completed in accordance with all applicable State and County health and safety regulations. Please see attached Item 10-BEST MANAGEMENT PRACTICES PLAN for more details.

11) **Monitoring and Assessment Plan** (see Guidelines - Note 11)

The Monitoring and Assessment Plan shall, at a minimum, include the following:

a) Description of the methods and means being used or proposed to monitor the quality of the surrounding near shore waters. (Describe the planned monitoring program frequency)

Monitoring During Construction:

Water quality monitoring will be conducted during construction to monitor impacts during construction to determine duration and extent of any measurable impacts. Monitoring will consist of annotation and photographic documentation of the nearshore conditions. At least 3 photos will be taken and cataloged from land: one upwind/up current of the project site, one directly out to sea from the project site and one downwind/down current of the project site. In the event of a visible plume that cannot be explained by recent high surf, storm conditions or high tides, and where similar turbidity is not found on other north shore locations, and therefore it is within reason to suspect that the turbidity may be caused by the project, the project will be halted or altered to limit negative impacts. Additionally, the size and location of the plume will be described in an accompanying narrative and documented photographically. Documentation will be kept to demonstrate how the project activity is in compliance with the State water quality standards and will not have adverse affects on the pre-project marine and coastal environment.

Beach Profiling:

The Spreckelsville beach Restoration Foundation has conducted baseline beach profiles at three locations in the cove. Additionally the eastern most property in the cove has baseline beach profiles on file for a total of four transects in the Laulea Cove. Though not required by Appendix A, if State or local agencies request it, ongoing beach profiles could be conducted along these same transects.

Beach Monitoring Plan:

Photographs will be taken to document beach conditions pre-project, during, and post-project. A minimum of three photographs will be taken on each documentation date: a view to the east, a view to the west and a view looking landward at the beach.

Water Quality Monitoring Plan:

Per Appendix A photographic water quality monitoring will be conducted before construction begins to document ambient conditions, during construction to monitor any impacts during construction and after construction to determine duration and extent of any measurable impacts. Monitoring will consist of annotation and photographic documentation of the nearshore conditions. At least 3 photos will be taken and cataloged from land: one up current/upwind of the project site, one directly out to sea from the project site and one down current/downwind of the project site.

Monitoring frequency is planned as follows:

	Beach Monitoring	Water Quality Monitoring
	Photos	Photos
Baseline photos	√	√
Within one week prior to project initiation	√	√
During sand placement	√	√
Immediately after completion of project	√	√
Every day for 3 days subsequent	√	√
1 week after completion	√	√
2 weeks after completion	√	√

1. Additional monitoring will also be conducted if/when a visible plume is discernable for more than 48 hours, that cannot be explained by high surf, storm conditions or high tides, and where similar turbidity is not found at other north shore locations, and therefore it is within reason to suspect that the turbidity may be caused by the project.
2. Additionally, the size and location of a plume will be described in an accompanying narrative and documented photographically.
3. Documentation will be kept to demonstrate how the project activity is in compliance with the State water quality standards and will not have adverse affects on pre-project marine and coastal environments.

b) Acknowledgement of required final compliance report to be submitted to the DLNR-OCC within two months of completion of authorized project. (See Guidelines note 11).

Applicant acknowledges the required final report will be submitted to the DLNR within two (2) months of completion of authorized project. The final report shall include, as appropriate, descriptions of the nourishment activities, discussion of any deviations from the proposed project design and the cause of these deviations, results from any additional environmental monitoring including sediment analysis, water quality parameters and discussion of any necessary corrective action(s) and photographs as required in section 7.h.

Authorized Signature: Patricia B Cadiz

Name and Title: Patricia B. Cadiz, President, SBRF, Inc. Date: December 15, 2015

12) Summary of Supporting Documents (see Guidelines - Note 12)

List and submit applicable maps, photos, plans, specifications, copies of associated permits or licenses, federal applications, Environmental Assessments or Environmental Impact Statements, as applicable, etc.

	Document Title	Page Referenced	Document Date
a)	Owner information and Permissions	Item 1	
b)	Regional, Vicinity, Parcel Maps	Item 5a	varies
c)	Aerial, pre-project and current photos	Item 5b	as labeled
d)	Delineation Map	Item 5c	February 2007
e)	Other shoreline survey Map	Item 5d	February 2003
f)	Extraction Site location map	Item 7b	Sept 2015
g)	Historical Shorelines/Erosion Rate map	Item 7d	2004
h)	Scale Drawing showing area to be filled and Typical Cross Section Drawing	Item 7g	2015
i)	Photos of proposed fill area	Item 7h	Oct 14-Dec 15
j)	General Liability policy	Item 7j	07/01/15-07/01/16
k)	Hydrographic charts	Item 7k	varies
l)	Marine Site Assessments/Benthic Habitat Biology	Item 7l	2006, '07, '09 & '15
m)	Existing Sediment Analysis	Item 8a	May 11, 2015
n)	Proposed Fill Sediment Analysis	Item 8b	Feb & Mar 2015
o)	Compatibility Analysis	Item 8c	09/2007
p)	OEQC Environmental Notice (Draft)	Item 10	Nov 2015
q)	Best Management Practices Plan	Item 10	Nov 2015

13) **Additional Information** (see Guidelines - Note 13)

14) **Authorization of Representative** (see Guidelines - Note 14)
Check one and complete the appropriate space(s). Alteration of this item will result in the invalidation of the authorization statement(s).

a. This statement authorizes the named individual (s) or any individual occupying the named position of the company/organization listed below to act as our representative to process the following General Application for Small-Scale Beach Nourishment for the subject project. The Owner hereby agrees to comply with and be responsible for all permit terms and conditions.

Said representative is further authorized to fulfill all terms and conditions of this application:
Yes__x__ No_____

1. Company/Organization Name: Spreckelsville Beach Restoration Foundation, Inc._____

Street Address : 2406 Waipua Street_____

City, State and Zip Code+4: Paia, HI 96779_____

Authorized Person & Title: Patricia B Cadiz, President_____

Phone No.: (808) 283-5070_____ Fax No.: (___)_____

Effective date(s).: as of December 5, 2015_____

b. A separate statement is attached. Yes x____ No _____

15) **Certification** (see Guidelines - Note 15)
Alteration of this item will result in the invalidation of this application.

_____ I certify that for a municipal agency, I am a principal executive officer or ranking elected official.

_____ I certify that for a state agency, I am a principal executive officer or ranking elected official.

_____ I certify that for a federal or other non-federal public agency, I am a principal executive officer or ranking elected official.

_____ I certify that for a federal agency, I am the chief executive officer of the agency, or I am the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

_____ I certify that I am a general partner for a partnership or association.

_____ I certify that I am the proprietor for a sole proprietorship.

_____ I certify that I am the legal owner of a private residence or property.

__x__ I certify that for a corporation or association, I am the President, Vice President, Secretary, or Treasurer of the corporation or association and in charge of a principal business function, or I perform similar policy or decision-making functions for the corporation or association:

_____ I certify that for a corporation, I am the Manager of one or more operating facilities and have the authority to sign documents has been assigned or delegated to me in accordance with corporate procedures.

_____ I certify that for a trust, I am a trustee.

In accordance with all applicable State of Hawaii and federal statues there is reasonable assurance that the proposed activity will be conducted in such a manner which will not violate basic water quality criteria applicable to all waters and in a manner consistent with the DLNR, COE, DOH and CZM programs where the proposed nourishment would take place.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Signature: Patricia B Cadiz Date: Dec, 15, 2015

Printed Name & Title: Patricia B Cadiz, President

Company/Organization Name: Spreckelsville Beach Restoration Foundation, Inc.

Phone No.: (808) 283-5070 Fax No.: ( )

16). **Filing Fee** (see Guidelines - Note 18)
Check one and complete the appropriate space(s). Non-refundable filing fee.

Check # _____

_____ Category I Project ($50)
_____ Category II Project ($250)
_____ Attached to application

Payable to: *State of Hawaii*

Inquiries and Submittals:

Contact Information

SSBN inquiries and submittals shall be directed to the street or mailing address listed below:

(1) ***Street Address***

State of Hawaii
Department of Land and Natural Resources
Office of Conservation and Coastal Lands
1151 Punchbowl Street
Honolulu, Hawaii 96809
(808) 587-0377
(808) 587-0322 Fax
http://www.hawaii.gov/dlnr/occl/index.php

(2) ***Mailing Address***

State of Hawaii
Department of Land and Natural Resources
Office of Conservation and Coastal Lands
P.O. Box 621
Honolulu, Hawaii 96809

Questions should be directed to the DLNR OCCL.

Note: The length of time required to process this permit will be directly related to the complexity of the project and the adequacy and completeness of the information submitted by the applicant (see Section V.4 of the Guidelines manual).

SSBN Application Checklist		
If any item is listed as "no," attach a sheet with the reason for its exclusion from the application. Sections 10g, 12, 14 and 15 may be omitted (with a "N/A" answer) if applicable.		
Item Number	**Description**	**Item addressed? (yes/no)**
1.	Owner Information	yes
2.	General Contractor Information	yes
3.	Emergency Contact Information	yes
4.	Project Site Information	yes
5.	Location Map and Survey Information	yes
6.	Receiving State Water Information	yes
7.	Project Description	yes
	Proof of $1,000,000 Liability Insurance (attached)	yes
8.	Description of the Existing Sedimentary Environment and Compatibility of Proposed Nourishment Sediment	yes
9.	Project Schedule	yes
10.	Site-Specific BMP Plan	yes
	10.g Letter to Environmental Notice (Draft attached)	yes
11.	Applicable Monitoring and Assessment Plan	yes
12.	Supporting Documents	yes
13.	Additional Information	na
14.	Authorization of Representative	yes
15.	Certification	yes
16.	Filing Fee ($50 Category I; $250 Category II) is attached	yes
17.	Number of copies with supporting documents submitted	
	b) One (1) copy for projects on Oahu with owner's original signature	
	c) Two (2) copies for projects on islands other than Oahu (one with owner's original signature)	yes

Item 1
Owner Information and Permission

OWNER INFORMATION:

Location of SSBN Category 2:

Legal Name: Barbara D and Robert J Woods Trust (TMK: (2) 3-8-002:006)

Street Address: 461 Laulea Street

City, State and Zip+4 Code: Paia, HI 96779

Mailing Address: same

City, State and Zip+4 Code:

Contact Person & Title: Barbara Woods, Secretary, Spreckelsville Beach Restoration Foundation Inc.

Ingress/Egress:(Permissions obtained and documented through County SMA jurisdiction)
Legal Name: Willie and Annie Nelson (TMK: (2) 3-8-002:007)

Street Address: 463 Laulea Street

City, State and Zip+4 Code: Paia, HI 96779

Mailing Address: same

City, State and Zip+4 Code:

Contact Person & Title: Annie Nelson

Barbara Woods
461 Laulea Place
Spreckelsville, Maui, HI 96779

Nov. 12, 2015

Re: Small Scale Beach Nourishment-Category II Application for TMK (2)3-8-02:006

To Whom It May Concern:

I am the legal owner of this property and hereby authorize the Spreckelsville Beach Restoration Foundation to submit this Small Scale Beach Nourishment-Category II Application on my behalf.

Signed,

Barbara Woods
Barbara Woods

STATE OF HAWAII)
) SS.
COUNTY OF MAUI)

On this 18th day of Nov, 2015, in the Second Judicial Circuit of the State of Hawaii, before me, the undersigned Notary Public, appeared Barbara Woods, to me personally known, did say that such person executed the 2 page Acknowledgement dated 11/20, 2015, as the free act and deed of such person, and if applicable in the capacity shown, having been duly authorized to execute such instrument in such capacity.

5

Notary's Printed Name: Dawn Villarreal
Notary Public, State of Hawaii

My commission expires: May 11, 2017

Barbara Woods
461 Laulea Place
Spreckelsville, Maui, HI 96779

Feb 27, , 2015

Re: Special Management Area Assessment Application for TMK (2)3-8-02:006

To Whom It May Concern:

I am the legal owner of this property and hereby authorize the Spreckelsville beach Restoration Foundation to submit this Special Management Area Assessment Application on my behalf.

Signed,

Barbara Woods
Barbara Woods

NOTARY CERTIFICATION ATTACHED

State of **Hawaii**

County of Maui }

On February 27, 2015, before me, C. Sialana
(here insert name of notary),

personally appeared Barbara D Woods
(name(s) of Signer(s))

N/A,

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature C. Sialana C. Sialana *(SEAL)*
Notary Public, State of Hawaii

My Commission Expires: May 18, 2018

This area for Official Notarial Seal

NOTARY PUBLIC CERTIFICATION

Doc. Date: 2/27/2015 # Pages:

Notary Name: C. Sialana Judicial Circuit: 2nd

Doc. Description: special Management Area

Assessment Application for TMK (2)3-8-02:006

Notary Signature: C. Sialana

Date: 2/27/2015

ALL PURPOSE ACKNOWLEDGMENT

Willie H. Nelson
463 Laulea Place
Spreckelsville, Maui, HI 96779

March 2nd, 2015

Re: Special Management Area Assessment Application for TMK (2)3-8-02:007

To Whom It May Concern:

I am the owner of this property and hereby authorize the Spreckelsville Beach Restoration Foundation, to submit this Special Management Area Assessment Application on my behalf.

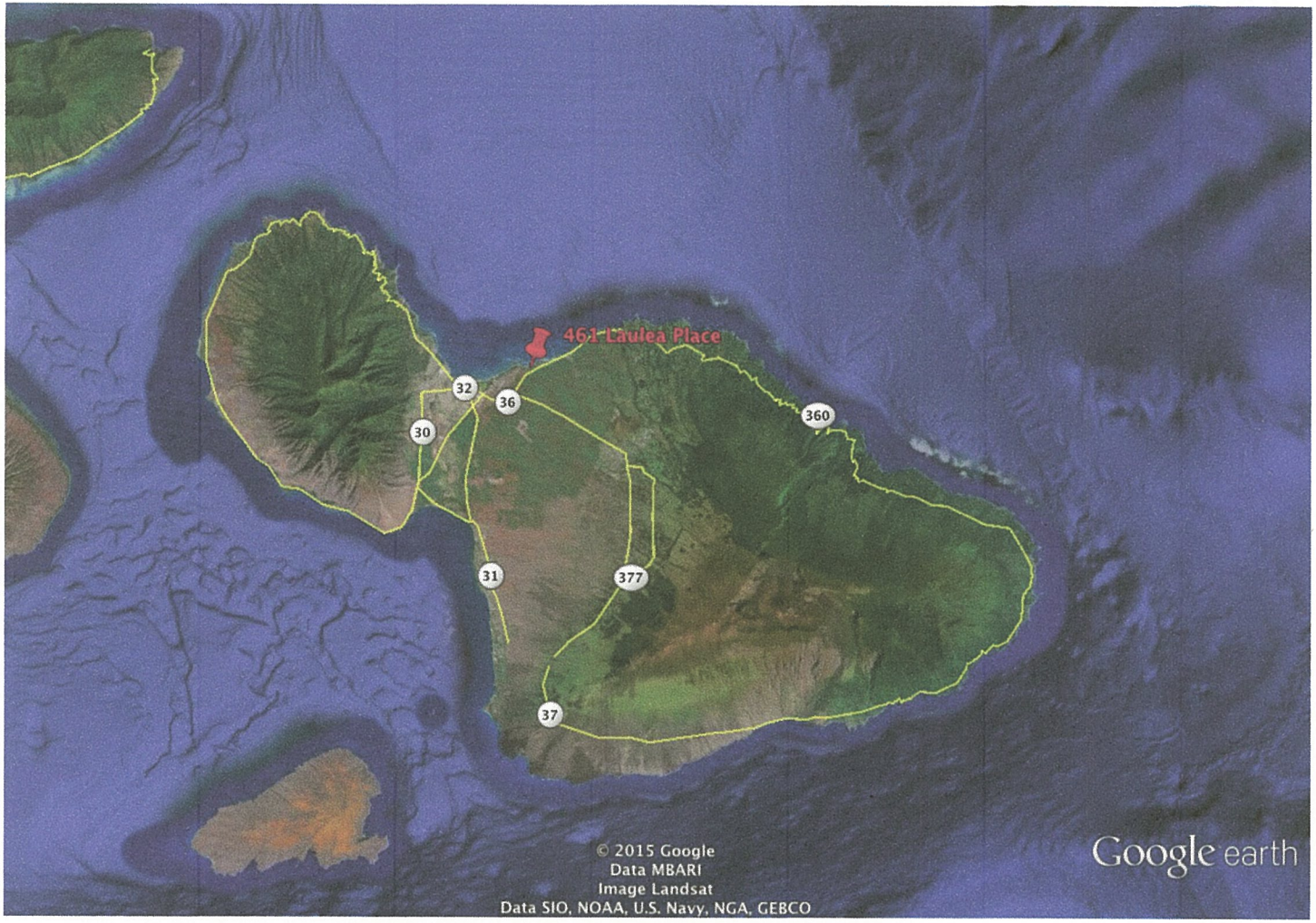
Signed,

Willie H. Nelson

PAUL ENGLISH
Notary Public, State of Texas
My Commission Expires
November 03, 2018

By Paul English

Item 5
a) Regional and Vicinity and Parcel Location Maps



Google earth

miles 30
km 60

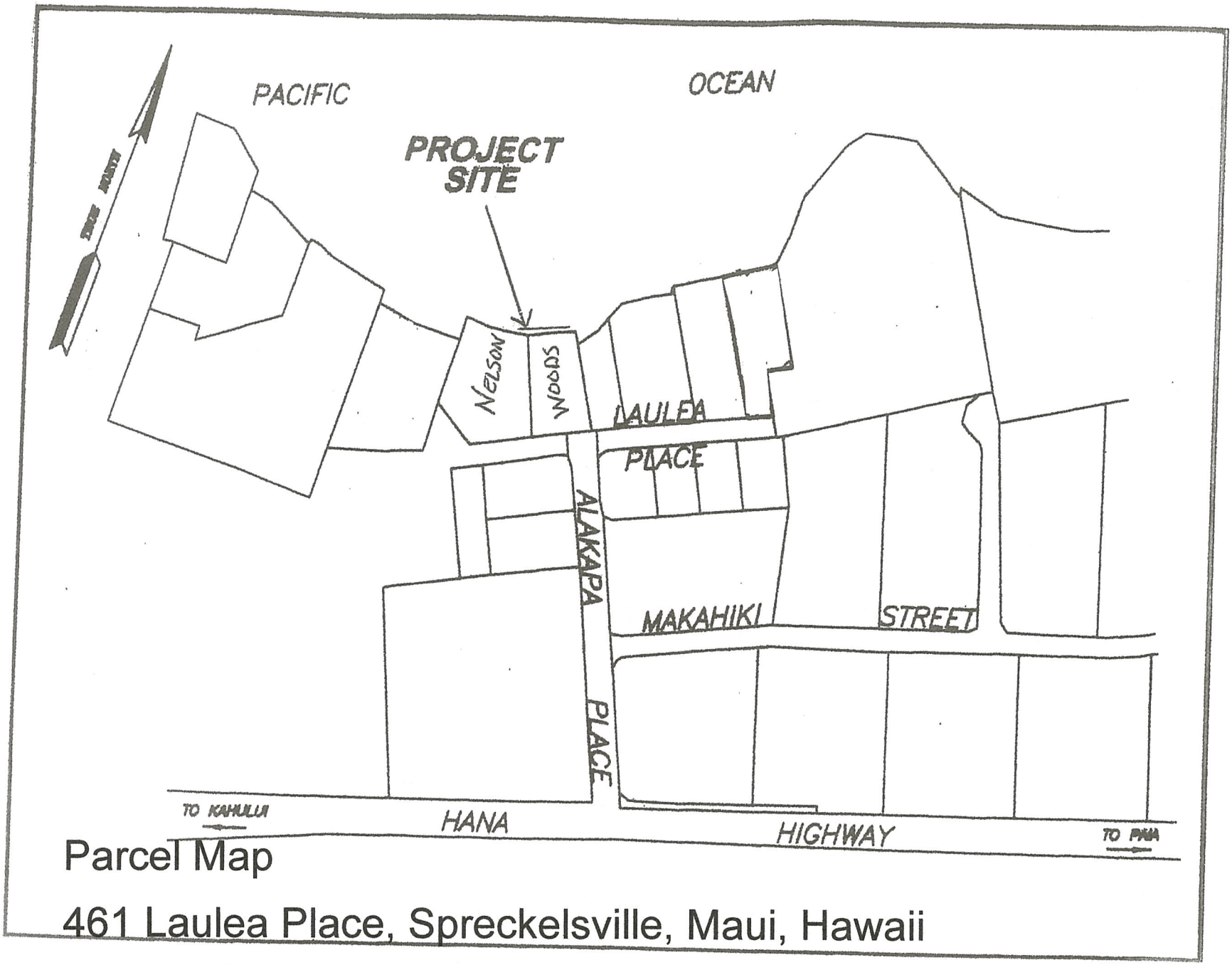
Regional Map
461 Laulea Place, Spreckelsville, Maui, Hawaii

Google earth

miles 2
km 4

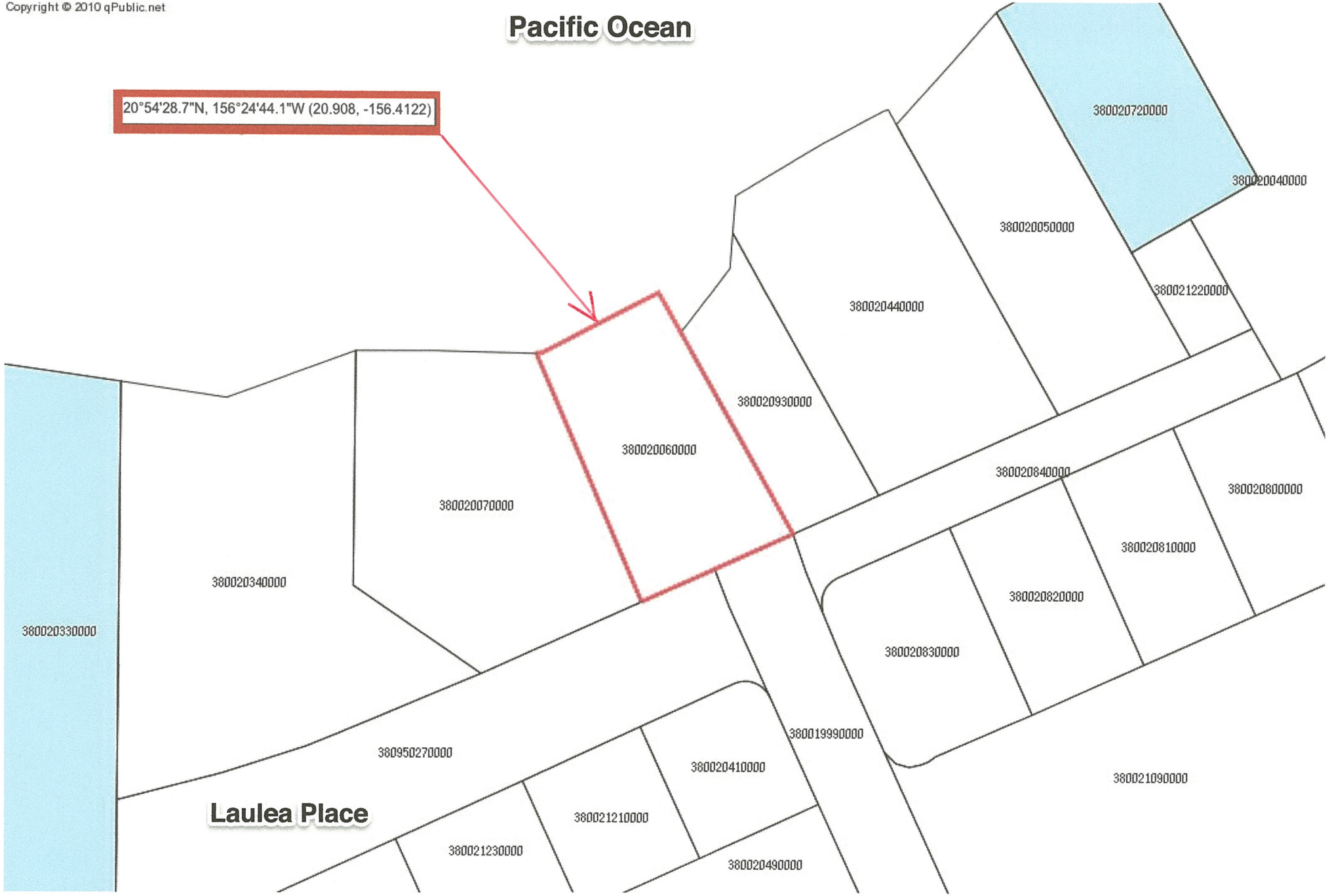
Vicinity Map

461 Laulea Place, Spreckelsville, Maui, Hawaii



Parcel Map

461 Laulea Place, Spreckelsville, Maui, Hawaii



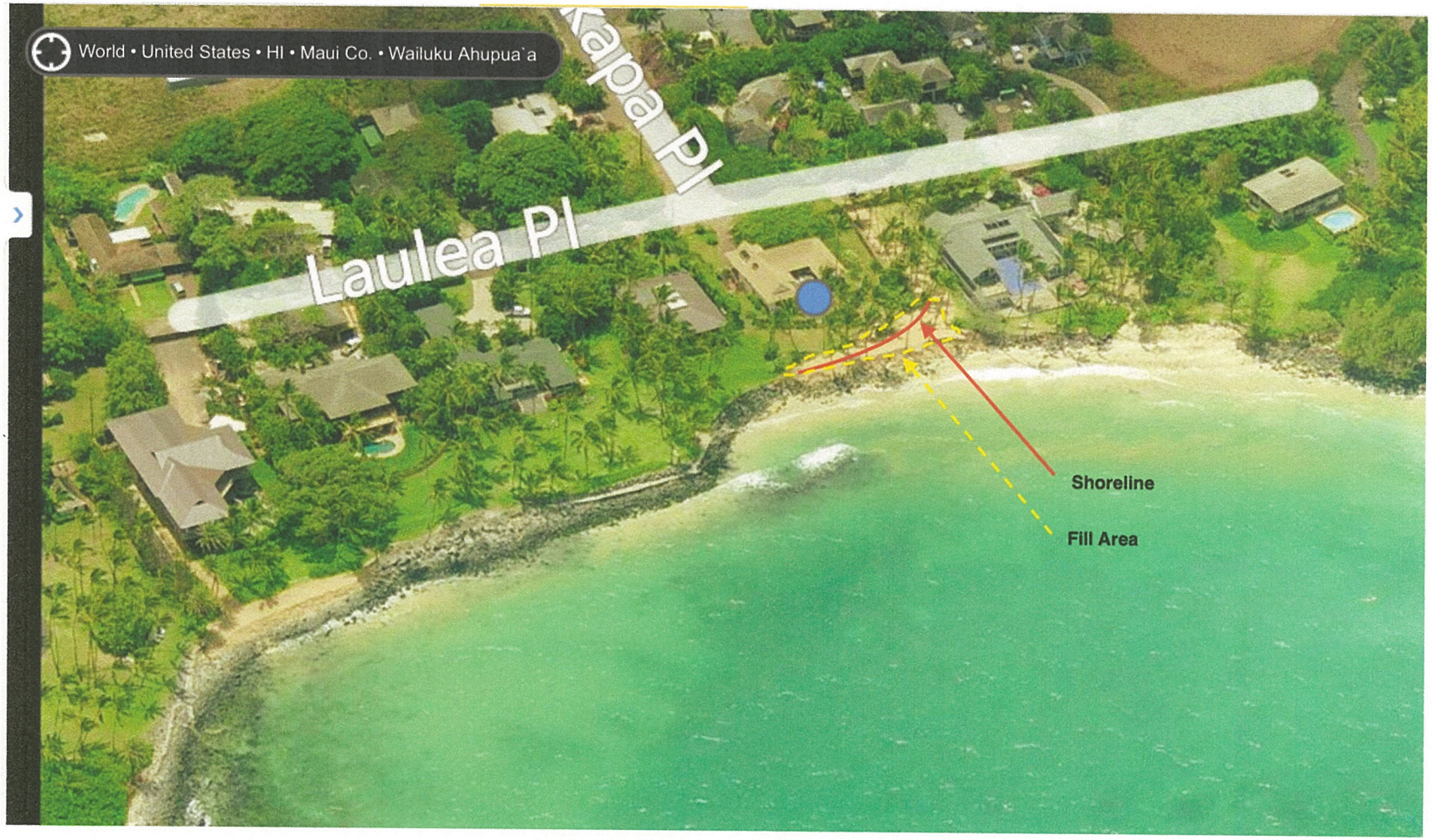
Item 5 b)
Photo p 1. Aerial Shoreline delineation

Photo p 2. Two views of project area in 2007 – before work began

Photo p 3. View eastward of placed sand 10/7/2014

Photo p 4. View westward of placed sand with vegetation 8/26/2015

Photo p 5. Views west and east of project site after major high wave and high tide event of October 27, 2015

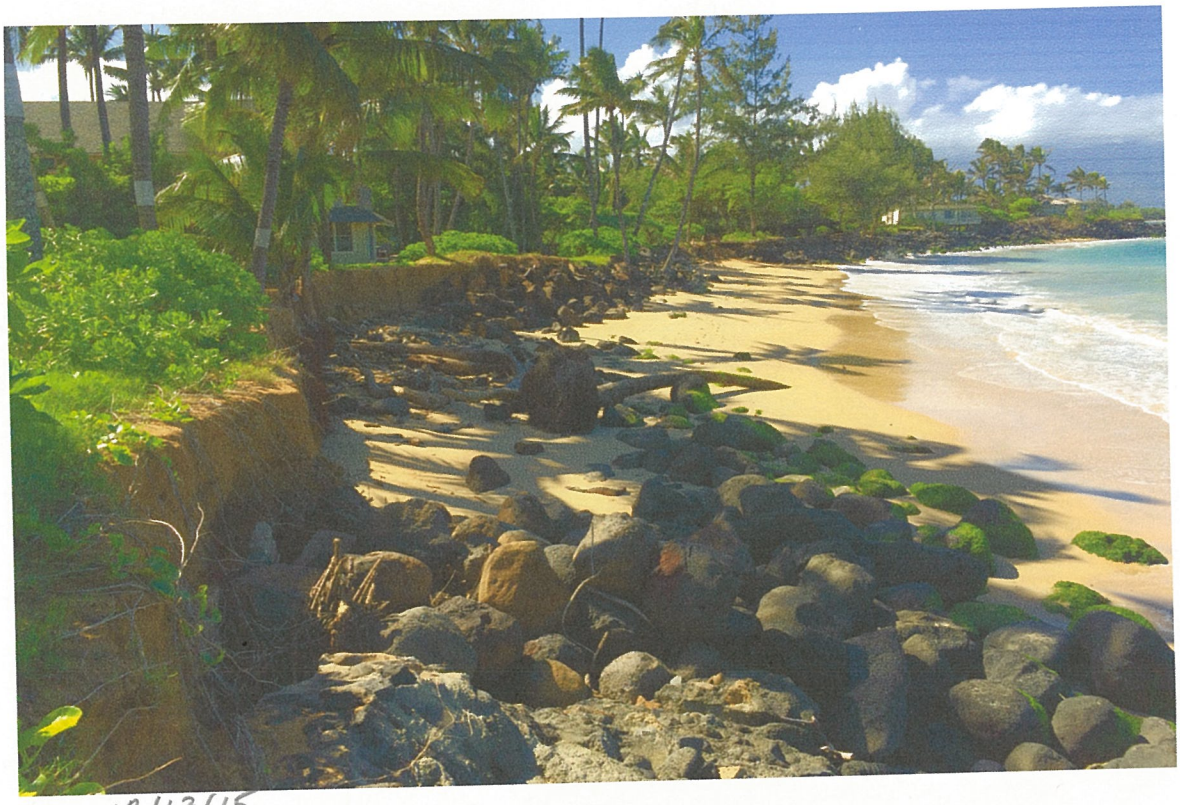

World • United States • HI • Maui Co. • Wailuku Ahupua`a
Kapa Pl
Laulea Pl
Shoreline
Fill Area


01/24/2007 10:09:12

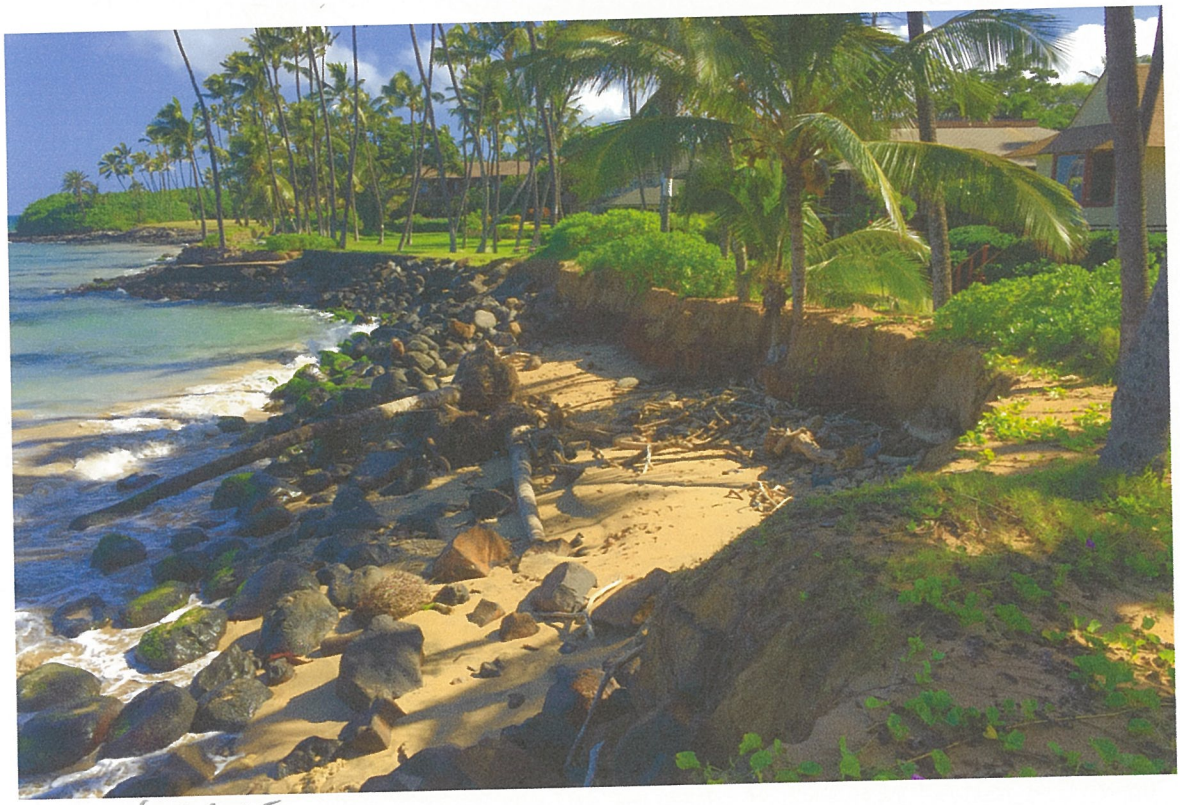

02/01/2007 14:04:39

10/7/14

8/26/15

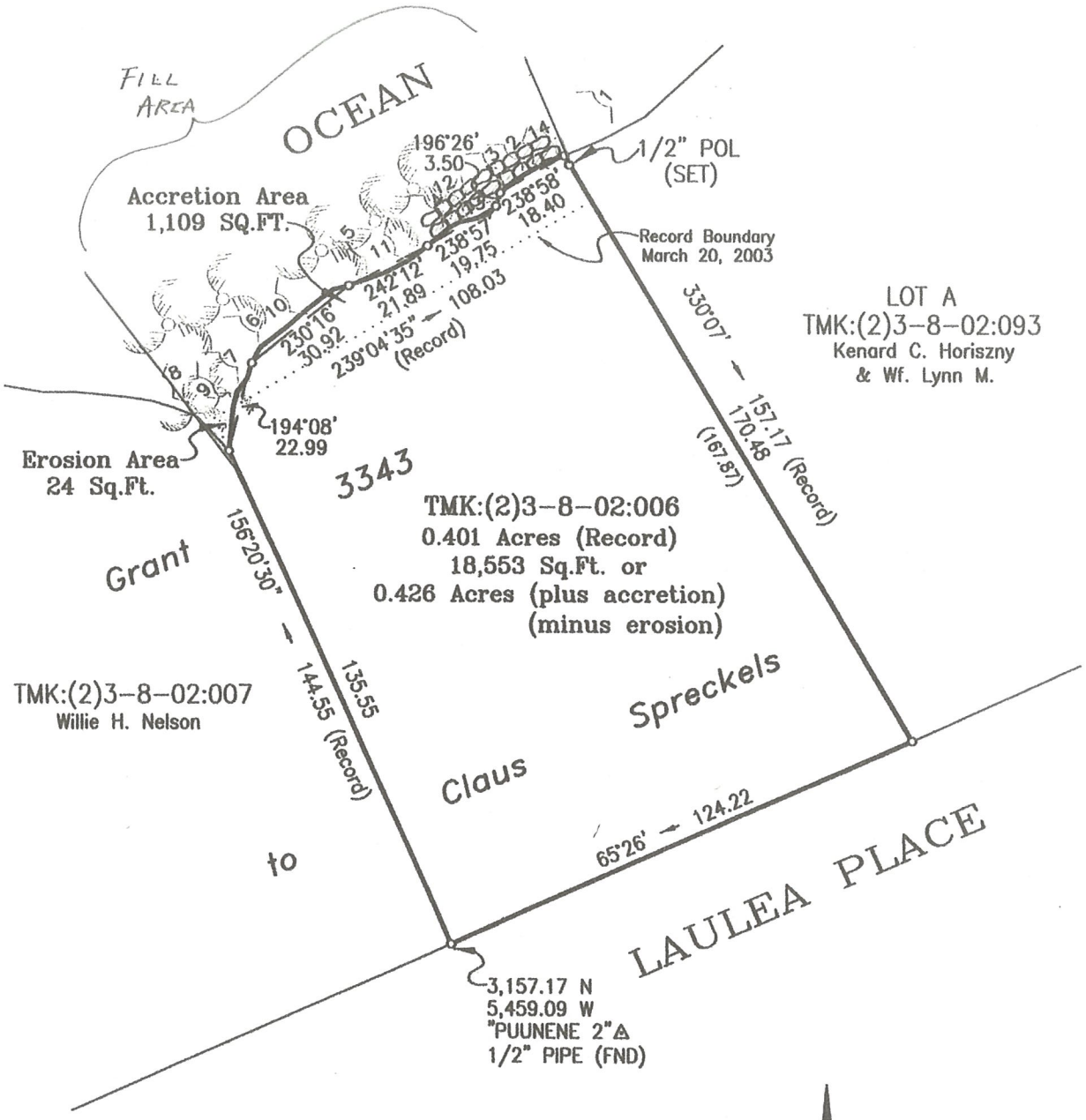


12/13/15



Nov 2015

Item 5
c) Delineation Map



NOTES:

1. This map is based on an actual field survey performed on 01 FEB 07.
2. Azimuths and coordinates are referred to Government Survey Triangulation Station "PUUNENE 2".
3. (0) Indicates: location, direction number, and included angle of accompanying photographs.
4. Owners shown derived from mauipropertytax.com.

This map was prepared by me or under my direct supervision.

RANDALL SHERMAN
LICENSED PROFESSIONAL LAND SURVEYOR
#LS4187
HAWAII, U.S.A.

Randall Sherman
Licensed Professional Land Surveyor
State of Hawaii Certificate Number LS4187
License Expiration Date: April 30, 2008
Land Court Certificate No 189

Prepared For:

Patty Cadiz

Exhibit Showing
Parcel 6

being a portion of

GRANT 3343

to Claus Spreckels

Situated at

Spreckelsville, Wailuku, Maui, Hawaii

TERMS AND CONDITIONS:

1. This authorization is based upon review and concurrence by pertinent local, state and federal regulatory agencies (Table 1) which have been offered an opportunity to review and comment the subject project.

2. Monitoring of the nearshore water quality shall be conducted in accordance with the supplied best management practices and water quality monitoring plan. For future restoration efforts, a marine biological survey and quantitative water quality monitoring is *recommended* to address potential questions regarding long-term impacts to the marine ecosystem.

3. Work shall be conducted at low tide to the most practical extent possible and no work shall occur if there is high surf or ocean conditions that will create unsafe work or beach conditions.

4. The applicant shall obtain the appropriate land disposition approval for the work; this may include a Right of Entry from the State Land Division Maui District Office (808) 984-8103.

5. A shoreline delineation was conducted by OCCL staff on April 23, 2007. During this site visit staff delineated the shoreline based on evidence present at the time. This delineation is verified in the submitted shoreline survey map from Valley Isle Surveyors by Randall Sherman dated May 4, 2007. This map shall be utilized for subsequent shoreline certifications and delineations related to the subject parcel.

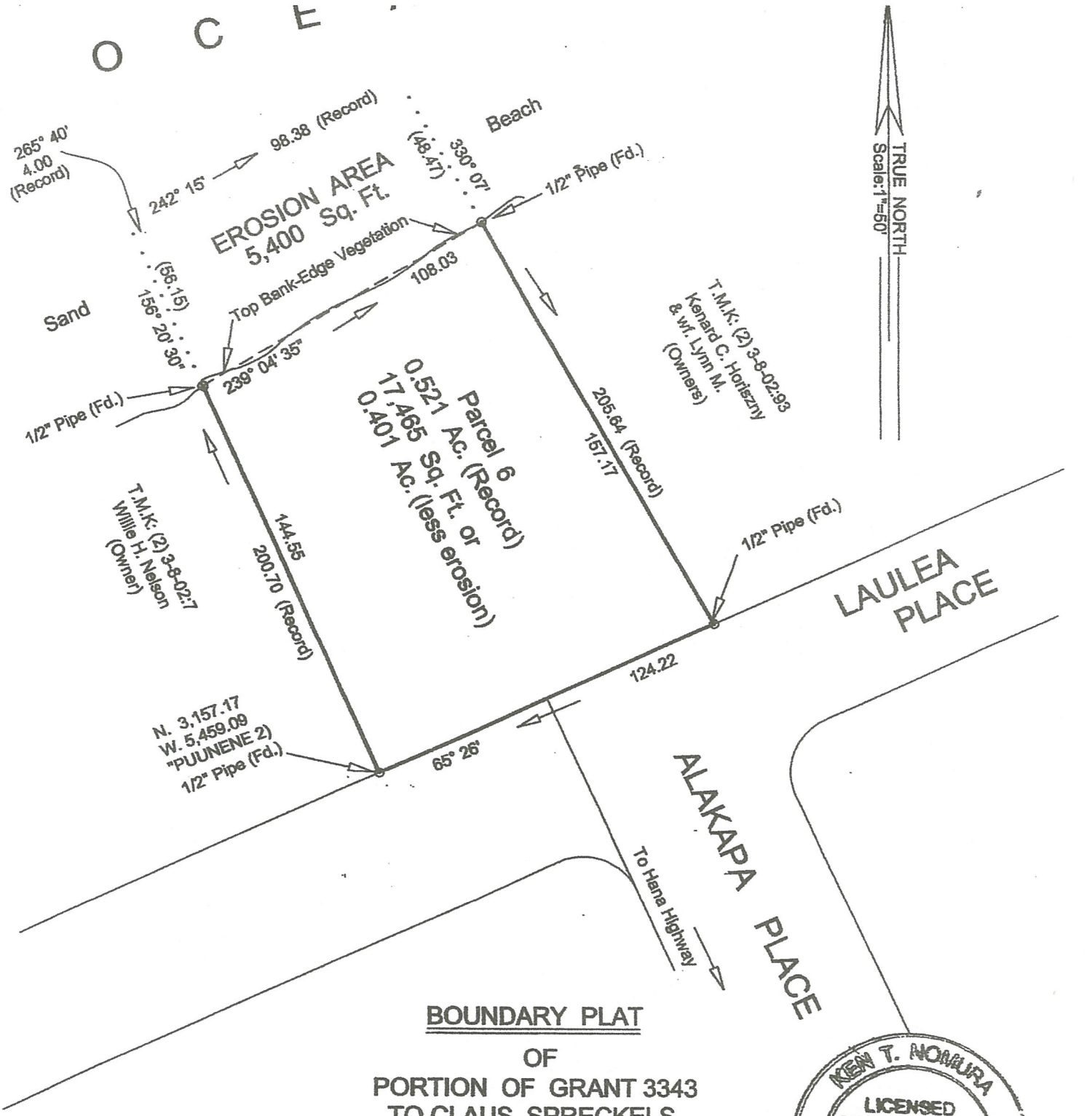
6. The applicant shall submit a summary report to the DLNR within 90 days of the completion of the project describing the status of the fill, what maintenance actions took place and include photographic or other quantitative evidence (beach profiles or volume calculations) of the beach condition.

7. The applicant shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments for projects authorized under this authorization including obtaining an appropriate land disposition such as a right of entry. Department authorization of the proposed project does not eliminate this responsibility.

8. Authorization of the sand use and placement is contingent upon review and approval of the sand by the Department. The sand shall meet the following State quality standards:

    a) The proposed fill sand shall not contain more than six (6) percent fines, defined as the #200 sieve (0.074 mm). We understand the proposed sand source to contain less than two (2) percent fine material.
    b) The proposed beach fill sand shall not contain more than ten (10) percent coarse sediment, defined as the #4 sieve (4.76 mm) and shall be screened to remove any non-beach compatible material and rubble.
    c) No more than 50 (fifty) percent of the fill sand shall have a grain diameter less than 0.125 mm as measured by #120 Standard Sieve Mesh.

Item 5
d) Other Survey: TMK 3-8-2-006



BOUNDARY PLAT

OF
PORTION OF GRANT 3343
TO CLAUS SPRECKELS

SPRCEKELSVILLE, WAILUKU, MAUI, HAWAII

SCALE: 1 inch = 50'

DATE: March 20, 2003

Prepared by: A & B Properties, Inc.
Kahului, Maui, Hawaii

KEN T. NOMURA
LICENSED PROFESSIONAL LAND SURVEYOR
No. LS-7633
HAWAII, U.S.A.

NOTES:

1. Azimuths and coordinates referred to Government Survey Triangulation Station "PUUNENE 2".
2. Owners of adjacent parcels taken from records of the Real Property Mapping Branch.
3. Actually field survey performed on February 18, 2003.
4. Lot corners are marked as noted.

This work was prepared by me or under my supervision.

4/30/04

Ken T. Nomura
Licensed Professional Land Surveyor
Certificate No. LS-7633
Expiration Date: 4/30/04

T.M.K: (2) 3-8-02:6

DESCRIPTION

PARCEL 6
OF
TAX MAP KEY: (2) 3-8-02

All of that certain parcel of land, being a portion of Grant 3343 to Claus Spreckels situated at Spreckelsville, Wailuku, Island and County of Maui, State of Hawaii.

Beginning at a ½-inch pipe at the southwesterly corner of this parcel of land, the coordinates of said point of beginning referred to Government Survey Triangulation Station "PUUNENE 2" being 3,157.17 feet North and 5,459.09 feet West and running by azimuths measured clockwise from True South:

1.	156°	20' 30"	144.55 feet	along the remainder of Grant 3343 to Claus Spreckels (being along T.M.K: (2) 3-8-02:7) to a ½-inch pipe;
2.				Thence along the shoreline, the direct azimuth and distance between points along said shoreline being: 239° 04' 35" 108.03 feet to a ½-inch pipe;
3.	330°	07'	157.17 feet	along the reminder of Grant 3343 to Claus Spreckels (being along T.M.K: (2) 3-8-02:93) to a ½-inch pipe;
4.	65°	26'	124.22 feet	along the northerly side of Alakapa Place and along Lot 12 of the Ulmer Subdivision to the point of beginning and containing an Area of 17,465 Square Feet or 0.401 Acre.

Prepared by: A&B Properties, Inc.
Kahului, Maui, Hawaii

April 4, 2003

This work was prepared by me or under my supervision.

KEN T. NOMURA
LICENSED PROFESSIONAL LAND SURVEYOR
No. LS-7633
HAWAII, U.S.A.

4/30/04

Ken T. Nomura
Licensed Professional Land Surveyor
Certificate No. LS-7633
Expiration Date: 4/30/04

ME
27/30-p

Item 7
b) Extraction site location map

Zoom County | Zoom to Box | Zoom In | Zoom Out | Pan by Hand | Get Info | Zoom To Parcel | Center On Parcel | Measure | Area Tool | Print Page | Search Sales | Additional Options

Controls

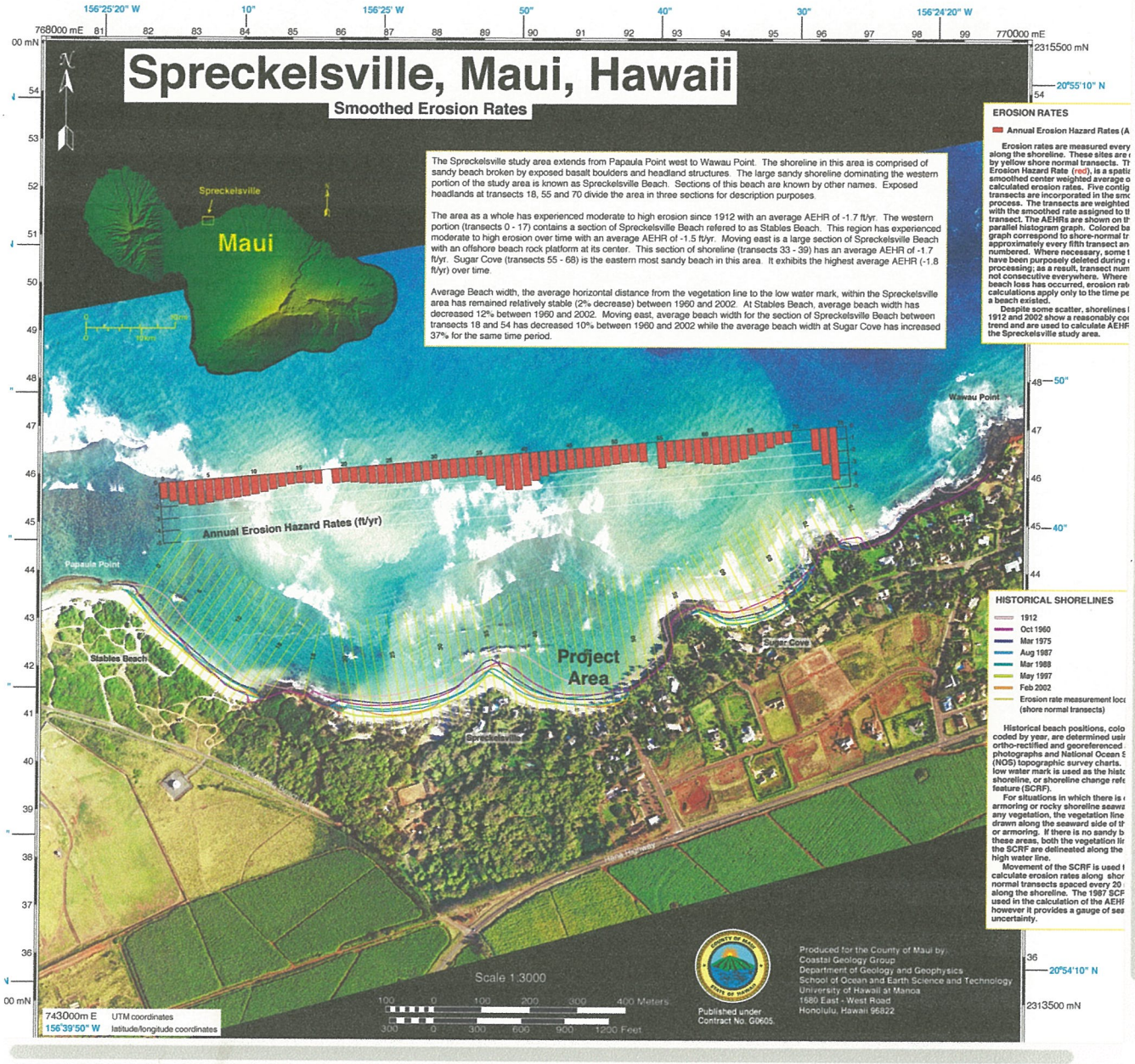
Available Layers

- [x] Parcels
- [ ] Yearly Sales
- [ ] Parcel Numbers
- [ ] Roads
- [ ] Tsunami Evacuation Zones
- [ ] Flood Hazard Areas
- [ ] State Land Use Districts
- [ ] Special Management Area
- [x] Streets (Google)
- [ ] Satellite (Google)
- [ ] Hybrid (Google)
- [ ] Physical (Google)

Show Scale

Item 7d

Historical Shorelines at Project Site



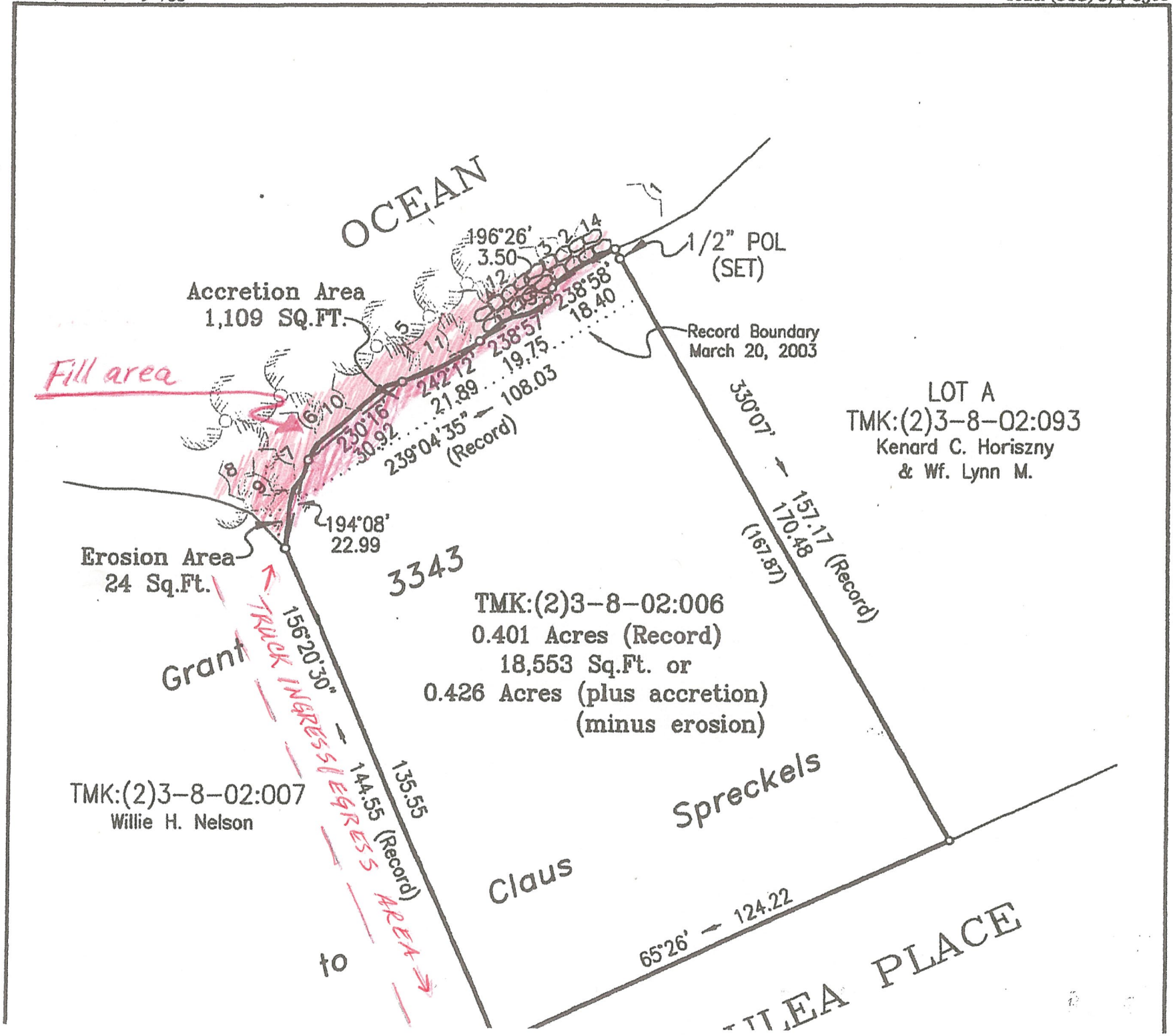
Item 7

g) Scale Drawing showing area to be filled and Typical Cross-Section drawing.

P.O. Box 1001
Kihei, Maui, HI 96753

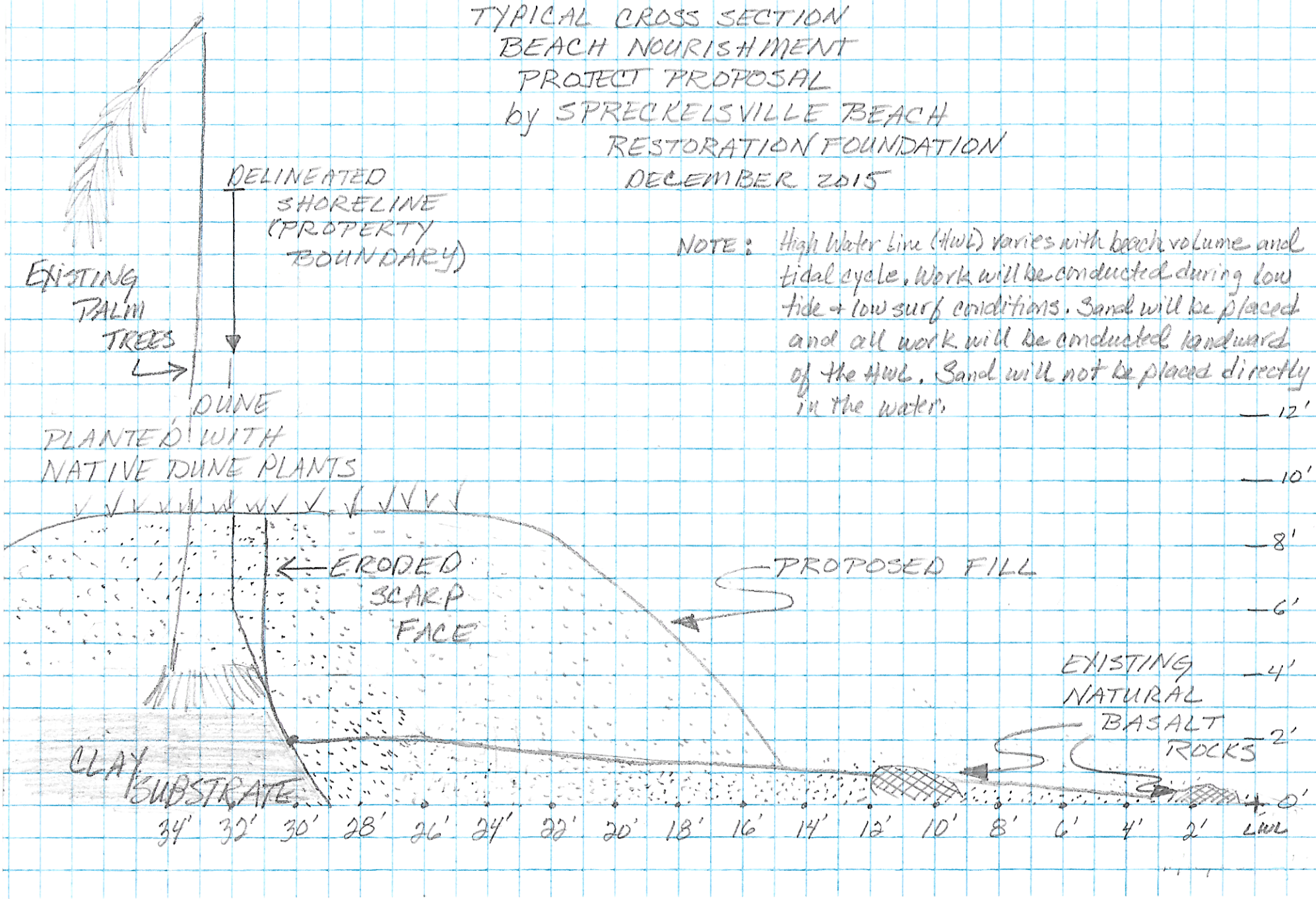
Valley Isle Surveyors, Inc.

TEL: (808) 874-8060
FAX: (808) 874-8366



461 LAULEA PLACE
TYPICAL CROSS SECTION
BEACH NOURISHMENT
PROJECT PROPOSAL
by SPRECKELSVILLE BEACH RESTORATION FOUNDATION
DECEMBER 2015

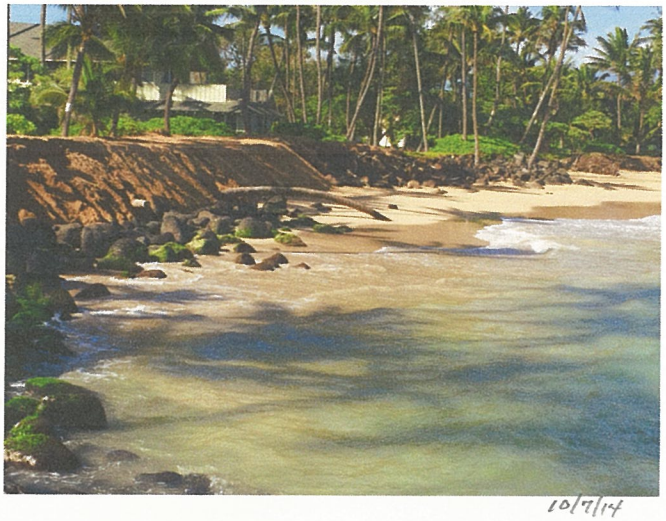
NOTE: High Water Line (HWL) varies with beach volume and tidal cycle. Work will be conducted during low tide + low surf conditions. Sand will be placed and all work will be conducted landward of the HWL. Sand will not be placed directly in the water.



Item 7
h) Photographs of proposed fill area

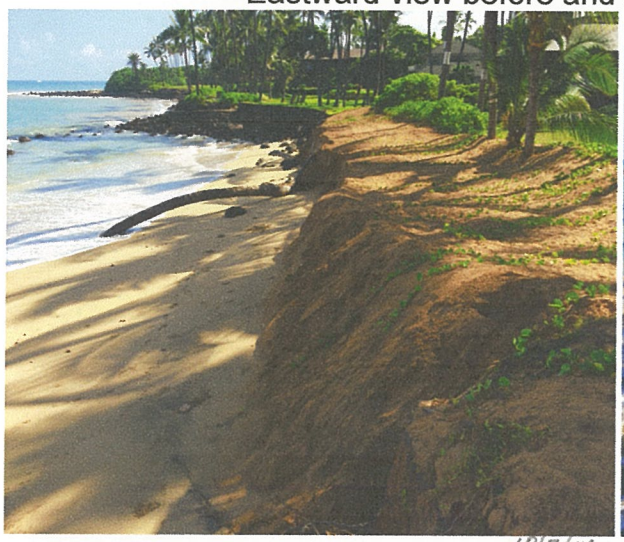

World • United States • HI • Maui Co. • Wailuku Ahupua`a
Kapa Pl
Laulea Pl
Shoreline
Fill Area

Landward View

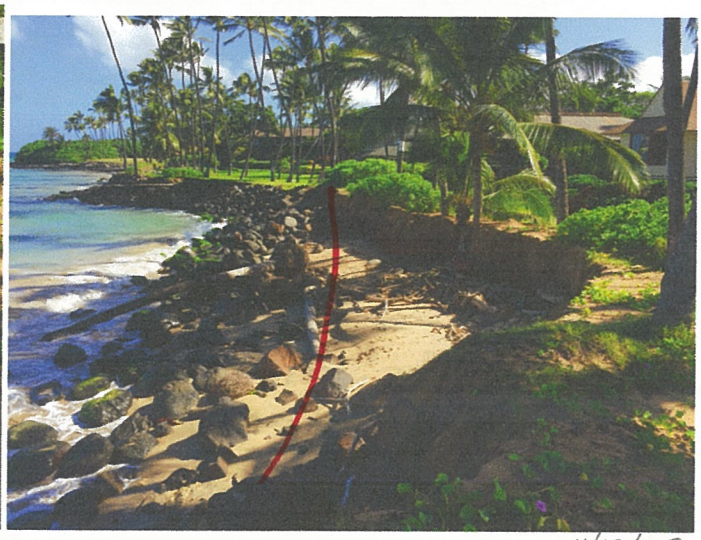


10/7/14

Eastward view before and after erosion event on 10/27/15



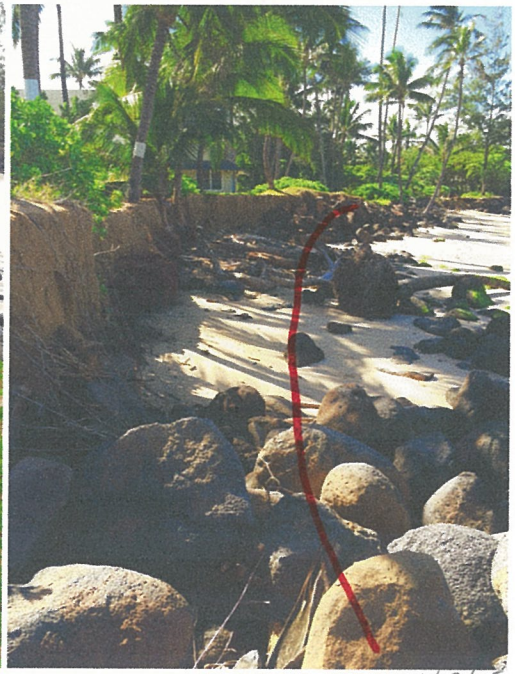
10/7/14



11/18/15

Westward view before and after erosion event on 10/27/15

8/26/15



12/13/15

Item 7 j)
Proof of liability insurance

TAVATRU-01 LROQUE

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 8/18/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
Insurance Factors 745 Fort Street Suite 1000 Honolulu, HI 96813	PHONE (A/C, No, Ext): (808) 546-7469	FAX (A/C, No): (808) 521-5484
	E-MAIL ADDRESS:	

INSURED	INSURER(S) AFFORDING COVERAGE	NAIC #
Tavares Trucking Inc PO Box 1862 Kahului, HI 96733	INSURER A : National Interstate Ins Co	32620
	INSURER B : Markel Insurance Co	38970
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE X OCCUR	X		TGL5240716-05	07/01/2015	07/01/2016	DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 100,000
							MED EXP (Any one person)	$ 50,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 1,000,000
	POLICY PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$ 1,000,000
	OTHER:							$
A	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	X ANY AUTO			TCA5240565-11	07/01/2015	07/01/2016	BODILY INJURY (Per person)	$ 1,000,000
	ALL OWNED AUTOS / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$ 1,000,000
	HIRED AUTOS / NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$ 1,000,000
								$
	UMBRELLA LIAB OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$
	DED RETENTION $							$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						PER STATUTE / OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N / A (Mandatory in NH)	N/A		MWC0009063-05	07/25/2015	07/25/2016	E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Certificate holder is named as Additional Insured only to the extent set forth in the policy provisions. Please note 10 days notice of cancellation on work comp in general.

CERTIFICATE HOLDER

State of Hawaii Dept of Land & Natural Resources, Land Div
PO Box 621
Honolulu, HI 96809

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

GREAT AMERICAN INSURANCE GROUP

301 E. Fourth Street, Cincinnati, OH 45202

ExecPro℠ DECLARATIONS

for

Nonprofit Solutions Insurance Policy

Insurance is afforded by the company indicated below: (Each a capital stock corporation)

☒ Great American Insurance Company

Policy Number: EPP3951008 Policy Form Number: D16100

Item 1. Name of **Organization**: SPRECKELSVILLE BEACH RESTORATION

Mailing Address: 2406 WAIPUA ST

City, State, Zip Code: PAIA, HI 96779

Attn: EXECUTIVE DIRECTOR

Item 2. **Policy Period**: From 04/04/2015 *(Month, Day, Year)* To 04/04/2016 *(Month, Day, Year)*

(Both dates at 12:01 a.m. Standard Time at the address of the **Organization** as stated in Item 1)

Item 3. Aggregate Limit(s) of Liability for each **Policy Year**:

(a) $ 1,000,000 for all **Claims** other than **Claims** for **Employment Practices Wrongful Acts**.

(b) $ 10,000 Donor Data Loss Crisis Fund Sublimit of Liability. This limit is part of and not in addition to the Limit of Liability provided for in 3(a).

(c) $ 1,000,000 for all **Claims** for **Employment Practices Wrongful Acts**. This limit is:
☒ part of and not in addition to the Limit of Liability provided for in 3(a).
☐ separate from and in addition to the Limit of Liability provided for in 3(a).

(d) $ 150,000 FLSA Defense Sublimit of Liability. This limit is part of and not in addition to the Limit of Liability provided for in 3(c).

Item 4. Retentions:

Insuring Agreement A:	$ 0	Each **Claim**
Insuring Agreements B and/or C:	$ 0	Each **Claim**

Item 5. Premium:

$ 1,077

Item 6. Endorsements Attached:

DTCV_09P DTDP_09P

Item 7. Notices: All notices required to be given to the **Insurer** under this Policy shall be addressed to:

Great American Insurance Companies
Executive Liability Division
P.O. Box 66943
Chicago, Illinois 60666

Item 8. Prior & Pending Litigation Date: 04/04/2007

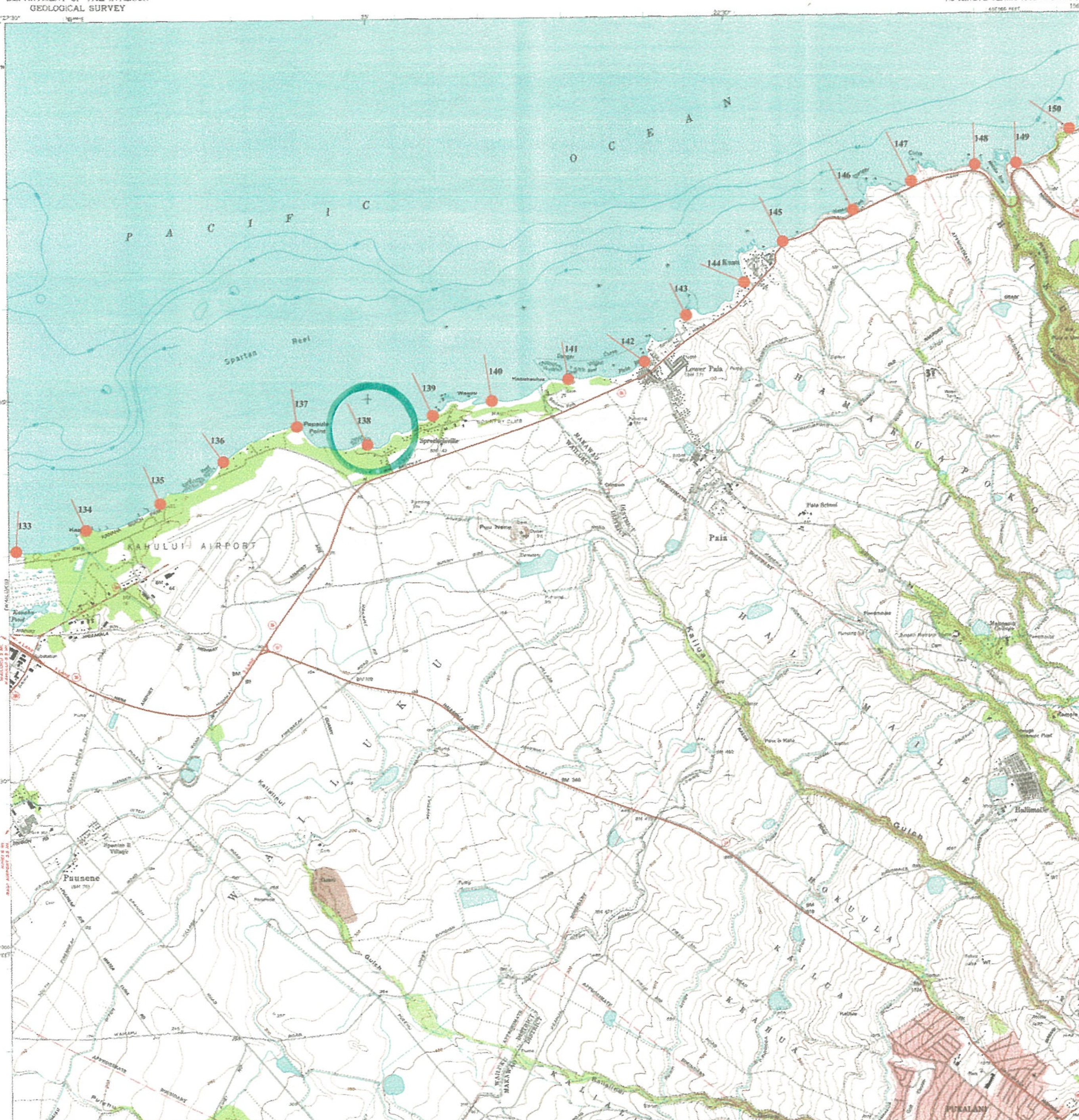
These Declarations along with the completed and signed Proposal Form and Nonprofit Solutions Insurance Policy, shall constitute the contract between the **Insureds** and the **Insurer**.

THIS IS A CLAIMS MADE POLICY. READ IT CAREFULLY.

Item 7 k)
Hydrographic chart showing Spartan Reef and Spreckelsville area.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PAIA QUADRANGLE
HAWAII—MAUI CO.
ISLAND OF MAUI
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey
Revised in cooperation with Hawaii Dept. of Transportation

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs taken 1960. Field checked 1964. Revised from aerial photographs taken 1977. Limited field check 1981. Map edited 1983

Selected hydrographic data compiled from NOS/NOAA charts 4116, 4124, and 4130. This information is not intended for navigational purposes

Projection and 10,000-foot grid ticks: Hawaii coordinate system, zone 2 (transverse Mercator) Clarke spheroid 1866. Old Hawaiian Datum. 1000-meter Universal Transverse Mercator grid ticks, zone 4, shown in blue. International spheroid. To place on the predicted North American Datum 1983 move the projection lines 267 meters north and 292 meters west as shown by dashed corner ticks

Red tint indicates area in which only landmark buildings are shown

APPROXIMATE MEAN DECLINATION 1983

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET

DATUM IS MEAN SEA LEVEL

DEPTH CURVES IN FEET—DATUM IS MEAN LOWER LOW WATER

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

HAWAIIAN ISLANDS

QUADRANGLE LOCATION

ROAD CLASSIFICATION

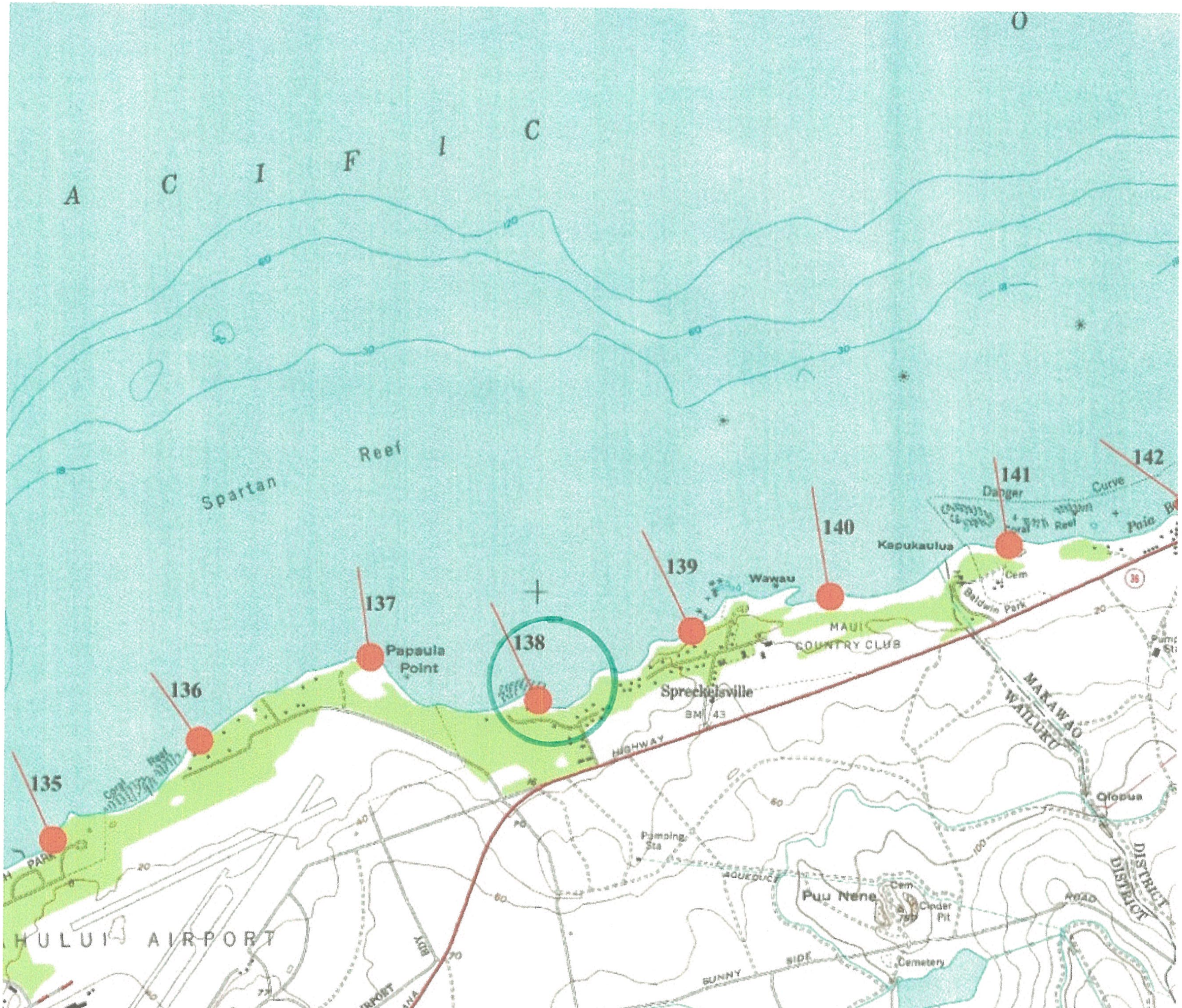
Primary highway, all weather, hard surface	Light-duty road, all weather, improved surface
Secondary highway, all weather, hard surface	Unimproved road, fair or dry weather

State Route

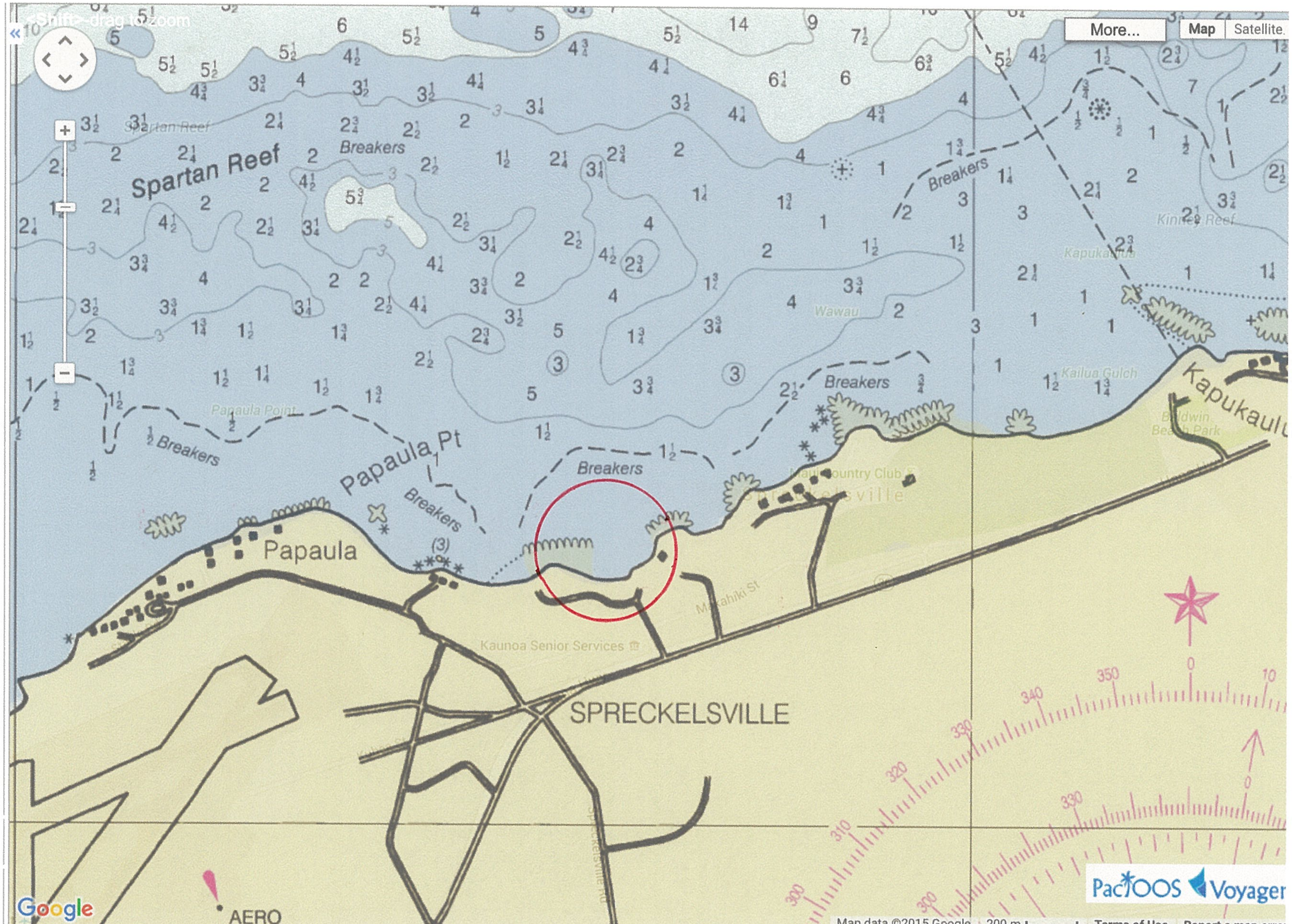
Map of the Island of Maui, scale 1:62 500, from an earlier survey is available

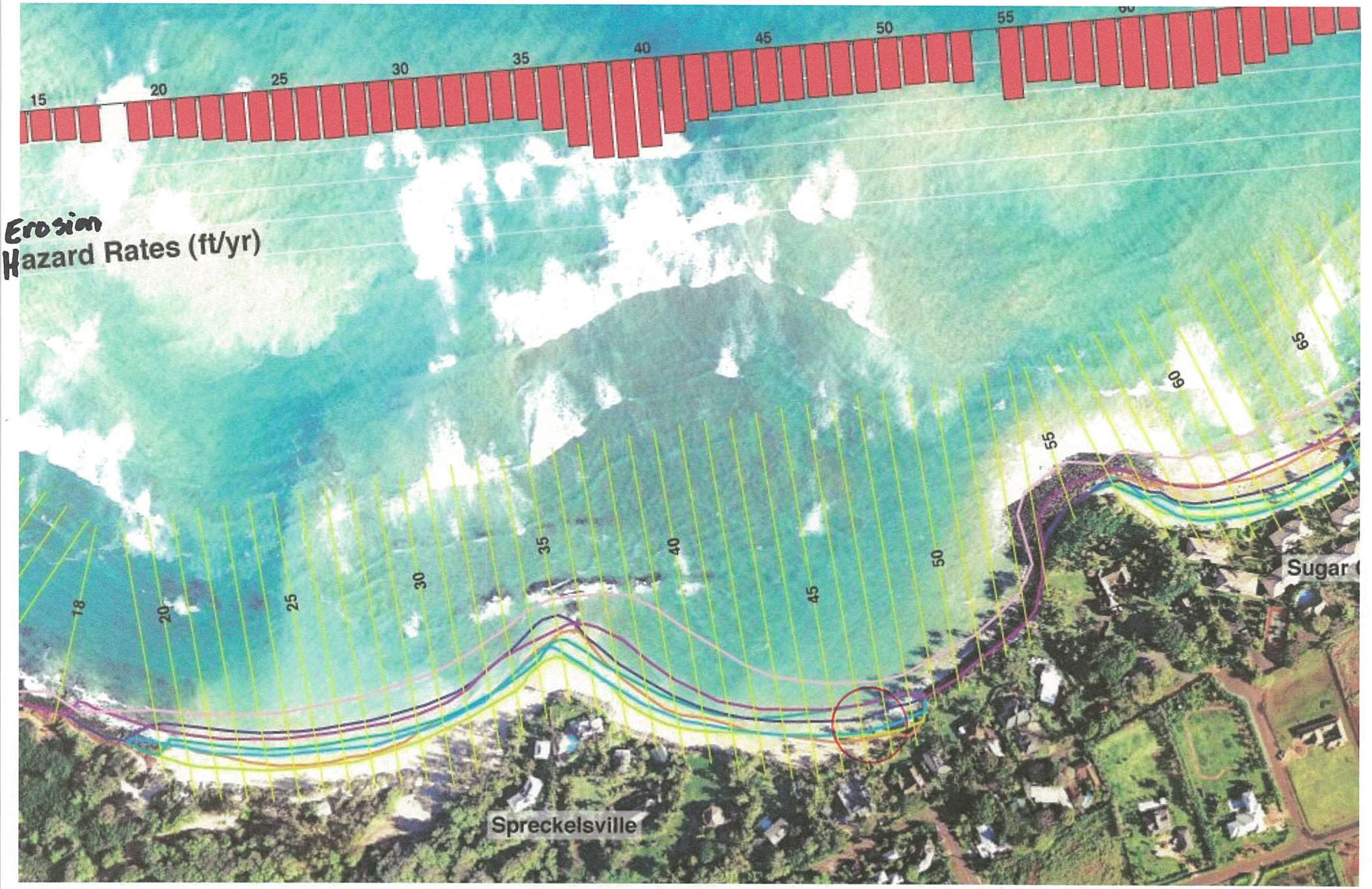
PAIA, HAWAII
N2050—W15620/7.5

1983



A C I F I C
O
Spartan Reef
135
136
137
138
139
140
141
142
Papaula Point
Wawau
Kapukaulua
Danger Curve
Reef
MAUI COUNTRY CLUB
Spreckelsville
Baldwin Park
Cem
HIGHWAY
MAKAWAO
WAILUKU
DISTRICT
Olopua
Pumping Sta
AQUEDUCT
Puu Nene
Cinder Pit
Cemetery
SUNNY SIDE
ROAD
AIRPORT
HANA
HULUI AIRPORT


More...
Map
Satellite
<Shift>-drag to zoom
Spartan Reef
Breakers
Papaula Point
Papaula Pt
Papaula
Wawau
Kapukaulua
Kinau Reef
Kailua Gulch
Baldwin Beach Park
Maui Country Club
Makahiki St
Kaunoa Senior Services
SPRECKELSVILLE
Spreckelsville Rd
AERO
PacIOOS Voyager
Google
Map data ©2015 Google
200 m
Terms of Use
Report a map error


15
20
25
30
35
40
45
50
55
Erosion
Hazard Rates (ft/yr)
18
20
25
30
35
40
45
50
55
60
65
Spreckelsville
Sugar

7k.

Item 7 l)
Marine Site Assessments conducted on 2/21/06, 6/19/07, 10/22/07 and 12/14/09 and NOAA Benthic Habitat Biology Map 2015

LINDA LINGLE
GOVERNOR OF HAWAII

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
DEPUTY DIRECTOR - LAND

DEAN NAKANO
ACTING DEPUTY DIRECTOR - WATER

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

REF:OCCL:DE

File: SSBN MA-04-05

March 22, 2006

MEMORANDUM:

Subject: Site Assessment for Small-Scale Beach Nourishment, McBarnett Residence 467 Laulea Place, Paia, Maui TMKs 3-08-02:34. Category I / DA File No. POH

The Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) has recently carried out a nearshore site assessment for the subject property on February 21, 2006. This assessment has been conducted as part of the review process for an application to carry out a small-scale beach nourishment project (500 cubic yards (cy)) at the subject property. The purpose of the site assessment is to offer a qualitative assessment of the existing site conditions and bottom type for the purpose of evaluating appropriate Best Management Practices (BMP's) and water quality monitoring related to the proposed project. Please review the attached assessment report and provide comments as necessary (**comments due by**). If you have questions regarding this project please contact Dolan Eversole at (808) 587-0321.

Sincerely,

SAMUEL. J LEMMO, Administrator
Office of Conservation and Coastal Lands

Attachments: Underwater site photos 2-21-06 (on Cd-Rom)

CC: Mrs. Mary Jane McBarnett 467 Laulea Place Paia, Hi 96779
Chairman
U.S. Fish and Wildlife Service
NOAA Fisheries Pacific Islands Regional Office 1601 Kapiolani Blvd., Suite 1110 Hon, HI 96814
DAR
DOH-CWB (Ed Chen)
ACOE (Lolly Silva)
Dr. Richard Brock UH Sea Grant 2525 Correa Rd HIG 238, Honolulu, Hi 96822
Zoe Norcross (Maui Co Planning Dept)

Nearshore Marine Site Assessment:

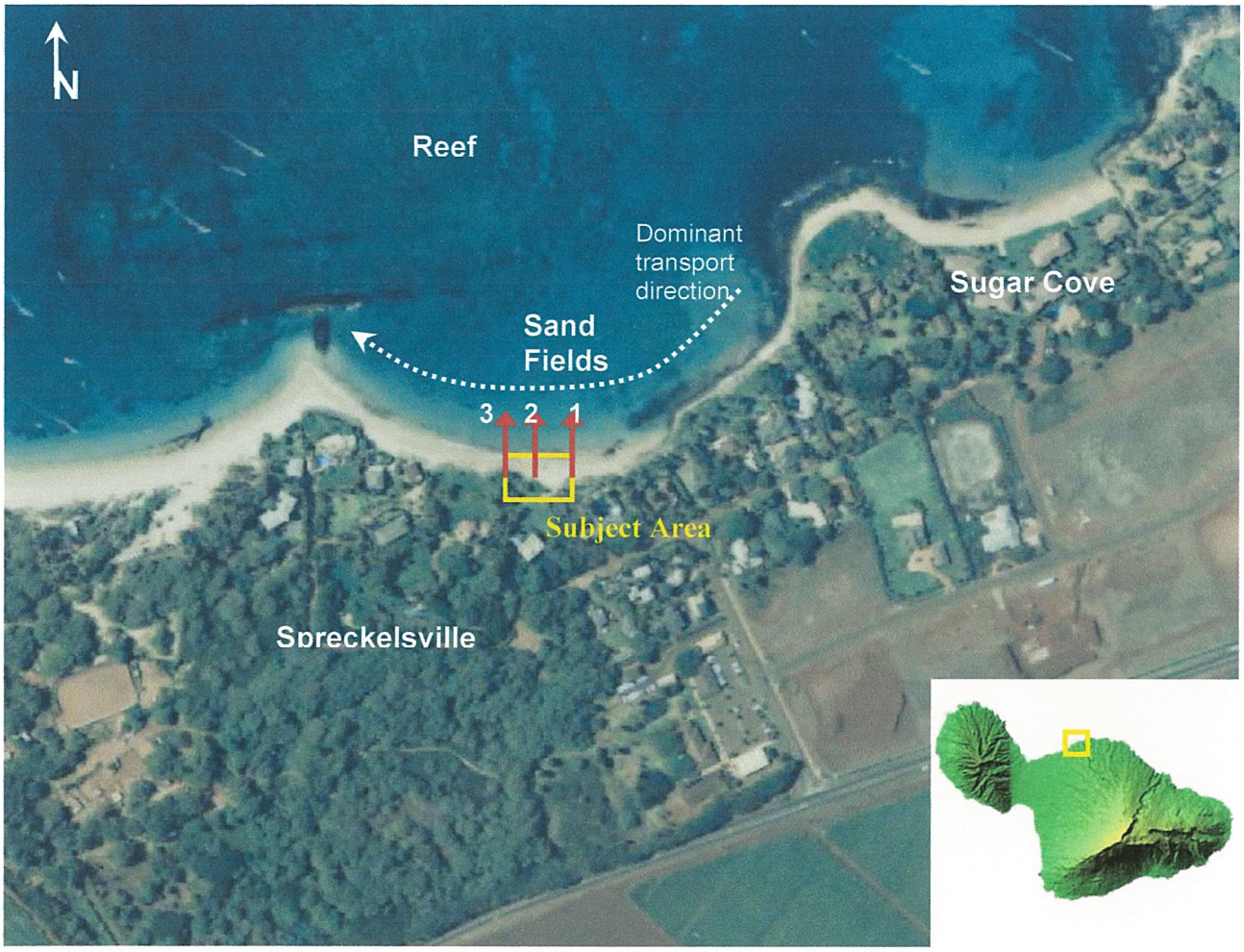
Conditions

Date: February 21, 2006
Time: 12:00 to 2:00pm
Personnel: Dolan Eversole, Chris Conger (OCCL)

Marine Conditions: North Swell 2-4 ft faces, Northeast winds 10-15 mph,
Low Tide (Kahului) 08:40AM +0.6 ft
High tide 01:05PM +1.2 ft
Moderate rainfall the previous day, no observed turbidity due to runoff. Approximately 1-2m depth offshore to extent of transects. Soft rolling waves on sandy beach 1-2 ft faces. Generally fair to poor water visibility with suspended sand and sediment from wave action.

Transects: (3 total)
3, 25 meter shore-perpendicular transects established fronting the property (Figure 1).

Location: McBarnett Residence, Spreckelsville, Maui

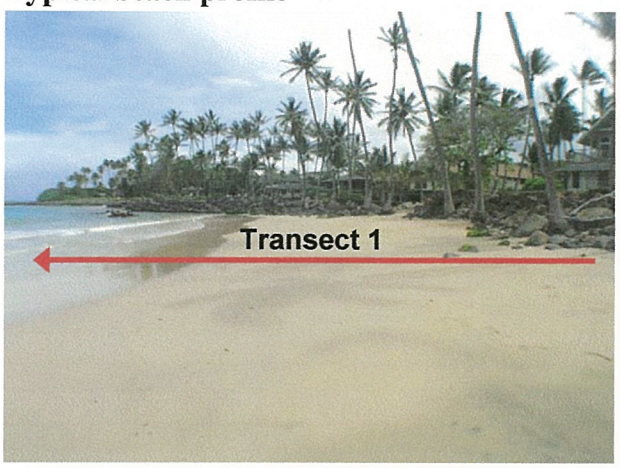


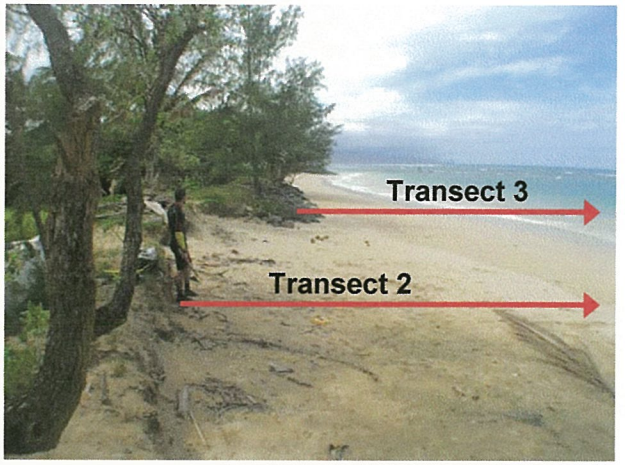
Observations:

General Setting:

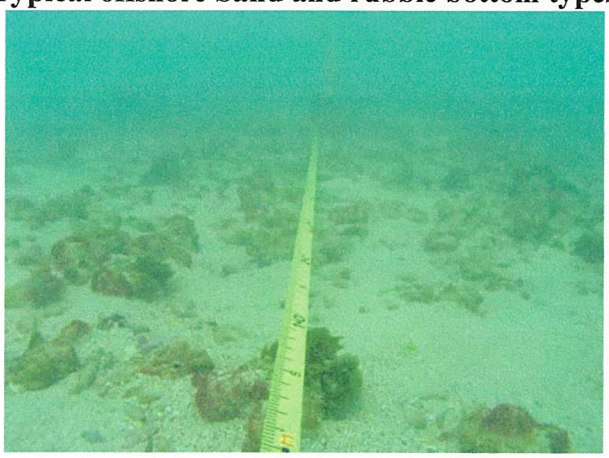
Project area is characterized by fine to medium. Moderately well sorted, dominantly tan to white carbonate beach sands and some basalt sand, minor terrestrial brown clays, silts to east. Hard bottom (uncolonized) observed sporatically where thin sand bed wasn't present. Shoreline armoring present on either side of subject property. This is the only property without shoreline armoring.

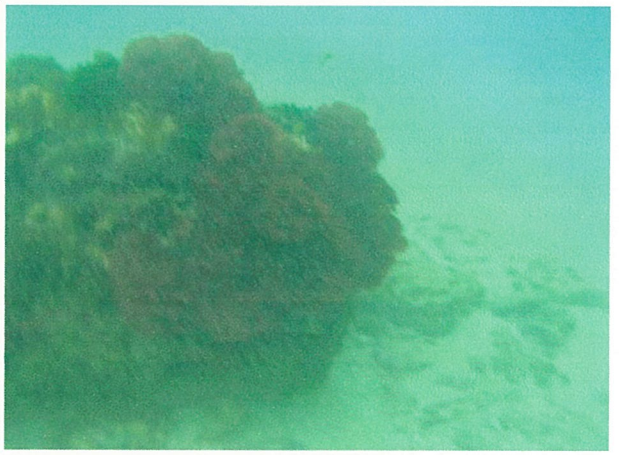
Typical beach profile





Typical offshore Sand and rubble bottom types





Transect Surveys: 1-3. Shore Perpendicular.

Fair to good water visibility. Colonized coral rubble and basalt boulders (mostly fleshy algae). Fossil reef hard bottom with coralline algae colonization. 100% sand 20m from waterline, then progressively more hard bottom cover. Estimated coral cover less than 1%. Variety of fleshy brown and green algae. A few scattered sea urchin observed on basalt boulders. No other benthic communities observed. Some ghost crab holes observed on beach face.

LINDA LINGLE
GOVERNOR OF HAWAII

ALLAN A. SMITH
INTERIM CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
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LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

REF:OCCL:DE

File: SSBN MA-07-01

July 18, 2007

MEMORANDUM:

Subject: Follow up Site Assessment for Small-Scale Beach Nourishment, DA File No.POH-2007-103, 461 Laulea St. Spreckelsville Beach TMK: (2) 3-8-02:06 (seaward).

The Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) has recently carried out a follow up nearshore site assessment for the subject property on June 19, 2007. This assessment has been conducted as part of the environmental monitoring process for the small-scale beach nourishment project (500 cubic yards (cy)) at the subject property and follows the initial (pre-project) assessment carried out February 21, 2006. **Beach restoration activities occurred on June 13 & 14, 2007**. The purpose of the site assessment is to offer a qualitative assessment of the existing site conditions and bottom type for the purpose of evaluating the effectiveness of Best Management Practices (BMP's) and water quality monitoring related to the project. If you have questions regarding this project or would like to receive copies of the site visit photographs please contact Dolan Eversole at (808) 587-0321.

Sincerely,

SAMUEL. J LEMMO, Administrator
Office of Conservation and Coastal Lands

CC: Chairperson
Maui Board Member / MDLO
Mrs. Patricia Cadiz, Spreckelsville Beach Restoration Foundation, Inc. 2406 Waipua Street Paia, Maui, Hawaii 96779
U.S. Fish and Wildlife Service
NOAA Fisheries Pacific Islands Regional Office 1601 Kapiolani Blvd., Suite 1110 Hon, HI 96814
ACOE/ DAR
DOH-CWB (Ed Chen)
Maui Co Planning Dept (Zoe Norcross, Thorne Abbott)

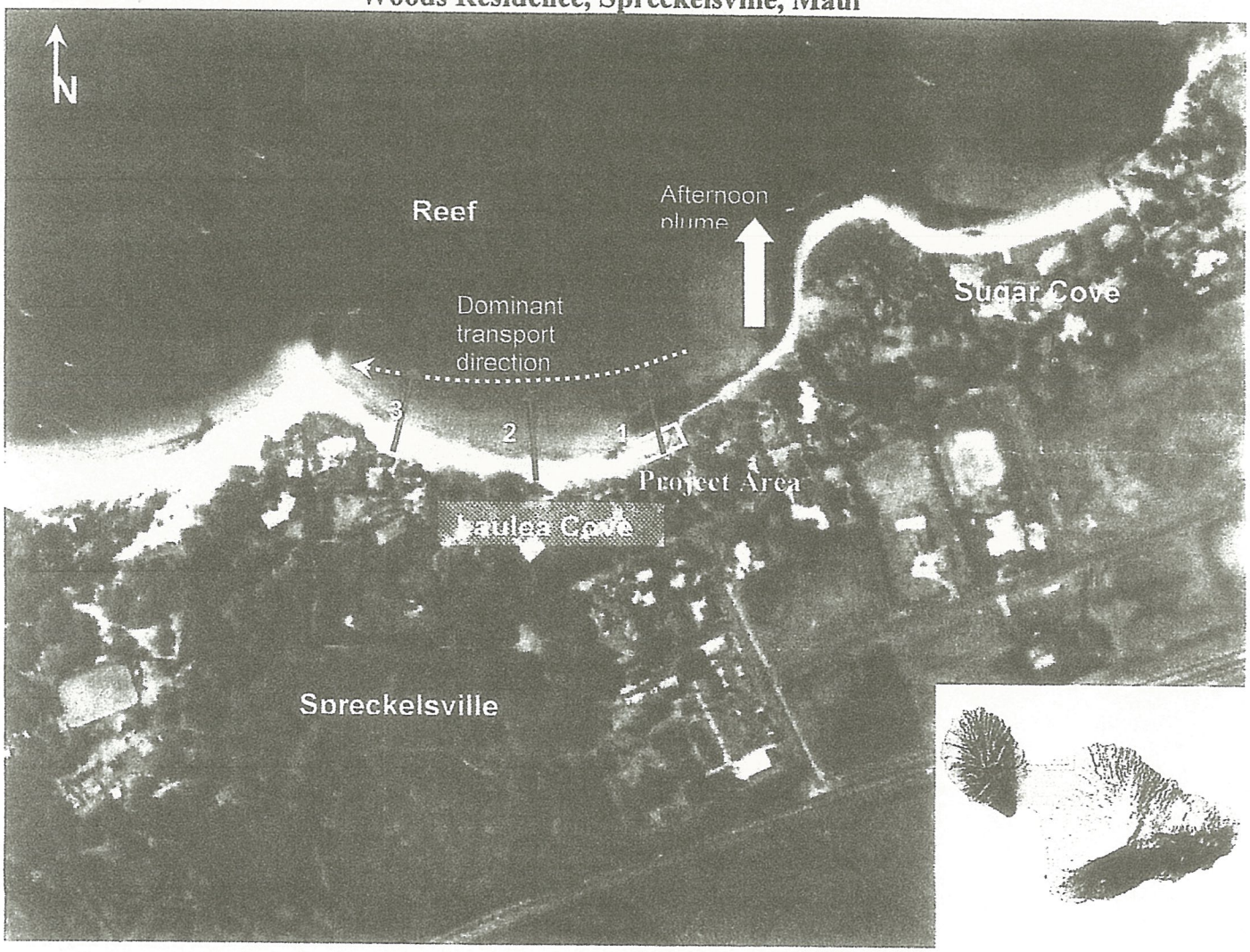
Nearshore Marine Site Assessment Conditions
Date: June 19, 2007
Time: 12:00 to 2:00pm
Personnel: Dolan Eversole, Chris Conger (OCCL)

Marine Conditions: North Swell 2-4 ft faces, Northeast winds 10-15 mph,
Low Tide (Kahului) 10:30AM +0.11ft
High tide 06:15PM +2.32 ft
Tradewinds 15-20 mph, sunny low tide

500 Cubic yards of beach fill placed June 13&14, 2007. Approximately 3-6 ft depth offshore to extent of transects. Soft rolling waves on sandy beach 1-2 ft faces. Generally fair to poor water visibility with suspended sand and sediment from wave action. Steep-sloped sandy bank from beach fill extending seaward to MHW. More wave energy at Transect 4 (west end) due to tradewind waves. Tan dune emplaced MHW to shoreline.

Transects: (3 total)
3, 50 meter (160 ft) shore-perpendicular transects established fronting the property (Figure 1).
Location: Laulea Cove, Spreckelsville, Maui N 20.90776° W 156.41237°

Woods Residence, Spreckelsville, Maui



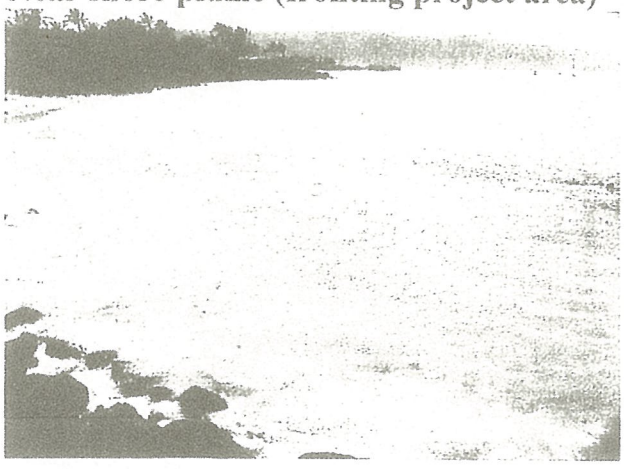
General Setting:

Project area is characterized by fine to medium moderately well sorted dominantly tan to white carbonate beach sands and some basalt sand, minor terrestrial brown clays and silts to east. Hard bottom (uncolonized) observed sporadically where thin sand bed wasn't present. Bottom type characterized by a mix of thin carbonate sediment with coralline and beach rock rubble. Platy beach rock and coralline rubble observed at 40 m (128 ft) offshore where it appears to transition from thin marine sands to hard bottom. Shoreline armoring present on either side of subject property. This is the only property without shoreline armoring.

A 500 cy beach fill was performed June 13 & 14, 2007 at the subject property using fine to medium tan to light brown inland carbonate sand from a local commercial source. The sand appears to have been placed landward of the Mean High Water (MHW) line up to a crest elevation of up +8 feet Mean Sea Level (MSL), to abut and extend slightly landward of the pre-existing escarpment. The nourished dune crest extends landward to the intersection with previous bank and provides 4-6 ft of vertical relief from the existing back beach dune grade. The restored sandy dune has been replanted (approved by DLNR) with several native species of dune plants including Pohinahina, Akulikuli and Pohuehue. The revegetation activities are occurring from the dune crest landward only.

Nearshore water visibility is poor to fair (~5 ft). A small tan plume was observed in the immediate nearshore (wave breaker zone) extending ~15 ft offshore. A different tan plume was observed in the am fronting the Williams property 2 properties to the east extending offshore parallel to the rocky headland. Not clear if the plume is related to any sand placement activities. The plume appears to be sandy in origin and dissipated with the incoming tide. High tide conditions (~+2 ft tide at 4pm) were just approaching newly placed fill. Nearshore visibility improved over morning conditions at lower tide. Thin layer of white carbonate (Micrite?) silt was observed covering bottom nearshore. This was also observed in pre-construction site visit and doesn't appear to have changed in concentration or extent.

Near shore plume (fronting project area)

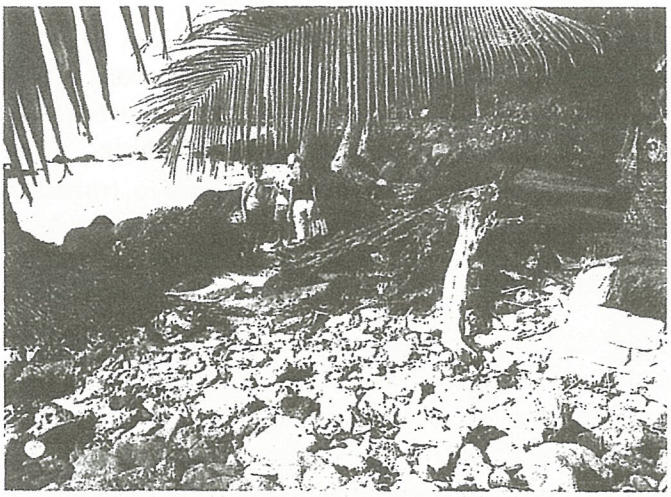


Adjacent updrift area with similar plume

Summary:

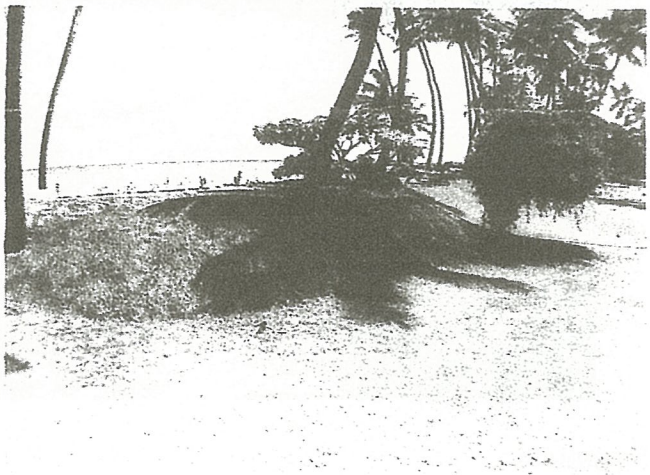
Beach fill placed approximately 20 ft seaward and landward of the pre-existing bank. Vertical scarping of the placed fill occurring with a near-vertical seaward face approximately 10 ft above the existing beach grade. No obvious signs of placed sand migrating across the active beach or change in beach width. Minimal fill sand has entered the littoral system to date due to lack of significant erosion of place sand. **No observed change in marine conditions or marine substrate from previous site assessment in February, 2007.**

Pre Construction Photos:



Post-Construction:

Back Beach Dune



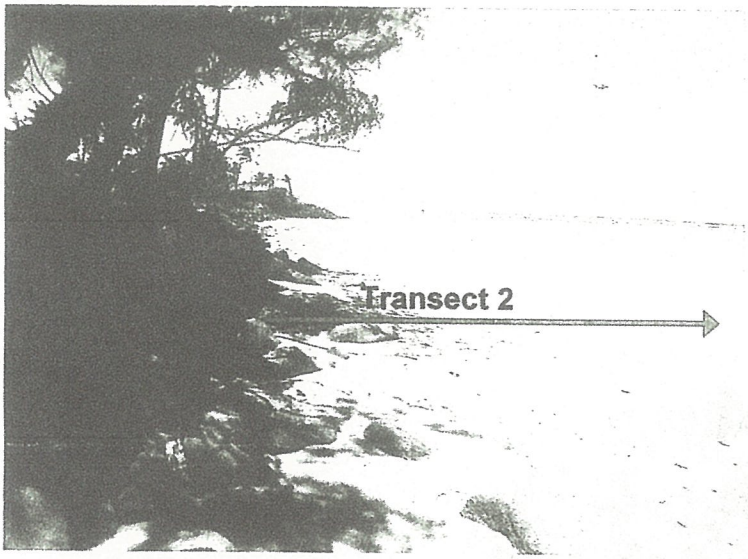
Transect Surveys: 1-3. Shore Perpendicular.
Fair to poor water visibility. Colonized coral rubble and basalt boulders (mostly fleshy algae). Fossil reef and coralline rubble hard bottom with coralline algae colonization. 100% sand 20 – 40 m from waterline, then progressively more hard bottom cover. Estimated coral cover less than 1%. Variety of fleshy brown and green algae. A few scattered sea urchin observed on basalt boulders. No other benthic communities observed. Some ghost crab holes observed on beach face.

Typical offshore sand and rubble bottom types

Transect 1

Transect 1

Transect 2



Transect 3

LINDA LINGLE
GOVERNOR OF HAWAII

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

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
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CONSERVATION AND COASTAL LANDS
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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

REF:OCCL:DE

File: SSBN MA-07-01/MA-07-04

October 25, 2007

MEMORANDUM:

Subject: Site Assessment for Small-Scale Beach Nourishment.
461 Laulea St. Spreckelsville Beach TMK: (2) 3-8-02:06.
DA File No.POH-2007-103 and
455 Laulea St. Spreckelsville Beach
TMK: (2) 3-8-02:072. DA File No.POH-2007-332

The Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) has recently carried out nearshore marine surveys for the subject properties on October 22, 2007. These assessments have been conducted as part of the environmental monitoring process for the small-scale beach nourishment projects at the two different properties and follow two previous assessments carried out February 21, 2006 and June 19, 2007. **Beach restoration activities occurred as authorized at the Woods project (MA-07-01) site on June 13 & 14, 2007.**

The site assessment is the third survey for the Laulea cove area and serves as the second post-construction survey for the Woods project (DA # POH-2007-103). OCCL staff also conducted a pre-construction survey of the Cirrus property (DA # POH-2007-332) and the results of this survey are presented here as a regional marine survey report. The purpose of the site assessment is to offer a qualitative assessment of the existing site conditions and bottom type for the purpose of evaluating the effectiveness of Best Management Practices (BMP's) and water quality monitoring related to the project. If you have questions regarding this project or would like to receive additional copies of the site visit photographs please contact Dolan Eversole at (808) 587-0321.

Sincerely,

Sam Lemmo, Administrator
Office of Conservation and Coastal Lands

CC: Chairperson
Maui Board Member / MDLO
Mrs. Patricia Cadiz, Spreckelsville Beach Restoration Foundation, Inc. 2406 Waipua Street Paia, Maui, Hawaii 96779
Mrs. Patricia Cadiz, Cirrus, LLC. 455 Laulea St Spreckelsville, Maui, Hawaii 96779
U.S. Fish and Wildlife Service
NOAA Fisheries Pacific Islands Regional Office 1601 Kapiolani Blvd., Suite 1110 Hon, HI 96814
ACOE/ DAR
DOH-CWB (Ed Chen)
Maui Co Planning Dept (Zoe Norcross, Thorne Abbott)

Nearshore Marine Site Assessment Conditions
Date: October 22, 2007
Time: 12:00pm to 3:00pm
Personnel: Dolan Eversole, Chris Conger (OCCL)

Marine Conditions: Wind Swell 0-1 ft faces, Tradewinds 0-5 mph, sunny, calm, high tide
Low Tide (Kahului) 05:33AM +0.57ft
High tide 12:04PM +2.38 ft

500 Cubic yards of beach fill placed at the Woods property on June 13&14, 2007. Approximately 6 ft water depth offshore at extent of transects. Generally fair to poor water visibility with suspended sand and sediment from wave action. Steep-sloped sandy bank from beach fill extending seaward to MHW. More wave energy at Transect 3 (west end) due to tradewind waves. Restored dune at Woods property. Three new transects added (# 4-6) for proposed beach restoration at east end of bay (DLNR File MA-07-04/ POH-2007-332) at 455 Laulea St. This report will also serve as a pre-project survey for this application as well as a follow up survey for MA-07-01.

Transects: (6 total)
6, 50 meter (160 ft) shore-perpendicular transects established for project area (Figure 1).
Location: Laulea Cove, Spreckelsville, Maui N 20.90776° W 156.41237°

Laulea Cove, Spreckelsville, Maui

General Setting:

Project area is characterized by fine to medium moderately well sorted dominantly tan to white carbonate beach sands, some basalt sand, suspended terrestrial brown clays and silts to east. Coral rubble and gravel are more pronounced in eroded beach sections (Transects 2 and 3) and appears to be more concentrated than in the recent past, especially in the west Laulea Cove area. Hard bottom (uncolonized coral rubble) is observed offshore sporadically where a thin sand bed wasn't present. Bottom type is characterized by a mix of thin carbonate sediment with coralline and beach rock rubble. Platy beach rock and coralline rubble observed at 40 m (128 ft) offshore where it appears to transition from thin marine sands to hard bottom at Transects 1-3. Transects 3-6 mostly rocky shoreline (1-3 ft diameter basalt rocks) with very small amount of fine sand within swash zone transitioning to think bed of fine sand that thickens and coarsens seaward. Well-sorted med to fine tan sand field observed approximately 30-60 meters offshore. Sand field appears thicker and more stable than surficial deposits nearshore. Shoreline armoring present along entire project area.

History

Woods- An approved 500 cy beach fill was performed June 13 & 14, 2007 at the Woods property using fine to medium tan to light brown inland carbonate sand from a local commercial source. The sand was placed landward of the Mean High Water (MHW) line up to a crest elevation of up ~+8 feet Mean Sea Level (MSL), to abut and extend slightly landward of the pre-existing escarpment. The nourished dune crest extends landward to the intersection with previous bank and provides 4-6 ft of vertical relief from the existing back beach dune grade. The restored sandy dune has been replanted (approved by DLNR) with several native species of dune plants including Pohinahina, Akulikuli and Pohuehue. The revegetation activities are occurring from the dune crest landward only.

Regional nearshore water visibility is generally poor but was especially poor visibility (<1 ft) from the shoreline to 25 meters offshore then poor to fair visibility (~2-4 ft) to 50 m offshore. A small tan-brown plume was observed in the immediate nearshore (wave breaker zone) extending ~25 ft offshore. A similar but more concentrated tan plume was observed fronting the Cirrus property to the east extending offshore parallel to the rocky headland. Not clear if the plume is related to any sand placement activities but appears to be composed of suspended clay and silt particles. The plume appears to be muddy (silts and clays in suspension) in origin and did not dissipate noticeably with the changing tide.

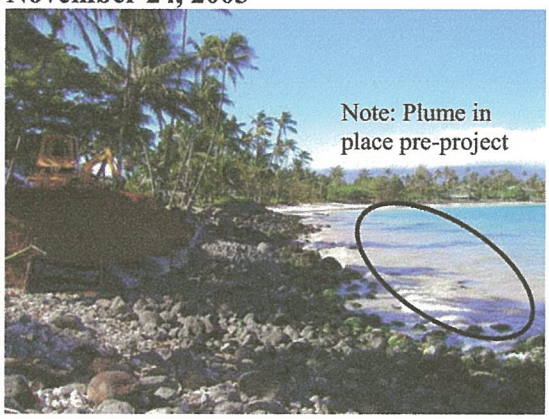
High tide conditions (~+2.4 ft tide at 12pm) were just approaching the newly placed sand fill, indicating the reach of tidal-induced erosion has already occurred and only seasonal high surf would erode the dune fill at this point. Nearshore visibility remained unchanged and appeared about the same throughout the course of the survey. A thin layer of white carbonate (Micrite?) silt was observed covering bottom further offshore. This was also observed in pre-construction site visit and doesn't appear to have changed in concentration or extent. The concentration and extent of the silty plume appears to have increased from previous surveys but is not directly attributed to the placement of the sand. Local residents stated the extent and concentration of the silty plume is the same it has been for many years. Residents also suggest that marine erosion of a clay bank along the shoreline may be contributing to the observed plume. The OCCL is investigating the history and origin of the plume and has acquired historical photographs of the same plume in existence well before the placement of sand fill in the region.

Cirrus-An approved 500 cy beach fill was performed in 3 stages between November, 2003 and November, 2004 at the Cirrus property using fine to medium tan to light brown inland carbonate

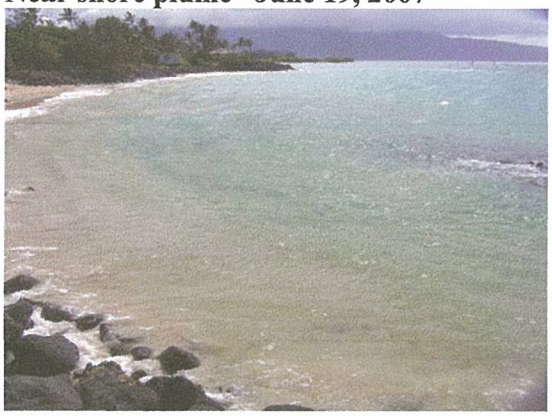
sand from a local commercial source. The sand was placed landward of the Mean High Water (MHW) line up to a crest elevation of up ~+6 feet Mean Sea Level (MSL), to abut and extend landward of the pre-existing escarpment in the formation of a protective coastal dune.

Woods Property Pre-construction
May, 2007

Cirrus Property Construction
November 24, 2003

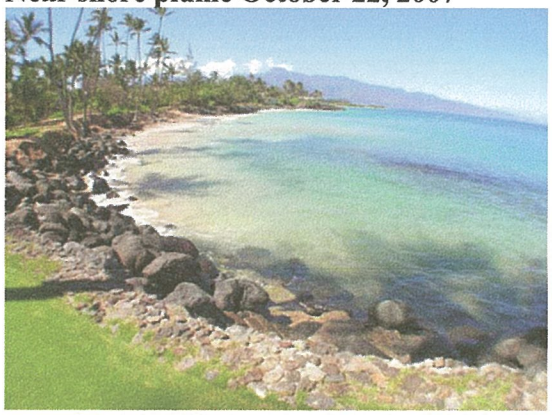


Woods Property Post-construction
Near shore plume June 19, 2007



Cirrus Property Post-construction
June 19, 2007

Woods Property Post-construction
Near shore plume October 22, 2007



Cirrus Property Post-construction
October 22, 2007

Summary:

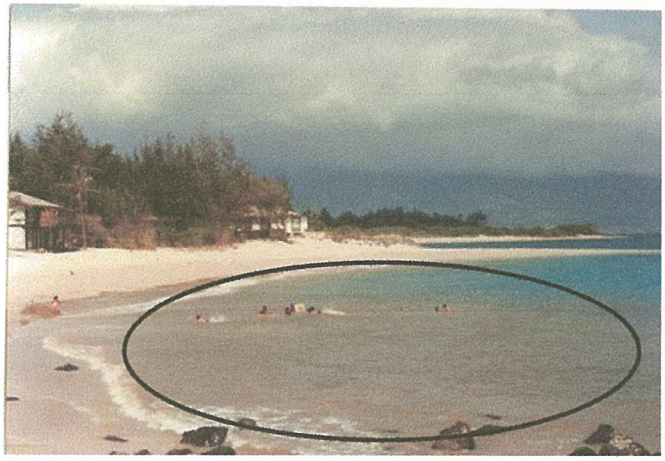
Woods Project:

Beach fill placed approximately 20 ft seaward and landward of the pre-existing bank. Vertical scarping of the placed fill occurring with a near-vertical seaward face approximately 10 ft above the existing beach grade. No obvious signs of placed sand migrating across the active beach or change in beach width. Approximately 200-300 cy of fill sand has entered the littoral system to date due to lack of significant erosion of placed sand. **No observed change in marine conditions or marine substrate from previous site assessment in June, 2007.**

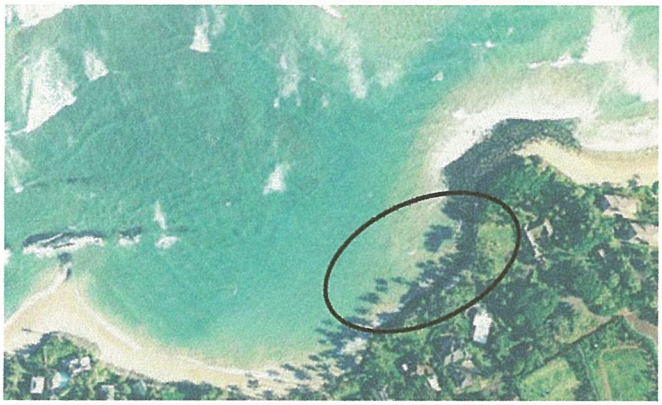
Historical Photographs (note nearshore plume)

1960

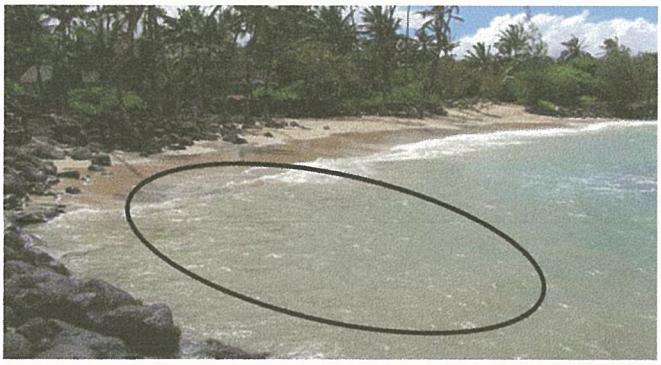
1986



1997



2002

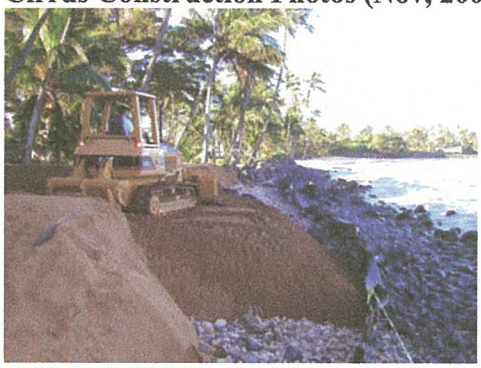


2005

2007

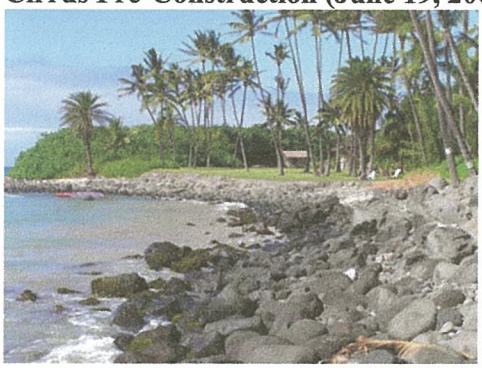
Woods Pre Construction Photos (1-10-07)

Cirrus Construction Photos (Nov, 2003)

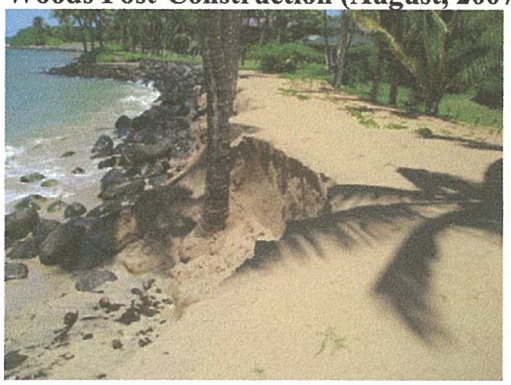


Woods Post-Construction (June 19, 2007)

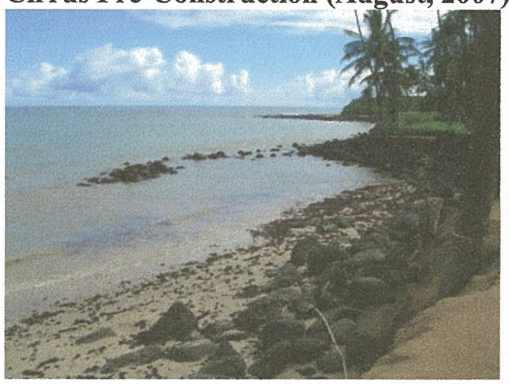
Cirrus Pre-Construction (June 19, 2007)



Woods Post-Construction (August, 2007)

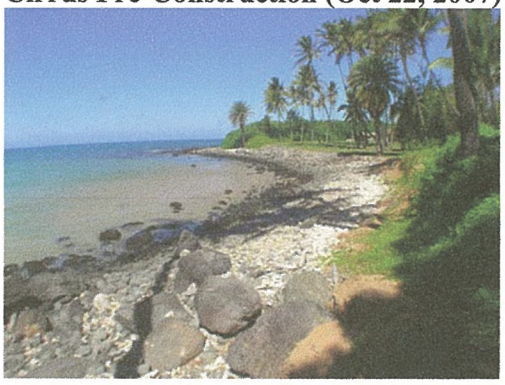


Cirrus Pre-Construction (August, 2007)



Woods Post-Construction (Oct 22, 2007)

Cirrus Pre-Construction (Oct 22, 2007)

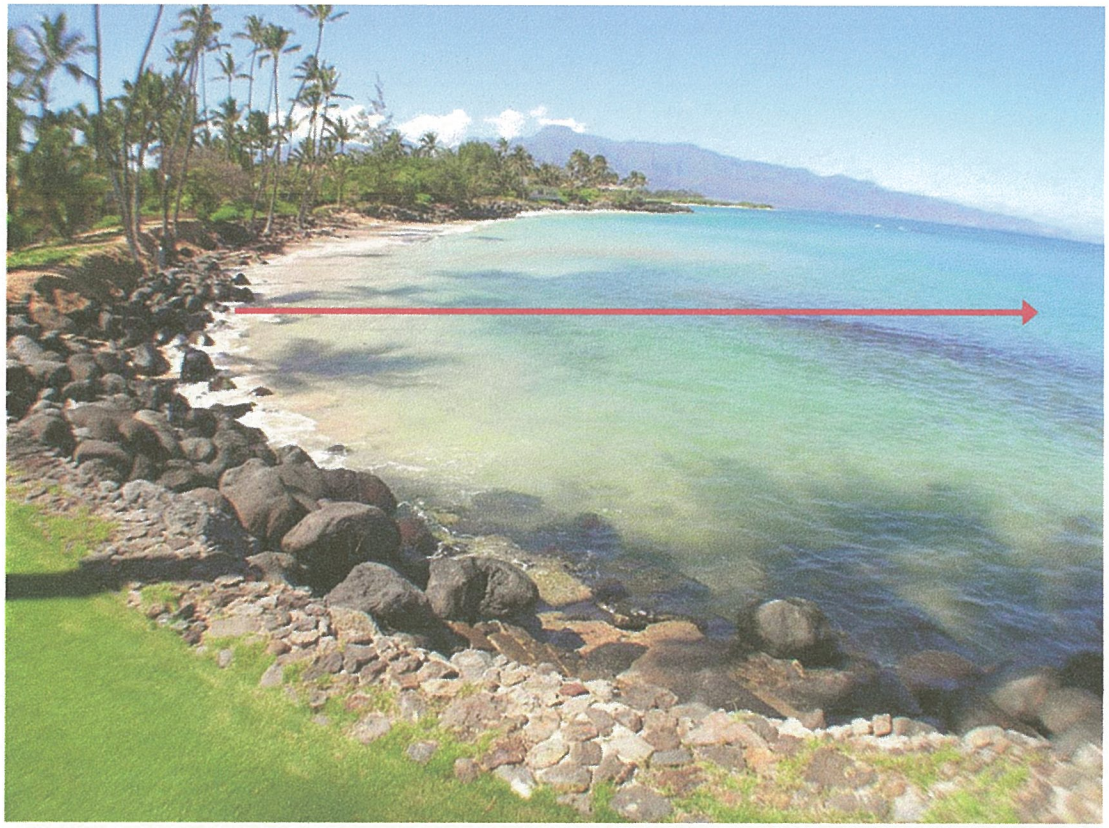


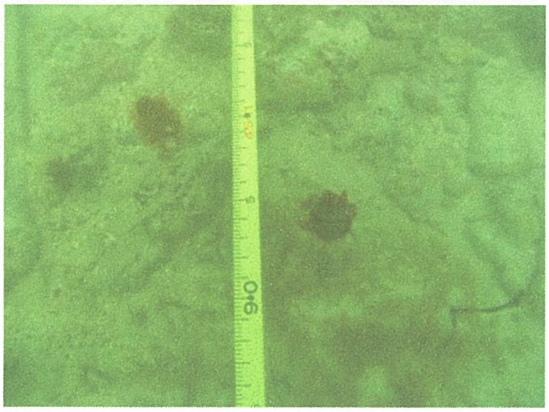
Transect Surveys: 1-3. Shore Perpendicular (West Laulea Cove)

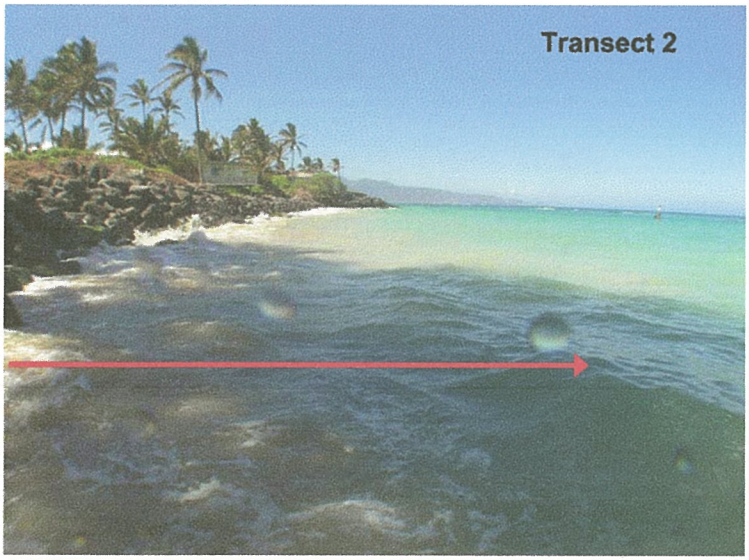
Fair to poor water visibility. Fair visibility nearshore at Transect 1 progressively decreasing offshore. Very low visibility near shore to 10 to 25 m offshore at Transect 2 with course coral gravel material on beach. Colonized coral rubble and basalt boulders (mostly fleshy algae). Fossil reef and coralline rubble hard bottom with coralline algae colonization. Sand lenses 20–40 m from waterline, then progressively more hard bottom cover. Estimated coral cover less than 1%. Variety of fleshy brown and green algae. A few scattered anemone beds observed on flat hard grounds. Large step crest and wave action on rocks at transect 2. Transect 3 shows better water quality than all other transects.

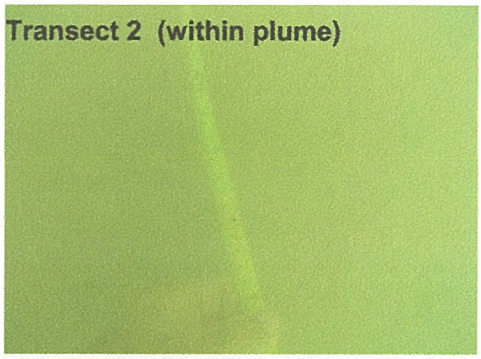
Typical offshore sand and rubble bottom types (October 22, 2007)

Transect 1

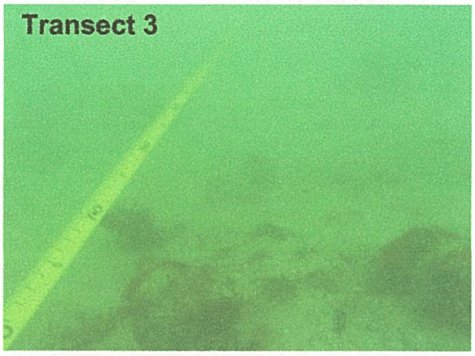


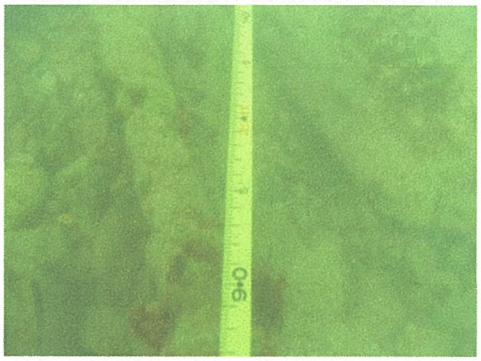



Transect 2


Transect 2 (within plume)


Transect 3

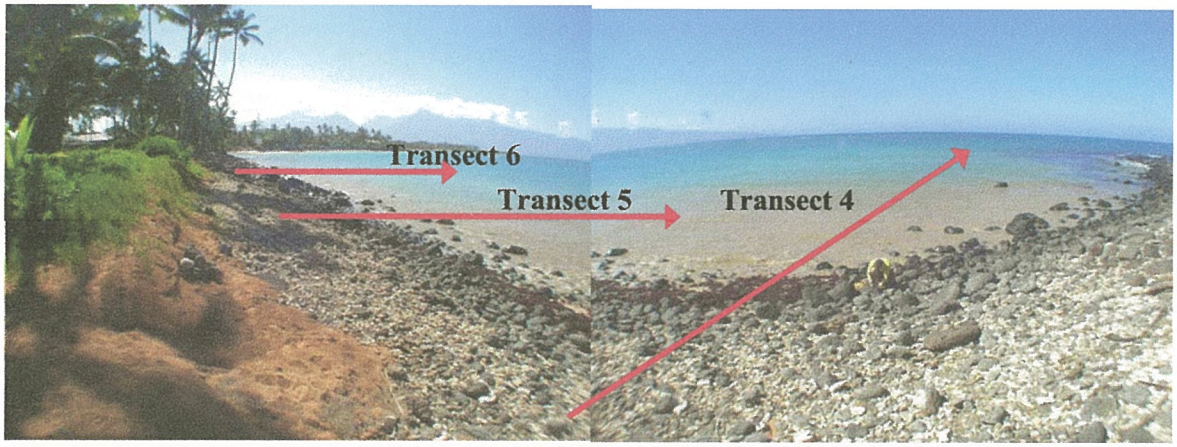

Transect 3



Transect Surveys: 4-6. Shore Perpendicular (East Lualea Cove).
--Camera battery failed at Transect 4--

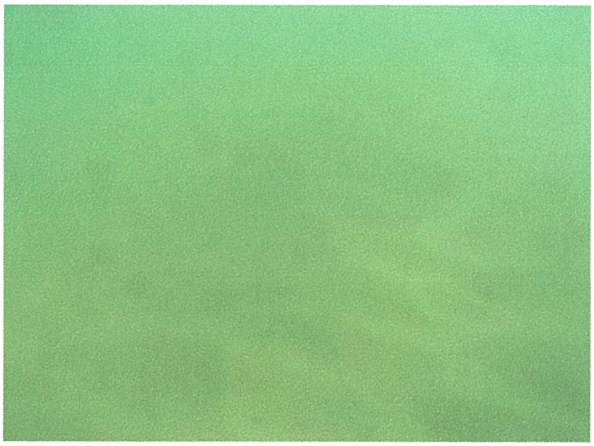
Fair to poor water visibility. No visibility nearshore at Transect 4 progressively improving offshore to 2-3 ft. Silty mud (1-3 inches thick) observed in shallow nearshore (2-3 ft water depth) in pockets around rock scour holes. Silt and clay in suspension nearshore possibly attributed to erosion of clay bank on rocky headland to the east. Historical aerial photographs and local resident's statements suggest this area exhibited turbid water before any fill activities occurred in the region. Possible contributors to silty plume are natural erosion of the clay bank, fine sediment transport from up current collecting in the cove or resuspension of fine sediment eroded from previous or associated fill efforts.

Very low visibility near shore to 20 m offshore at Transect 5 with coarsening sediment size seaward. Uncolonized coral rubble and basalt boulders with thin sand veneer. Tan, well-sorted medium-grain size, carbonate sand field observed approximately 150 ft offshore and roughly in-line with aeolian sand transport around the headland. Fossil reef and coralline rubble hard bottom with coralline algae colonization. Estimated coral cover less than 1%. Transect 6 shows better water visibility than all other transects with >6 ft visibility.



Typical nearshore conditions at Transect 4

Typical nearshore conditions at Transect 6 and offshore sand field



GOVERNOR OF HAWAII

COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
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

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

REF:OCCL:DE

File: SSBN MA-07-01/MA-07-04

December 23, 2009

MEMORANDUM:

Subject: **Marine Survey and Site Assessment for Small-Scale Beach Nourishment.** 461 Laulea St. Spreckelsville Beach TMK: (2) 3-8-02:06. DA File No.POH-2007-103 and 455 Laulea St. Spreckelsville Beach TMK: (2) 3-8-02:072. DA File No.POH-2007-332

The Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) has recently carried out nearshore marine surveys for the subject properties on December 14, 2009. These qualitative assessments have been conducted as part of the environmental monitoring process for the small-scale beach nourishment projects at the two different properties and follow two previous assessments carried out February 21, 2006 and June 19, 2007. Beach restoration activities occurred as authorized at the subject project sites (MA-07-01 &04). A project sand volume summary is offered to familiarize you with the history of these projects. Project Summary (Lualea Cove, Spreckelsville, Maui)

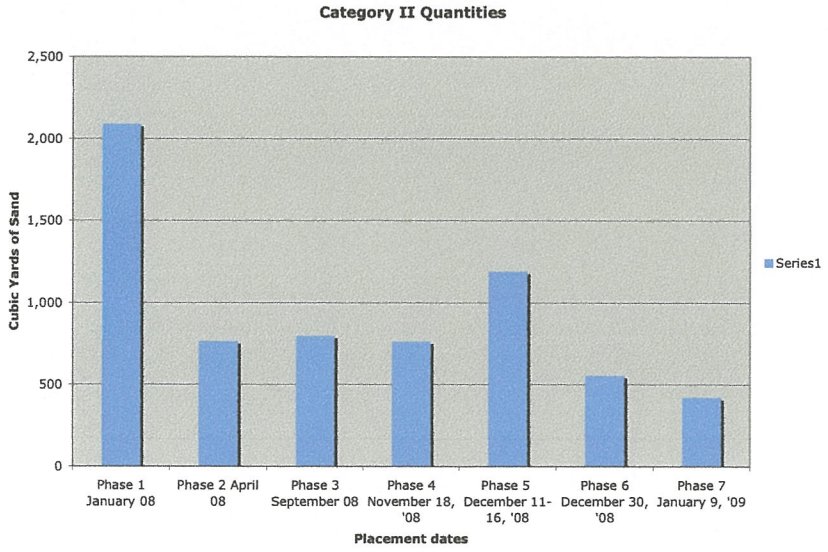


Table 1. Project Volume Summary and Activities History

Project Status			
Authorization Expired 1/16/09	**SBRF TMK: (2) 3-8-02:06**	**Cirrus TMK: (2) 3-8-02:072**	**TOTALS** Cubic Yards
Phase 1 January 08	1607	360	1967
Phase 2 April 08	586	128	715
Phase 3 September 08	613	184	798
Phase 4 November 18, '08	585	0	585
Phase 5 December 11-16, '08	915	248	1163
Phase 6 December 30, '08	425	0	425
Phase 7 January 9, '09	324	0	324
Total	**5055**	**921**	**5976**
Permitted Volume (cy)	6,500	3,000	**9,500**
Placed as of Jan, 2009	5,055	921	**5,976**
Percent of permit completed	78%	31%	**63%**
Unused Permit Balance	1,445	2,079	**3,524**

The site assessment is the fourth survey for the Laulea cove area and serves as the second post-construction survey for the Woods project (DA # POH-2007-103). OCCL staff also conducted a survey of the Cirrus property (DA # POH-2007-332) and the results of this survey are presented here as a regional marine survey report. **The purpose of the site assessment is to offer a qualitative assessment of the existing site conditions and bottom type for the purpose of evaluating the effectiveness of Best Management Practices (BMP's) and water quality monitoring related to the project.** The current authorization for these two projects is expired but the applicant is interested in continued beach maintenance at both locations. If you have questions regarding this project or would like to receive additional copies of the site visit photographs please contact Dolan Eversole at dolan.eversole@hawaii.gov or (808) 587-0377.

Sincerely,

Sam Lemmo, Administrator
Office of Conservation and Coastal Lands

CC: Chairperson
Maui Board Member / MDLO
Mrs. Patricia Cadiz, Spreckelsville Beach Restoration Foundation, Inc. 2406 Waipua Street Paia, Maui, Hawaii 96779
U.S. Fish and Wildlife Service
NOAA Fisheries Pacific Islands Regional Office 1601 Kapiolani Blvd., Suite 1110 Hon, HI 96814
ACOE/ DAR
DOH-CWB (Ed Chen)
Maui Co Planning Dept

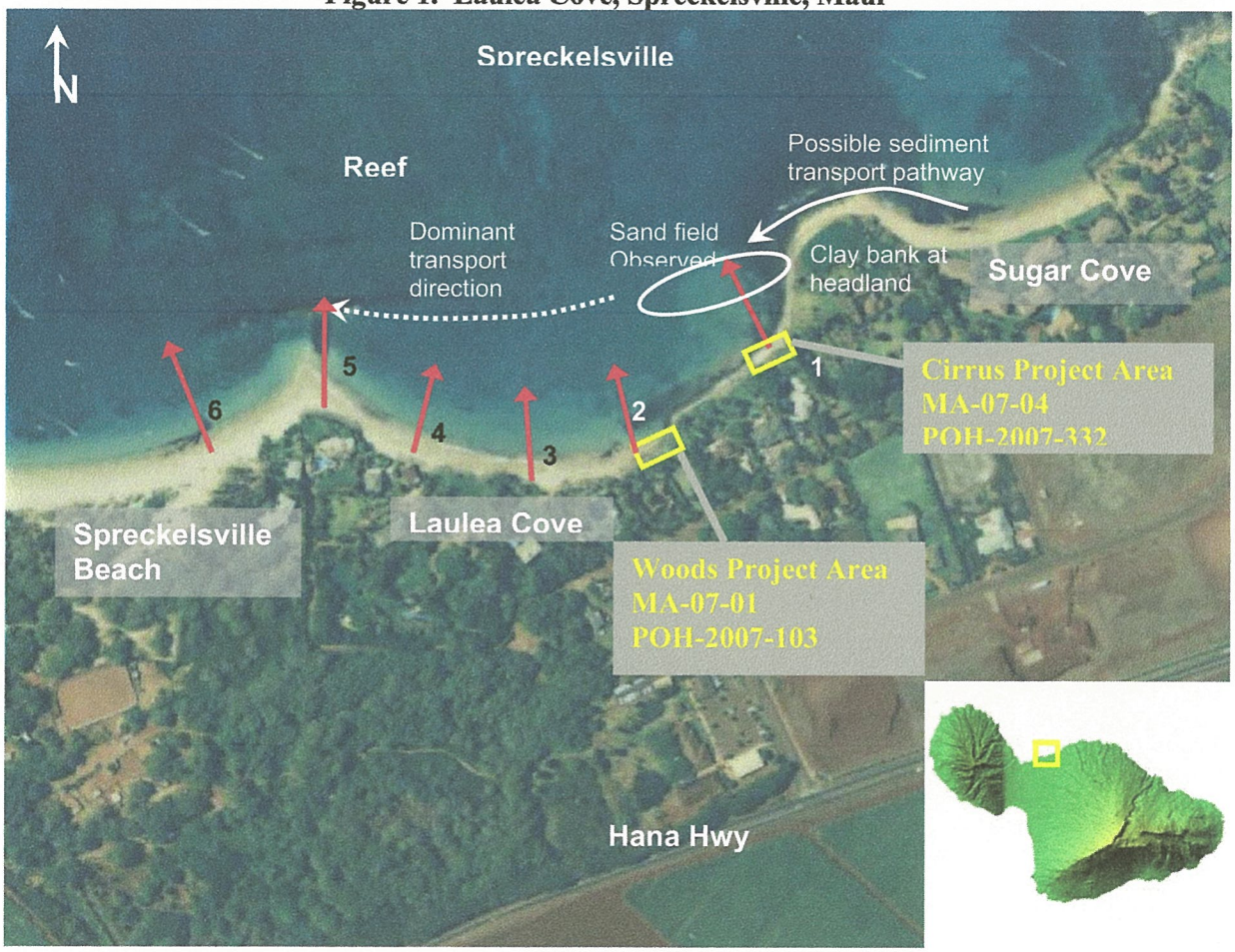
Nearshore Marine Site Assessment Conditions
Date: December 14, 2009
Time: 10:00am to 1:00pm
Personnel: Dolan Eversole, Chris Conger (OCCL)

Marine Conditions: Wind Swell 0-1 ft faces, Tradewinds 0-5 mph, sunny, calm, mid-tide
Low Tide (Kahului) 08:35AM +1.0ft, High tide 12:00PM +1.3 ft
Previous high surf December 6-10th, 2009 (20-50 foot faces) caused significant erosion of the seaward dune face (approximately 10-15ft)

Last placement action 420 Cubic yards of beach fill placed at the Woods property on January 9 2009. Approximately 6-8 ft water depth offshore at extent of transects. Generally fair to poor water visibility with suspended sand and sediment from wave action. Steep-sloped sandy bank from beach fill extending seaward to MHHW. More wave energy at Transect 3 (west end) due to tradewind waves. One new transect added (# 6) to extend coverage down drift of project area.

Transects: (6 total)
6, 50 meter (160 ft) shore-perpendicular transects established for project area (Figure 1).
Location: Laulea Cove, Spreckelsville, Maui N 20.90776° W 156.41237°

Figure 1. Laulea Cove, Spreckelsville, Maui



General Setting:

Project area is characterized by fine to medium moderately well sorted dominantly tan to white carbonate beach sands, some basalt sand, suspended terrestrial brown clays and silts to the east. Coral rubble, shingle and gravel are more pronounced in eroded beach sections (Transects 2 and 3). Hard bottom (uncolonized coral rubble) is observed offshore sporadically where a thin sand bed wasn't present. Bottom type is characterized by a mix of thin carbonate sediment with coralline and beach rock rubble. Platy beach rock and coralline rubble observed at 40-50 m (128-150 ft) offshore where it appears to transition from thin marine sands to hard bottom at Transects 1-3. Transects 4-5 are mostly rocky shoreline (2-4 ft diameter basalt rocks) with very small amount of fine sand within swash zone transitioning to think bed of fine sand that thickens and coarsens seaward. Well-sorted med to fine tan sand field observed approximately 30-60 meters offshore. Sand field appears thicker and more stable than surficial deposits nearshore. Shoreline armoring present along entire project area. Low beach slope ~1V: 15H, wet sand beach present. Little to no branching corals observed in this marine survey. **Generally there was little recognizable change in the marine substrate or biological assemblages from the past surveys (June, 2007 and October, 2007).**

History

Woods- An approved 500 cy beach fill was performed June 13 & 14, 2007 and subsequent follow ups through 2009 (See Table 1), at the Woods property using fine to medium tan to light brown inland carbonate sand from a local commercial source. The sand was placed landward of the Mean High Water (MHW) line up to a crest elevation of up ~+8 feet Mean Sea Level (MSL), to abut and extend slightly landward of the pre-existing escarpment. The nourished dune crest extends landward to the intersection with previous bank and provides 4-6 ft of vertical relief from the existing back beach dune grade. The restored sandy dune has been landscaped (approved by DLNR) with several

native species of dune plants including Pohinahina, Akulikuli and Pohuehue. The revegetation activities are occurring from the dune crest landward only.

Regional nearshore water visibility is generally poor but was especially poor visibility (<1 ft) from the shoreline to 25 meters offshore then poor to fair visibility (~2-4 ft) to 50 m offshore. A small tan-brown plume was observed in the immediate nearshore (wave breaker zone) extending ~10 m offshore. A similar but more concentrated tan plume was observed fronting the Cirrus property to the east extending offshore parallel to the rocky headland. Not clear if the plume is related to any sand placement activities but appears to be composed of suspended clay and silt particles. The plume appears to be muddy (silts and clays in suspension) in origin and did not dissipate noticeably with the changing tide.

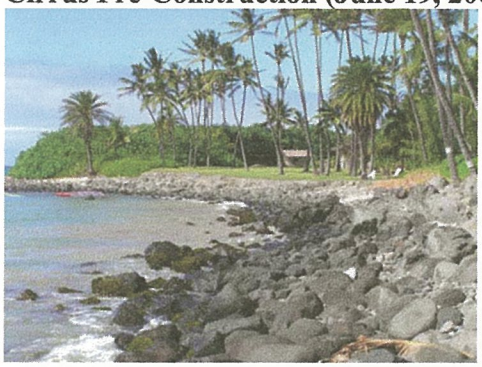
Past high tide conditions (~+2.4 ft tides) were just approaching the newly placed sand fill, indicating the reach of tidal-induced erosion has already occurred and only seasonal high surf would erode the dune fill at this point a fact observed by the recent erosion of the dune due to high surf. Nearshore visibility was highly variable in spatial extent and generally was better further offshore and further to the west of Laulea Cove. A thin layer of white carbonate (Micrite?) silt was observed covering bottom along the immediate nearshore at transect 1. This was also observed in pre-construction site visit and doesn't appear to have changed in concentration or extent. The concentration and extent of the silty plume appears to have decreased from previous surveys. Local residents stated the extent and concentration of the silty plume is the same it has been for many years. Residents also suggest that marine erosion of a clay bank along the shoreline may be contributing to the observed plume. The OCCL is investigating the history and origin of the plume and has acquired historical photographs of the same plume in existence well before the placement of sand fill in the region (see past marine survey report from 4-30-08).

Woods Pre Construction Photos (1-10-07)

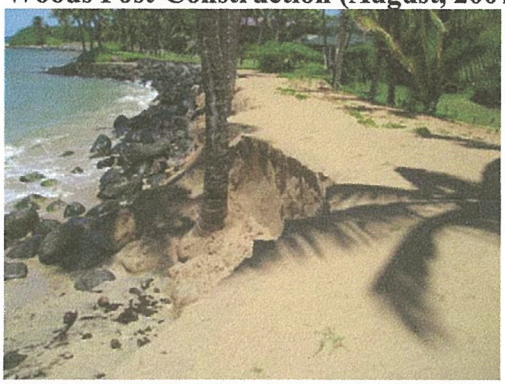
Cirrus Construction Photos (Nov, 2003)

Woods Post-Construction (June 19, 2007)

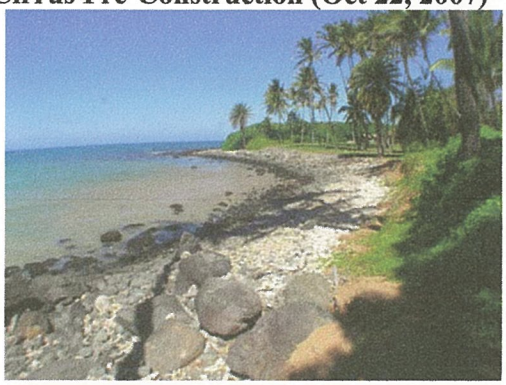
Cirrus Pre-Construction (June 19, 2007)



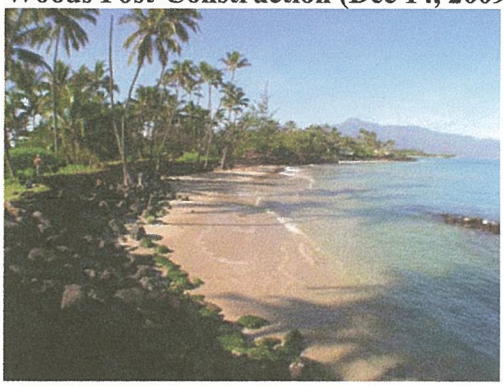
Woods Post-Construction (August, 2007)



Cirrus Pre-Construction (Oct 22, 2007)



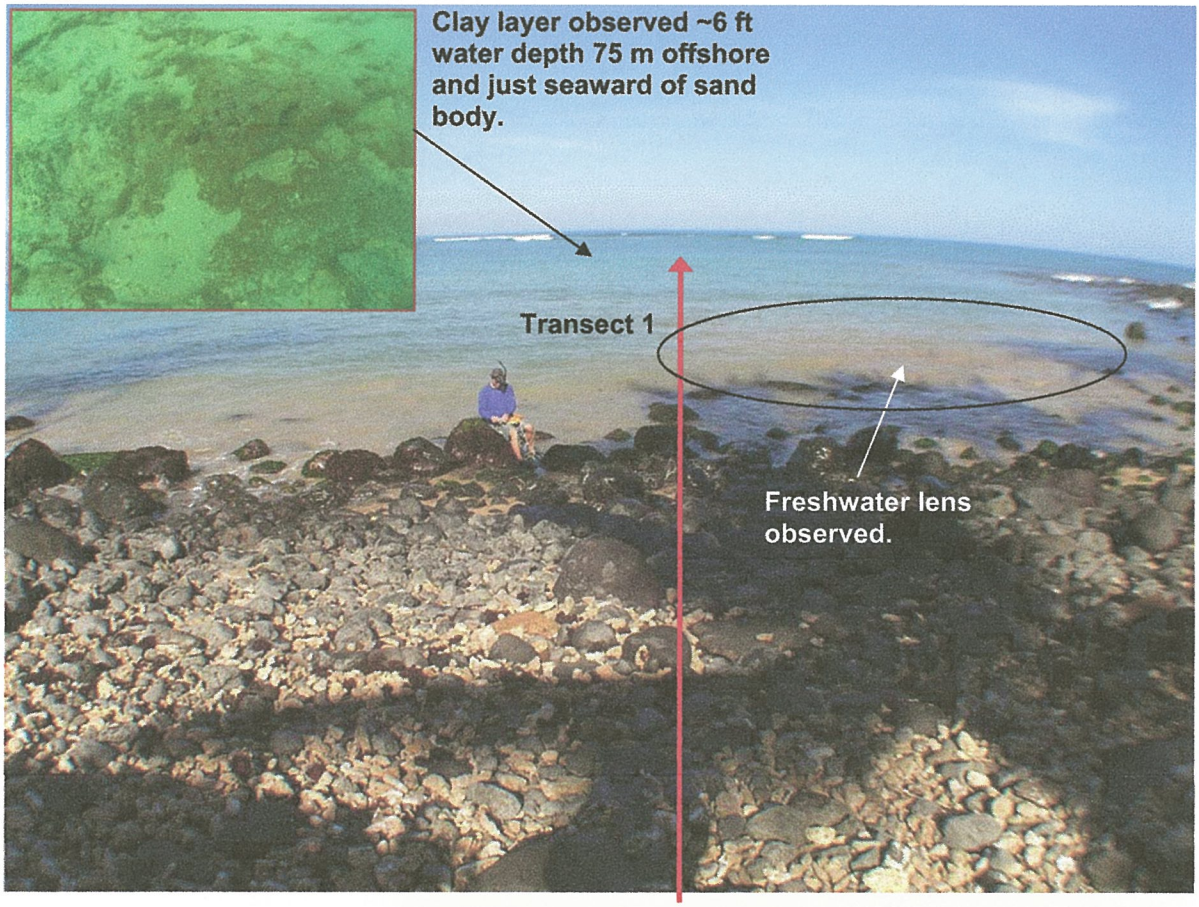
Woods Post-Construction (Dec 14, 2009)



Cirrus post-Construction (Dec 14, 2009)

Transect Surveys: 1. Shore Perpendicular (East Laulea Cove)

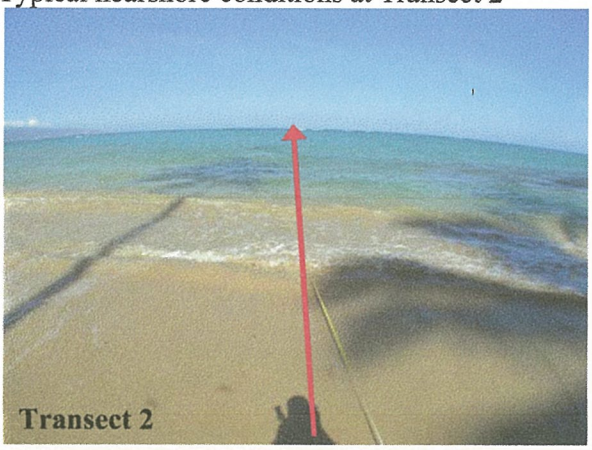
Fair to poor water visibility. Poor visibility nearshore at Transect 1 progressively improving offshore. Very low visibility (0-1ft) near shore to 10 to 25 m offshore at Transect 1 with course coral gravel material on beach. Freshwater lens observed in immediate shoreline area. Colonized coral rubble and basalt boulders (mostly fleshy algae). Fossil reef and coralline rubble hard bottom with coralline algae colonization. Sand body ~40 m from waterline, then progressively more hard bottom cover. Estimated coral cover less than 1%. Variety of fleshy brown and green algae observed on hard grounds. Hard, dense, clay layer with thin layer of coralline sand covering observed just seaward of sand body approximately 75 m offshore. Silt and clay in suspension nearshore. Historical aerial photographs and local resident's statements suggest this area exhibited turbid water well before any fill activities occurred in the region. Possible contributors to silty plume are erosion of the natural clay bank, fine sediment transport from up current collecting in the cove or re-suspension of fine sediment eroded from previous or associated fill efforts.

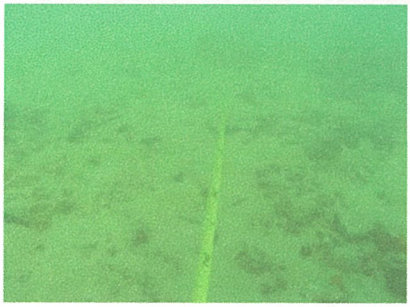


Typical offshore sand and rubble bottom types (Dec 14, 2009)

Transect Surveys: 2-4. Shore Perpendicular (Laulea Cove).
Primary area of sand fill activities. Low beach slope ~1V:15H, wet sand beach with coarsening sediment size seaward present fronting a rock revetment. Coral rubble observed at beach toe. Laulea Cove Fair water visibility. Very low visibility near shore at shore break to 20 m offshore at all 3 transects. Primarily uncolonized coral rubble and basalt boulders with thin sand veneer. Tan, well-sorted medium to fine-grain size, carbonate sand field observed approximately 50m offshore. Fossil reef and coralline rubble hard bottom with little to no coralline algae colonization. Estimated coral cover less than 1%. Little to no branching corals observed in this marine survey. Transect 5 & 6 show better water visibility than all other transects with >4 ft visibility and improving visibility with distance from shore. No coral or coralline algae observed along transect. Human debris (golf balls, masts, etc..) observed at 40-50 m offshore.

Typical nearshore conditions at Transect 2

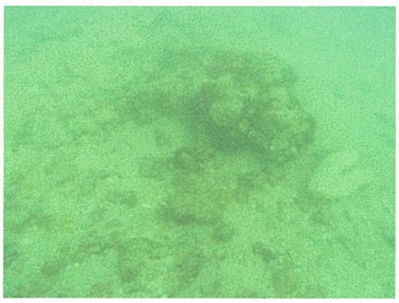




Transect Surveys: 3. Shore Perpendicular (Laulea Cove).

Shoreline armoring present along entire project area. Coral rubble and shingle back beach, exposed during erosion events. Low beach slope ~1V:15H, wet sand beach with coarsening sediment size seaward present fronting a rock revetment. Coral rubble observed at beach toe. Very low visibility near shore at shore break to 20 m offshore at all 3 transects. Primarily uncolonized coral rubble and basalt boulders with thin sand veneer beyond 60 m offshore. Tan, well-sorted medium to fine-grain size, carbonate sand observed approximately 0-50m offshore. Fossil reef and coralline rubble hard bottom offshore with little coralline algae colonization. Estimated coral cover less than 1%. No branching corals observed in this marine survey. Unidentified sponge present (<1% cover) at 50 m offshore. Transect 3 visibility improving with distance from shore. No coral or coralline algae observed along transect. Green-red algae observed on subaerial exposed rocks.

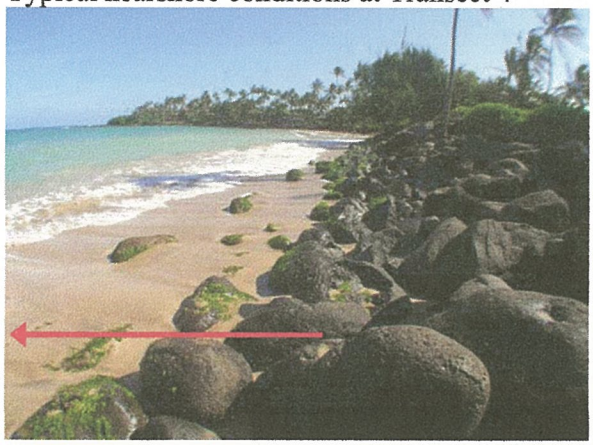
Typical nearshore conditions at Transect 3

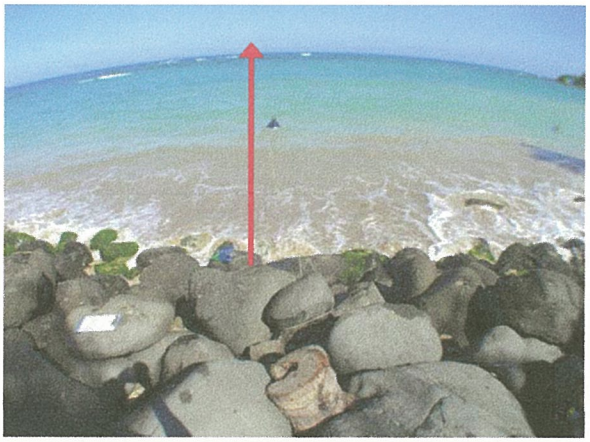


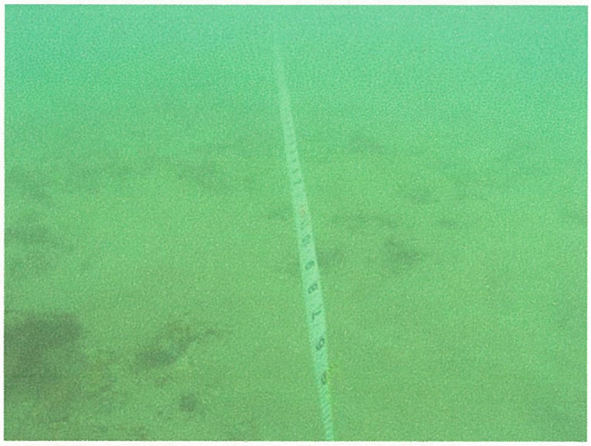
Transect Surveys: 4. Shore Perpendicular (West Laulea Cove).

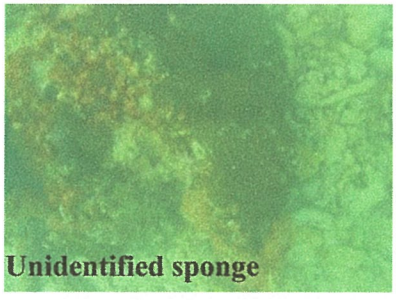
Shoreline armoring present along entire project area. Narrow wet sand beach with coarsening sediment size seaward present fronting a rock revetment. Coral rubble observed at beach toe. moderate visibility near shore at shore break to 20 m offshore. Primarily uncolonized coral rubble and basalt boulders with thin sand veneer beyond 60 m offshore. Tan, well-sorted medium to fine-grain size, carbonate sand observed approximately 0-50m offshore. Fossil reef and coralline rubble hard bottom offshore with coralline algae colonization. Estimated coral cover less than 1%. No branching corals observed in this marine survey. Unidentified sponge present (<1% cover) at 50 m offshore. Transect 4 visibility improving with distance from shore. Green-red algae observed on subaerial exposed rocks. Hard bottom cover present beyond 50 m offshore.

Typical nearshore conditions at Transect 4





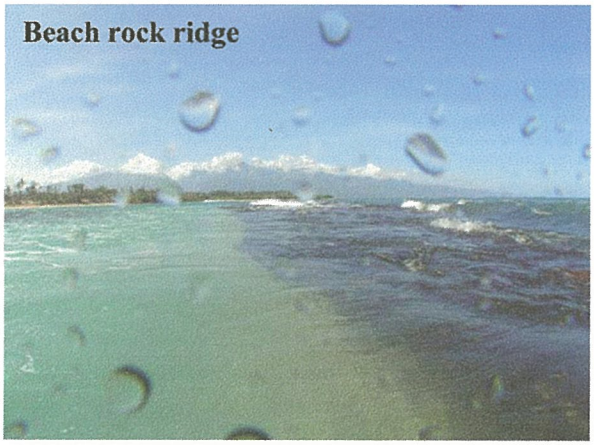


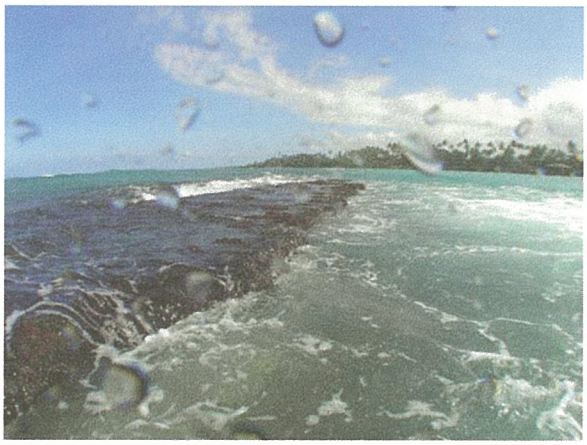


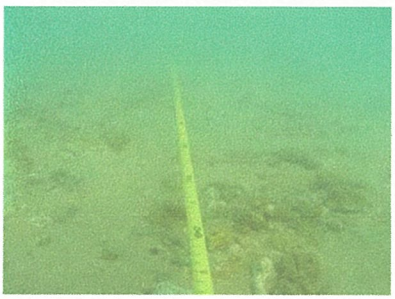
Unidentified sponge

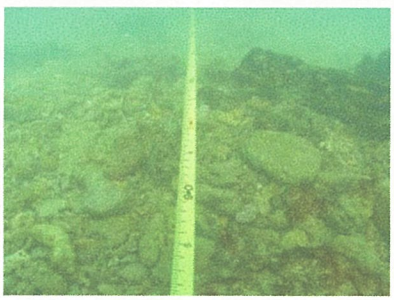
Transect Surveys: 5. Shore Perpendicular (West Laulea Cove) Grossman Residence Point. Shoreline armoring present along entire project area. Coral rubble observed at beach toe. Moderate to fair visibility near shore at shore break to 20 m offshore. Primarily uncolonized coral rubble and basalt boulders with thin sand veneer beyond 60 m offshore. Shore-parallel intertidal beach rock ridge at 60-70 m offshore. Basalt boulder (natural?) groin-like feature extending perpendicular to shoreline connecting to beach rock ridge. Fossil reef and coralline rubble hard bottom >50m offshore with some coralline algae colonization. Estimated coral cover less than 1%. *One* branching coral observed in this marine survey. Unidentified sponge present (<1% cover) at 50 m offshore. Transect 5 visibility improving with distance from shore. Green-red algae observed on subaerial exposed rocks. Hard bottom cover present beyond 50 m offshore.

Typical nearshore conditions at Transect 5





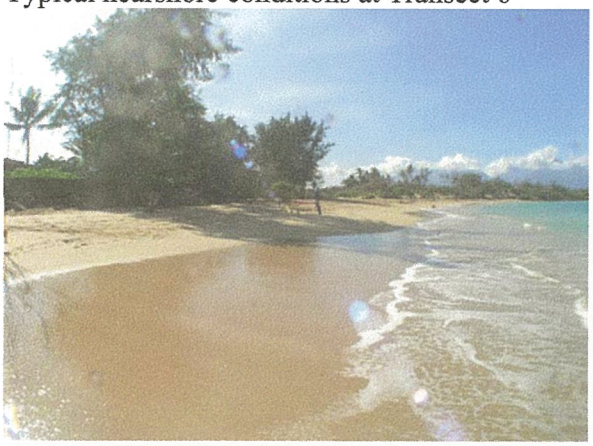


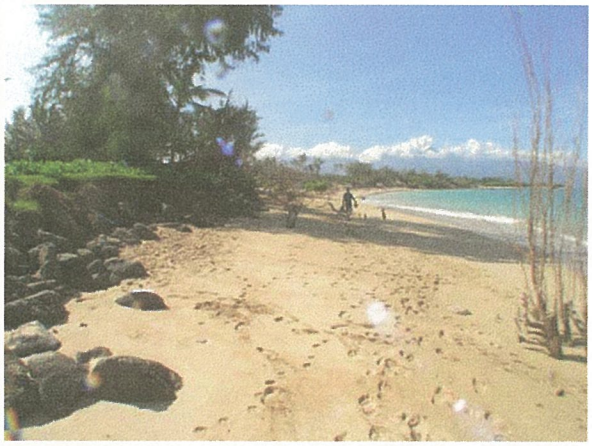
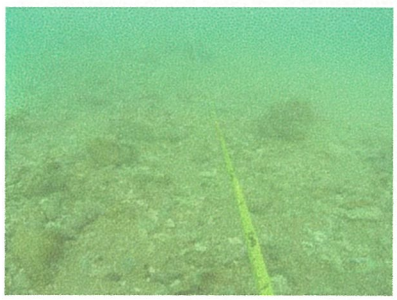
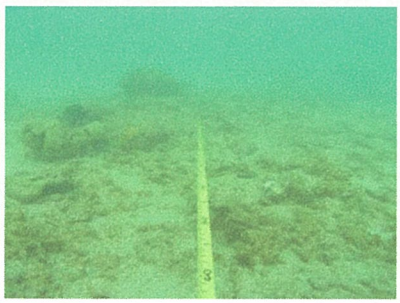
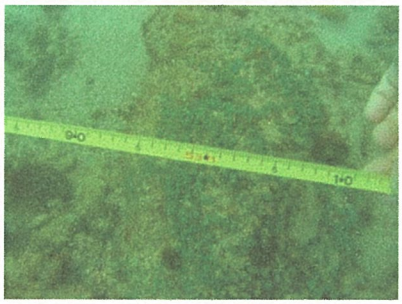


Transect Surveys: 6. Shore Perpendicular (Spreckelsville Beach)

Moderate to good visibility (5-10') near shore and improving with distance from shore. Sandy shoreline at public beach park. Primarily sand and uncolonized coral rubble nearshore (<50 m) and basalt boulders with thin sand veneer beyond 60 m offshore. Shore-parallel inter-tidal beach rock ridge at 60-70 m offshore. Basalt boulder (natural?) groin-like feature extending perpendicular to shoreline connecting to beach rock ridge. Fossil reef and coralline rubble hard bottom >50m offshore with some coralline algae colonization. Estimated coral cover less than 1%. Unidentified sponge present (<1% cover) at hard bottom near beach rock ridge. Wider assemblage of marine life near beach rock (spiny lobster, wrasse, green algae, sponges). Hard bottom cover present beyond 50 m offshore.

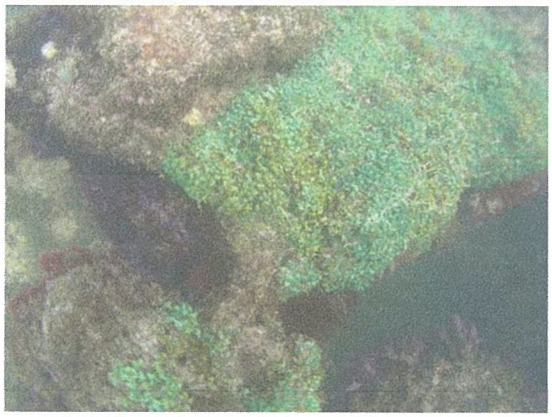
Typical nearshore conditions at Transect 6

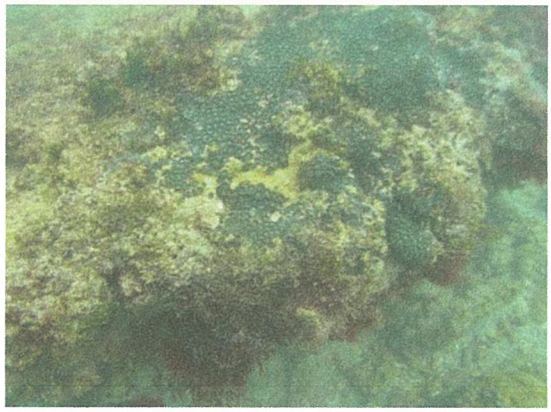


Transect Surveys: Beachrock Ridge (offshore 75 m Spreckelsville Beach)
Moderate to good visibility (5-10') near shore and improving with distance from shore. Shore-parallel inter-tidal beach rock ridge at 60-70 m offshore. Basalt boulder (natural?) groin-like feature extending perpendicular to shoreline connecting to beach rock ridge. Fossil reef and coralline rubble hard bottom >50m offshore with some coralline algae colonization. Estimated coral cover less than 1%. Unidentified sponge present (<1% cover) at hard bottom near beach rock ridge. Wider assemblage of marine life near beach rock (spiny lobster, wrasse, green algae, sponges). Hard bottom cover present beyond 50 m offshore.

Typical nearshore conditions at Beach Rock ridge.





Item 7 l) Benthic Habitats Biology

Item 8 a) Existing Sediment Analysis

AMERON
HAWAII

Quality Assurance Laboratory

Aggregate Physical Series Report

	* Existing Sediment MATERIAL		
	SBRF 'UPPER BEACH	**BERM WWTF**	
Date Sampled:	5/11/15	5/11/15	
Sieve Number	% Pass	% Pass	
4	100	100	
8	100	100	
16	100	99	
30	99	58	
50	92	8.1	
100	12	.4	
200	.3	.2	

Remarks

Jonah Abreu
Technical Services

Item 8 b) Proposed Fill Sediment Analysis

AMERON

HAWAII

Quality Assurance Laboratory

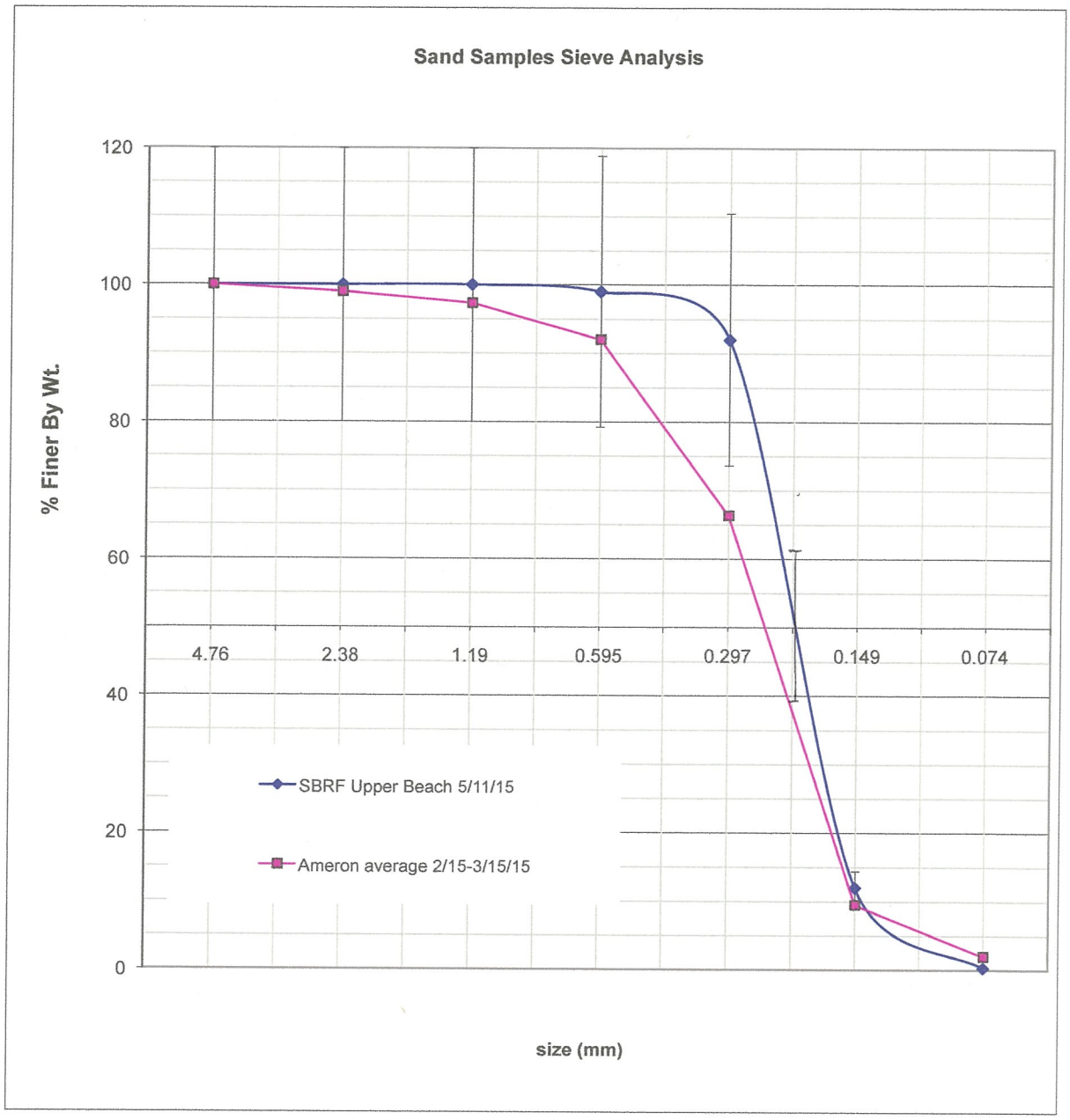
Aggregate Physical Series Report

	MATERIAL					
	Screened Dune Sand					
Date Sampled:	2/15		3/15		3/15	
Sieve Number	% Pass		% Pass	Spec.	% Pass	Spec.
4	100		100		100	
8	99		99		99	
16	98		97		97	
30	93		92		91	
50	68		67		64	
100	9.4		9.6		9.5	
200	1.6		2.1		2.2	

Remarks

Jonah Abreu
Technical Services

Item 8 c) Compatability Analysis



Percent (%) finer by weight

Sieve #	mm size	SBRF Upper Beach 5/11/15	Ameron average 2/15-3/15/15
#4	4.76	100	100.00
#8	2.38	100	99.00
#16	1.19	100	97.33
#30	0.595	99	92.00
#50	0.297	92	66.33
#100	0.149	12	9.50
#200	0.074	0.3	1.97

OEQC Public Notice of Planned Action (Draft Letter)

Project Name: SBRF, Inc.

Type of Document: Small Scale beach Nourishment Application – Category 2

Island: Maui

District: Paia

TMK: (2) 3-8-002:006

Permits Required: Small Scale Beach Nourishment -Category 2 Programmatic Permit and County SMA permit

Applicant: Spreckelsville Beach Restoration Foundation, Inc.
Mailing Address: 2406 Waipua Street, Paia, HI 96779

Contact and Phone Number: Patricia B Cadiz, President 808-283-5070

Approving Agency/
Accepting Authority: Department of Land and Natural Resources-
Office of Conservation and Coastal Lands (OCCL)
Mailing Address: 1151 Punchbowl Street, Room 131, Honolulu, HI 96813

Contact and Phone Number: Samuel J. Lemmo, Administrator, 808-587-0377

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10. BEST MANAGEMENT PRACTICES PLAN

The purpose of this Best Management Practices Plan (BMPP) is to ensure that adequate protective measures are in place during regular beach maintenance of the project. This plan is designed to prevent, if possible, or minimize adverse impacts to the environment. The project specifications will require the Construction Contractor to adhere to environmental protection measures, including, but not limited to, those included in this plan.

10.1 General

The Contractor shall be responsible for conformance to Title 11, Chapter 60 of the Public Health Regulations, Department of Health, State of Hawaii.

1. With the exception of those measures set forth elsewhere in this plan, environmental protection shall consist of the prevention of environmental pollution as the result of construction operations under this project. For the purpose of this plan, environmental pollution is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare, unfavorably alter ecological balances of importance to human life, affect other species of importance to man, or degrade the utilization of the environment for aesthetic and recreational purposes.

2. The work shall include the following:

A. Make sure that all permits required for this plan are obtained and valid for the construction period.

B. Provide all facilities, equipment and structural controls for minimizing adverse impacts upon the environment during the construction period.

3. Applicable Regulations: In order to provide for abatement and control of environmental pollution arising from the construction activities of the Contractor and his subcontractors in the performance of the work performed shall comply with the intent of the applicable Federal. State, and local laws and regulations concerning environmental pollution control and abatement, including, but not limited to the following regulations:

A. State of Hawaii, Department of Health, Administrative Rules. Chapter 55. WATER POLLUTION CONTROL: Chapter 54, WATER QUALITY STANDARDS.

B. State of Hawaii, Department of Health, Administrative Rules, Chapter 59, AMBIENT AIR QUALITY: Chapter 60, AIR POLLUTION CONTROL LAW.

C. State of Hawaii, Department of Health, Administrative Rules, Chapter 44A, VEHICULAR NOISE CONTROL

D. State of Hawaii, Occupational Safety and Health Standards, Title 12, Department of Labor and Industrial Relations, Subtitle 8, Division of Occupational Safety and Health, Subparagraph 12-202-13, ASBESTOS DUST: Environmental Protection Agency, Code of Federal Regulations Title 40, Part 61 Subpart A, NATIONAL EMISSION STANDARDS FOR AIR POLLUTANTS and Subpart B, NATIONAL EMISSION STANDARDS FOR ASBESTOS; and U.S. Department of Labor Occupational Safety and Health Administration (OSHA) Asbestos Regulations, Code of Federal Regulations Title 29, Part 1910.

10.2 Suitable Material

1. All maintenance equipment and material shall be free of contaminants of any kind including: excessive silt, sludge, anoxic or decaying organic matter, clay, dirt, oil, floating debris, grease or foam or any other pollutant that would produce an undesirable condition to the beach or water quality.

2. All berm fill sand shall be free from any objectionable sludge, oil, grease, scum, excessive

silt, organic material or other floating material.

10.3 Historic or Cultural Features

1. No adverse impacts to any historical or cultural feature are expected as there are none known in the project area.
2. Should any unanticipated archaeological site(s), such as walls, platforms, pavements and mounds, or remains such as artifacts, burials, concentrations of charcoal or shells be uncovered by the work activity, all work shall cease in the immediate area and the contractor shall notify the State Historic Preservation Office at 808.692.8015. No work shall resume until the owner/contractor obtains clearance from the Historic Preservation Office.

10.4 Environmental Protection

1. All permits and clearances shall be obtained prior to the start of any maintenance activities. The Contractor and his sub-contractors shall ensure that all construction work complies with all permit conditions and commitments made with environmental agencies.
2. The Contractor shall perform the work in a manner that minimizes environmental pollution and damage as a result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of the maintenance activities.
3. The contractor shall complete daily inspection of equipment for conditions that could cause spills or leaks; clean equipment prior to operation near the water; properly site storage, refueling, and servicing sites; and implement spill response procedures and stormy weather preparation plans.
4. The project shall be completed in accordance with all applicable State and County health and safety regulations.
5. The Contractor shall provide notifications to the National Marine Fisheries Services, 808.944.2200, including the Protected Resources Division, at least 72 hours prior to scheduled start of maintenance activities.

10.5 Solid Waste and Disposal

1. Any maintenance activity related debris that may pose an entanglement hazard to marine protected species must be removed from the project site if not actively being used and/or at the conclusion of the maintenance activity.
2. The Contractor shall not dispose of any concrete, steel, wood, and any other debris into any waters. Any debris that falls into the water shall be removed at once.
3. No contamination (trash or debris disposal, alien species introductions, etc.) of marine (reef flats, lagoons, open oceans, etc.) environments adjacent to the project site shall result from project related activities.
4. The Contractor shall remove all floating or submerged materials and/or debris at the end of each day, with the exception of any silt containment devices, as needed.
5. The Contractor shall ensure that an Oil Spill Response Plan is in place that shall detail procedures for managing the accidental release of petroleum products to the aquatic environment during construction. Absorbent pads will be available to facilitate the cleanup of petroleum spills.
6. Any spills or other contaminations shall be immediately reported to the DOH Clean Water Branch, Maui Office (808-873-3556).
7. In the event that floating hydrocarbon (oil, gas) products are observed, the Contractor or his designated individual will be responsible for directing that in-water work be halted so that appropriate corrective measures are taken in accordance with the Oil Spill Response Plan.

The Department of Land and Natural Resources shall be notified as soon as practicable, and the activity causing the plume will be modified by containment. The responsible individual will document the event and the measures taken to correct the issue, and will report the incident (with photographs) to the Office of Conservation and Coastal Lands as soon as is practicable. Work may continue only after the issue is no longer visible.

8. No contamination of the marine environment shall result from the permitted activities. Particular care must be taken to ensure that no petroleum products, trash or other debris enter near-shore and open ocean waters. When such material is found within the project area, the Contractor, or his designated construction agent, shall collect and dispose of this material at an approved upland disposal site.

9. Waste materials and waste waters directly derived from maintenance activities shall not be allowed to leak, leach or otherwise enter marine waters.

10.6 Waste Waters

Construction operations shall be conducted so as to prevent discharge or accidental spillage of pollutants, solid waste, debris, and other objectionable wastes in surface waters and underground water sources.

10.7 Erosion Control

1. Silt containment devices will be individually anchored and regularly inspected during sand placement operations, as needed.

2. The Contractor is responsible for the proper handling, storage and/or disposal of all waste generated by maintenance activities.

3. The Contractor shall confine all maintenance activities to areas defined by the drawings and specifications. No materials shall be stockpiled in the marine environment.

4. The Contractor shall keep maintenance activities under surveillance, management and control to avoid pollution of surface or marine waters. Daily visual inspection of the project site and its environs will be conducted by a designated individual, or his representative, to verify that the permitted activities do not result in uncontrolled adverse environmental impacts.

5.Visual inspections will be documented with photographs and written descriptions, if necessary.

6. Sand fill placement shall not be done during storms or periods of high surf.

7. Visual monitoring will include ongoing inspections for turbidity. In the event that turbidity is observed work shall halt and until the turbidity dissipates.

8. Drainage outlets shall be maintained to minimize erosion and pollution of the waterways during construction. Surface runoff shall be controlled in order to minimize silt and other contaminants entering the water. Should excessive siltation or turbidity result from the Contractor's method of operation, the Contractor shall install silt curtains or other silt contaminant devices as necessary to correct the problem.

9. Wherever trucks and/or vehicles leave the site and enter surrounding paved streets, the Contractor shall prevent any material from being carried onto the pavement. Waste water shall not be discharged into existing streams, waterways, or drainage systems such as gutters and catch basin unless treated to comply with the State Department of Health water pollution regulations.

10. During interim grading operations, the grade shall be maintained so as to preclude any damage to adjoining property from water and eroding soil.

11. Mean higher high water will be marked along the shoreline prior to conducting operations

to ensure that neither equipment nor fill operate or are placed seaward of MHHW.

10.8 Noise Control

1. Best management practices shall be utilized to minimize adverse effects to air quality and noise levels, including the use of emission control devices and noise attenuating devices.
2. Noise shall be kept within acceptable levels at all times in conformance with HAR Title 11 § 46 Community Noise Control, State Department of Health, Public Health Regulations.
3. Construction equipment shall be equipped with suitable mufflers to maintain noise within levels complying with applicable regulations.
4. Starting of construction equipment meeting allowable noise limits shall not be done prior to 7:00 a.m. Equipment exceeding allowable noise limits shall not be started up prior to 8 a.m.

10.9 Dust Control:

1. Dust, which could damage dwellings, or cause nuisance to persons, shall be abated and control measures shall be performed.
2. The Contractor, for the duration of the contract, shall maintain all excavations, embankments, haul roads, permanent access roads, plant sites, waste disposal areas, borrow areas, and all other work areas within or without the project limits free from dust which would cause a hazard to the work, or the operations of other contractors, or to persons or property. Industry accepted methods of stabilization suitable for the area involved, such as sprinkling or similar methods will be permitted. Chemicals or oil treating shall not be used.
3. The Contractor shall prevent dust from becoming airborne at all times including non-working hours, weekends and holidays in conformance with the State Department of Health, Administrative Rules, Title 11, Chapter 60 - Air Pollution Control.
4. The method of dust control and costs shall be the responsibility of the Contractor.

10.10 Air Pollution Control:

1. Emission: The Contractor shall not be allowed to operate equipment and vehicles that show excessive emissions of exhaust gases until corrective repairs or adjustments are made to the satisfaction of the Applicant.
2. Equipment will not be allowed to idle when not in use.

10.11 Protected Marine Species

1. The project manager shall designate a competent observer to survey the marine areas adjacent to the proposed action for ESA-listed marine species, including but not limited to the green sea turtle, hawksbill sea turtle, and Hawaiian monk seal.
2. Visual surveys for ESA-listed marine species shall be made prior to the start of work each day, and prior to resumption of work following any break of more than one half hour, to ensure that no protected species are in the area (typically within 50 yards of the proposed work).
3. Work shall be postponed or halted when ESA-listed marine species are within 50 yards of the proposed work, and shall only begin/resume after the animals have voluntarily departed the area. If ESA-listed marine species are noticed after work has already begun, that work may continue only if there is no way for the activity to adversely affect the animal(s). For example, divers performing surveys or underwater work (excluding the use of toxic chemicals) is likely safe. The use of heavy machinery is not.
4. Do not attempt to feed, touch, ride, or otherwise intentionally interact with any ESA listed marine species.
5. All on-site project personnel must be apprised of the status of any listed species potentially present in the project area and the protections afforded to those species under federal laws. A

brochure explaining the laws and guidelines for listed species in Hawaii, American Samoa, and Guam may be downloaded from:
http:www.nmfs.noaa.gov/prot_res/MMWatch/Hawaii.htm

6. The Contractor shall keep a record of all turtle sightings, incidents of disturbance, or injury, and shall provide a report to the State and the National Marine Fisheries Service (NMFS), and will be the contact person for any issues involving green sea turtles during maintenance activities.

7. Upon sighting of a monk seal or turtle within the safety zone during project activity, immediately halt the activity until the animal has left the zone. In the event a marine protected species enters the safety zone and the project activity cannot be halted, conduct observations and immediately contact NMFS staff in Honolulu to facilitate agency assessment of collected data. For monk seals contact the Marine Mammal Response Coordinator, David Schofield, at (808) 944-2269, as well as the monk seal hotline at (888) 256-9840. For turtles, contact the turtle hotline at 983-5730.

8. The Contractor shall immediately report any incidental take of marine mammals. The incident must be reported immediately to NOAA Fisheries' 24-hour hotline at 1-888-256-9840, and the Regulatory Branch of the USACE at 808-438-9258. In Hawaii, any injuries incidents of disturbance or injury to sea turtles must be immediately reported, and must include the name and phone number of a point of contact, location of the incident, and nature of the take and/or injury. The incident should also be reported to the Pacific Island Protected Species Program Manager, Southwest Region (Tel: 808-973-2987, fax: 808-973-2941).

10.12 Operational Controls

1. This Plan will be reviewed with the project field staff prior to the start of work.

2. All activities significantly impacting the environment will not begin until appropriate BMPP's are properly followed.

3. Construction will be immediately stopped, reduced or modified; and/or new or revised BMPP's will be immediately implemented as needed to stop or prevent polluted discharges to receiving waters.

10.13 Structure, Authority, and Responsibility

The Project Manager will ensure compliance with this plan.

The Project Manager will appoint and train one (1) additional individual to properly install all BMPP's and to comply with all aspects of this plan.

10.14 Suspension of Work:

1. Violations of any of the above requirements or any other pollution control requirements which may by specified in the Technical Specifications herein shall be cause for suspension of the work creating such violation.

2. If no corrective action is taken by the Contractor within 72 hours after a suspension is ordered by the Owner or Applicant, the Owner or Applicant reserves the right to take whatever action is necessary to correct the situation.

3. The Owner may also suspend any operations that he feels are creating pollution problems although they may not be in violation of the above-mentioned requirements.