



PLANNING COMMISSION

KAAINA S. HULL, CLERK OF COMMISSION

FRANCIS DEGRACIA, CHAIR
DONNA APISA, VICE CHAIR
GERALD AKO, MEMBER
HELEN COX, MEMBER
GLENDA NOGAMI STREUFERT, MEMBER
JERRY ORNELLAS, MEMBER
LORI OTSUKA, MEMBER

RECEIVED

23 OCT 18 A10 :02

- The Planning Commission Meeting will be at:

Līhu'e Civic Center, Moikeha Building
Meeting Room 2A-2B
4444 Rice Street, Līhu'e, Kaua'i, Hawai'i

PLANNING COMMISSION
COUNTY OF KAUAI

- Oral testimony will be taken on specific agenda items, at the public meeting location indicated on the meeting agenda.
- Written testimony indicating your 1) name or pseudonym, and if applicable, your position/title and organization you are representing, and 2) the agenda item that you are providing comment on, may be submitted on any agenda item in writing to planningdepartment@kauai.gov or mailed to the County of Kaua'i Planning Department, 4444 Rice Street, Suite 473, Līhu'e, Hawai'i 96766. Written testimony received by the Planning Department at least **24 hours prior** to the meeting will be posted as testimony to the Planning Commission's website prior to the meeting (<https://www.kauai.gov/Government/Boards-and-Commissions/Planning-Commission>). Any testimony received after this time will be retained as part of the record, but we cannot assure the Commission will receive it with sufficient time for review prior to the meeting.

IF YOU NEED AN AUXILIARY AID/SERVICE, OTHER ACCOMMODATION DUE TO A DISABILITY, OR AN INTERPRETER FOR NON-ENGLISH SPEAKING PERSONS, PLEASE CONTACT THE OFFICE OF BOARDS & COMMISSIONS AT (808) 241-4917 OR ADAVIS@KAUAI.GOV AS SOON AS POSSIBLE. REQUESTS MADE AS EARLY AS POSSIBLE WILL ALLOW ADEQUATE TIME TO FULFILL YOUR REQUEST. UPON REQUEST, THIS NOTICE IS AVAILABLE IN ALTERNATE FORMATS SUCH AS LARGE PRINT, BRAILLE, OR ELECTRONIC COPY.

PLANNING COMMISSION MEETING NOTICE AND AGENDA

Tuesday, October 24, 2023

9:00 a.m. or shortly thereafter

Līhu‘e Civic Center, Moikeha Building

Meeting Room 2A-2B

4444 Rice Street, Līhu‘e, Kaua‘i, Hawai‘i

A. CALL TO ORDER

B. ROLL CALL

C. APPROVAL OF AGENDA

D. MINUTES of the meeting(s) of the Planning Commission

1. None for this Meeting.

E. RECEIPT OF ITEMS FOR THE RECORD

F. HEARINGS AND PUBLIC COMMENT

1. Continued Agency Hearing

- a. None for this Meeting.

2. New Agency Hearing

- a. None for this Meeting.

3. Continued Public Hearing

- a. None for this Meeting.

4. New Public Hearing

- a. None for this Meeting.

G. CONSENT CALENDAR

1. Status Reports

- a. 2023 status report regarding Class IV Zoning Permit Z-IV-2015-8, Project Development Use Permit PDU-2015-7, Variance Permit V-2015-1, and Special Management Area Use Permit SMA(U)-2015-6 at Tax Map Key 4-1-003:004 (por.), 005, 007, 011, and 017 and 4-1-005:014 and 017 (the “permits”), with approval conditions as set forth in letter dated December 31, 2018 from the Planning Commission of the County of Kaua‘i (the “Conditions”) with Coco Palms Hui LLC, as Applicant (“Applicant”).

1. Director’s Report pertaining to this matter.

2. **Director's Report for Project(s) Scheduled for Agency Hearing**

- a. SPECIAL MANAGEMENT AREA USE PERMIT (SMA(U)-2024-5), CLASS IV ZONING PERMIT (Z-IV-2024-1), and USE PERMIT (U-2024-1) to allow construction of a new farm dwelling unit and associated site improvements within lot 20-A of the Seacliff Plantation Subdivision in Kilauea, involving a parcel situated approximately 1,300 feet southeast of the Pali Moana Place/Iwalani Lane intersection, adjacent to property identified as 3839 F Pali Moana Place, further identified as Tax Map Key: (4) 5-2-004:093 (Unit 2) affecting a portion of a larger parcel approximately 6.851 acres in size = **Bryan Madani and Kiana Buckley, Trustees of The Madani Buckley Trust.**

1. Director's Report pertaining to this matter.

3. **Class III Zoning Permits**

- a. None for this Meeting.

H. GENERAL BUSINESS MATTERS

1. Clerk of the Commission's Recommendation to Refer an Appeal of the Planning Director's Decision related to the Planning Director's 8/7/2023 Cease and Desist and Forfeiture of TVRNCU #1184 ('Ae Kai Le'a) for the Failure to Renew by March 6, 2023, Charles Smith and Deani Higashi, 2652-A Puuholo Road, TMK 26007012, Kauai, received on September 8, 2023, for referral to Board and Commissions as Contest Case File No. CC-2024-3. The renewal packet was hand delivered to the Department on April 19, 2023, and Denied on that date.

I. COMMUNICATION

1. None for this meeting.

J. COMMITTEE REPORTS

1. Subdivision Committee Report
 - a. None for this meeting.

K. UNFINISHED BUSINESS (For Action)

1. None for this Meeting.

L. NEW BUSINESS (For Action)

1. None for this Meeting.

M. EXECUTIVE SESSION

Pursuant to Hawaii Revised Statutes Sections 92-4 and 92-5(a)(4), the purpose of this executive session is to consult with the County's legal counsel on questions, issues, status, and procedural matters. This consultation involves consideration of the powers, duties, privileges, immunities, and/or liabilities of the Commission and the County as they relate to the following matters:

1. 2023 status report regarding Class IV Zoning Permit Z-IV-2015-8, Project Development Use Permit PDU-2015-7, Variance Permit V-2015-1, and Special Management Area Use Permit SMA(U)-2015-6 at Tax Map Key 4-1-003:004 (por.), 005, 007, 011, and 017 and 4-1-005:014 and 017 (the "permits"), with approval conditions as set forth in letter dated December 31, 2018 from the Planning Commission of the County of Kaua'i (the "Conditions") with Coco Palms Hui LLC, as Applicant ("Applicant").
2. Clerk of the Commission's Recommendation to Refer an Appeal of the Planning Director's Decision related to the Planning Director's 8/7/2023 Cease and Desist and Forfeiture of TVRNCU #1184 ('Ae Kai Le'a) for the Failure to Renew by March 6, 2023, Charles Smith and Deani Higashi, 2652-A Puuholo Road, TMK 26007012, Kauai, received on September 8, 2023, for referral to Board and Commissions as Contest Case File No. CC-2024-3. The renewal packet was hand delivered to the Department on April 19, 2023, and Denied on that date.

N. ANNOUNCEMENTS

1. Topics for Future Meetings.

The following regularly scheduled Planning Commission meeting will be held at 9:00 a.m., or shortly thereafter, on November 14, 2023. The Planning Commission anticipates this meeting to be held in-person at the Lihu'e Civic Center, Moikeha Building, Meeting Room 2A-2B, 4444 Rice Street, Lihu'e, Kaua'i, Hawai'i. The Commission will announce its intended meeting method via an agenda electronically posted at least six days prior to the meeting date.

O. ADJOURNMENT

DEPARTMENT OF PLANNING

KA'ĀINA HULL, DIRECTOR

JODI A. HIGUCHI SAYEGUSA, DEPUTY DIRECTOR



DEREK S.K. KAWAKAMI, MAYOR
MICHAEL A. DAHLIG, MANAGING DIRECTOR

SPECIAL MANAGEMENT AREA (SMA) Minor Determinations

Date (Action)	SMA Minor Permit number	Location (TMK)	Activity/ structure
Approved (10.02.2023)	SMA(M)-2024-4	Kōloa (2-6-016:007)	Construction/New swimming pool/ spa and pool equipment area. 6-foot Lava rock wall and 4 feet high gate.

Pursuant to Section 8-27.8 (6) of the Kaua'i County Code (1987), as amended, the following shoreline setback determinations by the Director are disclosed for purposes of public notification.

October 24, 2023

SHORELINE SETBACK DETERMINATIONS

Application No.	Name of Applicant(s)	Property I.D. (Tax Map Key)	Location	Development/Reasons
SSD-2024-19	Kaua'i Dream Trust	(4) 5-4-003:032	Princeville	New bathroom addition. / Development located on 150-foot-high cliff bluff and approximately 400 feet from evidenced shoreline. Required setback 60 feet from evidenced shoreline for addition.

In addition to the Applicant's submittal, the department has prepared a matrix identifying the conditions of the permit as well as the progress with the compliance of the requirements (see attached Exhibit 'B').

RECOMMENDATION

It is recommended that the Commission receives the Applicant's Annual Status Report dated June 30, 2023. Additionally, the Applicant is advised that all applicable conditions of approval, including the provision of annual status report as required by Condition No. 29, shall remain in effect.

By  _____
Dale A. Cua
Planner

Approved and recommended to Commission:

By  _____
Ka'aina S. Hull
Director of Planning

Date: 10/17/2023

EXHIBIT “A”

(2023 Annual Status Report)

**Coco Palms Permit Conditions Matrix
Status Report as of June 30, 2023**

Development Permits: Class IV Zoning Permit Z-IV-2015-8, Project Development Use Permit PDU-2015-7, Variance Permit V-2015-1 and Special Management Area Use Permit SMA(U)-2015-6 at Tax Map Keys 4-1-003: 004 (por.), 005, 007, 011, and 017 and 4-1-005: 014 and 017, with approval conditions as set forth in letter dated December 31, 2018, from the Planning Commission of the County of Kauai

Applicant: The original Applicant for the development permits was Coco Palms Hui LLC (“Hui”). However, RP21 Coco Palms LLC (“RP21”) now owns the fee simple parcels that are covered by the development permits while Hui remains the second assignee for the attendant state leases and revocable permits relating to the State properties that are covered by the development permits. As such, this annual report is submitted on behalf of both Hui and RP21.

	Count	Conditions
Completed Condition:	10	1, 2, 3, 4, 5, 10, 12, 13, 28, 29
Ongoing:	12	6, 7, 8, 9, 11, 14, 15, 17, 21 (except 21.b), 23, 25, 26,
Forthcoming:	7	16, 18, 19, 20, (21.b), 22, 24, 27
	29	

	Condition	Status	Comments to County
1.	The Applicant shall contribute \$50,000.00 to the County of Kauai to assist the Planning Department's historic preservation mission via its efforts to perpetuate the cultural and historic significance of the Wailua/Waipouli region consistent with the Department's historic preservation program, including the creation of educational programs and signage.	Complete	This contribution was paid to, and received by, the County of Kauai on October 17, 2015.
2.	The Applicant shall contribute \$50,000.00 to the County of Kauai to assist the County with its current place making efforts, including moku and ahupuaa signage of the Wailua area.	Complete	This contribution was paid to, and received by, the County of Kauai on October 17, 2015.

	Condition	Status	Comments to County
3.	Prior to building permit approval, the Applicant shall meet the requirements and standards of the Department of Land and Natural Resources (DLNR), State Historic Preservation Division (SHPD). The Applicant is further advised that should any archaeological or historical resources be discovered during ground disturbing/construction work, all work in the area of the archaeological/historical findings shall immediately cease and the Applicant shall contact the State Department of Land and Natural Resources, Historic Preservation Division and the Planning Department to determine mitigation measures. The Planning Department has reviewed the comments of the State Historic Preservation Division, and under its independent Chapter 6E and related Hawaii Constitutional obligations and duties, requires the following historic preservation measures be fulfilled by the Applicant.	Complete	As of June 2016, the Applicant has received approval from SHPD with respect to their HRS 6E-42 review and required mitigation actions. However, Applicant is also advised that should any human remains be discovered as a consequence of digging activities, WORK MUST IMMEDIATELY STOP IN THE VICINITY OF THE FIND AND SHPD AND THE PLANNING DEPARTMENT MUST BE NOTIFIED.
3.a	A revised SOW for the project, including any proposed work with potential to affect the historic lagoon, including staging areas, construction of new bridges, dredging, or filling in of areas near the lagoon;	Complete	
3.b	Information regarding any potential federal funding or federal permits that may be required, especially relative to the historic lagoons;	Complete	
3.c	An Intensive-Level Survey (ILS) that identifies and assesses all remaining architectural historic properties and their potential eligibility for the Hawaii and National Registers;	Complete	
3.d	A Burial Treatment Plan (BTP) that meets HAR §13-300-34(b), and following a determination by the KIBC regarding burial treatment, a Burial Site Component of a Data Recovery Plan (BSCDRP) that meets HAR §13-300-34(b)(3)(B); and	Complete	
3.e	A Revised Archaeological Monitoring Plan (AMP) that includes provisions for addressing architectural monitoring concerns and meets HAR §13-279-4, including ongoing monitoring during construction and 90 days after completion of construction.	Complete	

	Condition	Status	Comments to County
4.	Applicant shall submit a Construction and Demolition Debris Management Plan, and have the plan reviewed and concurred with by the Department of Public Works, Solid Waste Management Division. Applicant is encouraged to employ broad diversion efforts in its waste management plan.	Complete	This condition 4 is satisfied.
5.	Applicant is aware that any final construction plans involving the former Seashell Restaurant site that deviates substantially from the conceptual plans presented to the State Department of Land and Natural Resources may trigger compliance with the statutes and regulations under the jurisdiction of the Office of Coastal and Conservation Lands, Hawaii State Department of Land and Natural Resources if final development is proposed within the shoreline area. Applicant is on notice that, if any such final plans proposes development within the shoreline area, this permit action may be deemed invalid and require modification and re-approval only after compliance with Chapter 343, Hawaii Revised Statutes, is attained.	Complete	No current plans for development within the shoreline area.
6.	In order to minimize adverse impacts on the Federally Listed Threatened Species, Newell's Shearwater and other seabirds, all external lighting shall be only of the following types: shielded lights, cut-off luminaries, indirect lighting or other types permissible under applicable Federal Law or otherwise approved by the United States Fish and Wildlife Service. Spotlights aimed upward or spotlighting of structures, landscaping, or the ocean shall be prohibited unless otherwise permissible under Federal Law or approved by the United States Fish and Wildlife Service.	Ongoing	No external lighting being used at this time.

	Condition	Status	Comments to County
7.	To the extent possible within the confines of union requirements and applicable legal prohibitions against discrimination in employment, the Applicant shall seek to hire Kauai contractors as long as they are qualified and reasonably competitive with other contractors, and shall seek to employ residents of Kauai in temporary construction and permanent jobs. It is recognized that the Applicant may have to employ non-Kauai residents for particular skilled jobs where no qualified Kauai resident possesses such skills. For the purposes of this condition, the Commission shall relieve the Applicant of this requirement if the Applicant is subjected to anti-competitive restraints on trade or other monopolistic practices.	Ongoing	Upon approval of building permits for the Hotel Site, applicant will solicit bids from local contractors in accordance with this condition.
8.	The Applicant shall implement to the extent possible sustainable building techniques and operational methods for the project, such as Leadership in Energy and Environmental Design (L.E.E.D.) standards or another comparable state-approved, nationally recognized, and consensus-based guideline, standard, or system, and strategies, which may include but is not limited to recycling, natural lighting, extensive landscaping, solar panels, low-energy fixtures, low energy lighting and other similar methods and techniques. All such proposals shall be reflected on the plans submitted for building permit review.	Ongoing	Building Specifications for the Project are being developed, to the extent possible, with sustainable building techniques and operational methods, which may include recycling, natural lighting, solar panels, low-energy plumbing and electrical fixtures.
9.	As part of the building permit application, the Applicant shall comply with the building code requirements applicable to the construction plans submitted for the vertical improvements for the project. Any revisions shall be identified accordingly on the final site development plan and vertical building construction plans for building permit review and processing in accordance with applicable building code requirements.	Ongoing	25 of the 25 Building Permits for the Hotel Site have been approved and issued as of Feb 28, 2023.
10.	The Applicant shall contribute \$10,000.00 to the County of Kauai Transportation Agency to assist with the construction of a new bus stop along Kuhio Highway in the Wailua area.	Complete	This contribution has been paid to, and received by, the County of Kauai Transportation Agency on October 17, 2015.

	Condition	Status	Comments to County
11.	Applicant shall coordinate project plans with the Department of Public Works Wastewater Management Division to ensure that connection to a public sewer system is accomplished properly. Applicant shall also submit a current wastewater preliminary engineering report, as per County Sewer Standards, identifying details of sewer connections. Prior to building permit approval for vertical construction, Applicant shall submit construction plans for any necessary sewer improvements and if applicable, pay any required wastewater sewer system fees.	Ongoing	DPW/WMD has approved all of the 25 permit applications for the Hotel Site.
12.	Applicant shall submit a detailed water demand (both domestic and irrigation) calculations along with the proposed water meter size. Water demand calculations submitted by your engineer or architect should also include fixture count and water meter sizing worksheets. The Department of Water may require the payment fees specified in the existing County of Kauai ordinances as a consequence of the approved water demand calculations that are in addition to the existing water allocated to the property.	Completed	DOW has approved all 25 permit applications for the Hotel Site.
13.	Applicant shall prepare and receive the Department of Water's approval of construction drawings for the necessary water system facilities and construct said facilities. These facilities shall include but not be limited to: a) the interior plumbing with the appropriate backflow prevention device; b) the domestic service connection, if applicable; c) the fire service connection, if applicable. Requests for additional water meters or increase in water meter size beyond water meters already allocated to the property will be dependent on the adequacy of the source, storage and transmission facilities existing at the time.	Completed	DOW has approved all 25 permit applications for the Hotel Site. Collectively, the water demand of all 25 Buildings do not exceed the capacity of the installed 4-inch water meter.
14.	Applicant acknowledges affordable housing requirements apply to this proposal, and in compliance with Chapter 7A, Kauai County Code (1987), Applicant has entered into, and will perform its obligations under, that certain Housing Agreement (for Coco Palms) dated December 4, 2015, directly with the Kauai County Housing Agency, which has been fully executed and recorded on February 9, 2016.	Ongoing	Housing Agreement with County Housing Agency recorded on February 9, 2016. The Applicant intends to comply with the Housing Agreement.

	Condition	Status	Comments to County
15.	<p>Applicant shall submit by August 31, 2019 plans to for all remaining building permits for the construction of vertical improvements on the project site, and will thereafter diligently work in good faith with the Kauai Division of Buildings ("Building Division") to obtain final building permit approval for all remaining permits. Construction shall commence within one year after the date of final approval of the referenced building permits. Further, pursuant to PDU requirements in the CZO, construction shall commence within one year after the date of full approval of such building permits. Also, Applicant shall pull all such building permits within six months after the approval of the final building permit.</p>	Ongoing	<p>The first submittal of all building permit plans was complete on or before August 31, 2019.</p> <p>25 of the 25 permit applications for the Hotel Site have been approved and issued as of Feb 28, 2023.</p>
16.	<p>Screening of the construction site during construction along Kuhio Highway and Kuamoo Road to be aesthetically consistent with current construction standards on Kauai while maintaining compatibility with the nature of the site sitting at a coastal gateway for the area. Screening shall be properly maintained in a manner acceptable to the Director until such time as the Applicant has completed all vertical improvements. Further, the Applicant shall work with the State Department of Transportation to provide landscaping along the strip of land fronting the property fronting Kuhio Highway and properly maintain this landscaping in perpetuity.</p>	Forthcoming	<p>Screening of the construction site has been substantially complete along Kuhio Highway and Kuamoo Road. Applicant is committed to working with DOT on the landscaping along the Kuhio Highway.</p>
17.	<p>Applicant shall substantially complete the demolition work described in the existing demolition permits issued for the property by March 31, 2017 subject to extension caused by the occurrence of force majeure events.</p> <p>Applicant agrees that, if the concrete structures that remain on the property after the demolition work is completed is not incorporated into the construction of the vertical improvements by June 30, 2021, the Applicant shall, at its sole cost and expense, secure such concrete structures in full compliance with all health and safety requirements set forth in all applicable laws and ordinances.</p>	Ongoing	<p>Except as to three 3-story concrete structures, demolition was completed by March 31, 2017.</p> <p>Applicant has spent in excess of \$4.9MM for the demolition work.</p> <p>Demolition of the remaining three 3-story concrete structures has been incorporated into the plans submitted for building permits.</p>

	Condition	Status	Comments to County
18.	Applicant shall provide 20 public parking spaces at the North end of the project site with signage identifying their use by beachgoers and those using public transit when the operator opens to the public the building of the project that is closest to the parking lot containing such public parking spaces. Further, the Applicant shall provide 20 stalls for parking with signage identifying their use by public beachgoers along the south end of the project. These stalls shall be clearly marked for public beachgoers use only. Also, the Applicant at its own expense shall work with the county to site, design, construct, and maintain in perpetuity, a comfort station consisting of restrooms and showers for beachgoers. This comfort station shall be located adjacent or approximate to this public beachgoers parking area.	Forthcoming	There will be 20 identified parking spaces for public beachgoers and those using public transit at the North and South end of the project. A Building Permit for a Comfort Station adjacent to the South Parking lot has been approved and issued.
19.	All parking for guests, customers, and employees shall be accommodated on site. No parking on Kuamoo, Haleilio or Apana roads shall be allowed. No use of parking lots on adjacent property shall be allowed as well.	Forthcoming	Parking spaces shown on the site plans shall be for all guests, customers and employees. No parking on public roads will be allowed
20.	Given outstanding evaluation of the Traffic Impact Analysis Report (TIAR) by both the Department of Public Works and State Department of Transportation, in the interim, the Applicant shall provide the following to mitigate traffic impacts created by the development:	<i>See below.</i>	
20.a	Provide, at the Applicant's expense, a shuttle for eighteen (18) months beginning when the hotel operator opens the main lobby, at least 277 guest rooms and the food and beverage facilities and services of the project to the public as a pilot program to facilitate transit to and from the Lihue Airport and the development;	Forthcoming	
20.b	Provide, at the Applicant's expense, a circulator shuttle for eighteen (18) months beginning when the hotel operator opens the main lobby, at least 277 guest rooms and the food and beverage facilities and services of the project to the public to move patrons from the hotel to Lydgate and Wailua Beach Park, the Seashell Restaurant Site, the Coconut Marketplace and other destinations within the main Kapaa transit corridor that shall be determined by the County of Kauai Executive on Transportation at least 90 days before such shuttle service is scheduled to begin.	Forthcoming	

	Condition	Status	Comments to County
20.c	Provide, at the Applicant's expense, a bike share program operated by Applicant or a vendor selected by Applicant for patrons of the resort to allow guests to ride bikes into Kapaa Town and other destinations without driving;	Forthcoming	
20.d	The Applicant shall work with the State Department of Transportation and Department of Public Works to resolve pedestrian crossing, sidewalks and vehicular traffic demands created by the development, and bear implementation costs proportional to the impact that arises, including the installation of a continuous public sidewalk on the Kuhio Highway frontage between Kuamoo and Haleilio; and	Forthcoming	
20.e	Provide the Planning Department, Department of Public Works and State Department of Transportation an update to the TIAR one (1) year after receiving the last certificate of occupancy for the project evaluating traffic impacts created by the resort and analyze the need for additional bus stops.	Forthcoming	
20.f	Provide the Department with a report on the Applicant's efforts to work with the Department of Land and Natural Resources to obtain permission to use the lands held by lease for a mauka access, either vehicular, or bike/pedestrian, to allow movement of residents between Kuamoo road and Haleilio Road.	Forthcoming	
20 <i>con't</i>	Should the updated TIAR, as accepted by the three agencies, determine a significant adverse change in the traffic conditions resulting solely from project beyond the traffic conditions anticipated in the original TIAR, Applicant is aware that this permit is subject to reasonable modification by the Planning Commission that Applicant may be responsible for the proportionate costs for any impacts of such significant adverse change for which a nexus to the additional anticipated traffic conditions may be identified.	Forthcoming	
21.	Applicant shall work with the county and bear the costs of the following improvements:	<i>See below.</i>	

	Condition	Status	Comments to County
21.a	Provide an in lieu payment of \$93,750 to the County of Kauai by June 30, 2017 for the cost of a dedicated right turn lane on Haleilio Road, from Apana Road to Kuhio Highway In addition to an existing through lane. The County shall design and complete construction of continuous public sidewalks along Apana Road to Haleilio Road and along Haleilio Road to Kuhio Highway fronting the Applicant's property. Sidewalks must be a minimum of 5 feet wide and shall be dedicated to the County to the extent owned by Applicant. The portions of said right turn lane owned by Applicant shall be dedicated to the County; provided that the Applicant shall have the reserved right of entry over the dedicated areas in connection with its project. By January 31, 2019, the Applicant shall submit plans for the subdivision of the portions of its land to be dedicated to the Kauai Planning Department and shall thereafter diligently work in good faith with the Planning Department to obtain final subdivision approval of such plans, and to dedicate such subdivided portions to the County	Ongoing	<p>This \$93,750 lieu payment was paid to, and received by, the County of Kauai on June 30, 2017.</p> <p>Subdivision plans submitted to Kauai Planning Department on January 18, 2019 deadline. Condition satisfied.</p> <p>Final Subdivision approval issued by the Kauai Planning Commission on Jan. 28. 2020, including modification waiving requirement of Applicant to provide curbs, gutters and sidewalks. Surveyor's Affidavit recorded February 27, 2020 as Doc. No. A-73620668. Condition of Title Guarantee has been issued by Old Republic Title and submitted to the Planning Dept.</p> <p>The form of the dedication deed was delivered to the Planning Dept. on November 12, 2020 for review and comment; currently awaiting approval.</p>
21.a (sic)	Design and complete construction of widening Apana Road to be wide enough for two-way vehicle travel from the project entry on Apana Road to Haleilio Road. The Applicant will work with the County of Kauai Department of Public Works on the width, length, and other design details for this improvement, which shall be dedicated to the County of Kauai to the extent owned by Applicant; provided that the Applicant shall have the reserved right of entry over the dedicated areas in connection with its project.	Ongoing	<p>The \$93,750 lieu payment was paid to, and received by, the County of Kauai on June 30, 2017.</p> <p>Completed, except for pending dedication of subdivided portion to County with a reserved of right of entry to Applicant.</p>

	Condition	Status	Comments to County
21.b	Design and complete construction of "Do Not Block" markings along the eastbound lanes of Haleililo Road at the intersection with Apana Road, similar to the striping at Kuamo'o Road and Wailua Road.	Forthcoming	Marking to be performed upon completion of new Haleililo Road right turn lane project.
21. <i>con't</i>	The Applicant shall retain a surveyor to survey the portions of the Applicant's land over which the right turn lane right-of-way and sidewalks to be constructed pursuant to subparagraphs a-b above that will be dedicated to the County, then prepare and record the necessary title documents. The County, Planning Department and Department of Public Works will cooperate fully to process all necessary subdivision and dedication approvals on an expedited basis.	Ongoing	Final Subdivision approval issued by the Kauai Planning Commission on Jan. 28, 2020, including modification waiving requirement of Applicant to provide curbs, gutters and sidewalks. Surveyor's Affidavit recorded February 27, 2020 as Doc. No. A-73620668. Condition of Title Guarantee has been issued by Old Republic Title and submitted to the Planning Dept. The form of the dedication deed was delivered to the Planning Dept. on November 12, 2020 for review and comment; currently awaiting approval.
22.	If requested by the Transportation Agency due to increased ridership demand caused by the development, Applicant shall provide proportional support for one (1) additional bus stop and shelter for the Kauai bus.	Forthcoming	
23.	Form and character of the development shall reflect the prior history of the resort and the brand standards of the hotel operator including the usage of similar looking roof and facade material, color and landscaping. Further, non-reflective materials are necessary to promote the seashore area aesthetics. Prior to building permit application for reconstruction or new construction of buildings and landscaping, the Applicant shall submit renderings and plans for departmental design review.	Ongoing	The resort will reflect the prior resort with similar looking roof, color, and landscaping. Submitted building plans address this requirement.

	Condition	Status	Comments to County
24.	Applicant shall encourage employees to utilize the County's Transportation Agency transit services to mitigate commuter trips to and from the development. The Applicant shall work with the Transportation Agency on promotional events encouraging usage of the transit system at Coco Palms, including selling bus passes on behalf of the agency, signage, etc.	Forthcoming	
25.	The Applicant is advised that in connection with the issuance of building permits for the vertical improvements of the project, additional conditions from the reviewing government agencies may be imposed. It shall be the Applicant's responsibility to resolve those conditions with the respective agencies.	Ongoing	All comments from reviewing agencies on building permits have been addressed and all 25 building permits have been issued as of Feb 28 2023. No additional Development Permit conditions have been imposed to date.
26.	The Planning Commission reserves the right to add or delete conditions of approval in order to address or mitigate unforeseen Impacts that any subsequent changes to this project as proposed by Applicant may create, or revoke the permits through the proper procedures should conditions of approval be violated.	Ongoing	No additional Development Permit conditions have been imposed to date.
27.	During September 15 through December 15, construction shall only occur during daylight hours. Where possible as to not compromise safety of seabirds identified to be protected under Federal Law, exterior facility lights should be positioned low to the ground, be motion-triggered, and be shielded and/or full cut-off. Effective light shields should be completely opaque, sufficiently large, and positioned so that the bulb is only visible from below. Staff at the development shall be educated, and shall educate visitors with Information regarding such endangered or protected seabird fallout and response protocols for staff to recover downed birds. Design elements shall also minimize collision by such protected seabirds with objects that protrude above the vegetation layer, such as utility lines, guide wires and communication towers. Should development yield conditions leading to any take of protected species, Applicant is on notice that an incidental take permit is required.	Forthcoming	

	Condition	Status	Comments to County
28.	Applicant shall seek guidance from the Fish and Wildlife Service for the Applicant to develop and implement measures (e.g. monitoring, etc.), in order to avoid and minimize impacts to Hawaiian waterbirds during construction and operation of the development.	Complete	US Fish and Wildlife Service provided its comments on the CPH application to the Planning Commission in a letter dated March 2015 and will be addressed during construction and operation.
29.	On or before June 30th of each year until all conditions have been satisfied, the Applicant shall submit an annual report to the Planning Commission of the status of and progress on, each unsatisfied condition, particularly conditions with workforce housing requirements and transportation requirements. These conditions shall be modified by the Planning Commission to reflect the satisfaction of any condition.	Complete	Status report submitted on June 30, 2023.

MCCORRISTON MILLER MUKAI MACKINNON LLP

LAUREL LOO 4806
4463 Pahe'e Street, Suite 208
Lihu'e, Kaua'i, Hawai'i 96766
Telephone No.: (808) 632-2267
Facsimile No.: (808) 524-8293

Attorney for Applicants
BRYAN MADANI and KIANA BUCKLEY

BEFORE THE PLANNING COMMISSION

OF THE

COUNTY OF KAUA'I

In the Matter of the Application)	APPLICATION FOR SPECIAL
)	MANAGEMENT AREA PERMIT
)	SMA _____;
)	CLASS IV ZONING
)	PERMIT _____;
)	USE PERMIT _____;
)	EXHIBITS "A" – "D"
)	
OF)	
)	
BRYAN MADANI and KIANA BUCKLEY,)	
TRUSTEES OF THE MADANI)	
BUCKLEY TRUST DATED)	
MAY 29, 2019, affecting real property at)	
Kilauea, Island and County of Kaua'i,)	
State of Hawai'i, more particularly)	
Identified as Tax Map Key No.)	
(4) 5-2-004:093, Unit 2, containing an)	
Area of 3.6 acres, more or lee.)	
_____)	

APPLICATION FOR SPECIAL MANAGEMENT AREA USE PERMIT
CLASS IV ZONING PERMIT AND USE PERMIT

I. APPLICANTS AND OVERVIEW

A.. Applicants: The Applicants are BRYAN BUCKLEY and KIANA MADANI, TRUSTEES OF THE MADANI BUCKLEY TRUST DATED MAY 29, 2019, who have authorized Laurel Loo of McCorriston Miller Mukai MacKinnon, LLC, to file this Application.

B. Property: The Property is located at 3839 Pali Moana Place, Kilauea, Kauai, Hawaii, and is more particularly identified as Tax Map Key (4) 5-2-4:093, CPR Unit 2. A legal description of the Property is described in the Deed to the Property, attached hereto as Exhibit "A". An aerial view of the CPR unit is attached as Exhibit "B", with CPR Units 1 and 2 of this TMK enumerated in yellow.

C. Overview of Application: The Applicants are proposing to develop a farm dwelling and a swimming pool. The site plan, floor plans and elevations for the proposed structures are enclosed as Exhibit "C". Total lot coverage for this unit is 8,531 sq. square feet which includes the dwelling, pool, pool deck, driveway, entry and a water feature. The total lot coverage for the neighboring unit in the same parcel is 7,988 square feet. Therefore, total lot coverage for both units is 17,206 square feet, and on a lot size of 6.851 acres, equals 5.7% lot coverage. The Property will be landscaped with native plants.

II. LAND USE DESIGNATIONS AND DESCRIPTIONS

A. SLUC: The State Land Use is designated Agricultural.

B. County zoning: County zoning is Agriculture and Open, and also contains a portion of Special Treatment/R ("OST/R") zoning.

C. The General Plan Designation: The General Plan designation is Agricultural.

D. Special Management Area: The Property is in the Special Management Area.

E. Flood: The Property is designated flood zone X, which zone corresponds to areas outside the one percent annual chance floodplain and areas protected from the one percent annual chance flood by levees. Flood insurance is not required in this zone.

III. COMPREHENSIVE ZONING ORDINANCE

A. Agricultural. The purpose of this district, pursuant to Sec. 8-8.1 of the Comprehensive Zoning Ordinance is it:

establishes means by which land needs for existing and potential agriculture can be both protected and accommodated, while providing the opportunity for a wider range of the population to become involved in agriculture by allowing the creation of a reasonable supply of various sized parcels .. (a) To protect the agriculture potential of lands within the County of Kaua'i to insure a resource base adequate to meet the needs and activities of the present and future. (b) To assure a reasonable relationship between the availability of agriculture lands for various agriculture uses and the feasibility of those uses. (c) To limit and control the dispersal of residential and urban use within agriculture lands.

B. Open. The Property is also designated as Open zoning. Pursuant to Section 8-9.1 of the CZO:

The Open District is established and regulated to create and maintain an adequate and functional amount of predominantly open land to provide for the recreational and aesthetic needs of the community or to provide

for the effective functioning of land, air, water, plant and animal systems or communities.

(a) To preserve, maintain or improve the essential characteristics of land and water areas that are:

- (1) of significant value to the public as scenic or recreational resources;
- (2) important to the overall structure and organization of urban areas and which provide accessible and usable open areas for recreational and aesthetic purposes;
- (3) necessary to insulate or buffer the public and places of residence from undesirable environmental factors caused by, or related to, particular uses such as noise, dust, and visually offensive elements.

(b) To preserve, maintain or improve the essential functions of physical and ecological systems, forms or forces which significantly affect the general health, safety and welfare.

(c) To define and regulate use and development within areas which may be potentially hazardous.

(d) To include areas indicated on the County General Plan as open or as parks.

(e) To provide for other areas which because of more detailed analysis, or because of changing settlement characteristics, are determined to be of significant value to the public.

C. Open-ST-R. The CZO at section 8-11.2 describes this special treatment as "Scenic/Ecologic Resources. . . Land and water areas which have unique natural forms, biologic systems, or aesthetic characteristics which are of particular significance and value to the general public.

IV. COASTAL ZONE MANAGEMENT ACT AND SPECIAL MANAGEMENT AREA RULES AND REGULATIONS

The Special Management Area Rules and Regulations of the County of Kaua'i state:

No development shall be approved unless the Director or the Planning Commission has found that:

1) The development will not have any substantial, adverse environmental or ecological effect except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health, safety, and welfare, or compelling public interest. Such adverse effect shall include, but not be limited to, the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect, and the elimination of planning options;

2) The development is consistent with the objectives and policies, as enumerated in HRS Chapter 205A and as referred to in Section 3.0 above, and the Special Management Area guidelines set forth in these Rules and Regulations; and

3) The development is consistent with the county general plan and zoning ordinances. Such a finding of consistency does not preclude concurrent processing where a general plan or zoning amendment may also be required.

Chapter 205A of the Hawai'i Revised Statutes lists as its objectives: recreational resources, historic resources, scenic and open space resources, coastal ecosystems, economic uses, coastal hazards, managing development, public participation, beach protection, marine resources, recreational resources, historic resources, scenic and open space resources, coastal ecosystems, economic uses, coastal hazards, managing development, public participation, beach protection and marine resources.

The total development on this unit – a farm dwelling, a swimming pool, and native landscaping -- is in keeping with the general characteristics of the surrounding neighborhood, as is evident in Exhibit B. The neighboring unit and many neighboring parcels include a dwelling and swimming pool.

Because of the foregoing, the development will not have any substantial or adverse environmental or ecological impact; and is in keeping with the surrounding neighborhood.

As such, the development is consistent with the objectives and policies of HRS Chapter 205A and the SMA guidelines adopted by the County.

V. NATIVE HAWAIIAN AND CULTURAL USES

The Kapa'akai analysis is attached hereto as Exhibit "D". It is a thorough description of the parcel and the region, and the Applicants have agreed to follow the recommendations of the consultant, including: 1) documentation, repair, and protection of the one historic cultural resource that was located, a railroad bridge culvert, and allowing educational and research tours of the site; 2) planning of native plants within the gulch; 3) minimizing grading and development to avoid inadvertent discovery of iwi kupuna; and 4) collaborating with the community to address the adverse impacts of general development at Seacliff Plantation.

VI. OTHER LAND FEATURES

A. Threatened and Endangered Species. According to the University of Hawaii Rare Species database, there are no known or reported threatened and endangered species within or adjacent to the Property.

B. Soils. The majority of the property is LhE2 (Lihue silty clay 25-40% slopes, eroded.) Approximately 10% of the unit is LdD (Lihue silty clay, 15-25% slopes). About 30 percent of the property is classified as LdD – Lihue silty clay, 15-35%, slopes.

C. Tsunami: The Property is not in the Tsunami Evacuation Zone.

VII. IMPACT OF THIS DEVELOPMENT/MEETING WITH THE COMMUNITY

As stated in sections IV and V above, there are no known negative historic or ecologic impacts this proposed use would bring. Traffic and noise may be impacted by

construction of the dwelling, but Applicants will be practicing Best Practices during construction.

The Applicant's agent Santo Giorgio presented the plans to the Kilauea Neighborhood Board at its regular meeting in January 2023. About 25 people from the community and board were present and no opposition was voiced.

VIII. CLASS IV PERMIT

Pursuant to Sec. 8-6.4 of the CZO, a Class IV Permit is required for development on a parcel one acre or more.

IX. USE PERMIT

Pursuant to Sec. 8-3.2 (e) of the CZO:

A Use Permit may be granted only if the Planning Commission finds that the establishment, maintenance, or operation of the construction, development, activity or use in the particular case is a compatible use and is not detrimental to health, safety, peace, morals, comfort and the general welfare of persons residing or working in the neighborhood of the proposed use, or detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the community, and will not cause any substantial harmful environmental consequences on the land of the applicant or on other lands or waters, and will not be inconsistent with the intent of this Chapter and the General Plan.

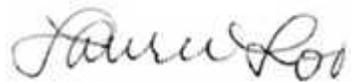
The Applicant's proposed use is compatible for the area and will not cause negative impacts on the lands or waters. It is similar to all uses previously granted in the same subdivision.

X. CONCLUSION

Applicant respectfully requests the granting of a SMA permit, Class IV zoning permit and Use Permit to allow the construction of a farm dwelling and swimming pool, as depicted in the attached exhibits.

DATED: Lihu`e, Kaua`i, Hawai`i, September 06, 2023.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Laurel Loo".

Laurel Loo

Attorney for Applicants
BRYAN BUCKLEY AND KIANA MADANI,
TRUSTEES OF THE MADANI BUCKLEY TRUST
DATED MAY 29, 2019

APARTMENT DEED

KNOW ALL PEOPLE BY THESE PRESENTS:

BERNARD CHRYSLER and SUSAN J. BATES, husband and wife, whose mailing address is 2500 Avenue Peirre Dupuy, Apt. 208, H3C 4L1 Canada, hereinafter called the "Grantor", in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration to the Grantor paid by BRYAN BUCKLEY and KIANA MADANI, Trustees of The Madani Buckley Trust dated May 29, 2019, whose mailing address is 237 Windward Avenue, Venice, California 90291, hereinafter called the "Grantee", the receipt of which is hereby acknowledged, do hereby grant and convey unto the Grantee, their successors in trust and assigns, IN TRUST, for the uses and purposes and with all the powers contained in the aforesaid trust instrument, including without prejudice to the generality of the foregoing, full power and authority to sell, convey, exchange, partition, mortgage, lease, pledge or otherwise deal with and dispose of any of the lands or other property or interests of the trust estate according to the Grantee's sole judgment and discretion, the property described in Exhibit "A" attached hereto and incorporated herein by reference.

AND the reversions, remainders, rents, issues, and profits thereof, and all of the estate, right, title and interest of the Grantor, both at law and in equity, therein and thereto.

TO HAVE AND TO HOLD the same, together with the improvements thereon and all rights, easements, privileges and appurtenances thereunto belonging or appertaining or held and enjoyed therewith, unto the Grantee, as Co-Trustees aforesaid, forever.

The Grantor hereby covenants with the Grantee that the Grantor is lawfully seised in fee simple of the premises described herein and has good right to sell and convey the same; that the same are free and clear of all encumbrances except as set forth herein and except for the lien of real property taxes not yet required by law to be paid; and that the Grantor will WARRANT AND DEFEND the same unto the Grantee against the lawful claims and demands of all persons, except as aforesaid.

This conveyance and the respective covenants of the Grantor and the Grantee shall be binding on and inure to the benefit of the Grantor and the Grantee, respectively. The terms "Grantor" and "Grantee" as and when used herein, or any pronouns used in place thereof, shall mean and include the singular or plural number, individuals, partnerships, trustees and corporations, and each of their respective heirs, personal representatives, successors and assigns. All covenants and obligations undertaken by two or more persons shall be deemed to be joint and several unless a contrary intention is clearly expressed herein.

The Grantee shall observe, perform, comply with and abide by the Declaration of Condominium Property Regime and the Bylaws described in Exhibit "A" hereto.

IN WITNESS WHEREOF, the Grantor has caused these presents to be duly executed on
this 9th day of June, 20 21.

(SIGNATURES CONTINUED ON NEXT PAGE)

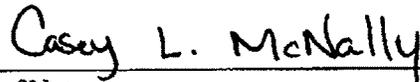
GRANTOR:



BERNARD CHRYSLER

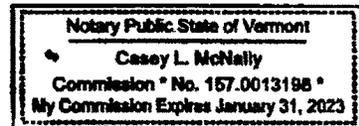
STATE OF Vermont)
) SS:
COUNTY OF Franklin)

On this 9th day of June, 2021, before me appeared BERNARD CHRYSLER, to me personally known, who, being by me duly sworn or affirmed, did say that such person(s) executed the foregoing APARTMENT DEED dated 9th of June, 2021, which document consists of 8 page(s), as the free act and deed of such person(s), and if applicable, in the capacities shown, having been duly authorized to execute such instrument in such capacities.



Name of Notary:
Notary Public, in and for said County and State.

My commission expires: _____



GRANTOR:

Susan J. Bates
SUSAN J. BATES

STATE OF Vermont)
COUNTY OF Franklin) SS:

On this 9th day of June, 2021, before me appeared SUSAN J. BATES, to me personally known, who, being by me duly sworn or affirmed, did say that such person(s) executed the foregoing APARTMENT DEED dated 9th of June, 2021, which document consists of 8 page(s), as the free act and deed of such person(s), and if applicable, in the capacities shown, having been duly authorized to execute such instrument in such capacities.

Casey L. McNally
Name of Notary:)
Notary Public, in and for said County and State.

My commission expires: _____

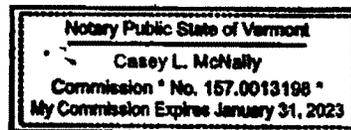


EXHIBIT "A"

-FIRST:-

Unit No. 2 of the Condominium Project known as "LA PALOMA CONDOMINIUM" as established by Declaration of Condominium Property Regime dated April 13, 2001, recorded in the Bureau of Conveyances of the State of Hawaii as Document No. 2001-064463, and as shown on Condominium Map No. 3254 and any amendments thereto.

Together with appurtenant easements as follows:

Exclusive easements to use other limited common elements appurtenant thereto designated for its exclusive use by the Declaration, and the Condominium Map.

-SECOND:-

An undivided one-half (1/2) fractional interest appurtenant to the Apartment and in all common elements of said Project as described in the Declaration.

The land upon which said Condominium Project "LA PALOMA CONDOMINIUM" is located being more particularly described as follows:

All of that certain parcel of land (being portion(s) of the land(s) described in and covered by Royal Patent Grant Number 2896 to C. Titcomb) situate, lying and being at Kilauea Bay, Kilauea, Island and County of Kauai, being LOT 20A, being a portion of the consolidation of Lots 8, 9 and 20, Seacliff Plantation at Kilauea Bay, containing an area of 6.851 acres, more or less.

Together with a nonexclusive easement appurtenant to said Lot to use Roadway Lots 27, 28 and 29 of the Seacliff Plantation at Kilauea Bay Community for ingress and egress purposes, Reserving However, unto Roberson/Larson Partners, and/or The Pali Moana Company, their successors and assigns, the right from time to time to convey said Roadway Lots 27, 28 and/or 29 to a community organization or such other entity for the care and maintenance of the same, or to convey said Roadway Lots 27, 28 and 29 to the County of Kauai as a public road in which latter event, the said easements shall be automatically extinguished.

Together with a nonexclusive easement for ingress and egress for beach access and parking of vehicles over and across Easement "Q-1", known as Kahili Quarry Road, containing an area of 1.818 acres, more or less, as granted by Easement Deed for Access and Parking dated March 1, 1988, recorded in Liber 21703 at Page 797.

Together with the right, as provided in the Declaration, to use Easement "ET-1" (being a 20 foot wide equestrian trail), Easement "PT-1" (being a 20 foot wide pedestrian trail), and Easement "PA-1" (being a picnic area), which easements are over and across the Remainder of Lot 9 of the Seacliff Plantation subdivision map prepared by Portugal and Associates, Inc., dated

July 15, 1988, for the Consolidation of A Portion of the Remainder of Lot 9 with Lot 11 into Lot 11-A and Remainder of Lot 9.

Together with access and utility easement over, under, through and across Easement "B-1" across Lot 9-A, in favor of Lot 20-A, containing an area of 0.222 acres, more or less, as granted by Substitution and Termination of Easement dated September 5, 1991, recorded as Document No. 91-132904.

All of that certain parcel of land (being portion(s) of the land(s) described in and covered by Royal Patent Grant Number 2896 to C. Titcomb) situate, lying and being at Kilauea, Island and County of Kauai, State of Hawaii, being EASEMENT "B-1", containing an area of 0.222 acres, more or less.

Together also with a nonexclusive easement for pedestrian and vehicular purposes as a roadway over and across (a) a 30 foot wide road known as "KAHILI QUARRY ROAD", containing area of 4.589 acres, more or less, (b) a parcel containing an area of 1.665 acres, more or less, (c) a parcel containing an area of 0.538 acre, more or less, and (d) a parcel containing an area of 0.506 acres, more or less, as granted by instrument dated December 17, 2002, recorded as Document No. 2003-003808, and subject to the terms and provisions contained therein.

Said parcel(s) of land being more particularly described in Declaration of Condominium Property Regime dated April 13, 2001, recorded in said Bureau of Conveyances as Document No. 2001-064463.

Being the same premises conveyed to BERNARD CHRYSLER and SUSAN J. BATES, husband and wife, as Tenants by the Entirety, by APARTMENT DEED dated March 19, 2004, recorded in the Bureau of Conveyances of the State of Hawaii as Document No. 2004-067050.

SUBJECT, HOWEVER, to the following:

1. Mineral and water rights of any nature.
2. The terms and provisions contained in the DECLARATION OF COVENANT, CONDITIONS AND RESTRICTIONS OF THE SEACLIFF PLANTATION AT KILAUEA BAY COMMUNITY dated August 31, 1983, recorded in Liber 17405 at Page 411.

Said Declaration was amended by instrument dated --- (acknowledged March 1, 1988, March 2, 1988, March 3, 1988 and March 7, 1988), recorded in Liber 21704 at Page 1, dated September 9, 1988, recorded in Liber 22367 at Page 21, dated December 28, 1988, recorded in Liber 22766 at Page 559, and dated June 3, 2002, etc., recorded as Document No. 2002-105319.

3. The terms and provisions contained in the DECLARATION RE ELECTRICAL USE dated July 25, 1988, recorded in Liber 22226 at Page 340.

4. Each lot shall be subject to sheet flow surface waters to such lots from the roadways fronting the respective lot, as set forth in Amended Declaration of Covenants, Conditions and Restrictions of the Seacliff Plantation at Kilauea Bay Community dated September 9, 1988, and recorded in Liber 22367 at Page 21.

5. Grant of Viewplane Easement dated December 13, 1990, recorded as Document No. 90-195551, in favor of Lot 9, over and across Lot 20, referred to as Easement "A", being more particularly described therein.

6. Concrete swale along portion of boundary fronting Pali Moana Place, as shown on consolidation map prepared by Cesar C. Portugal, Registered Professional Land Surveyor, with Portugal & Associates, Inc., dated July 16, 1991, revised July 24, 1991.

7. The terms and provisions contained in the following:

DECLARATION OF CONDOMINIUM PROPERTY REGIME FOR "LA PALOMA CONDOMINIUM" dated April 13, 2001, recorded as Document No. 2001-064463.

Condominium Map No. 3254 and any amendments thereto.

-Note:- Any recorded amendments to said Declaration affecting apartments other than the specific apartment described herein, are not shown.

8. The terms and provisions contained in the BY-LAWS OF THE ASSOCIATION OF UNIT OWNERS dated April 13, 2001, recorded as Document No. 2001-064464.

9. WAIVER AND RELEASE dated January 8, 2001, recorded as Document No. 2001-007874, by ROBERT J. CAMPBELL and CLARITA S. CAMPBELL with the BUILDING DIVISION OF THE DEPARTMENT OF PUBLIC WORKS OF THE COUNTY OF KAUAI, regarding indemnify and holds harmless the County of Kauai from any claim, action, suit, or demand of any kind which could or will arise out of the absence of county-supplied water.

10. The terms and provisions contained in the LA PALOMA CONDOMINIUM DEED dated July 31, 2001, recorded as Document No. 2001-119787.

11. GRANT to PETER SOMERS, Trustee of the Peter J. Somers Revocable Trust dated August 31, 2001, with full powers to sell, mortgage, lease or otherwise deal with the land, dated December 17, 2002, recorded as Document No. 2003-003808, granting an easement for pedestrian and vehicular purposes.

==== County Road
[Red Box] Tax Map Key

EXHIBIT "B"

EXHIBIT "B"

0001

0002

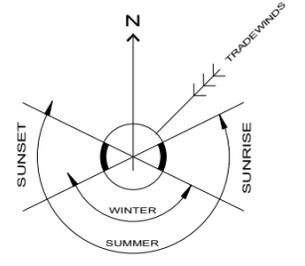
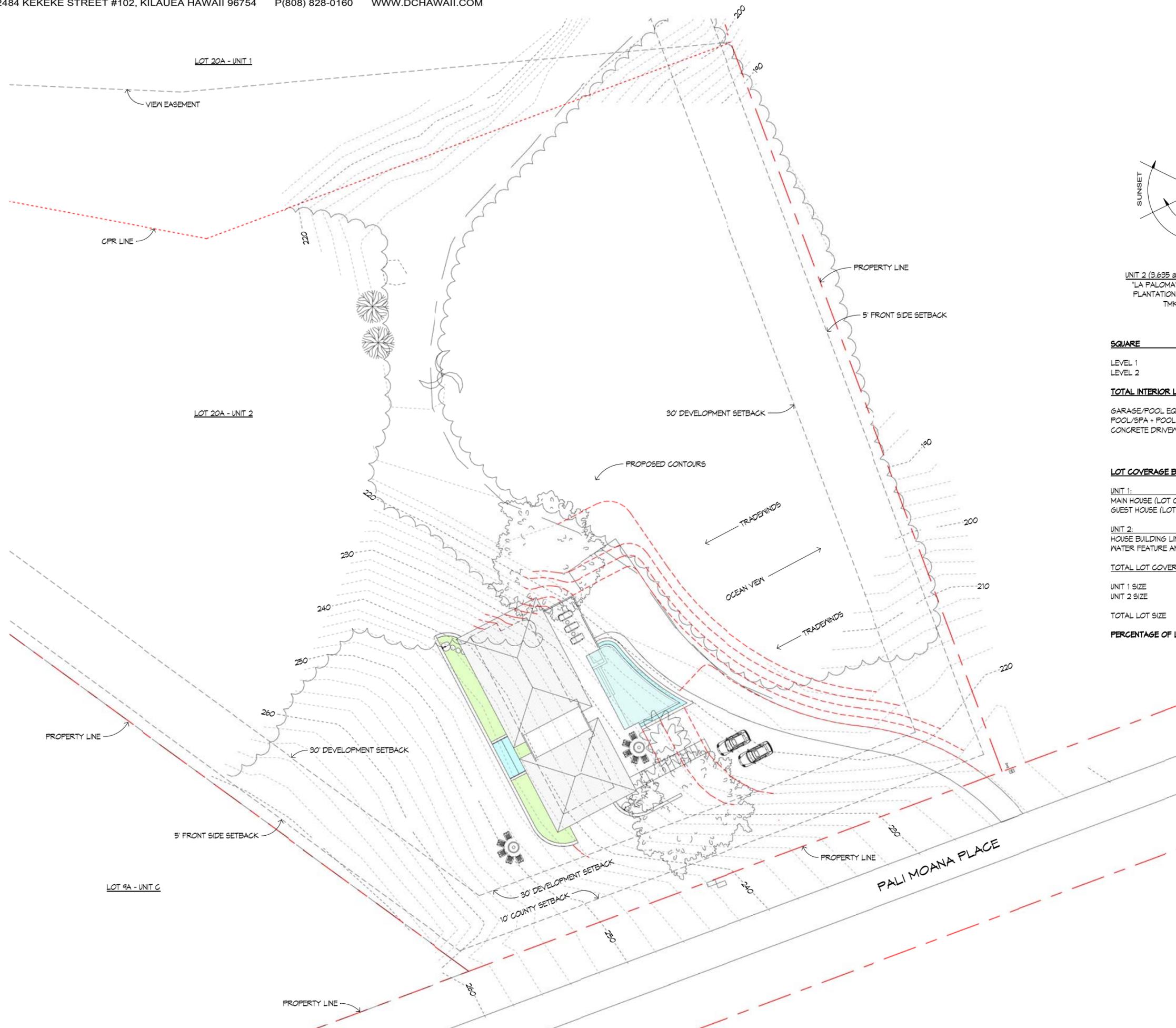
Pali Moana Pl

Pali Moana Pl



Location of 4-5-2-004:093 CPRs 1 & 2, Kilauea, Kaua'i

EXHIBIT "B"



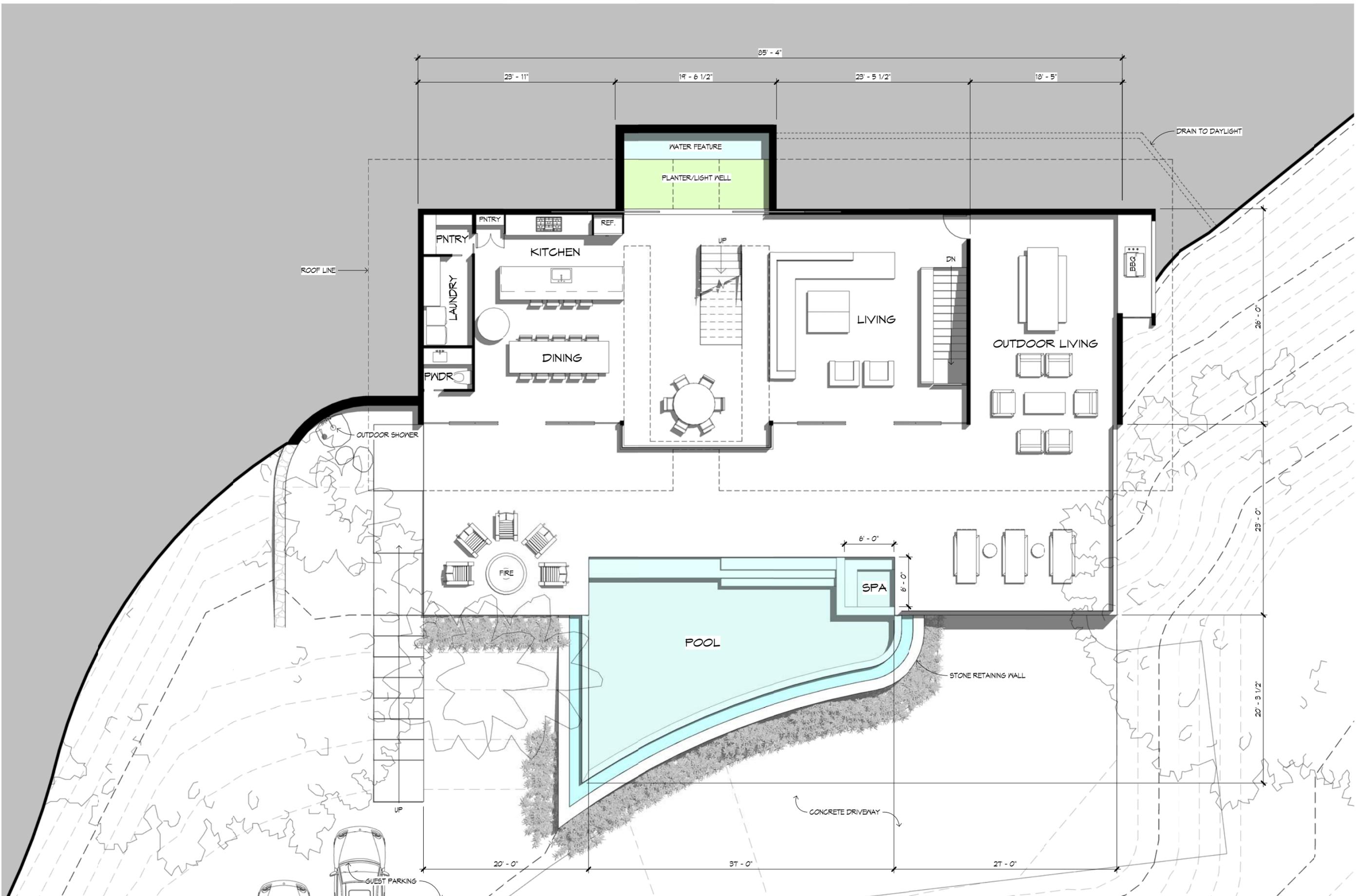
UNIT 2 (3.635 acres) OF LOT 20A (6.85 acres)
 "LA PALOMA" CONDOMINIUM AT SEACLIFF
 PLANTATION KILAUEA BAY, KAUAI, HAWAII
 TMK: 5-2-04-093 UNIT 2

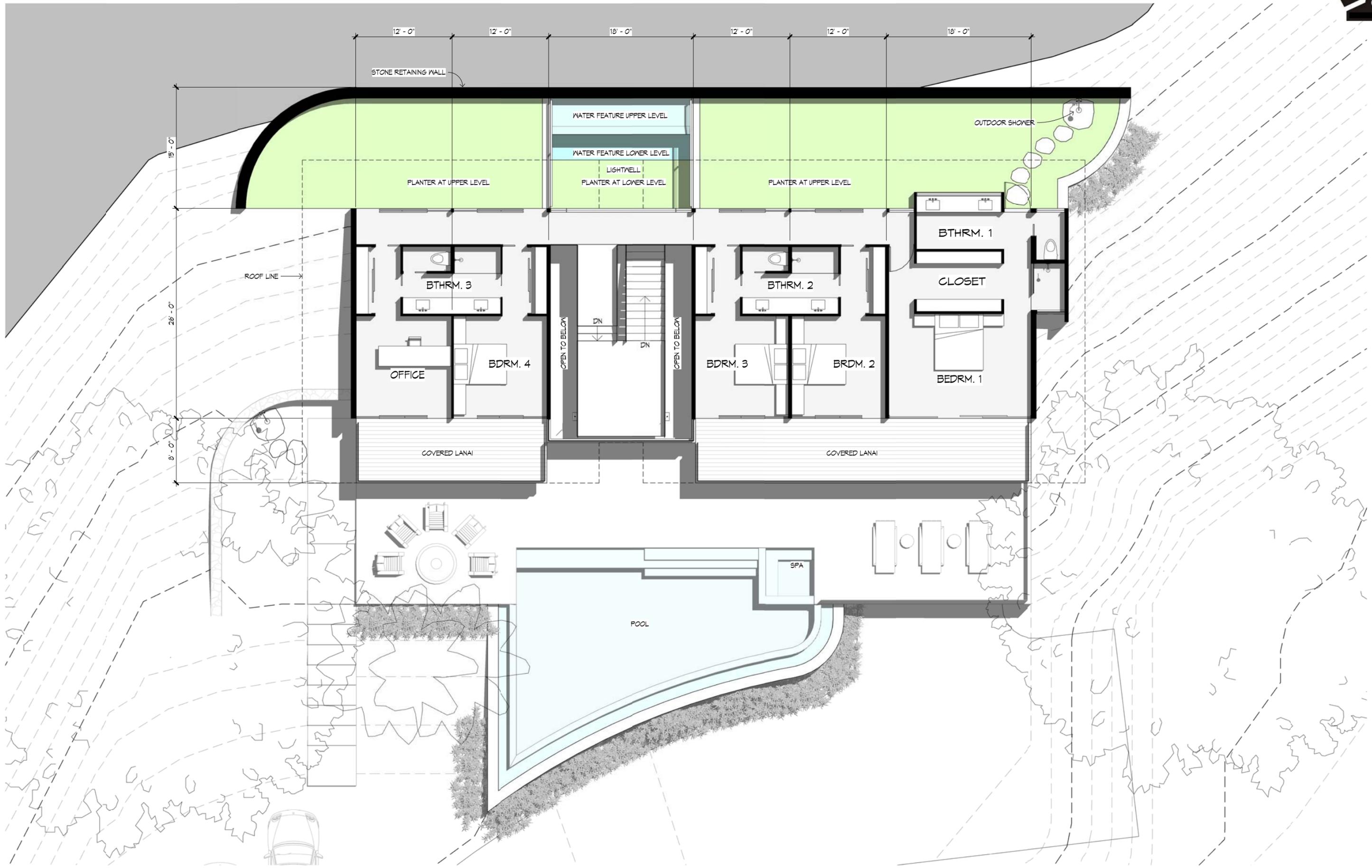
SQUARE	FOOTAGE	BREAKDOWN
LEVEL 1		1,194 S.F.
LEVEL 2		2,347 S.F.
TOTAL INTERIOR LIVING SPACE		4,141 S.F.
GARAGE/POOL EQUIPMENT/STORAGE		1,050 S.F.
POOL/SPA + POOL DECK + OUTDOOR LIVING		3,056 S.F.
CONCRETE DRIVEWAY		3,536 S.F.

LOT COVERAGE BREAKDOWN:

UNIT 1:	
MAIN HOUSE (LOT COVERAGE)	7,988 S.F.
GUEST HOUSE (LOT COVERAGE)	687 S.F.
UNIT 2:	
HOUSE BUILDING LINE, POOL, POOL DECK & DRIVEWAY, WATER FEATURE AND ENTRY STEPS (LOT COVERAGE)	8,531 S.F.
TOTAL LOT COVERAGE (UNIT 1 & 2)	17,206 S.F.
UNIT 1 SIZE	3.216 ACRES (140,088 S.F.)
UNIT 2 SIZE	3.635 ACRES (158,340 S.F.)
TOTAL LOT SIZE	6.851 ACRES (298,429 S.F.)
PERCENTAGE OF LOT COVERAGE	5.7%

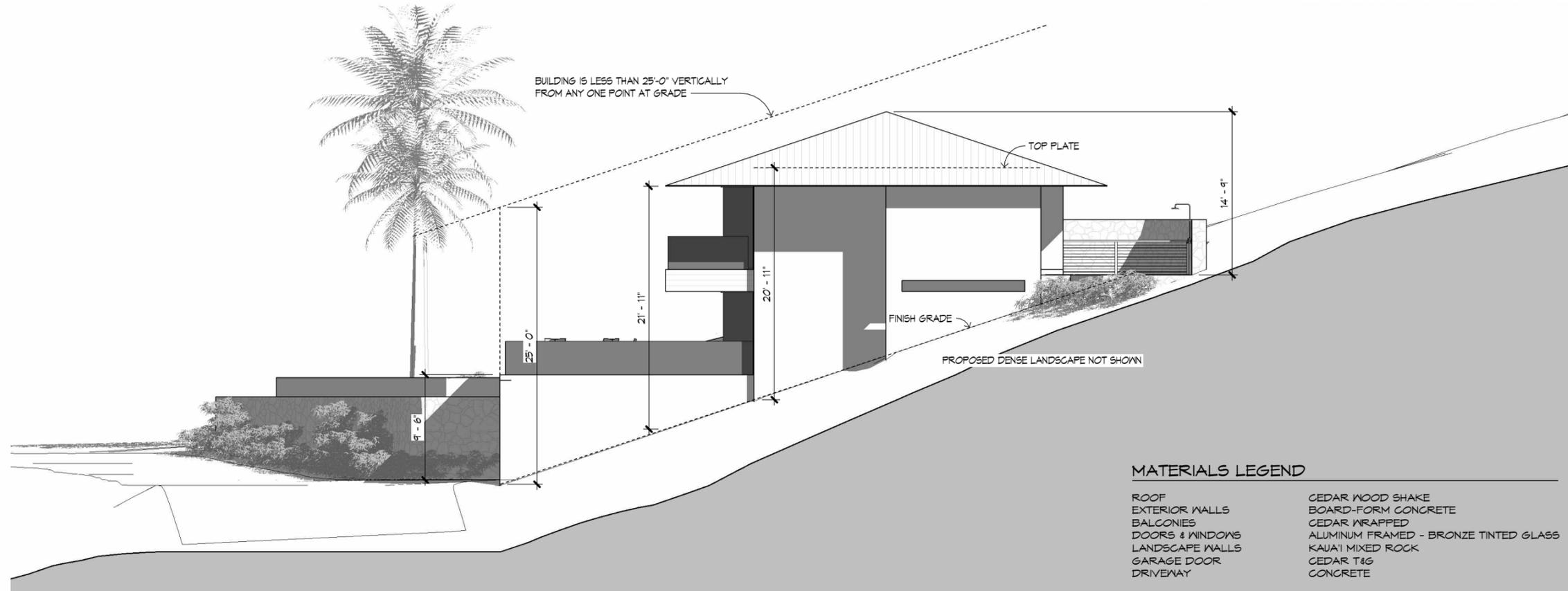
EXHIBIT "C"







NOTE:
IT IS OWNERS INTENTION TO HEAVILY PLANT THIS SIDE OF THE BUILDING FOR PRIVACY
AND TO SCREEN BUILDING MASS FROM DISTANT NEIGHBORS AT CRATER HILL LOCATION



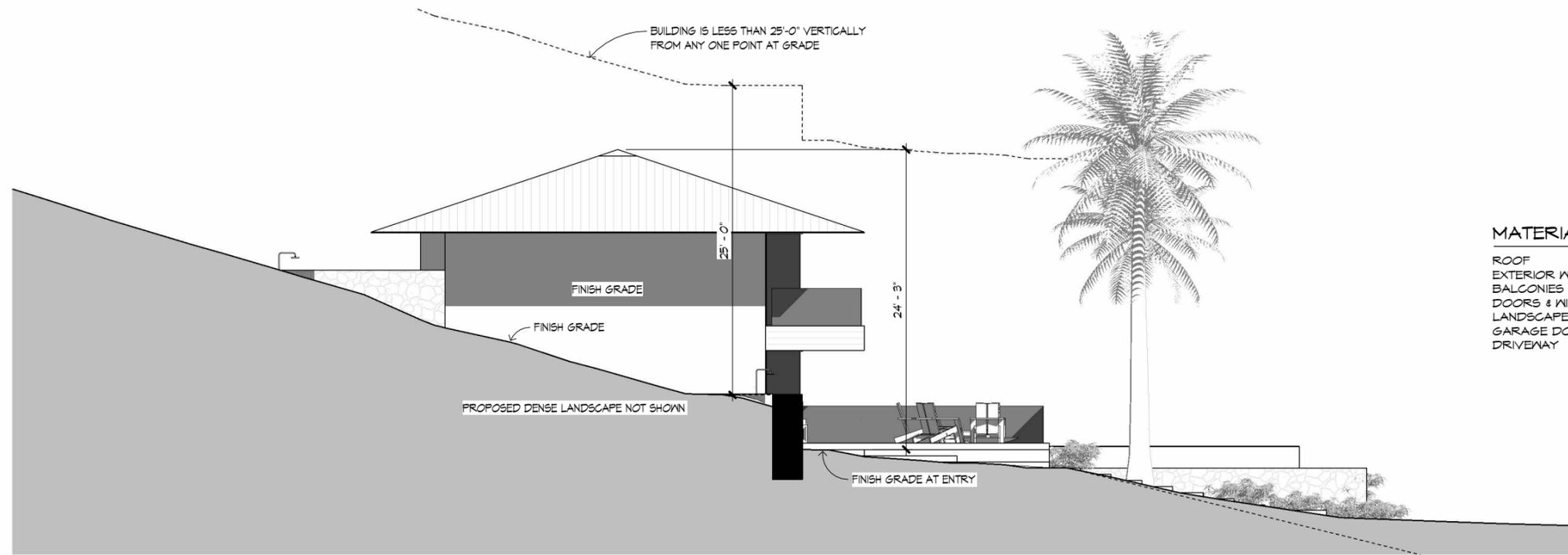
MATERIALS LEGEND

- | | |
|-----------------|---------------------------------------|
| ROOF | CEDAR WOOD SHAKE |
| EXTERIOR WALLS | BOARD-FORM CONCRETE |
| BALCONIES | CEDAR WRAPPED |
| DOORS & WINDOWS | ALUMINUM FRAMED - BRONZE TINTED GLASS |
| LANDSCAPE WALLS | KAUAI MIXED ROCK |
| GARAGE DOOR | CEDAR T&G |
| DRIVEWAY | CONCRETE |

NORTH



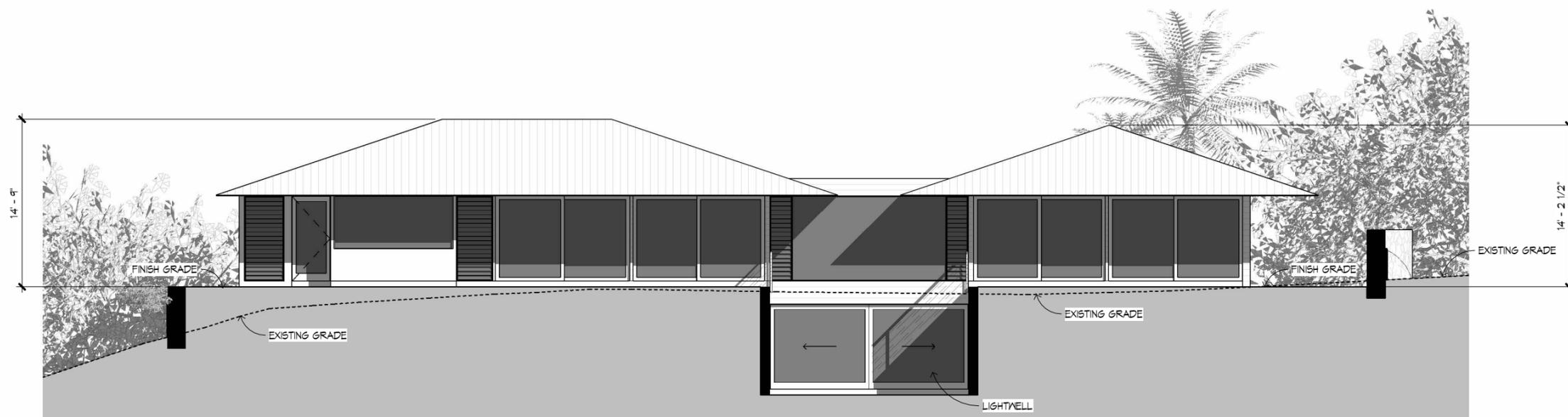
EAST



MATERIALS LEGEND

ROOF	CEDAR WOOD SHAKE
EXTERIOR WALLS	BOARD-FORM CONCRETE
BALCONIES	CEDAR WRAPPED
DOORS & WINDOWS	ALUMINUM FRAMED - BRONZE TINTED GLASS
LANDSCAPE WALLS	KAUAI MIXED ROCK
GARAGE DOOR	CEDAR T&G
DRIVEWAY	CONCRETE

SOUTH



WEST



***Ka Pa'akai* Assessment Related to
Native Hawaiian Traditional and Customary Practices**

TMK No: (4) 5-2-004:093 (Lot 20A, Unit 2), owned by Bryan Buckley

**Prepared by Dawn N.S. Chang, Esq.
December 2022**

I. Introduction

A. Subject Property and Proposed Project

BUCKLEY – Bryan Buckley (landowner) owns the real property identified as TMK: (4) 5-2-004:093 (Lot 20A, Unit 2) located within the Kilauea Ahupua‘a Hanalei District, Island and County of Kaua‘i, State of Hawai‘i (subject property). The subject property is located at 3839-F Pali Moana Place, Kilauea, Hawai‘i 96754, containing approximately 3.635 acres within the Seacliff Plantation Kilauea subdivision. The subject property is County zoned Agricultural Open Space and Special Treatment District. The Landowner is submitting a (permit) to the Kaua‘i County Planning Department (KCPD) for the construction of a single-family dwelling, pool, garage/pool equipment storage, and concrete driveway with a total lot coverage of 158,340 sq.ft. (proposed project). The subject property is adjacent to the property owned by Nathaniel Carden and Beth Woods.

The subject property is located within the Seacliff Plantation¹, a gated community bordered by Kīlauea Point National Wildlife Refuge on the north, Kīlauea Agricultural Park across Pali Moana Place to the west, and the mouth of Kīlauea Stream not far east (the stream is approximately 665 m east from the subject property). The project area falls within the Kīlauea Ahupua‘a, which is part of Hanalei District.

B. Kaua‘i County’s Constitutional Obligation

The State and its agencies are obligated to preserve and protect the reasonable exercise of customarily and traditionally exercised rights of Native Hawaiians to the extent feasible. This

¹“At the base of extinct volcano Nihoku, the gated community of Plantation is one of the most desirable complexes of its kind in the area. Located partway between the town of Kilauea and the Kilauea Lighthouse, this master-planned community offers its residents an exceptional quality of living.” The Seacliff Plantation consists of 25 estates, many of which have been further divided via the Hawai‘i CPR process providing about twice the number of homesites. It is composed of 48 building sites, which range in size from 3 to 10 acres. Prior to the 1970s, the land where Seacliff Plantation is currently located was once part of the Kilauea Sugar Plantation. *Seacliff Plantation Realtor’s website.*

affirmative obligation is set forth in the Hawai‘i State Constitution (Article XII, section 7)², State Laws (Hawai‘i Revised Statutes Sections 1-1 and 7-1), and judicial precedent. The Court has held that state agencies may not act without independently considering the effect of their actions on Hawaiian traditions and practices. Public Access Shoreline v. Hawai‘i County Planning Commission (PASH), 903 P.2d 1246, 79 Haw. 425 (1995).

To assist the state and its agencies in fulfilling its constitutional obligation as set forth in Article XII, section 7, the court has provided an analytical framework “to accommodate the competing interests of protecting native Hawaiian culture and rights, on the one hand, and economic development and security, on the other.” Ka Pa‘akai O Ka ‘Āina v. LUC (Ka Pa‘akai), 94 Haw. at 46, 7 P.3d at 1083 (2000). The analytical framework provides the following, (1) the identity and scope of valued cultural, historical, or natural resources in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area; (2) the extent to which those resources, including traditional and customary native Hawaiian rights, will be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken by the LUC to reasonably protect native Hawaiian rights if they are found to exist. Id. at 47, 7 P.3d at 2084.

C. Scope and Purpose of the *Ka Pa‘akai* Assessment

The Landowner has requested that an expert consultant (Consultant) be engaged to conduct an assessment related to Native Hawaiian traditional and customary practices, if any, on the subject property. The assessment shall consist of archival research of existing historic preservation documentation, pedestrian field inspection by the archaeological consultant, and outreach to individuals and families who may have a lineal and cultural connection (hereinafter referred to as Cultural Descendants) to the subject property or vicinity of the subject property, Native Hawaiian cultural practitioners, or members of the community who may have knowledge of Native Hawaiian traditional and customary practices, on the subject property or in the vicinity, including areas *outside*³ the subject property. The Consultant shall prepare a written assessment of the Ka Pa‘akai analytical framework for the subject property which shall supplement the Landowner’s Application to the Director of the Planning Department or to assist the Planning Commission with its *Ka Pa‘akai* analysis.

² Article XII, section 7 of the State Constitution provides that the State reaffirms its obligation and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua‘a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights.

³ The court in Ka Pa‘akai found that LUC erred in not considering resources *outside* the proposed project site. “Moreover, none of the LUC’s findings or conclusions addressed possible native Hawaiian rights or cultural resources *outside* of KD’s 235-acre RMP, such as *Ka Pa‘akai*’s members’ use of the mauka-makai trails to reach salt-gathering areas, the religious significance of the 1800-1801 lava flow, or the gathering of Pele’s Tears.” Ka Pa‘akai 7 P.3d at 1086, 94 Haw. at 49.

D. Cultural Consultation

On August 25, 2022, the Consultant extended an invitation to several Cultural Descendants and knowledgeable community members to visit the subject property, talk story, and be briefed by the architect, Santo Giorgio, on the proposed project. Gary Smith and Dr. Mehana Blaich Vaughan accepted the invitation and joined us at the subject property and shared their mana‘o. Gary describes himself as an “old timer” who has first-hand experience of many of the traditions of Kilauea. He was born on and worked on the plantation, and after graduating from college he returned to Kilauea. Gary’s father was the plantation manager. Many in the community describe “Uncle Gary” as the unofficial historian of Kilauea. Mehana lives in Kilauea and her husband and children have ancestral ties to the area. She is an Associate Professor at the University of Hawai‘i at Mānoa in the Department of Natural Resources and Environmental Management in the College of Tropical Agriculture and Human Resources, a Sea Grant College Program and Hui ‘Āina Momona appointee, and a graduate from Harvard University, the University of Hawai‘i at Mānoa, and Stanford University.

E. Consultant’s Qualification

My mother is Edna Kealohapauole Ho‘okano Shiroma, her father was Kamiko Ho‘okano, his father was Willy Ho‘okano, and his mother was Louisa Cooke Ho‘okano, and his father was ‘Iokewe Ho‘okano. Our ‘ohana come from the ahupua‘a of Kahalu‘u on Oahu and still own several kuleana parcels that were used for lo‘i kalo and residence. My Tutu and other members of our ‘ohana are buried on our kuleana lands in both marked (headstone) and unmarked (near a ti or pōhaku) burials. Our ‘ohana are lawai‘a (fishers) who practiced traditional fishing using ko‘a and continue to fish in an area traditionally known as Ka-waha-o-ka-manō (Kaneohe Bay).

I have a master’s degree in Social Work and was a community organizer for the Queen Lili‘uokalani’s Children’s Center in Waimanalo in the 1970’s. I graduated from the William S. Richardson School of Law in 1985. After graduating from law school, I clerked for Judge Walter Heen with the Intermediate Court of Appeals for several years before joining the State Attorney General’s (AG) Office. As a Deputy Attorney General, I served as counsel to various Boards and Commissions with the Department of Land and Natural Resources. During my tenure at the AG’s Office, I had the privilege of drafting the Hawai‘i State Burial Laws (HRS, Chapter 6E-42) and litigating numerous cases involving Native Hawaiians rights and issues, including State v. OHA (2009) involving the alienation of state ceded lands which was decided by the U.S. Supreme Court. Since 2001, I have been the principal and owner of Ho‘ākea LLC dba Ku‘iwalu, a consulting firm that specializes in facilitating culturally sensitive and contentious issues, including preparation of Ka Pa‘akai Assessments. Currently, I also sit on the Hawai‘i State Land Use Commission. In addition to my private consulting work, I offer training on Native Hawaiian Land Laws and Rights, including on Traditional and Customary Native Hawaiian Rights (Ka Pa‘akai Assessments), to private and government agencies.

II. Ka Pa‘akai Analysis

A. The identity and scope of valued cultural, historical, or natural resources on the subject property or within the vicinity of the property, including the extent to which traditional and customary Native Hawaiian rights are exercised on the property.

1. Review of archival research based upon previous archaeological documentation and recent field inspection.⁴ The archaeological documentation⁵ identified the following valued cultural, historical, or natural resources on or outside the subject property:

- **Place Names**

A number of notable geographic features occur in the vicinity of the project area. Kīlauea stream, which flows from the south of the project area to the west before emptying into the ocean, strongly influences not only the natural landscape but human settlement on and use of it. The stream serves as the boundary between Kīlauea Ahupua‘a and Kāhili Ahupua‘a, and (surviving) terraces for traditional-style agriculture often follow its curve. Kāhili means “feather standard” (carried by attendants to herald royalty). The name Mōkōlea (or Mōkōlea Point) refers to a promontory north of the mouth of Kīlauea stream and means “plover island (mō here being short for moku)” as it is a key seabird nesting location (albeit not strictly an island). Another important nesting area for seabirds can be found north of Kīlauea Point, on a small island named Moku‘ae‘ae, which John Clark (2003) interprets as simply meaning “fine [i.e., small] island.”⁶

- **Wahi Pana**

There are stories or traditions associated with some of the wahi pana (legendary places) in Kīlauea Ahupua‘a. While Menehune are associated with the makai (oceanward) portion of Kīlauea, not only as builders but as fishermen plying the waters offshore Kīlauea from a settlement at Hanalei Bay to the west (Wichman 1985:36), the mauka (mountainward) portion of the ahupua‘a is also home to a great work said to have been accomplished by non-human prowess. The celebrated chief Manokalanipō was said to have commanded a supernatural mo‘o (lizard) to open up the mauka part of Kīlauea, where the land was good for planting, but water

⁴ In 2022, Ku‘iwalu retained the services of Scientific Consultant Surveys (Archaeological Consultant) to prepare an Archaeological Literature Review and Field Inspection (LRFI) for a 6.851 acre parcel in Seacliff Plantation, Kilauea Ahupua‘a, Hanalei District, Island of Kaua‘i, Hawai‘i, TMK: (4) 5-2-004:093. The LRFI includes relevant information on Traditional background, Historic Setting, Previous Archaeology in the project area vicinity, and the results of the field inspection. Relevant excerpts of the LRFI will be referenced in the Ka Pa‘akai Assessment. Attachment A is a copy of the LRFI.

⁵ The Consultant acknowledges that the archival research generally relies upon archaeological research and interpretations from sources that may not have a cultural connection to the place or interpretations that are not from primary source documents (i.e., Hawaiian language data and research). However, the information may provide a source of information that may be relevant in identifying valued cultural, historical, and natural resources in the area, including traditional and customary practices. For purposes of this Ka Pa‘akai Assessment, where the community and cultural informants may dispute or provide contrary information to the archival research, the archival information will not be included in the text of this Assessment but will remain as part of the LRFI.

⁶ LRFI at page 9.

was lacking, for agriculture. Three long irrigation ditches on slopes of Kīlauea mauka resembled the claw marks of a mo‘o, and the ridge above Kīlauea stream was called Kamo‘okoa, meaning “brave lizard” (Wichman 1998:102).

Wichman (1998:103) also relates a story that purports to explain the “volcanic cone open to the ocean” resulting in the “long beach unprotected by any reef” at the coast of Kīlauea Ahupua‘a, as well as “three huge stones” that once stood atop the cone but “have since been moved, with great difficulty, to make room for sugarcane.” These features were attributed to the actions of the volcano goddess Pele: Pele had come to Kaua‘i and fallen in love with Lohi‘au, a chief of Hā‘ena. She promised to find a home for the two of them, but whenever she struck her staff, she was met by water, for her sister Nā-maka-o-kaha‘i, goddess of the sea, was her enemy. Pele caused an eruption here, but it was soon extinguished when the sea goddess broke down the walls of the crater, drowning the fire with the ocean. [Wichman 1998:103]. Already frustrated by her sister’s sabotage, Pele is enraged when “three beautiful sisters” named “Kalama, Pua, and Lāhela” laughed at the failure of her efforts, and she promptly turns all three into stone, leaving them in place as an object lesson of why she should not be ridiculed.⁷

- **Mo‘olelo**

Kīlauea Ahupua‘a is mentioned as part of the long journey of Hawai‘i island chief Lonoikamakahiki to see for himself “the famous trunkless koa [Acacia koa] tree of Ka-hiki-kolo, a tree from which earlier warriors had fashioned war clubs” (Wichman 2003:67). This journey began with Lonoikamakahiki accompanied by “his favorites, his warriors as companions and also his servants” but this retinue soon abandoned him, and when he “happened to look back to see where the rest of his people were” he found “only a solitary man following him... a stranger with whom he had no acquaintance” (Fornander 1916-17, Vol 4:352). The stranger was Kapa‘ihiahilina, a Kaua‘i native who had heard that the Hawai‘i ali‘i had been deserted by his followers, and brought “a calabash of poi [a Hawaiian dish made from the fermented root of the taro which has been baked and pounded to a paste] with some ‘o‘opu [general name for fishes included in the families Eleotridae, Gobiidae, and Blennidae] fish” as provisions for Lonoikamakahiki (Wichman 2003:68). Lonoikamakahiki was determined to press on to his destination and observing that Kapa‘ihiahilina scrupulously observed the kapu (taboos, prohibitions) that were accorded to royalty, told his faithful companion that they would proceed as equals: Lonoikamakahiki said to him: “do not hold me in sacredness because you are my own brother. I have nothing dearer than yourself, therefore, where I sleep there will you sleep also. Do not hold me aloof, because all that is good has passed and we are now travelling in the region of the gods.” In consequences of this, the king’s wishes were observed, and they sat down together. [Fornander 1916-17, Vol 4:352]. The food that Kapa‘ihiahilina had brought ran out, but he foraged hala (screw pine. Pandanus tectorius) fruit for food, and also braided ferns into garments to replace the malo (male’s loincloth) made of tapa (bark cloth) they wore, which had been damaged by rain. With the aid of this skilled friend, Lonoikamakahiki achieved his wish to see the trunkless koa tree, and returned safely home, where he made his new trusted confidante his prime minister. The meteoric rise of this outsider [Wichman (2003:67) characterizes the Kaua‘i man as a chief himself, but Fornander (1916-17, Vol 4:352) does not give him any rank] led to jealousy from Lonoikamakahiki’s subordinate chiefs, who began plotting against

⁷ Id. at page 9-10.

Kapa'ihiahilina. The plotters eventually convinced Lonoikamakahiki to bar his friend from his presence by spreading rumors that Kapa'ihiahilina had slept with his wife. Kapa'ihiahilina then composed a chant reminding Lonoikamakahiki of their friendship, and how they had faced adversity together in their passage through the wilderness of Kīlauea (and other parts of Kaua'i), a part of which says:

We ate of the ripe pandanus in our wanderings,
Thus were our days of hunger appeased, my companion,
My companion of the tall pandanus,
From Kilauea to Kalihi;
The pandanus that had been partly eaten,
Of Pooku in Hanalei.

Hala ia mao a ka ua ilaila, e ke hoa-e,
Hele aku a ai i ka pua pala o ka hala
Hala ia la pololi o ka ua ilaila, e ke hoa.
He hoa i ka nahele la uhala loloa,
Mai Kilauea a Kalihi la;
O ka hala i aina kepaia,
O Pooku i Hanalei-la.
[Fornander 1916-17, Vol 4:358-359]

This chant reminded Lonoikamakahiki of his affection for his friend and all that Kapa'ihiahilina had done for him, and he gave orders that his friend be restored to the prime minister position and the plotters be executed.

Kīlauea Ahupua'a is also mentioned as the place where an ali'i named Kāhili ruled, but the mo'olelo that speaks of him actually takes place in Kīpū Ahupua'a, near the Hulē'ia River and Mount Hā'upu. Kahili arrives in Kīpū at the court of the ali'i nui (high chief) Hina, famed for her beauty, just in time to become the subject of a rivalry between the Kaua'i ali'i nui and a rival beauty visiting from O'ahu, Pele'ula. Pele'ula had heard that "Kaua'i women were the most beautiful" while holding court at her home of Waialua, and proud of the splendor of her court and her own charms, had made up her mind to visit Kaua'i to settle the question of where the greatest beauty lay (Wichman 1991:110). Hina welcomed the visiting Pele'ula and invited all her own subordinate ali'i to present themselves, all the better to show off Kaua'i. When Kāhili arrived, both Hina and Pele'ula saw that he was exceptionally handsome and agreed to make him the prize in a contest between them, initially ten rounds of kilu (a throwing game; also: a small gourd or coconut shell, usually cut lengthwise, used to play the game of kilu). A game of kilu ordinarily featured many players who threw at targets placed in front of other participants to pick a partner for a kiss (or more), comparable in this respect to the contemporary game of spin-the-bottle. So enamored were the two female ali'i nui, however, that they instead asked Kāhili to be the sole target in a direct kilu contest between the two of them. The handsome young ali'i was all too happy to be the center of attention, showing his value as stakes by performing a dance and chant in which he declared "Here are the bones of Ko'olau, / The 'ulu, breadfruit tree [Artocarpus altilis] and warrior of Kilauea" (Wichman 1991:114). The two women proved to be equally adroit at kilu, and instead decided to have a beauty contest, letting Kāhili pick which of

them he found to show her charms to best advantage. Both women prepared themselves with their best adornments and present their own dances and chants before the court. Pele‘ula showed off well, but Hina’s performance evoked not only her own beauty but the natural wonder of Kaua‘i. Even her rival had to admit that “the beauties of Kaua‘i are beyond compare” (Wichman 1991:119). To commemorate this, a profile of Hina, called Hinaiuka, was carved on the face of Hā‘upu.⁸

- **Lifestyle and Subsistence**

Edward and Elizabeth Handy (1972) note that Kīlauea has long been a favorable location for agriculture, and naturally became a population center as well. On the island of Kauai there were five areas where development of food resources produced concentration of population. One of the best deep-sea fishing areas was along the windward or Napali coast. Adjoining this to the southward were localities where irrigated taro was cultivated extensively in terraces, termed lo‘i, at Hā‘ena, Hanalei, and Kīlauea. [Handy and Handy 1972:269]

Handy and Handy (1972) also note that the tendency for relatively steep terrain in this region, especially upland, inhibited terracing for wet kalo agriculture. Agriculture was likely on kula (lit. plain, pasture, in context: dryland suitable for dry cultivation in contrast to wet cultivation in lo‘i) lands with ‘uala as the favored staple crop.

Kīlauea is watered by a small river whose headwaters take the flow of streams above Kalihiwai as well as those coming down sloping kula lands above Kīlauea. This is a peculiar terrain, with terraces along the north side of the river toward its seaward end belonging to Kīlauea and those on the south side to the small ahupua‘a named Kāhili. A mile upstream is a small, terraced area, but beyond this there were no terraces, for the mainstream flows in a narrow gulch, and so do other side streams which flow into the Kīlauea River. [Handy and Handy 1972:421]⁹

- **Water and Marine Resources**

Wichman’s (1985:36) account of the Menehune favoring fishing grounds offshore of Kīlauea indicates that marine resources were ample, despite the lack of a reef in the collapsed cinder cone that shapes the beach. Mōkōlea and Moku‘ae‘ae are now part of a nature reserve (see Cultural Resources, below), but these seabird nesting sites were also a source of food. “In the interview of a local resident, Kwai Chew Lung (Chow) ... he recalls that the Hawaiians used to pick up baby chicks on Moku‘ae‘ae Rock... he also remembers going fishing there and hunting for eggs to eat” (Frederickson and Frederickson 1989:15).¹⁰

⁸ Id. at pages 12-13.

⁹ Id. at pages 13-14.

¹⁰ Id at page 14.

- **Cultural Resources**

Thomas Thrum (1907) recorded a single heiau named Pailio in Kīlauea Ahupua‘a, as well as another heiau named Kipapa in Kāhili Ahupua‘a, but based on later investigations, it would appear that both heiau have been destroyed by subsequent activity (see Previous Archaeology, below). There is considerable amount of remnant Pre-Contact Hawaiian terracing near Kīlauea Stream (on private lands), southwest of the current project area, especially where the terrain is steep and uninviting to post-Contact development.

In some cases (see Previous Archaeology, below), post-Contact agricultural and habitation features have been found built over or reusing the Pre-Contact terracing. While the native Hawaiian population decreased in the 19th century, immigration brought in new settlement, including many Asian workers employed by the Kilauea Sugar Company plantation. Asian-style rice pond fields that were likely developed from remains of older native Hawaiian lo‘i (to the south of the project area Clark and Rechtman 2010, Clark et al. 2011), and the presence of a Japanese Cemetery to the west (Cleghorn 2001, Spear 2014, Hulen and Barna 2021), speak to the historical demographic changes in Kīlauea Ahupua‘a.

In the present day, some cultural resources in Kīlauea Ahupua‘a are accessible through programs for preservation of historic locations and traditional culture. A number of structures have been placed on the National Register of Historic Places (NRHP). This includes several buildings associated with the Kīlauea plantation, as well as the Daniel K. Inouye Kilauea Point Lighthouse located within the Kilauea Point National Wildlife Refuge (KPNWR). A number of Hawaiian cultural organizations partner with the KPNWR to provide access to the coastal region for traditional cultural practices (see Land Use in the Post-Contact Period to the Present).¹¹

- **Mahele Awards and Kanaina Testimony**

The Indices of Awards Made by the Board of Commissioners to Quiet Land Titles in the Hawaiian Islands (Land Commission 1929) do not list any Land Commission Awards (LCA) in Kīlauea Ahupua‘a. Lloyd Soehren’s (2002-2019) Hawaiian Place Names database notes that Kīlauea Ahupua‘a was “returned by Kekauonohi, retained by aupuni at the Mahele.” The Office of Hawaiian Affairs (n.d.) Kipuka Online Database suggests a slightly more complex transaction in which Kīlauea Ahupua‘a was “relinquished by Mikahela Kekauonohi to Kamehameha III” and “relinquished by Kamehameha III to Government.” It should be noted that LCA No. 8559-B, the claim for the crown lands of Hawaii in the name of William C. Lunalilo, includes Kāhili and Kalihiwai Ahupua‘a, the ahupua‘a east and west of Kīlauea Ahupua‘a, whereas Nāmāhana Ahupua‘a to the northwest was claimed by Keahikuni Kekau‘ōnohi (also called Mikahela or Miriam) as part of LCA No. 11216. It makes geographic sense that the King, Kekau‘ōnohi, or both once had a claim on Kīlauea Ahupua‘a given their claims on adjacent ahupua‘a.

The Indices (Land Commission 1929) do list seven other LCAs in Kāhili Ahupua‘a and 28 other LCA in Kalihiwai Ahupua‘a aside from those of the Crown (LCA No. 8559-B; Lunalilo); these are presumably kuleana claims. The seven kuleana claims in Kāhili Ahupua‘a are the kuleana awards closest to the current project area, and cluster on the east bank of Kīlauea stream, mostly

¹¹ Id. at pages 14-15.

near the stream mouth. LCA No. 10333, claimed by Naiamane on behalf of her deceased husband Oopu, and confirmed by Royal Patent Grant No. 3370 in 1856, sits on the present border with Kīlauea Ahupua‘a (Waihona ‘Āina N. d.). The other six LCAs in Kāhili Ahupua‘a are LCA Numbers 9067, 10013, 10013-B, 10015, 10082, and 10083.

Māhele records indicated that there were other claims made for lands in Kīlauea Ahupua‘a during the Māhele, but none were awarded.¹² This includes a claim (No. 6529) by Holokukini,¹³ on the basis that he served as konohiki for Kīlauea Ahupua‘a under Aaron Keali‘iahonui (husband of Kekau‘ōnohi), and six other claims, all of which were rejected or abandoned. Among the kuleana claims was one (No. 9217) that gained some later notoriety for (the claimant) Kealawa‘a complaining that “I returned my claim to land of Kilauea to the Konohiki for the land is being filled with cattle & I have no desire to combat them [sic]” (Waihona ‘Āina 2005).¹⁴

- **Kilauea Sugar Company and Kilauea Railroad system**

Charles Titcomb would eventually go on to purchase the whole of Kīlauea Ahupua‘a in 1863 and start a plantation there. Jesse Condé and Gerald Best (1983:150) indicate the plantation was sold to Captain John Ross and Edward P. Adams in 1877. According to the Kaua‘i Historical Society (N.d.), the plantation was subsequently incorporated as a company, Kilauea Sugar Company Limited, in 1880 and would remain in operation for over 90 years: It became known as Kilauea Sugar Plantation Company after purchase by a California corporation in April 1899. Headquarters were in San Francisco, California, with local operations in Kīlauea, Kaua‘i, Hawai‘i. In 1955, C. Brewer and Company Ltd., the company’s Honolulu sugar factor (agent), purchased a majority of stock, and the company reverted to its original name, Kilauea Sugar Company Limited. All sugar operations were terminated on December 31, 1971. [Kaua‘i Historical Society N.d.:2]

William Dorrance and Francis Morgan (2000:32) note that “Kilauea Sugar Company was among the smallest in the Islands,” which, given that they indicate it reached “5,000 acres” suggests the economy of scale required for success during the heyday of commercial sugar in Hawai‘i. Carol Wilcox (1996:84) explains that the plantation “had to make the best of marginal conditions. Plagued by rocky terrain, small size, few water resources, and its remote, windward location, it never enjoyed the success of other, better situated plantations.” While the plantation was not as massive as some of its peers, it boasted its own railroad to haul sugar to the mill. The Kaua‘i Plantation Railway (2008) website recorded those railroads on Kaua‘i island used unusually narrow gauge, but the railroad at Kilauea, the first on the island of Kaua‘i, was even narrower.

¹² While there were no Mahele claims that may have been actually awarded, the sworn Kanaina testimony indicates that there were native Hawaiian who lived in the area but abandoned their claims because they were unable to compete with the introduced cattle. (Attachment A of the LRFI)

¹³ Although the Mahele records indicate that Claim No. 6529 was not awarded the Kanaina testimony to the claim references 4 lo‘is in the ili of Puua and 6 lo‘is in Kilauea belonging to Holokukini called Maluawai ili and a house lot, a pasture and 2 tenants. Id. LRFI at pages A10 -A11. Since the claim was not awarded there is no location of the lo‘i’ s or house lot.

¹⁴ Id. at pages 19 – 22.

In late 1881 management of the Kilauea Plantation ordered rail equipment from the John Fowler Co, of Leeds, England. Rail, spikes, locomotive and cars arrived on Kauai late in 1881 and by the end of 1882 the line was in operation. The track gauge was 2' and the tiny (likely 6 tons) 0-4-2 Fowler locomotive could move up to ten loaded cars of cut cane in one train. While the original line at Kilauea Plantation remained at 2' gauge to the end, all the other lines on Kauai chose 30" gauge, the only Island in the Hawaiian Chain to run with this gauge.

Condé and Best (1983:150) report that “rail equipment for Kilauea was duly shipped to Kauai and by a curious twist was not only the first railroad built on that island, but it had its first spike driven by an [sic] Hawaiian Princess” on September 24, 1881. This dignitary was Princess Regnant Lydia Kamaka‘eha, who would in a decade be crowned as Queen Lili‘uokalani, the last monarch of the Kingdom of Hawai‘i. She was visiting Kaua‘i, and had not been aware of the railroad, but upon arriving at Kīlauea Village, she was greeted by employees of the Plantation: ...she was informed that at that moment the first piece of track for the first railway on Kauai was about to be laid, and it would be considered an honor if Her Royal Highness would drive the first spike, which she kindly consented to do. Proceeding to the plantation... a large crowd had collected; the Royal Standard having been hoisted on a temporary staff. Her Royal Highness... took great interest in all these particulars and expressed her great satisfaction at being able to be present at the laying of the first railway on the Island of Kauai and trusted it might soon gird the whole island and so develop its resources and promote the industry of its people. [Pacific Commercial Advertiser 1881 in Condé and Best 1983:151]

By November of 1881, the railroad at the Kilauea Sugar Company plantation was operational, with three miles of track laid. Both sugar operations and the railroad grew over the next several decades, and “in 1910, Kilauea’s railroad system was comprised of 12 ½ miles of permanent track, 5 miles of portable track, 200 cane cars, six sugar cars and four locomotives” (Soboleski 2017).

Much of the infrastructure built up for the Kīlauea plantation did not survive to the current day. The railroad was phased out first: “Kahili Landing and its railroad track was abandoned beginning in 1928, when sugar from the mill was trucked to Ahukini Landing instead, and by the spring of 1942, trucks had replaced railroad locomotives and cane cars as the means of hauling sugarcane to the Kilauea mill” (Soboleski 2017). Wilcox (1996) states that the land continued to see some agricultural use after sugar operations ended in 1971, but there was no upkeep of the plantation irrigation system, and parts of it were destroyed while others were simply abandoned: ... no mechanism was established to secure the easements or maintain the old system. Over the years the connections between reservoirs and delivery systems were destroyed by roads, pasture, development, neglect, and intent. The Hanalei Ditch was abandoned, its flumes and siphon no longer operable. The connection from the Kalihawai Reservoir to Stone Dam was destroyed, as was that between Puu Ka Ele and Morita reservoirs. Puu Ka Ele and Koloko reservoirs' delivery systems were gone. C. Brewer established Kīlauea Irrigation Company, a public utility, to administer the surviving sections that service its guava farming operation. By the mid-1990s, some reservoirs stood alone with little utilitarian purpose. [Wilcox 1996:85]¹⁵

¹⁵ Id. at pages 22- 24.

One archaeological site was identified during the field inspection on June 1, 2022. The site was designated as Temporary Site 1 (TS-1) and was comprised of two features: a railroad bridge culvert (Feature 1), and remnant section of railroad track (Feature 2) was found on the subject property. The on-site archaeologist determined that the site was post-Contact in nature recorded it with photographs and two GPS points taken at the center points of its two features. Figure 7 shows these GPS points superimposed on a client-provided construction map.

Feature 1 (Fe. 1; railroad bridge culvert) was built using basalt and mortar construction and is in good overall condition, protected by thick vegetation that surrounds it. Both ends of the culvert tunnel are exposed and the interior is passable. Feature 2 (Fe. 2; piece of old railroad track) was discovered approximately 12 m east of Fe. 1, by using a metal detector to allow detection through the dense vegetation. Figures 8 through 16 are photographs of the features, and Table 3 summarizes the location and condition of the features. These features were constructed as a part of the railroad built to haul sugar for the plantation operated by the Kilauea Sugar Company. Another portion of that railroad located to the northwest was previously designated as SIHP Site No. 50-30-04-01812. It is possible that other remnant portions of the railroad may be found under the foliage or even under the ground surface of other nearby property parcels.¹⁶

- **Kilauea Point National Wildlife Refuge**

Kilauea Point National Wildlife Refuge (KPNWR) occupies Kīlauea Point peninsula, Mōkōlea Point peninsula, Crater Hill, and the coastline north of the project area. The wildlife refuge was established in 1985 and expanded to its current extent in 1988. KPNWR is administered by the US Fish and Wildlife Service (FWS) and is open to visits (and thus serves as a tourist attraction). The FWS maintains the refuge to protect and preserve not only flora and fauna, especially migratory seabirds and the endangered nēnē (Hawaiian goose, *Nesochen sandvicensis*), but also the Daniel K. Inouye Kīlauea Point Lighthouse and Light Station. The FWS also partners with local native Hawaiian organizations such as Kaipuwai Foundation and Na Kia’i Nihoku, that “perform Native Hawaiian cultural practices and ceremonies at Nihoku summit on the summer and winter solstice and the spring and fall equinox” (Fish and Wildlife Service N.d.).¹⁷ Additionally, portions of KPNWR are open to fishing, and “native Hawaiian fishing at Kīlauea (East) Cove” is recognized as a cultural practice (Fish and Wildlife Service N.d).¹⁸

2. *Information from Cultural Consultation that identified the following cultural, historical, and natural resources, including traditional and customary Native Hawaiian practices that may be related to or within the vicinity of the subject property:*¹⁹

¹⁶ Id. at page 39 – 49, Figures 8 to 16.

¹⁷ In addition, Dr. Mehana Blaich Vaughan noted that “*through these organizations, hālau visit the area to conduct ceremony and offer hula and oli, due to the site’s significance in Pele traditions and other hula practice. Kia’i Kāhili also works with FWS on their coastal lands.*”

¹⁸ Id. at page 24-25.

¹⁹ Not all of the Cultural Descendants assert that they are ancestral descendants to the ahupua’a tenant of the subject property. However, the court in PASH noted, “[t]he right of each ahupua’a tenant to exercise traditional and

- **Bird Hunting**

As a young man I often hunted the pasture lands of Nihoku for pheasants. At the time, the land all the way to the Kahili river was used by Gay and Robinson for cattle grazing. The road down to Kahili was fenced on both sides with 4 heavy gauge, single wire strands held up by Kiawe posts that due to their scarcity were strategically placed to best take advantage of their strength and longevity. These posts were brought in from the west side as they did not grow here. The fence spaces between the major posts were further supported by locally cut guava wood which also helped to keep the wire strands from sagging as the wire was u-nailed to many of these fill-in posts. No barbed wire was used so we could easily pass between the wire strands when moving from the makai pasture to the Nihoku pasture. Sometimes we would start our hunt on the plateau just above the project site. There the plantation's field road followed the iron wood lined valley edge and then as it reached the slopes of Nihoku there was a small seldom used road built during the war that led East into the Nihoku pasture where the Robinson's had a corral. This area was called Marine Camp since it was occupied during the war by Marines who guarded the pre-radar installation atop Nihoku. The remains of the old redwood train trestle bridge that traversed the valley were still visible in the 1960s.

For our hunting we would traverse the makai side of the valley taking a detour to cover the Northern slopes of Nihoku which are hidden from almost all southern vantage points. No seabirds frequented the area during those years. We continued down into Kahili, crossing over the fences on both sides of the quarry. Unlike the mauka pasture where the grass was as short as a lawn, the makai pasture was heavily overgrown so hunting was limited to the open areas. Once complete, we would walk back up the valley and pass the subject property before returning to our vehicle. Sometimes we would start our hunt at Kahili and do the trip in reverse. The valley floor and drainage area were covered in heavy growth of guava, cats' claw, and Christmas berry. The stream usually had some water in it which was seepage water that relied heavily on the fact that the plantation irrigated the field above it and Kilauea usually had ample rain to keep the seepage actively flowing. Pheasants favored this protected area where water was available during the heat of the day.²⁰ (Gary Smith)

customary practices remains intact, notwithstanding arguable abandonment of a particular site, although this right is potentially subject to regulation in the public interest.” PASH 903 P.2d at 1271, 79 Haw at 450. Thus, their comments are relevant to the Assessment even if they are not descendants of the ahupua‘a tenant.

²⁰ Portions of the talk story or information provided by Gary Smith and Dr. Mehana Blaich Vaughan are in *italics*. A copy of the Assessment was distributed to Gary Smith and Dr. Mehana Blaich Vaughan. The Assessment has been revised in accordance with Gary Smith’s comments. The Consultant also received comments from Dr. Mehana Blaich Vaughan and used her best efforts to revise the Assessment in accordance with her comments. Dr. Mehana Blaich Vaughan referenced the “extensive cultural consultation given by multiple different individuals on the cultural significance of Nihoku and traditional and customary practices which take place on the mountain and in surrounding areas.” She references the planning director’s reports and recommendations, and interview transcripts for the Green proposed development in Seacliff for lot 11-a throughout 2021 and 2022 in the public record. In the Consultant’s view, *Ka Pa ‘akai* rights are personal rights that require a determination of how the identified resources (step 1) will be affected or impaired by the proposed action (step 2), and then determine a feasible action to be taken to protect native Hawaiian traditional and customary rights. The Consultant’s difficulty with referencing other cultural consultation is the uncertainty of whether this proposed action (the construction of the subject property)

- **Fishing**

Fishermen would also use this spot to park their car and walk to go fishing at Makapili Rock. The field road turned and continued westward along the base of Nihoku and met up with the Japanese cemetery road, known today as Mihi Rd. Here one could turn right and travel on that road up to the top of Nihoku. Fishermen going to Makapili Point would use this road as well. (Gary Smith)

Appreciate the reference to the importance of Nihoku for fishing. Not mentioned is its significance along with the lands above Kahili river as significant kilo sights for fishing, yet this activity is referred to frequently in kama'āina testimony as well as for hunting of pigs, not just pheasant. (Dr. Mehana Blaich Vaughan)

- **Kilauea Japanese Cemetery**

Known today as the Kilauea Japanese Cemetery it got its start as a Chinese cemetery circa 1870 and then Japanese Cemetery around 1900. By 1910 some Koreans were also interred as well. Today there is no evidence of Chinese or Korean graves. No other races were buried there until 2000 when a formal nonprofit association was created to assume ownership of the land from C. Brewer. I am currently its president. (Gary Smith)

- **Pailio heiau**

Pailio heiau may have been located above the subject property. The heiau is associated with Chief Halanikikaupua and is associated with Nihoku. There is an oli and hula that references ilio and is associated with Nihoku. (Gary Smith)

- **Kilauea Sugar Plantation Company and Railway**

The Kilauea Sugar Plantation Company has a long and rich history in Kilauea. It was the smallest plantation in the Hawaiian Islands and the most northern plantation on Kauai. The plantation began in 1863 by Mr. Titcomb who bought the Kilauea land from King Kamehameha IV. The Kilauea railroad was the first built on Kauai and the first spike was driven by Lydia Kamaka'eha Princess Regnant (later to become Queen Lili'uokalani) on September 24, 1881. The Kilauea railroad was three miles long. Due to the hauling of cane by trucks which substantially reduced the harvesting costs at Kilauea, the railroad was put out to "permanent pasture" in 1942. However, the rail crossing/bridge/culvert which was built circa 1890 still exists on the subject property. Although the rail bed appears to have been altered by fill and grading, it still sufficiently documents the original path of the railway system. (Gary Smith)

would have an effect on their traditional and customary practices. For this reason, the Consultant has not included the record of the extensive cultural consultation recommended by Dr. Mehana Blaich Vaughan in this Assessment.

- **Nihoku**

Nihoku is referenced in the Hawaiian publication, Ke Kumu Hawaii dated March 30, 1836, in association to Lono's travels on Kauai. The article describes Lono's rule as benevolent and sites extraordinary examples of his kindness and compassion for the people of Kauai. He shares his sad news of the loss of his wife. It is Lono's mana and stature as the highest chief of Hawaii island and his presence in Nihoku that elevates Nihoku to a place of cultural significance.

The name Nihoku appears in several historical sources. One, Nihoku appears in the 3/30/1836 Vol. II, No. 7 nupepa Ke Kumu Hawaii by a contributor known only as "P" under the headline No Lon. Two, it also appears in Ka Mo'olelo no Hiiakaikapoliopole by Hooulumahie pg 19 where Nihoku is credited with its own wind name Aopoomuku. Three, it appears in the 1863 Royal Patent No 2896 Kamehameha IV to Charles Titcomb. Four, Nihoku also appears in Ka mo'olelo...kekahi Ali 'i Kahiko o Kaua 'i one of these chiefs mentioned is Halanikikaupua of Nihoku. Further, the order in which Pele puts Nihoku in her wind chant places it minimally between Kahili and Nāmāhana. This source of information is from the ka poe Kahiko. It is the entire hill itself that is Nihoku. (Gary Smith)

Other sources which are more valuable for this region, written in their original Hawaiian and translated by knowledgeable Hawaiian language speakers include the mo'olelo of A'ahoaka, a chant written for Puapualenalena including the Hala groves of Nihoku, and multiple nupepa articles including Kanikau written by 'ohana of the area published in the 19th century. Pele's wind chant offers another source as does Uncle Gary's place names map based on many of these sources. A few of these are included in the link below, but A'ahoaka and Pele are separate searches. Both are referenced in a document compiled by our community and shared by county in Green contested case hearing materials.

<https://www.dropbox.com/s/0zj6fcx093zwwq4m/Kahili%20archival%20docs%20copy.pdf?dl=0>

Nihoku is considered culturally significant for its association with mo'olelo, kilo (celestial navigation), hula & oli, visual landmark, fishing, hunting, Makahiki trail, and cultural practices. Climbing to the top of Nihoku as a youngster was considered a "rite of passage" for those who grew up in Kilauea. It was a visual landmark that could be seen from a distance, but you knew you were getting close to Kilauea if you could see Nihoku. For people who grew up in the area, the area where Seaclyff Plantation subdivision is situated is considered part of the "cultural landscape" of Nihoku. (Dr. Mehana Blaich Vaughan)

- **Gullies**

Also, gullies which hold water are significant areas, whether or not sites can be found there. Considering the location of the subject parcel, at the foot of Nihoku, above the river and directly across from some of the most significant sites and settlements, it is likely that this aina was a

corridor between the top of the mountain and the river, and thus important. I believe this gully would have contained water, permitted agriculture and also bathing, or preparation for ceremony, either at Nihokū crest or at the Pailio heiau location thought to be nearby. So, despite sites other than the railway bridge not being found, the gully itself, what is planted there, and retaining access through that area seem important. (Dr. Mehana Blaich Vaughan)

B. The extent to which these resources, including traditional and customary Native Hawaiian rights will be affected or impaired by the proposed action

1. Findings from the LRFI regarding impacts of the proposed project on historic properties.

- **Pre-contact features or sites**

The general pattern seen in the previous archaeological work in the vicinity is one that is common to many regions of the Hawaiian Islands where commercial sugar or pineapple agriculture occurred. Remaining Pre-Contact sites are largely found within gullies or other areas of uneven ground, especially near water features. Relatively flat areas, such as tablelands have been subject to considerable ground disturbance for large scale commercial cultivation and Pre-Contact features that may (likely) have been present there have been removed or destroyed.

Based on the findings of this LRFI, only an historic-era cultural resource was identified. Note that portions of the project area were heavily overgrown and more intensive survey during AIS could lead to the identification of additional historical-era resources associated with the railway line. No excavations were conducted during this LRFI and thus, there remains the slight possibility that Pre-Contact cultural resources such as habitation area could be documented in subsurface contexts below the plow zone. The same would hold true for iwi kupuna (ancestor bones): only a slight possibility that such exist on this plateau area. The majority of traditional burials in the area have been documented near the direct coastline and in sandy sediment.²²

- **Railroad bridge culvert and section of the railroad track**

The LRFI identified within the subject property, a railroad bridge culvert and section of railroad track (TS-1) that could be impacted by activity within the subject property and should be preserved and protected.

2. *Specific comments from the Cultural Consultation related to the impacts of the proposed project to the valued resources, including traditional and customary Native Hawaiian rights and resources:*

- **Railroad bridge culvert**

The culverted train crossing (railroad bridge culvert) is not only a post-contact historic feature, but it also has cultural significance because of its association with Princess Lydia Kamaka‘eha

²² LRFI, at page 49.

Princess Regnant (later to become Queen Lili'uokalani). The overgrowth has probably protected it over the years since the railroad stopped operating, but it is in pristine condition and should be protected, preserved, and honored. (Gary Smith and Dr. Mehana Blaich Vaughan)

- **Impacts to the cultural landscape of Nihoku, including the ability to exercise traditional and customary practices associated with Nihoku and Kilauea**

For many of the Kilauea community, especially the Native Hawaiians who have ancestral connections to Kilauea, they feel strongly that the entire Seacliff Plantation subdivision, has and will adversely impact the cultural landscape of Nihoku, including their traditional and customary native Hawaiian rights. They believe that although the proposed project may not individually impact the cultural landscape, it is the collective impact of the entire Seacliff Plantation Subdivision that has adversely impacted their cultural practices, rights, and resources. The Cultural Descendants, especially kupuna, no longer have access to fishing, hunting birds, practicing kilo, visual corridor of Nihoku, climb Nihoku, and access to walk the annual Makahiki trail through Kilauea. (Gary Smith and Dr. Mehana Blaich Vaughan)

III. RECOMMENDED CONDITIONS

- A. Based upon the archival research, previous archaeological studies and relevant comments from the Cultural Consultation, the following feasible action or mitigation measures, should be taken to reasonably protect Native Hawaiian rights and resources, and are recommended conditions to the Planning Department or Planning Commission for consideration:²³**

- **Regarding the protection and preservation of the railroad bridge culvert and section of the railroad track (TS-1).**
 1. Further documentation of the historic property (TS-1) should be prepared to determine its extent, age, function, and significance.
 2. Until the extent of TS-1 is confirmed to not extend onto the subject property through further documentation, the Landowner agrees to coordinate with Cultural Descendants and knowledgeable community members²⁴ on the protection and preservation of the railroad bridge culvert and sections of the railroad track located on the subject property. The following are specific recommendations by the Cultural Descendants:
 - The stone culvert floor at intake should be repaired and the stone head walls be cleared of vegetative growth. Loose rocks should be secured in place and cemented if formerly affixed in that manner;
 - The drain way, at least up to 15 feet on either side of the lowest point where the water naturally flows should remain as it is with the existing buffalo grass

²³ These recommended conditions are in addition to any conditions proposed by the Kaua'i County Planning Department.

²⁴ Including Gary Smith and Dr. Mehana Blaich Vaughan.

as a bulwark against erosion. Ultimately the invasive grass can be kept in check by weed whacking, encroachment of naupaka and the shaded canopy of the new dry land forest;

- Development in this area should contain a large buffer from the gully, control for erosion and runoff, not allow for substantial movement that changes the slope and shape of the terrain and contain sediment so as to avoid filling the railway tunnel further, as is already observable;
- The rail crossing/bridge/culvert built circa 1890, should be placed on the State of Hawai‘i Historic Registry;
- Although the rail bed appears to have been altered by fill and grading, it still sufficiently documents the original path of the railway system. It should also be included in the registry process. Any subsequent work along the bed which reveals the original tracks and elevation should be documented by photos, survey elevations and GPS info, and updated in the registry;
- The Landowner should place a commemorative plaque at the site and inform the Seacliff Plantation Owner's Association of the significance of the structure. The Owner's Association should inform other owners along the rail path to take pride in its presence by preserving any evidence of its path through their properties as well;
- The Seacliff Plantation Subdivision storm drain exit on the property above the crossing should never be altered or extended and that the drainage field remain continually grassed to avoid soil erosion;
- Lastly, the Landowner should make genuine efforts to accommodate up to four (4) annual field trips from school groups or historical organizations and researchers.

- **Regarding the planting of native plants.**

3. The Landowner shall consider the planting of native plants in gulch within the subject property. Native plants can include naupaka, Milo, Kukui, Noni and Kou to provide the basic canopy and ground cover. In addition, but not mandatory are plantings of Ohia and Koa which would be more challenging for the property owner to keep viable. Their inclusion and success would speak volumes to the Landowner's care and concern in the re-establishment of a true native dry land forest.

- **Regarding iwi kupuna.**

4. There remains the slight possibility that pre-Contact cultural resources such as habitation area could be documented in subsurface contexts below the plow zone. The same would hold true for iwi kupuna: only a slight possibility that such exist on this plateau area. The majority of traditional burials in the area have been documented near the direct coastline and in sandy sediment. However, cultural informants have referred to burial sites in the areas, therefore, grading and development in the area should be minimized to avoid inadvertent discovery of iwi kupuna. Although no iwi kupuna have been discovered on the subject property, in the event iwi kupuna are discovered, all work in the immediate area shall cease and the

Landowner shall contact SHPD, and any Cultural Descendants recognized by the Kaua‘i Ni‘ihau Island Burial Council for the area.

- **Regarding “reasonable”²⁵ mitigation impacts to Nihoku as a cultural landscape**

5. Cultural Descendants and members of the Kilauea community have raised concerns that although the Landowner’s proposed project may not individually impact traditional and customary practices, the collective and cumulative impact from the past development and any proposed development, including the proposed project within Seacliff Plantation, has and will adversely impact the traditional and customary practices of Native Hawaiians’ rights and resources associated with the cultural landscape of Nihoku and Kilauea. In the spirit of Article XII, Section 7 that seeks to find balance between preserving and protecting traditional and customary native Hawaiian rights and private landowners’ right to develop, the Landowner agrees to request a meeting with the Seacliff Plantation Homeowner’s Association to explore opportunities to engage, collaborate, and coordinate with the Cultural Descendants and Kilauea community to constructively address their concerns related to the adverse impacts of Seacliff Plantation’s development on traditional and customary practices exercised by native Hawaiians rights and resources. These concerns include reasonable access to the ocean (especially for kupuna) to hunt pigs, fish, gather resources for subsistence and conduct education and ceremonies such as Makahiki, solstice and equinox observances and kilo events.²⁶

²⁵ The court has held that any conditions placed on a permit should be deemed ‘reasonable’ and must bear an essential nexus to the legitimate State interests under Art. XII, section 7, and must be ‘roughly proportional’ to the impact of the proposed action. PASH v. HPC, 79 Haw. 425, 436 (1995).

²⁶ Haiku Plantations Association v. Lono, 618 P.2d 312 (1980). Haiku Plantations subdivisions is a gated community in Kaneohe and residents are members of the Haiku Plantation Association. The Association was required to provide vehicular right-of-way access to the mauka kuleana owner. The kuleana owner appealed the trial court’s determination that his access did not include the right to park. Although the Hawaii Appellate court did not expand the access easement to include parking it did uphold the right-of-way easement for ingress and egress granted pursuant to HRS §7-1.

**ARCHAEOLOGICAL LITERATURE REVIEW AND
FIELD INSPECTION FOR A 6.851-ACRE PARCEL AT
SEACLIFF PLANTATION, KĪLAUEA AHUPUA‘A,
HANAIEI DISTRICT, ISLAND OF KAUA‘I, HAWAI‘I
[TMK: (4) 5-2-004:093]
LOT 20A UNITS 1 & 2**

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September 2022

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TABLE OF CONTENTS

INTRODUCTION	1
ENVIRONMENTAL SETTING	5
LOCATION	5
GEOLOGY AND TOPOGRAPHY.....	5
CLIMATE AND HYDROLOGY	5
SOILS.....	6
VEGETATION	6
TRADITIONAL BACKGROUND	8
TRADITIONAL LAND DIVISIONS	8
PLACE NAMES	9
WAHI PANA.....	9
MO‘OLELO.....	11
LIFESTYLE AND SUBSISTENCE	13
WATER AND MARINE RESOURCES	14
CULTURAL RESOURCES.....	15
HISTORICAL SETTING.....	15
PRE-CONTACT POLITICAL HISTORY	15
EARLY POST-CONTACT HISTORY	17
THE MĀHELE	19
LAND USE IN THE POST-CONTACT PERIOD TO THE PRESENT	22
PREVIOUS ARCHAEOLOGY IN THE PROJECT AREA VICINITY	25
EARLY ARCHAEOLOGICAL STUDIES (THRUM 1907, BENNETT 1931).....	25
KĪLAUEA POINT NATIONAL WILDLIFE REFUGE (KIKUCHI 1987, FREDERICKSEN AND FREDERICKSEN 1989)	30
TOENJES AND HAMMATT 1990.....	31
HAMMATT AND CHIOGIOJI 1992.....	31
HAMMATT ET AL. 1996	31
MCGERTY ET AL. 1997, CARSON ET AL. 1998, TOME AND DEGA 2009	32
BURGETT ET AL. 2000, KAMAI AND HAMMATT 2013	33
IDA AND HAMMATT 1997.....	33
MCGERTY AND SPEAR 1998.....	34
MCGERTY AND SPEAR 2001	34
ELMORE AND KENNEDY 2001.....	34
CLEGHORN 2001, SPEAR 2014, HULEN AND BARNA 2021	34
RECHTMAN ET AL. 2001.....	35
ELMORE AND KENNEDY 2002, BEVAN ET AL. 2004	35
DAGHER 2007	36
SHIDELER ET AL. 2008	36
CLARK AND RECHTMAN 2010, CLARK ET AL. 2011	37
SROAT ET AL. 2010	38
DAGHER AND DEGA 2011	38

HAMMATT AND SHIDELER 2014.....	38
PUTZI ET AL. 2014	38
METHODOLOGY	39
FIELD METHODOLOGY	39
LABORATORY METHODOLOGY AND CURATION	39
RESULTS OF THE FIELD INSPECTION	39
FINDINGS AND RECOMMENDATIONS.....	49
REFERENCES	50
APPENDIX A: NATIVE CLAIMS AND NATIVE AND FOREIGN TESTIMONY FOR THE AHUPUA‘A OF KĀHILI.....	A

LIST OF FIGURES

Figure 1: A portion of a 1998 USGS topographic map (Anahola, HI quadrangle; 1:25,000 scale) showing the location of the project area and the nearby Kilauea Stream.....	2
Figure 2: A portion of a Tax Map Key map showing the location of the project area in the context of zone 5, section 2, plat 4 (Real Estate Data, Inc., 1992).....	3
Figure 3: A Google Earth aerial photograph (imagery date: 12/16/2013) showing the location of the project area	4
Figure 4: Google Earth aerial photograph showing the soil series in the project area and in its vicinity (U. S. Department of Agriculture Natural Resource Conservation Service, and University of California, Davis California Soil Resource Lab 2017).....	7
Figure 5: TMK map (zone 5, section 2, plat 004) with LCA parcels labeled; adapted from Ida and Hammatt 1997	21
Figure 6: A portion of a 1998 USGS topographic map (Honolulu and Kaneohe, HI quadrangles; 1:25,000 scale) showing previous archaeology in the vicinity of the project area.....	26
Figure 7: GPS points for the two features of TS-1 in the context of the project area parcel (purple border)...	40
Figure 8: TS-1 railroad bridge culvert - northeast view	41
Figure 9: TS-1 railroad bridge culvert – east view	42
Figure 10: TS-1 railroad bridge culvert - northeast view	43
Figure 11: TS-1 railroad track - northeast view	43
Figure 12: Tunnel underneath TS-1 railroad bridge - inside culvert view	44
Figure 13: TS-1 railroad bridge culvert - southwest view.....	45
Figure 14: TS-1 Railroad Bridge culvert view to the northwest.....	46
Figure 15: TS-1 railroad bridge culvert - south view	47
Figure 16: TS-1 railroad bridge culvert wall - northwest view	48

LIST OF TABLES

Table 1: Soil types represented on Figure 5.	8
Table 2: Archaeological Studies in Nāmāhana, Kilauea, and Kāhili Ahupua‘a	27
Table 3: TS-1 component archaeological features.....	39

INTRODUCTION

At the request of Ku'iwalu Consulting, Scientific Consultant Services, Inc. (SCS) has conducted this archaeological Literature Review and Field Inspection (LRFI) for a 6.851-acre Parcel (Lot 20A, Units 1 & 2) in Seacliff Plantation, Kīlauea Ahupua'a, Hanalei District, Island of Kaua'i, Hawai'i [tax map key (TMK) parcel: (4) 5-2-004:093]. The project area is shown on a portion of a United States Geological Survey (USGS) topographical map, a Tax Map Key (TMK) map, and a Google aerial photograph (Figures 1 through 3).

The field inspection was conducted on June 1, 2022, by SCS Archaeologist Jason Stolfer, M.A. under the supervision of the Principal Investigator Michael F. Dega, Ph.D, and consisted of a 100% pedestrian survey across the project area.

During survey, a single archaeological site, designated Temporary Site 1 (TS-1) was identified. This site was comprised of a railroad bridge culvert, as well as a nearby section of railroad track. It is likely that TS-1 was part of the railroad built to haul sugar for the plantation operated by the Kilauea Sugar Company, and that other portions of that railroad may still be present in the vicinity.

This report is not intended to meet HAR §13-276 requirements for an Archaeological Inventory Survey (AIS), but aims to identify potential cultural resources in the project area and its vicinity, and to provide in brief the history of relevant archaeological research within Kīlauea Ahupua'a. Thus, the scope of work for the current investigation includes the following two aspects:

- Literature review consisting of a study of previous archaeological reports pertaining to the project area and its vicinity. This research is conducted in order to determine 1) known archaeological and cultural sites that have been recorded in the project area, 2) features, sites, or cultural resources that may be associated with the subject property adjacent to it, if any, to assist in the *Ka Pa'akai* Assessment, and 3) support appropriate recommendations to State Historic Preservation Division (SHPD).
- Field inspection via pedestrian survey of the project area. This inspection is conducted in order (1) to identify any surface archaeological features and (2) to investigate and assess the potential for impact to such sites. This assessment will also identify any sensitive areas that may require further investigation or mitigation before work on the project proceeds.

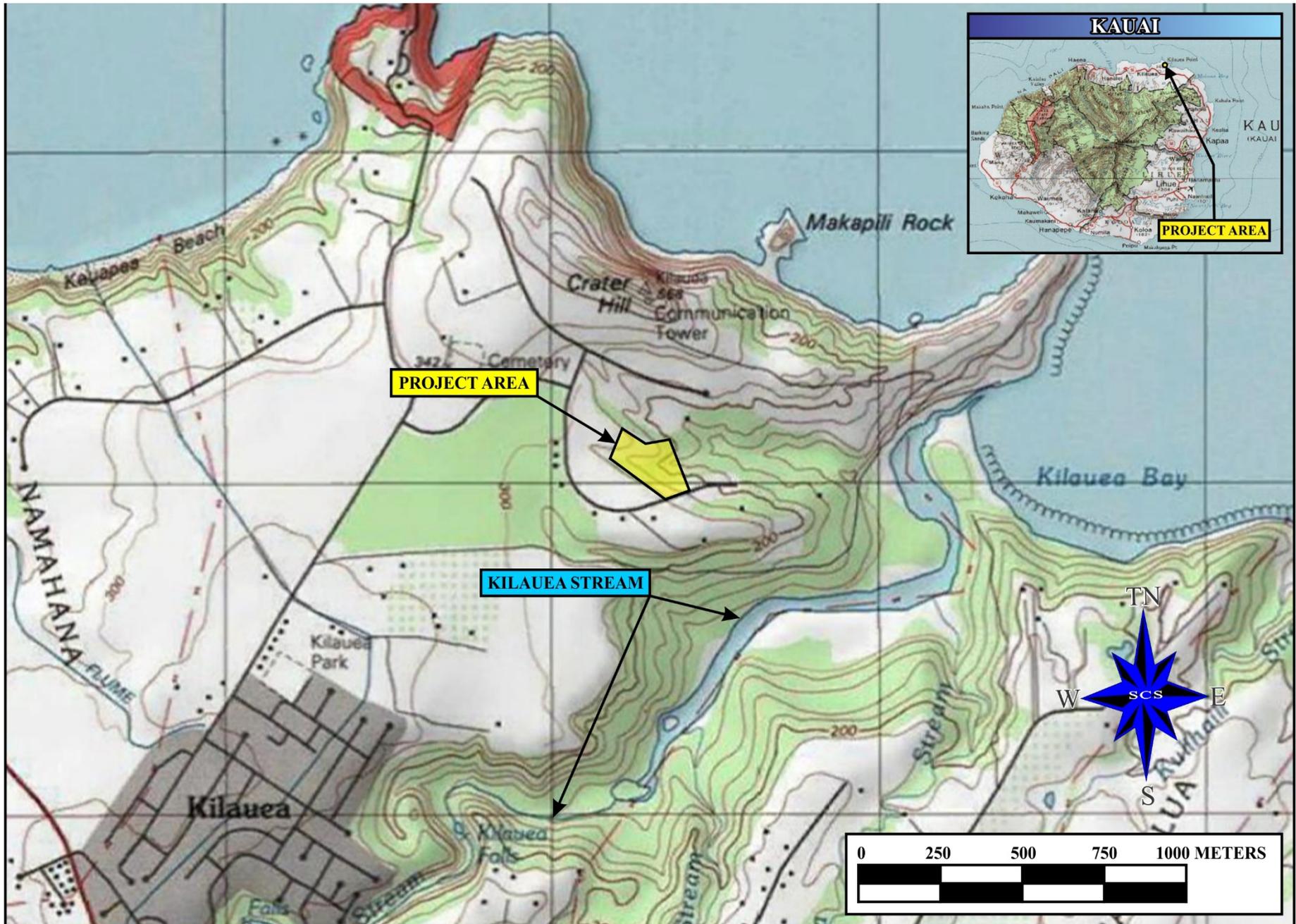


Figure 1: A portion of a 1998 USGS topographic map (Anahola, HI quadrangle; 1:25,000 scale) showing the location of the project area and the nearby Kilauea Stream

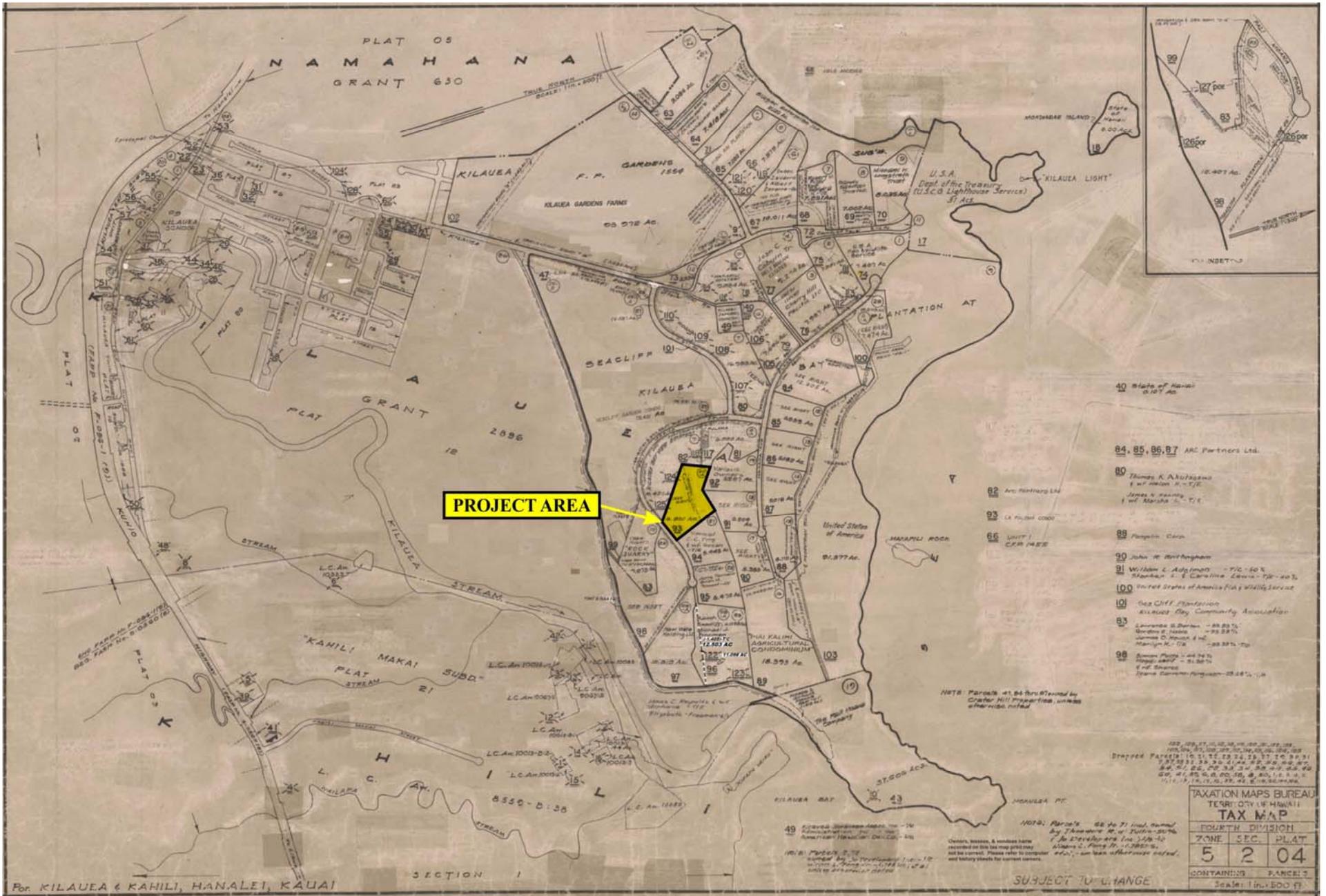




Figure 3: A Google Earth aerial photograph (imagery date: 12/16/2013) showing the location of the project area

ENVIRONMENTAL SETTING

LOCATION

The field inspection occurred within a project area consisting of TMK parcel (4) 5-2-004:093, which encompasses 6.851 acres divided between two Condominium Property Regime (CPR) units, with the northern CPR (Unit 1) comprising 3.216 acres, while the southern (Unit 2) is 3.635 acres. This parcel is Lot 20A of the Seacliff Plantation gated community, and is surrounded on all sides by other lots within Seacliff Plantation. The project area is bordered by Pali Moana Place on the south. Seacliff Plantation is bordered by Kīlauea Point National Wildlife Refuge on the north, while other notable places nearby include Kīlauea Agricultural Park across Pali Moana Place to the west, and the mouth of Kīlauea Stream not far east (the stream is approximately 665 m east from the project area). This location would colloquially be referred to as being located in Kīlauea, after the Census Designated Place (CDP) of Kīlauea, since addresses in the State of Hawai‘i are typically given using CDP in place of city or county.

The project area falls within contemporary Kīlauea Ahupua‘a, which is part of Hanalei District (Hawaii State Office of Planning 2021). Hanalei is one of the five judicial districts dividing Kaua‘i County and occupies most of the north coast of Kaua‘i Island and a rough pie-wedge inland from the coast.

GEOLOGY AND TOPOGRAPHY

Kaua‘i is the oldest and fourth largest of the eight main Hawaiian Islands. It was formed from a single great shield volcano (Macdonald et al. 1983:453). At one time that volcano was the largest caldera in the islands, extending 15 to 20 kilometers across. Mount Wai‘ale‘ale, which forms the central hub of the island, rises 1,598 meters above mean sea level (amsl). Topographically, Kaua‘i is a product of heavy erosion as it features broad, deep valleys and large alluvial plains. Its land area is approximately 1,432 square kilometers.

The elevation of the project area ranges from approximately 60 to 80 m above mean sea level (amsl). It is located in a region of relatively flat terrain between the coast and Kīlauea Stream.

CLIMATE AND HYDROLOGY

The project area is located near the northern shore of Kaua‘i, facing the northeastern trade winds that bring precipitation. However, the near-coastal location means it does not much benefit from orographic lift effects from those trade winds hitting Mount Wai‘ale‘ale. Therefore, the project area still sees moderate rainfall, higher than leeward lowlands but lower than other windward locales further upland.

Mean annual rainfall over the project area is 1460 mm (57.5 in). Rainfall is higher in winter and spring, with a peak of 185 mm (7.3 in) in November, and a low in June of 76 mm (3.0 in) (Giambelluca et al. 2013).

Average annual air temperature in the project area is 22.9 °C (73.2 °F). August is the hottest month with an average of 24.7 °C (76.4 °F), while February is the coolest with an average at 21.1 °C (69.9 °F) (Giambelluca et al. 2014).

Kīlauea Stream to the east is the nearest major water feature (see Figure 1). The stream runs on a roughly southwest to northeast axis, with its mouth emptying into Kīlauea bay. The *Hawaii Stream Assessment* (Hawaii Cooperative Park Service Unit 1990:36) classifies it as a perennial stream. Kīlauea Stream is sometimes also referred to as Kīlauea River.

SOILS

According to Foote et al. (1972: Sheet 25) and the U. S. Department of Agriculture Natural Resource Conservation Service, and University of California, Davis California Soil Resource Lab (2017), the project area topsoils are of the Lihue series, primarily Lihue silty clay, 25 to 40 percent slopes, eroded (LhE2), with a region of Lihue silty clay, 15 to 25 percent slopes (LhD) in the southeast, and a slight sliver of Lihue silty clay, 0 to 8 percent slopes (LhB) on the northwest. Figure 5 is a soil map of the vicinity of the project area, and Table 1 summarizes the soil types.

The Lihue series “consists of well-drained soils on uplands” and are “developed in material weathered from basic igneous rock” (Foote et al. 1972:82). LhB has slow runoff and slight erosion hazard, and is “used for sugarcane, pineapple, pasture, truck crops, orchards, wildlife habitat, and homesites” (Foote et al. 1972:82-83). LhD has medium runoff and moderate erosion hazard, and is “used for sugarcane, pineapple, pasture, wildlife habitat, and woodland” (Foote et al. 1972:83). LhE2 has rapid runoff and severe erosion hazard, and is “used for pasture, woodland, and wildlife habitat,” with “small areas are used for pineapple and sugarcane” (Foote et al. 1972:83).

VEGETATION

According to Sonia and James Juvik (1998:122, 127) before human settlement the native ecosystem of the area would have been ‘lowland dry and mesic forest, woodland, and shrubland.’ Indigenous flora that may persist in this environment include ‘*a‘ali‘i* (hopbush, *Dodonaea viscosa*), ‘*ākia* (*Wikstroemia* sp.), ‘*elama* (*Diospyros hillebrandii*), ‘*kāwelu* (variable lovegrass *Eragrostis variabilis*) ‘*koa* (*Acacia koa*), ‘*ko‘oko‘olau* (*Bidens* sp.) ‘*ohi‘a* (*Metrosideros macropus*), ‘*pili* (black speargrass, *Heteropogon contortus*), ‘*ūlei* (Hawaiian hawthorn *Osteomeles anthyllidifolia*), and ‘*wiliwili* (*Erythrina sandwicensis*).



Figure 4: Google Earth aerial photograph showing the soil series in the project area and in its vicinity (U. S. Department of Agriculture Natural Resource Conservation Service, and University of California, Davis California Soil Resource Lab 2017)

Table 1: Soil types represented on Figure 5.

Abbrev.	Full (Soil) Name	Abbrev.	Full (Soil) Name
BS	Beaches	Mr	Mokuleia fine sandy loam
DL	Dune land	Mta	Mokuleia clay loam, poorly drained variant
IoB	Ioleau silty clay loam, 2 to 6 percent slopes	MZ	Marsh
IoC	Ioleau silty clay loam, 6 to 12 percent slopes	PnC	Puhi silty clay loam, 8 to 15 percent slopes
IoE2	Ioleau silty clay loam, 20 to 30 percent slopes, eroded	PnE	Puhi silty clay loam, 25 to 40 percent slopes
LhB	Lihue silty clay, 0 to 8 percent slopes	QU	Quarry
LhC	Lihue silty clay, 8 to 15 percent slopes	rRO	Rock outcrop
LhD	Lihue silty clay, 15 to 25 percent slopes	rRR	Rough broken land

TRADITIONAL BACKGROUND

Archaeological data indicate that initial settlement of the Hawaiian Islands occurred on the windward shoreline areas around 10th century C.E. (Kirch 2011:22), with populations eventually settling into drier leeward areas at later periods (Kirch 1985:103). In the next few centuries coastal settlement was still dominant, while populations were beginning to expand to upland *kula* (pasture) zones from the 12th to the 16th century C.E. (Kirch 1985:103). Large scale or intensive agricultural endeavors were implemented in association with habitation. Settlers preferred coastal lands, but cultivated taro both near the shores and in the uplands.

TRADITIONAL LAND DIVISIONS

The islands of Hawai‘i were traditionally divided into *moku* (districts) and *ahupua‘a* (subdistricts). On Kauai this occurred during the reign of Manokalanipō (Wichman 1998:102). These divisions were meant to incorporate all of the natural and cultural resources necessary for subsistence, stretching from the ocean to the mountain peaks and providing access to ecosystems at various elevations (Lyons 1875:111). The *moku* were likely consolidated approximately 600 years ago, when the native population had expanded to a point where large political districts could be formed (Lyons 1875:29, Kamakau 1961:54, 55; Moffat and Fitzpatrick 1995:28). Kaua‘i traditionally consisted of six *moku* (Kona, Puna, Ko‘olau, Halele‘a, Napali, and Waimea), each comprised of constituent *ahupua‘a*. The etymology of the word *ahupua‘a* may be traced to the practice of marking the boundary with a heap (*ahu*) of stones surmounted by an image of a pig (*pua‘a*) or of laying a pig on an altar as a tax to the chief (Native Hawaiian Library n.d.).

These ancient land divisions are still commonly used to locate and refer to geographical features of the islands, and the State of Hawai‘i still uses *ahupua‘a* as administrative land divisions, although their modern boundaries may differ from the traditional ones. *Ahupua‘a* were often subdivided into smaller land divisions called *‘ili*, administered by *ali‘i* (chiefs), but unlike the larger units *‘ili* were not meant to encompass a broad selection of resource areas (Lucas 1995:40). The land holding of a *hoa‘āina* (tenant) under an *ali‘i* was called a *kuleana* (right, privilege), a term that eventually came to mean “property” or “land title” as well (Lucas 1995:61).

PLACE NAMES

Kamehameha Schools’ (n.d.) *Aloha ‘Āina Project* indicates that Kīlauea Ahupua‘a (where the project area is located) was traditionally a part of Ko‘olau Moku, and suggest boundaries similar to the modern demarcation. Kīlauea means “spewing” or “mush spreading”, in reference to the movement of lava during volcanic eruptions, and on Kaua‘i may refer to a tuff cone (not to be confused with the active volcano on Hawai‘i island). Ko‘olau means “windward,” appropriate to the *moku*’s location on the north shore of Kaua‘i, facing the prevailing trade winds.

A number of notable geographic features occur in the vicinity of the project area. Kīlauea stream, which flows from the south of the project area to the west before emptying into the ocean, strongly influences not only the natural landscape but human settlement on and use of it. The stream serves as the boundary between Kīlauea Ahupua‘a and Kāhili Ahupua‘a, and (surviving) terraces for traditional-style agriculture often follow its curve. Kāhili means “feather standard” (carried by attendants to herald royalty). The name Mōkōlea (or Mōkōlea Point) refers to a promontory north of the mouth of Kīlauea stream, and means “plover island (*mō* here being short for *moku*)” as it is a key seabird nesting location (albeit not strictly an island). Another important nesting area for seabirds can be found north of Kīlauea Point, on a small island named Moku‘ae‘ae, which John Clark (2003) interprets as simply meaning “fine [i.e. small] island.” The name Nihokū is associated with Crater Hill, but there seems to be little if any historical usage of this name, so it is possible that it is a modern naming convention rather than a traditional Hawaiian name. North of Crater Hill and Kāhili Quarry Beach there is also a tied island called Makapili Rock that is connected to the shore by a tombolo (sandy isthmus). Makapili means “squinting eyes.”

WAHI PANA

There are stories or traditions associated with some of the *wahi pana* (legendary places) in Kīlauea Ahupua‘a. Frederick Wichman (1998:104) relates a story of how the *Menehune* (legendary race of small people), upon discovering Moku‘ae‘ae, “tried to bridge the channel between this island and the mainland with rocks.” However, the Menehune were not able to completed this task due to its length and complexity. William Hyde Rice explains:

The Menehune were a small people, but they were broad and muscular and possess of great strength. Contrary to common belief they were not possessed of any supernatural powers, but it was solely on account of their tremendous strength and energy and their great numbers that they were able to accomplish the wonderful things they did....

One curious thing about the Menehune was that they never worked in daylight, as they never wanted to be seen. It was their rule that any enterprise they undertook had to be finished in a single night. If this could not be done, they never returned to that piece of work. [Rice 1923:34-35]

The Menehune's attempt to build a causeway between Moku'ae'ae and Kīlauea Point failed because "just as they were able to touch bottom with their paddles, daylight interrupted their task" (Wichman 1998:104), and it was therefore abandoned. Although this tale records the Menehune acting of their own accord, others speak of *ali'i* bargaining with the Menehune to apply their prowess to construct great works elsewhere on Kaua'i (Wichman 2003:9-11).

While Menehune are associated with the *makai* (oceanward) portion of Kīlauea's, not only as builders but as fishermen plying the waters offshore Kīlauea from a settlement at Hanalei bay to the west (Wichman 1985:36), the *mauka* (mountainward) portion of the *ahupua'a* is also home to a great work said to have been accomplished by non-human prowess. The celebrated chief Manokalanipō was said to have commanded a supernatural *mo'o* (lizard) to open up the *mauka* part of Kīlauea, where the land was good for planting but water was lacking, for agriculture. Three long irrigation ditches on slopes of Kīlauea *mauka* resembled the claw marks of a *mo'o*, and the ridge above Kīlauea stream was called Kamo'okoa, meaning "brave lizard" (Wichman 1998:102).

Wichman (1998:103) also relates a story that purports to explain the "volcanic cone open to the ocean" resulting in the "long beach unprotected by any reef" at the coast of Kīlauea Ahupua'a, as well as "three huge stones" that once stood atop the cone but "have since been moved, with great difficulty, to make room for sugarcane." These features were attributed to the actions of the volcano goddess Pele:

Pele had come to Kaua'i and fallen in love with Lohi'au, a chief of Hā'ena. She promised to find a home for the two of them, but when ever she struck her staff, she was met by water, for her sister Nā-maka-o-kaha'i, goddess of the sea, was her enemy. Pele caused an eruption here, but it was soon extinguished when the sea goddess broke down the walls of the crater, drowning the fire with the ocean. [Wichman 1998:103]

Already frustrated by her sister's sabotage, Pele is enraged when "three beautiful sisters" named "Kalama, Pua, and Lāhela" laughed at the failure of her efforts, and she promptly turns all three into stone, leaving them in place as an object lesson of why she should not be ridiculed.

MO'OLELO

The *mo'olelo* (*lit.* stories; *also:* oral history) of Kaua'i include many legends and tales of great events, but few that occur in Kīlauea. It is also notable that these tales speak of the fruit-bearing trees of Kīlauea providing food, rather than a cultivated staple crop, which is consistent with the difficulties the terrain in Kīlauea Ahupua'a could present to flat field agriculture (see Lifestyle and Subsistence, below).

Kīlauea Ahupua'a is mentioned as part of the long journey of Hawai'i island chief Lonoikamakahiki to see for himself "the famous trunkless *koa* [*Acacia koa*] tree of Ka-hiki-kolo, a tree from which earlier warriors had fashioned war clubs" (Wichman 2003:67). This journey began with Lonoikamakahiki accompanied by "his favorites, his warriors as companions and also his servants" but this retinue soon abandoned him, and when he "happened to look back to see where the rest of his people were" he found "only a solitary man following him... a stranger with whom he had no acquaintance" (Fornander 1916-17, Vol 4:352). The stranger was Kapa'ihiahilina, a Kaua'i native who had heard that the Hawai'i *ali'i* had been deserted by his followers, and brought "a calabash of *poi* [a Hawaiian dish made from the fermented root of the taro which has been baked and pounded to a paste] with some 'o'opu [general name for fishes included in the families Eleotridae, Gobiidae, and Blennidae] fish" as provisions for Lonoikamakahiki (Wichman 2003:68). Lonoikamakahiki was determined to press on to his destination, and observing that Kapa'ihiahilina scrupulously observed the *kapu* (taboos, prohibitions) that were accorded to royalty, told his faithful companion that they would proceed as equals:

Lonoikamakahiki said to him: "do not hold me in sacredness because you are my own brother. I have nothing dearer than yourself, therefore, where I sleep there will you sleep also. Do not hold me aloof, because all that is good has passed and we are now travelling in the region of the gods." In consequence of this, the king's wishes were observed, and they sat down together.
[Fornander 1916-17, Vol 4:352]

The food that Kapa'ihiahilina had brought ran out, but he foraged *hala* (screwpine. *Pandanus tectorius*) fruit for food, and also braided ferns into garments to replace the *malo* (male's loincloth) made of *tapa* (bark cloth) they wore, which had been damaged by rain. With the aid of this skilled friend, Lonoikamakahiki achieved his wish to see the trunkless *koa* tree, and returned safely home, where he made his new trusted confidante his prime minister.

The meteoric rise of this outsider [Wichman (2003:67) characterizes the Kaua‘i man as a chief himself, but Fornander (1916-17, Vol 4:352) does not give him any rank] led to jealousy from Lonoikamakahiki’s subordinate chiefs, who began plotting against Kapa‘ihiahilina. The plotters eventually convinced Lonoikamakahiki to bar his friend from his presence by spreading rumors that Kapa‘ihiahilina had slept with his wife. Kapa‘ihiahilina then composed a chant reminding Lonoikamakahiki of their friendship, and how they had faced adversity together in their passage through the wilderness of Kīlauea (and other parts of Kaua‘i), a part of which says:

We ate of the ripe pandanus in our
wanderings,
Thus were our days of hunger
appeased, my companion,
My companion of the tall pandanus,
From Kilauea to Kalihi;
The pandanus that had been partly
eaten,
Of Pooku in Hanalei.

*Hala ia mao a ka ua ilaila, e ke hoae,
Hele aku a ai i ka pua pala o ka hala
Hala ia la pololi o ka ua ilaila, e ke
hoa.
He hoa i ka nahele la uhala loloa,
Mai Kilauea a Kalihi la;
O ka hala i aina kepaia,
O Pooku i Hanalei-la.*
[Fornander 1916-17, Vol 4:358-359]

This chant reminded Lonoikamakahiki of his affection for his friend and all that Kapa‘ihiahilina had done for him, and he gave orders that his friend be restored to the prime minister position and the plotters be executed.

Kīlauea Ahupua‘a is also mentioned as the place where an *ali‘i* named Kāhili ruled, but the *mo‘olelo* that speaks of him actually takes place in Kīpū Ahupua‘a, near the Hulē‘ia River and Mount Hā‘upu. Kahili arrives in Kīpū at the court of the *ali‘i nui* (high chief) Hina, famed for her beauty, just in time to become the subject of a rivalry between the Kaua‘i *ali‘i nui* and a rival beauty visiting from O‘ahu, Pele‘ula. Pele‘ula had heard that “Kaua‘i women were the most beautiful” while holding court at her home of Waialua, and proud of the splendor of her court and her own charms, had made up her mind to visit Kaua‘i to settle the question of where the greatest beauty lay (Wichman 1991:110). Hina welcomed the visiting Pele‘ula, and invited all her own subordinate *ali‘i* to present themselves, all the better to show off Kaua‘i. When Kāhili arrived, both Hina and Pele‘ula saw that he was exceptionally handsome, and agreed to make him the prize in a contest between them, initially ten rounds of *kilu* (a throwing game; *also*: the a small gourd or coconut shell, usually cut lengthwise, used to play the game of *kilu*). A game of *kilu* ordinarily featured many players who threw at targets placed in front of other participants to pick a partner for a kiss (or more), comparable in this respect to the contemporary game of spin-the-bottle. So enamoured were the two female *ali‘i nui*, however, that they instead asked Kāhili to be the sole target in a direct *kilu* contest between the two of them.

The handsome young *ali'i* was all too happy to be the center of attention, showing his value as stakes by performing a dance and chant in which he declared “Here are the bones of Ko‘olau, / The ‘ulu, breadfruit tree [*Artocarpus altilis*] and warrior of Kilauea” (Wichman 1991:114). The two women proved to be equally adroit at *kilu*, and instead decided to have a beauty contest, letting Kāhili pick which of them he found to show her charms to best advantage. Both women prepared themselves with their best adornments and present their own dances and chants before the court. Pele‘ula showed off well, but Hina’s performance evoked not only her own beauty but the natural wonder of Kaua‘i. Even her rival had to admit that “the beauties of Kaua‘i are beyond compare” (Wichman 1991:119). To commemorate this, a profile of Hina, called Hinaiuuka, was carved on the face of Hā‘upu.

LIFESTYLE AND SUBSISTENCE

The Pre-Contact (e.g. prior to western contact, which is generally considered to begin with the arrival of Captain James Cook in 1778) Hawaiian economy was largely based on subsistence agriculture and aquaculture, supplemented by collection of natural resources, including marine and avifaunal organisms and undomesticated flora. Patrick Kirch notes that the economy was productive and diverse enough to support “considerable craft specialization... canoe-makers, adz-makers, bird-catchers, wood-carvers and tattooing experts” (Kirch 1985:3). The existence of specialized artisans and artists implied a sophisticated society with a bounty of both surplus food and spare labor to support many cultural practices and non-subsistence activities.

Settlements often concentrated in river valleys most amenable to wet *kalo* (taro, *Colocasia esculenta*) cultivation, incorporating *lo'i* (pond fields, irrigated terraces) and *'auwai* (ditches, irrigation canals). Areas with higher precipitation permitted cultivation of *kō* (sugar cane, *Saccharum officinarum*) and *mai'a* (banana, *Musa* spp.). However, dryland agriculture centering on *'uala* (sweet potato, *Ipomoea batatas*) as the staple crop was also prevalent, especially on drier, leeward areas of the islands, where they were cultivated along with dryland varieties of *kalo*.

Edward and Elizabeth Handy (1972) note that Kīlauea has long been a favorable location for agriculture, and naturally became a population center as well:

On the island of Kauai there were five areas where development of food resources produced concentration of population. One of the best deep-sea fishing areas was along the windward or Napali coast. Adjoining this to the southward were localities where irrigated taro was cultivated extensively in terraces, termed *lo'i*, at Ha'ena, Hanalei, and Kīlauea. [Handy and Handy 1972:269]

Handy and Handy (1972) also note that the tendency for relatively steep terrain in this region, especially upland, inhibited terracing for wet *kalo* agriculture. Agriculture was likely on *kula* (*lit.* plain, pasture, *in context*: dryland suitable for dry cultivation in contrast to wet cultivation in *lo'i*) lands with *'uala* as the favored staple crop.

Kīlauea is watered by a small river whose headwaters take the flow of streams above Kalihiwai as well as those coming down sloping *kula* lands above Kīlauea. This is a peculiar terrain, with terraces along the north side of the river toward its seaward end belonging to Kīlauea and those on the south side to the small *ahupua'a* named Kāhili. A mile upstream is a small terraced area, but beyond this there were no terraces, for the main stream flows in a narrow gulch, and so do other side streams which flow into the Kīlauea River. Hawaiians evidently never developed *lo'i* here because the neighboring *kula* land is too high above the streams for irrigation. This *kula* would have been excellent sweet-potato land. On the whole, Kīlauea, despite a sizable river flowing through it, was a relatively small producer of taro because of the nature of its hinterland. [Handy and Handy 1972:421]

While the immediate vicinity of the project area has, in the current day, been rendered flat enough to be amenable to both agriculture and contemporary residential development, the soil map (see Figure 4 and Table 1) certainly shows that the terrain of this area varies greatly.

WATER AND MARINE RESOURCES

The project area is part of what the State of Hawai'i Division of Aquatic Resources (Parham et al. 2008) categorizes as the Kīlauea, Kaua'i Watershed, which is supplied with water by the perennial Kīlauea Stream, as well as ample rain (see Climate and Hydrology, above).

As Handy and Handy (1972) note (see Lifestyle and Subsistence, above), the (often steep) terrain near the river made it difficult to harness that water for *lo'i* agriculture. However, the ancient irrigation ditches attested by Wichman (1998) (see Wahi Pana, above) are evidence of substantial Pre-Contact agriculture, largely inland and *mauka* of the current project area.

Wichman's (1985:36) account of the Menehune favoring fishing grounds offshore of Kīlauea indicates that marine resources were ample, despite the lack of a reef in the collapsed cinder cone that shapes the beach. Mōkōlea and Moku'ae'ae are now part of a nature reserve (see Cultural Resources, below), but these seabird nesting sites were also a source of food. "In the interview of a local resident, Kwai Chew Lung (Chow) ... he recalls that the Hawaiians used to pick up baby chicks on Moku'ae'ae Rock... he also remembers going fishing there and hunting for eggs to eat" (Fredericksen and Fredericksen 1989:15).

CULTURAL RESOURCES

Thomas Thrum (1907) recorded a single *heiau* named Pailio in Kīlauea Ahupua‘a, as well as another *heiau* named Kipapa in Kāhili Ahupua‘a, but based on later investigations, it would appear that both *heiau* have been destroyed by subsequent activity (see Previous Archaeology, below). There is considerable amount of remnant Pre-Contact Hawaiian terracing near Kīlauea Stream (on private lands), southwest of the current project area, especially where the terrain is steep and uninviting to Post-Contact development.

In some cases (see Previous Archaeology, below), Post-Contact agricultural and habitation features have been found built over or reusing the Pre-Contact terracing. While the native Hawaiian population decreased in the 19th century, immigration brought in new settlement, including many Asian workers employed by the Kilauea Sugar Company plantation. Asian-style rice pond fields that were likely developed from remains of older native Hawaiian *lo‘i* (to the south of the project area Clark and Rechtman 2010, Clark et al. 2011), and the presence of a Japanese Cemetery to the west (Cleghorn 2001, Spear 2014, Hulen and Barna 2021), speak to the historical demographic changes in Kīlauea Ahupua‘a.

In the present day, some cultural resources in Kīlauea Ahupua‘a are accessible through programs for preservation of historic locations and traditional culture. A number of structures have been placed on the National Register of Historic Places (NRHP). This includes several buildings associated with the Kīlauea plantation, as well as the Daniel K. Inouye Kilauea Point Lighthouse located within the Kilauea Point National Wildlife Refuge (KPNWR). A number of Hawaiian cultural organization partner with the KPNWR to provide access to the coastal region for traditional cultural practices (see Land Use in the Post-contact Period to the Present).

HISTORICAL SETTING

PRE-CONTACT POLITICAL HISTORY

Wichman (2003:55) writes that “the genealogy of Kaua‘i *ali‘i* was considered the most ancient and impeccable in all the Hawaiian islands” and that “*Ali‘i* from other islands were eager to introduce the Kaua‘i bloodline into their own” because of the prestige of the noble lineages of Kaua‘i. Yet despite the high regard in which Kaua‘i *ali‘i* were once held, significant portions of their history have been largely inaccessible to western historians due to limited written records and *mo‘olelo* that have been preserved (Abraham Fornander 1880, Vol 2:291). Nonetheless, folklore associated with Kaua‘i provides some context for Kauai’s Pre-Contact history.

Martha Beckwith (1970) chronicles the venerable bloodlines from which most Hawaiian *ali‘i* claimed descent, originating from the god Wākea and his wife Papahānaumoku:

From Ulu and Nana-ulu, sons of Ki'i, twelfth in succession from Wakea and Papa, all high chief families count descent. Hikapoloa, as well as the Waha-nui and Keikipaanea families of early legend, belong to the Nanaulu line. The important Maweke family is, according to Kamakau, the first of that line from whom men today trace ancestry. Their contemporaries are the Paumakua of Oahu, the Kuhiailani of Hawaii, Puna of Kauai, Hua of Maui, and the Kamauaua of Molokai. To the Ulu line belongs the late migration of chiefs introduced by Paoa to the island of Hawaii from whom most families of that island trace descent. Both legends, that of Paoa and that of Maweke, are believed to have bearing upon early colonization of the Hawaiian group...

The coming of Maweke and his sons to the Hawaiian group is dated sometime between the eleventh and twelfth centuries. [Beckwith 1970:352]

Based on his being a contemporary of Māweke, whose reign is estimated to the 11th century C.E., Puna, the progenitor of Kaua'i's prestigious bloodlines, can be dated to roughly that time period. Perhaps the most famous descendants of Puna, as attested by the genealogies compiled by Samuel Kamakau (1992:448), are Kukona and his son Manokalanipō, respective the 7th and 8th *ali'i aimoku* (*lit.* chief who eats the land; *in context:* ruling chief of an island) of Kaua'i. Fornander (1980, Vol 2) highlights Kukona as being particular in his notability – he is a major figure in the legends where his forefathers are largely unmentioned:

Indigenous Kauai legends referring to this period have perished, and up to *Kukona's* time naught but the royal genealogy remains. But the war with the Hawaii chief, and the terrible defeat and capture of the latter, as well as *Kukona's* generous conduct towards the Oahu, Molokai, and Maui chiefs who fell into his hands after the battle, brought Kauai back into the family circle of the other islands, and with an *eclat* and superiority which it maintained to the last of its independence. [Fornander 1980, Vol 2:93]

The battle Fornander (1980, Vol 2:93) refers to also contributed to Kaua'i's prestige. In the early 15th century, Hawaii Island chief Kalaunuiohua launched an invasion of Kaua'i, accompanied by subordinate chiefs from other islands: Kanialuohua (Maui), Kahakuohna (Moloka'i), and Huakapouleilei (O'ahu). According to David Malo (1898:331-332), Kukona was able to win over these subordinate chiefs after defeating this invasion. Wichman (2003:55) characterizes the subsequent peaceful and prosperous times under Kukona's son Manokalanipō as a 'golden age':

Under Mano-ka-lani-pō, more and more land was opened for agriculture, and the population flourished. Warriors became more athletes than soldiers. So peaceful was this Golden Age that Palekaluhi, twin brother of Mano-ka-lani-pō, died in bed of old age. Such a passing was, after so many years of war, something to be noted. [Wichman 2003:55-56]

Although Manokalanipō led his father's warriors to war to capture the enemy chiefs Kukona was famous for winning over, he apparently had few worries about needing to fight during his own reign. Chiefs in this line of descent would subsequently rule Kaua'i for many generations.

EARLY POST-CONTACT HISTORY

Captain James Cook made the first recorded contact with the Hawaiian Islands when he landed at Waimea on the southern coast of Kaua'i on January 20, 1778 (Beaglehole 1967; Daws 1974:1–2). After Cook's HMS *Resolution* and HMS *Discovery*, other ships began frequenting the islands to take on provisions and to partake in the sandalwood industry. Soon after, missionaries, visitors, and entrepreneurs also began arriving. Introduction of new technologies, religions, and political systems would play a major role in the eventual unification of the Hawaiian Islands.

A political consolidation of the Hawaiian Islands was already underway, but was accelerated by contact and the introduction of gunpower weapons. Maui chief Kahekili II (c. 1737–1794) was able to bring not only O'ahu, but also Lāna'i and Moloka'i under his rule in addition to his native Maui, and was engaged in warfare with his Hawai'i Island rival Kalani'ōpu'u at the time of contact. Kahekili also seems to have considered Kaua'i to be within his sphere of influence since his half brother Kaeokulani was married to Kaua'i's ruler, Kamakahelei. While Kahekili came closer to unifying the island chain than any before him, after his death at Waikīkī in 1794, his realm fell to conflicts between his heirs and invasion from his traditional rivals on Hawai'i.

According to Fornander (1880, Vol 2:262) Kahekili's son Kalanikūpule was his official heir, but his uncle Kaeokulani (who co-ruled Kaua'i) was in *de facto* control of the majority of his inheritance after the passing of Kahekili. Kalanikūpule was initially only able to secure direct control over O'ahu: "*Kalanikupule*, at his father's death, was recognised as the Moi [king] of Maui and its dependencies, Lanai, Molokai, and Oahu, yet the previous arrangement between *Kahekili* and *Kaeokulani* remained in force for some time, the latter governing Maui and the adjacent islands, while *Kalanikupule* ruled over Oahu." This was not a stable state of affairs, and nephew and uncle were soon at odds with each other. Kalanikūpule would strike a bargain with Captain William Brown for military assistance in this civil war with his uncle, and the firepower provided by Brown's ships proved decisive, delivering him victory over Kaeokulani.

However, Kalanikūpule subsequently tried to seize Brown's ships and firearms to use against Kamehameha, who was now the ruler of Hawai'i Island, the primary rival center of power. While this betrayal was initially successful, the surviving Western crew were able to retake their ships, and promptly replenished their supplies by selling the weapons Kalanikūpule coveted to his rival (Kamakau 1992:170–171). Having secured an invaluable military advantage, Kamehameha established his presence on Maui with an invasion of Lāhainā in February of 1795, his large fleet of war canoes covering the coast from Launiupoko to Mala (Kamakau 1961:171). Kalanikūpule fled to O'ahu, but Kamehameha's forces pursued, and ended the war with the battle of Nu'uuanu on O'ahu in 1795. This left Kaua'i as the only significant political force in the island chain unconquered, and Edward Joesting (1984:58) notes that at this time it was undergoing its own civil war between two of Kaekulani's sons, Keawe and Kaumuali'i. However, Kamehameha's first invasion attempt in 1796 was foiled by bad weather while his fleet tried to cross the Kaieie Waho Channel between O'ahu and Kaua'i, with many canoes sunk (Joesting 1984:59).

Kamehameha was prevented from swiftly making a second attempt by the need to put down rebellions in his own territory, and while Keawe triumphed in the civil war on Kaua'i, he died soon after, and rulership defaulted back to Kaumuali'i. Kamehameha's second try at an invasion in 1804, gathered "an army consisting of about 7,000 Hawaiian men ... eight cannons. forty swivel guns. and six mortars," to be carried by not only canoes but "twenty-one armed schooners" (Joesting 1984:62). This invasion force was struck by an illness called *ma'i 'ōku'u* (*lit.* squatting sickness; possibly cholera). The loss to illness of many of his most "trusted counselors and chiefs. some of whom had served Kamehameha for twenty years or more" made the invasion impossible (Joesting 1984:62). Joesting (1984:62-63) states that the loss of loyal subordinates was so severe that Kamehameha worried about attempts to overthrow him. This may have motivated Kamehameha to shift towards negotiations, with an eventual agreement reached in 1810 for Kaumuali'i to become his vassal, officially completing the unification of the islands while allowing Kaumuali'i to continue to rule Kaua'i as a (largely autonomous) subordinate chief.

Christian missionaries had arrived on Kaua'i in 1820, some of them accompanying Humehume's return home after his father had earlier sent him to the United States (Mills 2002: 127). According to Robert Schmitt (1973:2-3), the missionaries organized Kaua'i's first censuses, beginning in 1831, and would provide the main source of population data until the first comprehensive government census in 1850. Kauai's population was recorded as 10,977 in 1832, thereafter declining to 8,934 in 1836 and 6,956 in 1850 (Schmitt 1973:8). A more detailed regional enumeration in 1835 counted 88 adults and 29 children for a total of 117 individuals in Kīlauea Ahupua'a (Schmitt 1973:25).

THE MĀHELE

In the 1840s, during the reign of Kāiulani, massive change in land tenure occurred, commonly referred to as the *Māhele* (division) because the *ʻāina* (land) was legally divided between owners (Daws 1974:128). The term may also refer to the idea of the Hawaiian *makaʻāinana* (commoners, residents; *lit.* on the land) being dispossessed of the *ʻāina*; separated from something that was once integral to their identity.

Formalizing land ownership had long been suggested by western advisors to the king and chiefs, but the five-month occupation of the islands by British naval officer George Paulet in 1843 may have added urgency to the issue, since privatization offered the hope that *aliʻi* might retain control over their lands as property even if national sovereignty were lost (Daws 1974:112-117). The Board of Commissioners to Quiet Land Titles (often shortened to “the Land Commission”) was established in 1845 to oversee land titles, and this Land Commission would hear claims during the *Māhele*.

The *Māhele* of 1848 divided Hawaiian lands between the the king, the chiefs, and the *aupuni* (government). The parcels awarded by the Land Commission were called Land Commission Awards (LCAs). Initially, this only established crown lands owned by the king, *aupuni* lands owned by the government and private lands owned by the *aliʻi*, which were often referred to as *konoiki* (*ahupuaʻa* headman) lands after the title given to land agents or stewards that managed *ahupuaʻa* and *ʻili*. The subsequent Kuleana Act of 1850 allowed *makaʻāinana* to file claims for land parcels and house lots on which they had been living or cultivating.

In order to file claims, however, the *makaʻāinana* first had to be aware of the awarding of *kuleana* lands and LCAs, procedures that were largely foreign to them. Many of the *makaʻāinana* could not afford the costs associated with filing. People claiming urban house lots in Honolulu, Hilo, and Lāhainā were required to pay commutation to the government before obtaining a Royal Patent on their awards (Chinen 1961:16). Rural *kuleana* claims required a survey, which could be quite costly, assuming that the services of one of the few surveyors present in the islands at the time could be obtained (Moffat and Fitzpatrick 1995:50). Furthermore, awards of rural *kuleana* lands often only encompassed land under active cultivation, without including other locations necessary for traditional survival strategies, such as previously cultivated but presently fallow lands, or resource gathering areas such as *ʻokipuʻu* (swidden gardens) and stream fisheries (Kameʻeleihiwa 1992:295; Kirch and Sahlins 1992:23, 110). These factors may have contributed to the relatively low number and size of claims, as only 8421 *kuleana* awards were issued, totaling only 28,658 acres (Moffat and Fitzpatrick 1995:50).

Some contemporary scholars have disputed the notion that the Māhele was the chief instrument of dispossession of the *kanaka maoli* (native Hawaiians). Beamer and Tong (2016:130) point out that although the claims system appears to have awarded the *maka ‘āinana* little, records show that they were able to purchase an estimated 167,290 acres of land between 1850 and 1893, often *aupuni* lands sold to them at relatively low cost. Beamer and Tong (2016:136) also argue that many *ali ‘i* leased or sold land to *hui* (associations) of *kanaka*, keeping some semblance of the former *ali ‘i - hoā ‘āina* relationship. In these ways, land not awarded to *maka ‘āinana* during the Māhele were still made available to them. Nonetheless, once foreigners were allowed to acquire land through the Alien Land Ownership Act of 1850, they quickly came to control much of it. By the end of the 19th century “white men owned four acres of land for every one owned by a native” (Daws 1975:125).

The *Indices of Awards Made by the Board of Commissioners to Quiet Land Titles in the Hawaiian Islands* (Land Commission 1929) do not list any LCAs in Kīlauea Ahupua‘a. Lloyd Soehren’s (2002-2019) *Hawaiian Place Names* database notes that Kīlauea Ahupua‘a was “returned by Kekauonohi, retained by *aupuni* at the Mahele.” The Office of Hawaiian Affairs (n.d.) *Kipuka Online Database* suggests a slightly more complex transaction in which Kīlauea Ahupua‘a was “relinquished by Mikahela Kekauonohi to Kamehemeha III” and “relinquished by Kamehemeha III to Government.” It should be noted that LCA No. 8559-B, the claim for the crown lands of Hawaii in the name of William C. Lunalilo, includes Kāhili and Kalihiwai Ahupua‘a, the *ahupua ‘a* east and west of Kīlauea Ahupua‘a, whereas Nāmāhana Ahupua‘a to the northwest was claimed by Keahikuni Kekau‘ōnohi (also called Mikahela or Miriam) as part of LCA No. 11216. It makes geographic sense that the King, Kekau‘ōnohi, or both once had a claim on Kīlauea Ahupua‘a given their claims on adjacent *ahupua ‘a*.

It is clear, however, that Kīlauea Ahupua‘a was declared *aupuni* lands during the Māhele, and that no *kuleana* awards are listed for the *ahupua ‘a*. The *Indices* (Land Commission 1929) do list seven other LCAs in Kāhili Ahupua‘a and 28 other LCA in Kalihiwai Ahupua‘a aside from those of the Crown (LCA No. 8559-B; Lunalilo); these are presumably *kuleana* claims. The seven *kuleana* claims in Kāhili Ahupua‘a are the *kuleana* awards closest to the current project area, and cluster on the east bank of Kīlauea stream, mostly near the stream mouth. LCA No. 10333, claimed by Naaimeneo on behalf of her deceased husband Oopu, and confirmed by Royal Patent Grant No. 3370 in 1856, sits on the present border with Kīlauea Ahupua‘a (Waihona ‘Āina N. d.). The other six LCAs in Kāhili Ahupua‘a are LCA Numbers 9067, 10013, 10013-B, 10015, 10082, and 10083. These seven awards are shown on Figure 5, and records for Kāhili Ahupua‘a LCA (excerpted from Ida and Hammatt 1997) are also included in Appendix A.

Māhele records indicated that there were other claims made for lands in Kīlauea Ahupua‘a during the Māhele, but none were awarded. This includes a claim (No. 6529) by Holokukini, on the basis that he served as *konohiki* for Kīlauea Ahupua‘a under Aaron Keali‘iahonui (husband of Kekau‘ōnohi), and six other claims, all of which were rejected or abandoned. Among the *kuleana* claims was one (No. 9217) that gained some later notoriety for (the claimant) Kealawa‘a complaining that “I returned my claim to land of Kilauea to the Konohiki for the land is being filled with cattle & I have no desire to combat them [*sic*]” (Waihona ‘Āina 2005).

LAND USE IN THE POST-CONTACT PERIOD TO THE PRESENT

Whaling declined in the late 19th century, and commercial agriculture and ranching came to the forefront of Hawaiian economy, in part because the Māhele had allowed the consolidation of lands into vast and now privately owned plantations and ranches. The Reciprocity Treaty of 1875 permitting duty-free trade of agricultural products between the Kingdom of Hawai‘i and the United States turned Hawaiian sugar into an immensely profitable commodity. Kuykendall (1967, Vol 3:46-48) credited the sugar industry with cementing commercial agriculture as the economic mainstay of the Hawaiian economy for the rest of the century and beyond.

Commercial sugar production on Kaua‘i began as early as 1835, when the firm Ladd and Company, affiliated with Christian missionaries, secured the first land lease in Hawaiian history, for 980 acres at Koloa for a sugar plantation (Joesting 1984:131). Joesting (1984:147) notes that “optimistic reports of progress in cultivating sugarcane at Koloa plantation raised interest in other agricultural crops,” such as a venture by Sherman Peck and Charles Titcomb to try to raise silkworms. While this plan failed, Titcomb would eventually go on to purchase the whole of Kīlauea Ahupua‘a in 1863 and start a plantation there. Jesse Condé and Gerald Best (1983:150) indicate the plantation was sold to Captain John Ross and Edward P. Adams in 1877.

According to the Kaua‘i Historical Society (N.d.), the plantation was subsequently incorporated as a company, Kilauea Sugar Company Limited, in 1880 and would remain in operation for over 90 years:

It became known as Kilauea Sugar Plantation Company after purchase by a California corporation in April 1899. Headquarters were in San Francisco, California, with local operations in Kīlauea, Kaua‘i, Hawai‘i. In 1955, C. Brewer and Company Ltd., the company’s Honolulu sugar factor (agent), purchased a majority of stock, and the company reverted to its original name, Kilauea Sugar Company Limited. All sugar operations were terminated on December 31, 1971. [Kaua‘i Historical Society N.d.:2]

William Dorrance and Francis Morgan (2000:32) note that “Kilauea Sugar Company was among the smallest in the Islands,” which, given that they indicate it reached “5,000 acres” suggests the economy of scale required for success during the heyday of commercial sugar in Hawai‘i. Carol Wilcox (1996:84) explains that the plantation “had to make the best of marginal conditions. Plagued by rocky terrain, small size, few water resources, and its remote, windward location, it never enjoyed the success of other, better situated plantations.” While the plantation was not as massive as some of its peers, it boasted its own railroad to haul sugar to the mill. The Kauai Plantation Railway (2008) website recorded that railroads on Kaua‘i island used unusually narrow gauge, but the railroad at Kilauea, the first on the island of Kaua‘i, was even narrower:

In late 1881 management of the Kilauea Plantation ordered rail equipment from the John Fowler Co, of Leeds, England. Rail, spikes, a locomotive and cars arrived on Kauai late in 1881 and by the end of 1882 the line was in operation. Track gauge was 2' and the tiny (likely 6 tons) 0-4-2 Fowler locomotive could move up to ten loaded cars of cut cane in one train.

While the original line at Kilauea Plantation remained at 2' gauge to the end, all the other lines on Kauai chose 30" gauge, the only Island in the Hawaiian Chain to run with this gauge.

Condé and Best (1983:150) report that “rail equipment for Kilauea was duly shipped to Kauai and by a curious twist was not only the first railroad built on that island, but it had its first spike driven by an [*sic*] Hawaiian Princess” on September 24, 1881. This dignitary was Princess Regnant Lydia Kamaka‘eha, who would in a decade be crowned as Queen Lili‘uokalani, the last monarch of the Kingdom of Hawai‘i. She was visiting Kaua‘i, and had not been aware of the railroad, but upon arriving at Kīlauea Village, she was greeted by employees of the Plantation:

...she was informed that at that moment the first piece of track for the first railway on Kauai was about to be laid, and it would be considered an honor if Her Royal Highness would drive the first spike, which she kindly consented to do. Proceeding to the plantation... a large crowd had collected, the Royal Standard having been hoisted on a temporary staff. Her Royal Highness... took great interest in all these particulars, and expressed her great satisfaction at being able to be present at the laying of the first railway on the Island of Kauai, and trusted it might soon gird the whole island and so develop its resources and promote the industry of its people. [Pacific Commercial Advertiser 1881 *in* Condé and Best 1983:151]

By November of 1881, the railroad at the Kilauea Sugar Company plantation was operational, with three miles of track laid. Both sugar operations and the railroad grew over the next several decades, and “in 1910, Kilauea’s railroad system was comprised of 12 ½ miles of permanent track, 5 miles of portable track, 200 cane cars, six sugar cars and four locomotives” (Soboleski 2017).

Much of the infrastructure built up for the Kīlauea plantation did not survive to the current day. The railroad was phased out first: “Kahili Landing and its railroad track was abandoned beginning in 1928, when sugar from the mill was trucked to Ahukini Landing instead, and by the spring of 1942, trucks had replaced railroad locomotives and cane cars as the means of hauling sugarcane to the Kilauea mill” (Soboleski 2017). Wilcox (1996) states that the land continued to see some agricultural use after sugar operations ended in 1971, but there was no upkeep of the plantation irrigation system, and parts of it were destroyed while others were simply abandoned:

.. no mechanism was established to secure the easements or maintain the old system. Over the years the connections between reservoirs and delivery systems were destroyed by roads, pasture, development, neglect, and intent. The Hanalei Ditch was abandoned, its flumes and siphon no longer operable. The connection from the Kalihiwai Reservoir to Stone Dam was destroyed, as was that between Puu Ka Ele and Morita reservoirs. Puu Ka Ele and Koloko reservoirs' delivery systems were gone. C. Brewer established Kīlauea Irrigation Company, a public utility, to administer the surviving sections that service its guava farming operation. By the mid-1990s, some reservoirs stood alone with little utilitarian purpose. [Wilcox 1996:85]

Several structures associated with the Kīlauea plantation were nominated for the NRHP. This includes the Kilauea Plantation Head Bookkeeper's House, Kilauea Plantation Head Luna's House, Kilauea Plantation Manager's House, Kilauea School, and Kilauea Plantation Stone Buildings. According to the Historic Hawai‘i Foundation (2021), these NRHP properties are located in Kīlauea Town, southwest of the current project area. Aside from plantation buildings, only one other NRHP site occurs within Kīlauea Ahupua‘a: the Daniel K. Inouye Kilauea Point Lighthouse (see Previous Archaeology, below), a set of stone structures located within the present-day Kilauea Point National Wildlife Refuge (KPNWR).

KPNWR occupies Kīlauea Point peninsula, Mōkōlea Point peninsula, Crater Hill, and the coastline north of the project area. The wildlife refuge was established in 1985 and expanded to its current extent in 1988. KPNWR is administered by the US Fish and Wild Life Service (FWS), and is open to visits (and thus serves as a tourist attraction).

The FWS maintains the refuge to protect and preserve not only flora and fauna, especially migratory seabirds and the endangered *nēnē* (Hawaiian goose, *Nesochen sandvicensis*), but also the Daniel K. Inouye Kīlauea Point Lighthouse and Light Station. The FWS also partners with local native Hawaiian organizations such as Kaipuwai Foundation and Na Kia‘i Nihoku, that “perform Native Hawaiian cultural practices and ceremonies at Nihoku summit on the summer and winter solstice and the spring and fall equinox” (Fish and Wild Life Service N.d.). Additionally, portions of KPNWR are open to fishing, and “native Hawaiian fishing at Kīlauea (East) Cove” is recognized as a cultural practice (Fish and Wild Life Service N.d.).

With the closure of the sugar plantation, some farming continued in Kīlauea, but much like the rest of Hawai‘i, the economy shifted toward tourism as the primary industry. The construction of Lihue Airport in 1948-49 had made Kaua‘i accessible for tourism, and “by 1955, the... airport was served by Hawaiian Airlines, Ltd. and Trans-Pacific Airlines, Ltd. on a scheduled basis” (Hawaii Department of Transportation 2022). Based on 2010 census data, the Cedar Lake Ventures, Inc. (2018) *Statistical Atlas* reports that 19.6% “of the civilian employed population aged 16 and older” on Kaua‘i is in the hospitality industry, making it the island’s largest sector of employment.

PREVIOUS ARCHAEOLOGY IN THE PROJECT AREA VICINITY

There has been a significant amount of previous archaeological work in the region, although much of it has concentrated on the coast, or on the far bank of Kīlauea Stream (in Kāhili Ahupua‘a). Conversely, Kīlauea Town to the southwest and the Seacliff Plantation community where the project area is located do not seem to have seen much investigation. Figure 8 shows the location of archaeological work in the vicinity of the project area. Note that several project areas adjoin or overlap Kīlauea Stream (also called Kīlauea River; see Figure 1 above for its location). These previous studies are also summarized on Table 2. While some early work was conducted (based heavily on recording oral accounts and checking for the features described in those accounts), the bulk of archaeological work in the State of Hawai‘i occurred after the U.S. Congress passed the National Historic Preservation Act (NHPA) in 1966 (Kawelu 2015:30).

EARLY ARCHAEOLOGICAL STUDIES (THRUM 1907, BENNETT 1931)

Thomas Thrum (1907) made an early attempt to list all of the *heiau* (*lit.* places of worship; *in context*: temples for native Hawaiian religious practice) in the Hawaiian Islands. The *heiau* he noted on Kaua‘i are described in an article in the 1907 edition of his *Hawaiian Annual* almanac. Thrum (1907:42) recorded one *heiau* named Pailio in Kīlauea Ahupua‘a, as well as one *heiau* named Kipapa in Kāhili Ahupua‘a.

Table 2: Archaeological Studies in Nāmāhana, Kīlauea, and Kāhili Ahupua‘a

Author(s), Date	Research Type	Location	Results
Thrum 1907	Almanac Listing	Kaua‘i Island	Kipapa Heiau (SIHP Site 50-30-04-00132); Pailio Heiau (SIHP Site 50-30-04-00133)
Bennett 1931	Island-wide Survey	Kaua‘i Island	Kipapa Heiau (SIHP Site 50-30-04-00132); Pailio Heiau (SIHP Site 50-30-04-00133)
Kikuchi 1987	Archaeological Survey	Kīlauea Point [TMK: (4) 5-2-004:017]	Kīlauea Point Lighthouse (SIHP Site 50-30-04-00300)
Toenjes & Hammatt 1990	Archaeological Survey	[TMK: (4) 5-2-004:102]	no findings.
Hammatt & Chiogioji 1992	Archaeological Inventory Survey	[TMK: (4) 5-2-017:028]	no findings.
Hammatt et al. 1996	Archaeological Inventory Survey	[TMK: (4) 5-2-021:005]	agricultural complex (SIHP Site 50-30-04-00625); charcoal kiln, enclosure (SIHP Site 50-30-04-00998); cattle fence (SIHP Site 50-30-04-00999)
McGerty et al. 1997	Archaeological Inventory Survey	[TMK: (4) 5-2-021:007]	permanent habitation complex (SIHP Site 50-30-04-00974); garden area & burials (SIHP Site 50-30-04-00975); habitation site (SIHP Site 50-30-04-00976); agricultural area (SIHP Site 50-30-04-00977)
Carson et al. 1998	Data Recovery	[TMK: (4) 5-2-021:007]	confirmed assessment of Site -00974; no cultural material found at Site -00975
Ida & Hammatt 1997	Archaeological Inventory Survey	[TMK: (4) 5-1-005:052 & 102 through 113]	irrigation flume (SIHP Site 50-30-04-00640); Pu‘uka‘ele Ditch remnants (SIHP Site 50-30-04-00641); partially buried culvert (SIHP Site 50-30-04-00642); swale tunnel (SIHP Site 50-30-04-00643)
McGerty & Spear 1998	Archaeological Inventory Survey	[TMK: (4) 5-2-011:033]	agricultural complex (SIHP Site 50-30-04-00625)

Author(s), Date	Research Type	Location	Results
Burgett et al. 2000	Archaeological Inventory Survey	[TMK: (4) 5-2-021:006]	dryland agricultural site (SIHP Site 50-30-04-00632); unmarked grave (SIHP Site 50-30-04-00633); floodplain soil deposits (SIHP Site 50-30-04-01993)
McGerty and Spear 2001	Archaeological Inventory Survey	[TMK: (4) 5-2-021:005]	additional features of Sites -00625, -00998, and -00999
Elmore and Kennedy 2001	Archaeological Inventory Survey	[TMK: (4) 5-1-005:005]	agricultural complex (SIHP Site 50-30-04-00515)
Cleghorn 2001	Archaeological Monitoring	Kilauea Japanese Cemetery [TMK: (4) 5-2-004:049 por.] telecommunications installation	no findings.
Rechtman et al. 2001	Archaeological Inventory Survey	Hālaulani Property [TMK: (4) 5-2-002:011]	dam on Kīlauea Stream (SIHP Site 50-30-03-02060); dam on Pu‘uka‘ele Steam (SIHP Site 50-30-03-02062); ditch and flume remnants (SIHP Site 50-30-03-02063); irrigation tunnel and flume supports (SIHP Site 50-30-03-02064)
Elmore and Kennedy 2002	Archaeological Inventory Survey	[TMK: (4) 5-1-005:016]	additional features of Site -00515; unable to locate Kipapa Heiau (Site -00132)
Bevan et. al 2004	Archaeological Monitoring	[TMK: (4) 5-1-005:016]	additional feature of Site -00515
Dagher 2007	Field Inspection	[TMK: (4) 5-2-023:027 & 028]	no findings.
Shideler et al. 2008	Archaeological Inventory Survey	Kilauea Falls Ranch [TMK: (4) 5-2-012:035 por.]	agricultural terrace (SIHP Site 50-30-03-00579); agricultural complex (SIHP Site 50-30-03-00580); retaining wall, ramp, and trail (SIHP Site 50-30-03-00581); terraces (SIHP Site 50-30-03-00582); terraces (SIHP Site 50-30-03-00583)
Tome & Dega 2009	Archaeological Inventory Survey	[TMK: (4) 5-2-021:007]	agricultural site (SIHP Site 50-30-04-05028)

Author(s), Date	Research Type	Location	Results
Clark and Rechtman 2010	Archaeological Inventory Survey	[TMK: (4) 5-2-012:019]	terraced (rice) fields, SIHP Site 50-30-04-02011); Post-Contact (concrete) structure (SIHP Site 50-30-04-02011)
Sroat et al. 2010	Archaeological Inventory Survey	Kīlauea Agricultural Park [TMK (4) 5-2- 004:099]	Post-Contact habitation site (SIHP Site 50-30-03-02123); plantation-era structures (SIHP Site 50-30-03-02124); Pre-Contact agricultural terrace (SIHP Site 50-30-03-02125); plantation-era drainage (SIHP Site 50-30-03-02126)
Dagher and Dega 2011	Archaeological Monitoring	Kīlauea River Cleanup	insolated finds of human skeletal remains and Post-Contact artifacts; no sites identified
Clark et al. 2011	Archaeological Inventory Survey	[TMK: (4) 5-2-21:041, CPR 0001; (4) 5-2- 12:035 por.; and (4) 5-2- 021:004 por.]	expanded scope of Site -02011 to 4.5 acres; additional features of Site -02012
Kamai & Hammatt 2013	After-the-fact Assessment	[TMK: (4) 5-2-021:006]	no further damage found to Sites -00632 & -00633
Hammatt & Shideler 2014	Field Inspection	[TMK: (4) 5-2-005:036]	no findings.
Spear 2014	Field Inspection	telecommunications facility [TMK: (4) 5-2- 004:049 por.]	no findings.
Putzi et al. 2014	Archaeological Inventory Survey	LDS meetinghouse [TMK: (4) 5-2-019:004]	buried fire pit (SIHP Site 50-30-04-02237)
Hulen and Barna 2021	Archaeological Monitoring	telecommunications facility [TMK: (4) 5-2- 004:049 por.]	no findings.

Wendell Bennett's (1931) *Archaeology of Kauai* attempted to provide a comprehensive overview of archaeological sites on Kaua'i, based on both prior records and his own fieldwork in 1928-29; his site numbers were later converted to State Inventory of Historic Places (SIHP) site numbers. Bennett (1931:133) assigned Pailio Heiau as Site 133 (later SIHP Site Number 50-30-04-00133), and Kipapa Heiau as Site 132 (later SIHP Site No. 50-30-04-00132). He was not able to locate Pailio, noting "nothing remains of the heiau to-day," but attested that Kipapa stood "on the end of the first bluff east of Kilauea River in Kāhili" (Bennett 1931:133).

KĪLAUEA POINT NATIONAL WILDLIFE REFUGE (KIKUCHI 1987, FREDERICKSEN AND FREDERICKSEN 1989)

William Kikuchi (1987) conducted an archaeological survey of Kīlauea Point [TMK: (4) 5-2-004:017] (as well as several other nearby coastal regions) on behalf of the U.S. Fish and Wildlife Service, which was planning to construct a visitor center for the wildlife refuge. The survey, which included excavation of a test pit to gauge the likelihood of cultural layers being present, found "no sign of any [Pre-Contact] use of the Kilauea Point National Wildlife Refuge area by native Hawaiians" (Kikuchi 1987:3, 11). However, Kikuchi (1987:1) did note that the lighthouse on Kīlauea Point "was placed on the Hawai'i Register of Historic Sites on November 4, 1974, and on the National Register of Historic Sites on October 18, 1979" and "was officially given the State of Hawai'i site number 50-30-04-300 [*sic*, SIHP Site No. 50-30-04-00300]."

In 1988, Xamanek Researches, LLC (XRL) (Fredericksen and Fredericksen 1989) conducted an Archaeological Inventory Survey (AIS) of the approximately 96-acre Crater Hill parcel [TMK: (4) 5-2-004:103] and the approx. 38-acre Mōkōlea Point parcel [TMK: (4) 5-2-004:043], which had just been added to the Kīlauea Point National Wildlife Refuge (previously only approx. 33 acres). Fredericksen and Fredericksen (1989:20) conducted a pedestrian survey of the project area, reporting that "there were no features or artifacts discovered during the course of the survey from either the Hawaiian [Pre-Contact] or [Post-Contact] periods." However, they documented a number of (non-Hawaiian) historic properties that would latter be designated as sites: a radar installation site (later assigned SIHP Site No. 50-30-04-01810) a sugar-loading complex at Mōkōlea Point (SIHP Site No. 50-30-04-01811) the Kīlauea plantation railroad (the railroad build by the Kilauea Sugar Company connecting their plantation to the dock; SIHP Site No. 50-30-04-01812), and a old quarry on Mōkōlea Point (SIHP Site No. 50-30-04-01813).

TOENJES AND HAMMATT 1990

In 1990, Cultural Surveys Hawai‘i, Inc. (CSH) (Toenjes and Hammatt 1990), conducted an archaeological survey on 94 acres of former Kilauea Sugar Plantation Company land north of Kīlauea town [TMK: (4) 5-2-004:102]. The area was “checked for coral, lithic and bone and shell midden remains” that might indicate a cultural deposit, but although “two loci suggesting previous traditional Hawaiian activity were found and tested for subsurface deposits” Toenjes and Hammatt (1990:14) found only a few coral and basalt fragments. Toenjes and Hammatt (1990:1) reported “no structural remains or in situ deposits of historic or archaeological significance.”

HAMMATT AND CHIOGIOJI 1992

In 1992, CSH (Hammatt and Chiogioji 1992) conducted an AIS on a 15.17-acre property for a proposed subdivision on the border of Nāmāhana and Kalihiwai Ahupua‘a [TMK: (4) 5-2-017:028]. In addition to the main project area, a proposed alternative well site “150 to 200 feet south of the south property boundary along the slope of a gully was surveyed” Hammatt and Chiogioji (1992:21). Hammatt and Chiogioji (1992:21) conducted a pedestrian survey of the parcel and excavated a test trench where “a thin scatter of marine sand, coral pebbles and fossil marine shell was observed.” The subsurface testing found only the plow zone from former commercial agricultural use of the parcel, and the marine material was interpreted as originating from the “liming of fields with quarried marine sand deposits” during sugarcane cultivation, and no archaeological sites were reported (Hammatt and Chiogioji 1992:21).

HAMMATT ET AL. 1996

In 1995, CSH (Hammatt et al. 1996) conducted an AIS on an approx. 5-acre portion of a 24.87-acre property parcel [TMK: (4) 5-2-021:005] where a single-family residence was proposed. Pedestrian survey and excavation of two test units and five shovel probes identified three archaeological sites. SIHP Site No. 50-30-04-00625 was an agricultural complex consisting of seven surface features (walls and terraces) and a subsurface cultural layer. Charcoal from the cultural layer was sent for radiocarbon analysis and returned a date range of 1410-1650 Common Era (C.E.) at 2-sigma (95% confidence). This charcoal was interpreted as originating from burning for land clearing purposes, suggesting that agricultural development in this region began around 1400 C.E. SIHP Site No. 50-30-04-00998 consisted of a charcoal kiln, as well as an adjacent terrace area and enclosure that may have been associated with the kiln. SIHP Site No. 50-30-04-00999 consist of two stacked boulder walls that were interpreted as a cattle fence. Hammatt et al. (1996) reported that “the owner of the property, has designed the access road and the location of his single-family residence to minimize impact to the archaeological sites,” allowing preservation through avoidance.

McGERTY ET AL. 1997, CARSON ET AL. 1998, TOME AND DEGA 2009

In 1996, SCS (McGerty et al. 1997) conducted an AIS on a portion of a 26.19-acre parcel on the east bank of Kīlauea stream [TMK: (4) 5-2-021:007]. The survey focused on the flat bench (also called a ‘natural terrace’) portion of the property parcel, above the floodplain. Pedestrian survey and excavation of seven trenches and nine test units identified four archaeological sites with a total of 47 component features. SIHP Site No. 50-30-04-00974 was comprised of ten terraces, ten (rock) alignments, an enclosure, a wall, two fire pits, a hearth, and an *imu* (underground oven). Two charcoal samples from the subsurface features were sent for radiocarbon analysis and both returned date ranges (at 2-sigma) from the late 1600s C.E. to the mid 1900s C.E. Site -00974 was interpreted as a Late Pre-contact to Early Post-Contact permanent habitation complex. SIHP Site No. 50-30-04-00975 was located west of Site -00974, and was comprised of two small enclosures, four alignments, two terraces, a wall, and a pathway. The Site -00975 enclosures were interpreted as possible burials, and the rest of the site as a small garden area. SIHP Site No. 50-30-04-00976 was located south of Site -00975, and was comprised of three enclosures, three terraces, and a possible posthole. A charcoal sample from the posthole was sent for radiocarbon analysis and returned a date range (at 2-sigma) from 1400 C.E. to 1520 C.E. or 1600 C.E. to 1620 C.E. Site -00976 was interpreted as a Pre-Contact habitation site. SIHP Site No. 50-30-04-00977 was located to the west of Site -00975, and consisted of two terraces and an alignment. Site -00977 was interpreted as a probable extension of the agricultural area of Site -00975, separated due to 20th century grading and grubbing in the area between them. As the location of Site -00974 was planned for development, McGerty et al. (1997) recommended that data recovery be conducted.

Subsequently, SCS (Carson et al. 1998) conducted data recovery at SIHP Site Numbers 50-30-04-00974 and 50-30-04-00975. Subsurface testing consisted of four backhoe and one manually excavated trench. Testing at Site -00974 yielded total of 111 artifacts interpreted as traditional Hawaiian, compared to only five artifacts that were distinctly Post-Contact. No cultural material was recovered from Site -00975. Radiocarbon analysis of a charcoal sample produced results consistent with previous samples from Site -00974: late 17th century to 20th century. The results of this data recovery support the prior assessment of Site -00974 (Carson et al. 1998).

In 2009, SCS (Tome and Dega 2009) conducted an AIS on a 6.8-acre portion of the floodplain at TMK: (4) 5-2-021:007. Pedestrian survey and excavation of 12 trenches identified an agricultural site, consisting of a rock walled *lo ‘i* and a rock alignment, that was designated as SIHP Site No. 50-30-04-05028. Tome and Dega (2009) postulated that this agricultural site was associated with the habitation sites previous identified by McGerty et al. (1997).

BURGETT ET AL. 2000, KAMAI AND HAMMATT 2013

In 1997, SCS (Burgett et al. 2000) conducted an AIS on a 27.56-acre parcel on the east bank of Kīlauea stream [TMK: (4) 5-2-021:006], immediately southwest of the parcel where a previous survey had been conducted by McGerty et al. (1997). Unlike the previous survey, this AIS included the floodplain as well as the leveled, upper portion (bench and slope) of the parcel. Pedestrian survey and subsurface testing via four trenches and four shovel probes identified three archaeological sites. SIHP Site No. 50-30-04-00632 consisted of 56 features on the slopes, including terraces, alignments, walls, and upright stones, as well as bedrock boulder overhangs and cupboards. Site -00632 was interpreted as a dryland, or *kula*, agricultural site. SIHP Site No. 50-30-04-00633 was an unmarked grave that a local informant, Kaipō Chandler, pointed out as the resting place of his uncle Thomas Goodman, who died in 1929. Site -00633 was located behind a house that Chandler helped build in the 1960s. SIHP Site No. 50-30-04-01993 consisted of soil deposits identified in the floodplain, which were associated with the construction of berms for *lo'i*. Sites -00632 and -01993 were assessed as representing Late Pre-contact to Early Post-Contact agricultural activity.

In 2012, CSH (Kamai and Hammatt 2013) conducted an after-the-fact assessment on a portion of the parcel [TMK: (4) 5-2-021:006] surveyed by Burgett et al. (2000), and submitted a letter report. The assessment was intended “to determine whether violations that occurred in November and December 2007 had an adverse effect to historic properties” Kamai and Hammatt (2013:2). This letter notes an earlier report regarding a previous violation in 2003, but that earlier report (McMahon 2003) was not on file at the State Historic Preservation Division (SHPD). Kamai and Hammatt (2013) concluded that there was no further damage to Sites -00632 and -00633 since 2003. As the earlier report is called a “damage assessment report,” it is presumed that these sites were indeed adversely affected during the 2003 violations (Kamai and Hammatt 2013:3).

IDA AND HAMMATT 1997

In 1997, CSH (Ida and Hammatt 1997) conducted an AIS on an 89-acre parcel for a proposed subdivision in Kāhili Ahupua‘a [then TMK: (4) 5-1-005:052; now TMK: (4) 5-1-005:052 & 102 through 113]. Full pedestrian survey and limited subsurface testing did not find any archaeological sites associated with native Hawaiian cultural activity, but did identify four historic properties associated with the former Kilauea Sugar Plantation Company, all which consisted of water control features. SIHP Site No. 50-30-04-00640 was an irrigation flume across Wailapa stream gulch. SIHP Site No. 50-30-04-00641 consisted of an irrigation ditch and tunnel that were interpreted as remnants of Pu‘uka‘ele Ditch. SIHP Site No. 50-30-04-00642 was a partially buried culvert near a swale connected to Kulihā‘ili stream gulch. SIHP Site No. 50-30-04-00643 was a 16m long tunnel at the end of a swale of the same gulch (Ida and Hammatt 1997).

McGERTY AND SPEAR 1998

In 1997, SCS (McGerty and Spear 1998) conducted an AIS on a proposed driveway corridor and associated buffer zones in Kīlauea town [TMK: (4) 5-2-011:033]. A single archaeological site was identified during survey. SIHP Site No. 50-30-04-00644 consisted of five terraces and a rock alignment, and was assessed as a Post-Contact agricultural complex (McGerty and Spear 1998).

McGERTY AND SPEAR 2001

In 2000, SCS conducted an AIS (McGerty and Spear 2001) on a parcel at TMK: (4) 5-2-021:004, on the east bank of Kīlauea stream. This is the parcel immediately south of the one [TMK: (4) 5-2-021:005] where Hammatt et al. (1996) previously conducted an AIS. McGerty and Spear (2001:1) indicate a project area of approx. 6 acres, yet the acreage of TMK: (4) 5-2-021:004 is considerably greater, so the survey likely only encompassed a portion of the parcel, probably in the northwest. McGerty and Spear (2001:19) state that “site numbers previously established by the 1996 study... were applied to similar features within the present project area,” effectively extending the sites previously identified by Hammatt et al. (1996) in neighboring parcel 004 into parcel 005. Therefore, a second charcoal kiln was added to SIHP Site No. 50-30-04-00998, while a section of pavement was added to SIHP Site No. 50-30-04-00999. Almost 50 new features, mostly terraces, were added to the SIHP Site No. 50-30-04-00625 agricultural complex. A charcoal sample from Site -00625 returned a radiocarbon result of 1440 C.E. to 1690 C.E., consistent with the previous analysis (McGerty and Spear 2001).

ELMORE AND KENNEDY 2001

In 2000-01, Archaeological Consultants of the Pacific, Inc. (ACP), conducted an AIS (Elmore and Kennedy 2001) on a 5.69-acre parcel [TMK: (4) 5-1-005:005] on the east bank of Kīlauea stream for the proposed construction of a private residence. Pedestrian survey and six shovel probes identified a single archaeological site. SIHP Site No. 50-30-04-00515 consisted of seven terraces along Wailapa stream, an *auwai* (ditch), the remnant foundation of a Post-Contact house, a stone alignment, and two stone mounds. Radiocarbon analysis of a sample from the terraces returned a date range (at 2-sigma) of 1660 C.E. to 1904 C.E. While no clear evidence of Pre-Contact activity at Site -00515 was found, Elmore and Kennedy (2001) considered it possible that initial agricultural use began Pre-Contact.

CLEGHORN 2001, SPEAR 2014, HULEN AND BARNA 2021

In 2001, Pacific Legacy, Inc. conducted archaeological monitoring (Cleghorn 2001) for the installation of a telecommunications compound at Kilauea Japanese Cemetery [TMK: (4) 5-2-004:049 por.]. No cultural materials were identified during monitoring.

In 2014, SCS conducted a field survey (Spear 2014) of the same project area [TMK: (4) 5-2-004:049 por.] for the proposed Kilauea Relo AT&T Facility upgrade. No historic properties were identified, but Spear (2014) recommended archaeological monitoring due to the possibility of unmarked burials in the vicinity.

In 2021, ASM Affiliates, Inc. conducted archaeological monitoring (Hulen and Barna 2021) during upgrades to the telecommunications station (Verizon KILAUEA_GRAVEYARD A) at [TMK: (4) 5-2-004:049 por.], the same facility previously monitored by Cleghorn (2001). No historic properties were identified during monitoring (Hulen and Barna 2021).

RECHTMAN ET AL. 2001

In 2001, Rechtman Consulting, LLC (RCL) conducted an AIS (Rechtman et al. 2001) of the Hālaulani Property, an approx. 1400-acre area inland of Kīlauea town [then TMK: (4) 5-2-002:011 & 012; now TMK: (4) 5-2-002:011]. Because of the very large project area, it was agreed in consultation with SHPD “that the margins of the streams and the Kamo‘okoa Ridge area would be surveyed at 100% intensive coverage and that the former and current sugarcane and orchard areas would be surveyed less intensively” (Rechtman et al. 2001:27). The survey identified four Post-Contact historic properties. SIHP Site No. 50-30-03-02060 was a basalt and concrete dam on Kīlauea Stream. Rechtman et al. (2001:30) noted that the site had been documented by an archaeological study in Kalihiwai Ahupua‘a to the east, as “majority of the ancillary dam features exist off property on the western bank,” but re-recorded it since it was partially within the project area. Based on a newspaper article about the opening of the reservoir formed by the dam, it was dated to 1881. SIHP Site No. 50-30-03-02062 was a dam complex on Pu‘uka‘ele Steam, also of basalt and concrete construction. SIHP Site No. 50-30-03-02063 was a water control complex extending from Pu‘uka‘ele Steam, consisting of a ditch and the remnant portions and scattered pieces of a flume. SIHP Site No. 50-30-03-02064 consist of an irrigation tunnel and two flume supports on Kīlauea Stream, approx. 150 m downstream from Site -02060. (Rechtman et al. 2001)

ELMORE AND KENNEDY 2002, BEVAN ET AL. 2004

In 2002, ACP conducted an AIS (Elmore and Kennedy 2002) of most of the property parcel at TMK: (4) 5-1-005:016 (excluding the northernmost thumb - shaped portion at the very mouth of Kīlauea stream). Elmore and Kennedy (2002:6) noted that “current TMK maps... depict Kipapa Heiau at the base of the bluff east of Kilauea River,” which would put Kipapa Heiau (SIHP Site No. 50-30-04-00132) within the project area. However, no sign of the heiau was found during the survey, and Elmore and Kennedy (2002:6) pointed out that the location indicated on the map was “a sandy location at which it is unlikely a commercially operated sugar cane field would be found.”

The survey did identify nineteen more features of SIHP Site No. 50-30-04-00515, which had previously been documented on an adjacent parcel [TMK: (4) 5-1-005:005] previously surveyed by Elmore and Kennedy (2001). A new sample sent for radiocarbon analysis from Site -00515 returned a date range (at 2-sigma) of 1475 C.E. to 1652 C.E., entirely predating the result from the earlier study. This may have been due to the sample being taken from a greater depth and different soil layer. Additionally, two new archaeological sites were identified. SIHP Site No. 50-30-04-01035 consisted of a terrace and a subsurface pit, and was interpreted as a habitation site. A sample from site -01035 returned a radiocarbon date range (at 2-sigma) of 1262 C.E. to 1523 C.E., which (if accurate) would make the site “one of the earliest occupations along the northern coast of Kauai” (Elmore and Kennedy 2002:44). SIHP Site No. 50-30-04-01036 was a stone wall that likely functioned as a boundary marker.

In 2003, ACP conducted archaeological monitoring (Bevan et. al 2004) at the same parcel [TMK: (4) 5-1-005:016] that had previously been surveyed by Elmore and Kennedy (2002). Monitoring was conducted during installation of utility lines and grading for driveways, and subsurface construction activities were kept a minimum of 25 ft away from any features if the previously identified Sites -00515 and -01035. During monitoring, “an isolated, previously unrecorded, non-irrigated terrace feature located on a steep slope below Rock Quarry Road” was identified, and due to similar context, added as yet another feature of SIHP Site No. 50-30-04-00515, but no sites were newly identified (Bevan et. al 2004:20).

DAGHER 2007

In 2007, SCS (Dagher 2007) conducted a Field Inspection (FI) of an approx. seven-acre property at the western end of Kilauea Town, on the border with Nāmāhana Ahupua‘a [TMK: (4) 5-2-023:027 & 028]. No historic properties were identified during the FI (Dagher 2007).

SHIDELER ET AL. 2008

In 2007, CSH conducted an AIS (Shideler et al. 2008) on a 74-acres portion of the Kilauea Falls Ranch property [TMK: (4) 5-2-012:035 por.], including land proposed for a private residence, an agroforestry area, and a region of tablelands suitable for development located near Kīlauea town. The survey identified a total of 62 archaeologically significant features comprising five sites within the agroforestry area. SIHP Site No. 50-30-04-00579 was an isolated agricultural terrace near the eastern end of the project area. SIHP Site No. 50-30-04-00580 was a complex consisting of 53 agricultural terraces and 2 enclosures that may have served as field shelters (temporary habitation), located west of Site -00579 and northwest of a bend in Kīlauea stream.

SIHP Site No. 50-30-04-00581 consisted of a retaining wall with a connected rock alignment that served as a ramp, a smaller second stone wall nearby, and a rock faced trail parallel to the retaining wall. Site -00581 is located near -00580, but is interpreted as a Post-Contact permanent habitation site, likely associated with Japanese occupants based on recovered artifacts. SIHP Site No. 50-30-04-00582 was a pair of terraces separate from, and located south of, the dense cluster of terraces comprising Site -00579. SIHP Site No. 50-30-04-00583 was another pair of terraces, located even further south from Site -00582. Unlike the *lo'i* terraces on the east bank of Kīlauea stream identified in other studies, the agricultural terraces identified by Shideler et al. (2008) are distant from the stream rather than on the floodplain. Shideler et al. (2008:69) note that “the vagaries of hurricane, tsunami, and flood may have made such planting down by the stream precarious” and that “cultivation upon the steep slope may have been more secure.”

CLARK AND RECHTMAN 2010, CLARK ET AL. 2011

In 2009, RCL conducted an AIS (Clark and Rechtman 2010) of a 0.735-acre parcel along the southeast bank of Kīlauea stream [TMK: (4) 5-2-012:019]. This parcel is the same land awarded to Naiamaneō with LCA No. 10333 (see The Māhele, above); although this is the only nearby example, it is not unknown for contemporary TMK parcels to match the boundaries of a plot awarded in the Māhele. Pedestrian survey and excavation of three trenches identified two historic properties. SIHP Site No. 50-30-04-02011 consists of nine terraced fields, which collectively occupying the entire parcel. These were interpreted as pond fields for Post-Contact rice cultivation, built on previous *lo'i* and *kula* land. SIHP Site No. 50-30-04-02012 is a partially-intact concrete slab along the southeast border of the parcel, interpreted as the foundation of a Post-Contact structure, likely a shed or other outbuilding (Clark and Rechtman 2010).

In 2011, RCL conducted an AIS (Clark et al. 2011) of a roughly 21-acre area comprising portions of several properties [TMK: (4) 5-2-21:041, CPR 0001; (4) 5-2-12:035 por.; and (4) 5-2-021:004 por.] surrounding the parcel previously surveyed by Clark and Rechtman 2010). Although Clark et al. (2011) identified new features, these were added as components of the two archaeological sites previously identified by Clark and Rechtman (2010). SIHP Site No. 50-30-04-02011 was expanded to cover approx. 4.5 acres and include a total of 69 discrete Post-Contact rice fields. In addition to the previously documented concrete slab, SIHP Site No. 50-30-04-02012 was revised to include a water retention pond, a cobble-lined trench for a water wheel, and four concrete basins with stone and concrete troughs (Clark et al. 2011).

SROAT ET AL. 2010

In 2010, CSH conducted an AIS (Sroat et al. 2010) of 75 acres at TMK (4) 5-2-004:099 for the planned Kīlauea Agricultural Park, located to the east of Pali Moana Place. The survey identified four archaeological sites, all of which were located in the southeast portion of the project area, where the terrain is more sloped and uneven. SIHP Site No. 50-30-04-02123 was a terrace interpreted as a Post-Contact habitation site. SIHP Site No. 50-30-04-02124 consisted of two concrete wall structures, one linear and one U-shaped, of uncertain function but assessed as likely associated with plantation-era infrastructure. SIHP Site No. 50-30-04-02125 was a terrace interpreted as a likely Pre-Contact agricultural site. SIHP Site No. 50-30-04-02126 was a machine-excavated ditch that was interpreted as a drainage feature for flood control. Sroat et al. (2010) concluded that Sites -02124 and -02126 were associated with Kilauea Sugar Company.

DAGHER AND DEGA 2011

In 2010-11, SCS conducted archaeological monitoring (Dagher and Dega 2011) of the Kīlauea River cleanup in 2010 to 2011, which was a follow up to the 2006 emergency cleanup after the Ka Loko Dam breach. During monitoring two separate isolated finds of human skeletal elements occurred, and a few Post-Contact artifacts were recovered, but no archaeological sites were identified (Dagher and Dega 2011).

HAMMATT AND SHIDELER 2014

In 2010, CSH conducted an FI (Hammatt and Shideler 2014) of 23.8-acre coastal parcel in Nāmāhana Ahupua‘a [TMK: (4) 5-2-005:036]. The FI did not identify any historic properties, but Hammatt and Shideler (2014) noted that the presence of *kalo* plants growing on steep *pali* (cliff, steep hill or slope) likely originated from shoots washed over the cliff from pre-contact *kalo* cultivation efforts, suggesting that pre-contact agriculture occurred nearby.

PUTZI ET AL. 2014

In 2014, SCS conducted an AIS (Putzi et al. 2014) on a approx. 5-acre parcel in Nāmāhana Ahupua‘a owned by The Church of Jesus Christ of Latter-Day Saints [TMK: (4) 5-2-019:004], ahead of the proposed construction of a meetinghouse for the Church. Full pedestrian survey and excavation of ten trenches identified a single archaeological site. SIHP Site No. 50-30-04-02237 consisted of a fire pit located 0.48 m below the surface. Charcoal recovered from Site -02237 was sent for radiocarbon analysis and returned a date range (at 2-sigma) of 1440 C.E. to 1530 C.E., establishing that the fire pit was Pre-Contact. Putzi et al. (2014) noted that although the parcel had once been owned by the Kīlauea Sugar Company, subsurface testing found no sign of a plow zone, suggesting it had been used for pasture instead of planting.

METHODOLOGY

FIELD METHODOLOGY

The archaeological field inspection was conducted on June 1, 2022, by SCS Archaeologist Jason Stolfer, M.A., under the supervision of primary investigator Michael F. Dega, Ph.D. Field methods consisted of a 100% pedestrian survey of the project area and documentation via digital photographs taken at various locations throughout the project area. Sites located were assigned a Temporary Site Number (TS#) as necessary, pending the assignment of a SIHP Site Number.

LABORATORY METHODOLOGY AND CURATION

Since no artifacts were identified during this project, laboratory work consisted of cataloging field notes and photographs. All field notes and digital photographs have been curated and are now stored at the SCS laboratory in Honolulu. All measurements were recorded in the metric system.

RESULTS OF THE FIELD INSPECTION

One archaeological site was identified during the field inspection on June 1. The site was designated as Temporary Site 1 (TS-1), and was comprised of two features: a railroad bridge culvert (Feature 1), and remnant section of railroad track (Feature 2) found nearby. The on-site archaeologist determined that the site was Post-Contact in nature recorded it with photographs and two GPS points taken at the center points of its two features. Figure 7 shows these GPS points superimposed on a client-provided construction map.

Feature 1 (Fe. 1; railroad bridge culvert) was built using basalt and mortar construction and is in good overall condition, protected by thick vegetation that surrounds it. Both ends of the culvert tunnel are exposed and the interior is passable. Feature 2 (Fe. 2; piece of old railroad track) was discovered approximately 12 m east of Fe. 1, by using a metal detector to allow detection through the dense vegetation. Figures 8 through 16 are photographs of the features, and Table 3 summarizes the location and condition of the features.

Table 3: TS-1 component archaeological features

Feature Number	UTM (converted) Zone 4Q	Lat Long +4 meters	Description	Status
Fe. 1	459316 E, 2457039 N	22°13'05.8 N, 159°23'41.1 W	culvert of a Plantation-era railroad bridge	Good condition
Fe. 2	459339 E, 2457048 N	22°13'06.0 N, 159°23'40.3 W	section of railroad track	Poor condition (rusted)

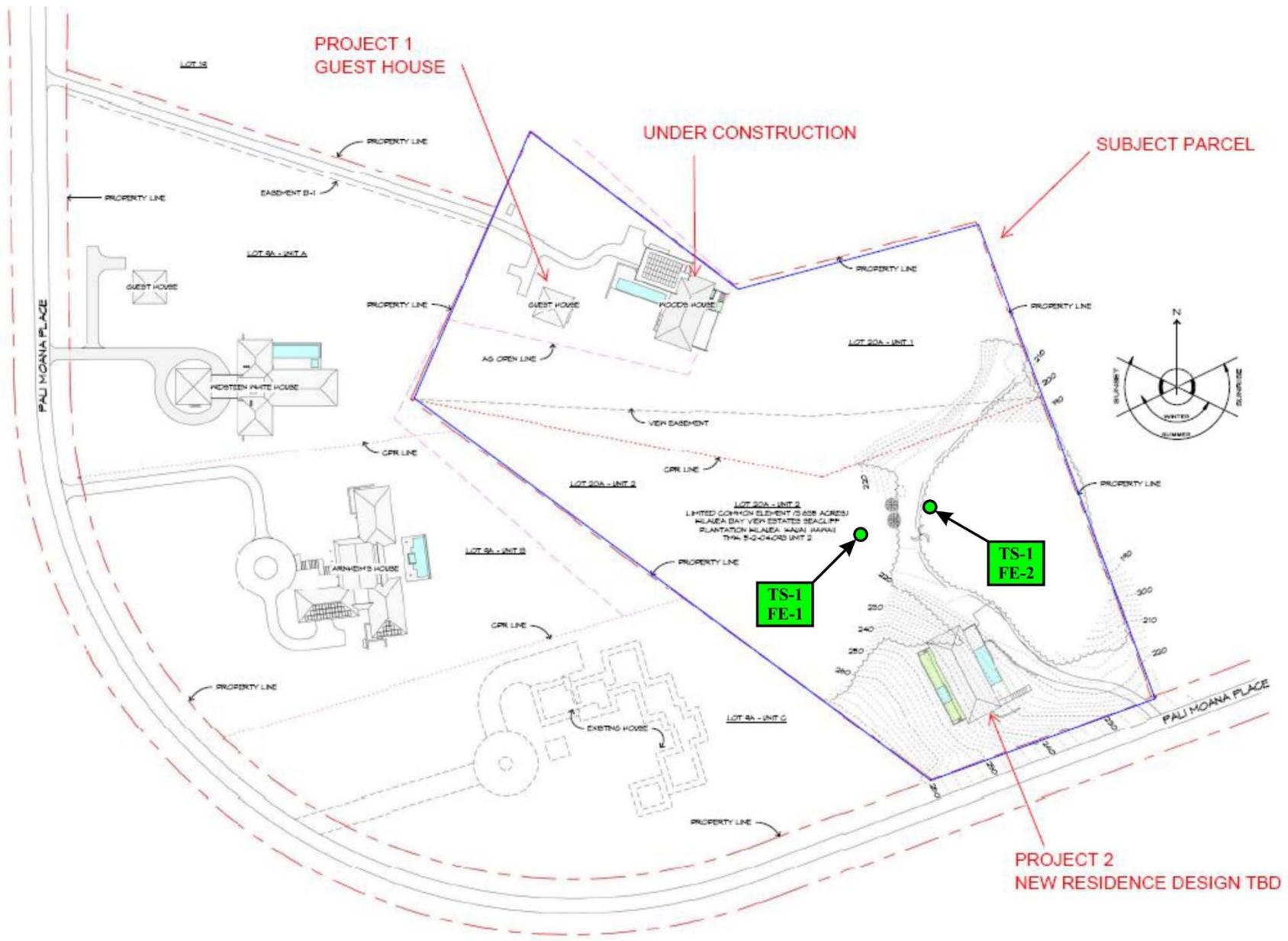


Figure 7: GPS points for the two features of TS-1 in the context of the project area parcel (purple border).

The southwest end (northeast view, Figures 8 through 10) of the railroad bridge culvert (Fe. 1) has an exposed face that measures 6.2 m long and varies in height from .4 m to 1.5 m.

The railroad track (Fe. 2) is difficult to see amidst the vegetation, but is highlighted by the meter bar and tape measure in Figure 10. The railroad track was partially exposed and appears to extend further east (away from the project area) beneath the dense vegetation.

The interior of the railroad bridge culvert (Fe. 1) consists of a horseshoe shaped tunnel with dimensions of 1.45 m high, 1.5 m wide, and 23 m long (Figure 11). Like the exterior faces, the interior exhibits basalt and mortar construction.

The northeast end (southwest view, Figures 12 through 15) of the culvert (Fe. 1) has guards on either side of the tunnel opening and extends out 1.3 m from the hillside that it is built into. The total height of the bridge culvert on this end is 2.3 m. The exposed portion of the culvert face extends sideways at least 2.5 m to northwest, but the stonework appears to extend further beneath the foliage. The culvert face is more visible from the south and extends sideways 10.5 m to the southeast before disappearing into the dense vegetation.



Figure 8: TS-1 railroad bridge culvert - northeast view



Figure 9: TS-1 railroad bridge culvert – east view



Figure 10: TS-1 railroad bridge culvert - northeast view



Figure 11: TS-1 railroad track - northeast view



Figure 12: Tunnel underneath TS-1 railroad bridge - inside culvert view



Figure 13: TS-1 railroad bridge culvert - southwest view



Figure 14: TS-1 Railroad Bridge culvert view to the northwest



Figure 15: TS-1 railroad bridge culvert - south view



Figure 16: TS-1 railroad bridge culvert wall - northwest view

This culvert and railroad bridge were likely constructed as a part of the railroad built to haul sugar for the plantation operated by the Kilauea Sugar Company (see Land Use in the Post-contact Period to the Present). A portion of this railroad located at Mōkōlea Point (approx. 800 m west northwest of the project area) was previously recorded as SIHP Site No. 50-30-04-01812. This railroad was the first to be built on the Island of Kaua‘i, and famously had its first spike ceremonially driven in by Princess Regnant Lydia Kamaka‘eha, (later Queen Lili‘uokalani) in 1881 (see Land Use in the Post-contact Period to the Present, above).

FINDINGS AND RECOMMENDATIONS

The general pattern seen in the previous archaeological work in the vicinity (see Previous Archaeology, above) is one that is common to many regions of the Hawaiian Islands where commercial sugar or pineapple agriculture occurred. Remaining Pre-Contact sites are largely found within gullies or other areas of uneven ground, especially near water features. Relatively flat areas, such as tablelands have been subject to considerable ground disturbance for large scale commercial cultivation and Pre-Contact features that may (likely) have been present there have been removed or destroyed.

The sole feature of archaeological significance (TS-1) identified during the present field inspection consisted of a railroad bridge culvert and section of railroad track. These features were constructed as a part of the railroad built to haul sugar for the plantation operated by the Kilauea Sugar Company. Another portion of that railroad located to the northwest was previously designated as SIHP Site No. 50-30-04-01812. It is possible that other remnant portions of the railroad may be found under the foliage or even under the ground surface of other nearby property parcels. Since a historic property has been identified within the project area, SCS recommends that an AIS be conducted to fully document the historic property (TS-1) and determine its extent, age, function, and significance. SHPD should be consulted both in regards to the AIS and to determine if TS-1 should receive a new SIHP number or be recorded as an additional portion of Site -01812.

Based on the findings of this LRFI, only an historic-era cultural resource was identified. Note that portions of the project area were heavily overgrown and more intensive survey during AIS could lead to the identification of additional historical-era resources associated with the railway line. No excavations were conducted during this LRFI and thus, there remains the slight possibility that pre-Contact cultural resources such as habitation area could be documented in subsurface contexts below the plow zone. The same would hold true for *iwi kupuna* (ancestor bones): only a slight possibility that such exist on this plateau area. The majority of traditional burials in the area have been documented near the direct coastline and in sandy sediment.

REFERENCES

- Beamer, Kamanamaikalani and N. Wahine‘aipoahu Tong
2016 “The Māhele Did What? Native Interest Remains” in *Hūlili: Multidisciplinary Research on Hawaiian Well-Being*, Vol. 10. Shawn Kana‘iaupuni, Brandon Ledward, and RaeDeen Keahiolalo, eds. 125-145. Kamehameha Publishing, Honolulu.
- Bevan, Amy S., Michelle Elmore and Joseph Kennedy
2004 *An Archaeological Monitoring Report for a Property Located at TMK: 5-1-05: 16 (Por.) in Kāhili Ahupua‘a, Hanalei District, Island of Kaua‘i*. Archaeological Consultants of the Pacific, Hale‘iwa, Hawai‘i.
- Burgett, Berdena, Leann McGerty, and Robert L. Spear
2000 *An Archaeological Inventory Survey of an Approximately 27.56 Acre Parcel, Kāhili Ahupua‘a, Ko‘olau District, Island of Kaua‘i, Hawai‘i [TMK 5-2-21: 6]*. Scientific Consultant Services, Inc., Honolulu.
- Carson, Mike T., Michael Dega and Robert L. Spear
1998 *Data Recovery For A Portion of Sites 50-03-04-974 & 975, Kāhili Ahupua‘a, Ko‘olau District, Island of Kaua‘i, Hawai‘i [TMK 5-2-21: Por. 7]*. Scientific Consultant Services, Inc., Honolulu.
- Cedar Lake Ventures, Inc.
2018 “Industries in Kauai County, Hawaii” *Statistical Atlas*. Cedar Lake Ventures, Inc., Excelsior, Minnesota (<https://www.staradvertiser.com/2021/07/02/breaking-news/historic-kauai-resort-in-blue-hawaii-to-be-auctioned-this-month/>) Accessed May 2022.
- Chinen, Jon J.
1961 *Original Land Titles in Hawaii*. Library of Congress Catalogue Card No. 61-17314. (<http://www.llmc.com/openaccess/docdisplay5.aspx?textid=39920489>) Accessed March, 2022.
- Clark, John R. K.
2003 *Hawaii Place Names: Shores, Beaches, and Surf Sites*. University of Hawai‘i Press, Honolulu.
- Clark, Matthew R., Ashton Dircks Ah Sam, and Robert B. Rechtman,
2011 *An Archaeological Inventory Survey of TMK:4-5-2-21 :041-0001 and Portions of TMKs:4-5-2-12:035 and 4-5-2-21 :004 Kāhili and Kīlauea Ahupua‘a, Ko‘olau District, Island of Kaua‘i*. Rechtman Consulting, LLC, Kea‘au, Hawai‘i.

- Clark, Matthew R., and Robert B. Rechtman,
 2010 *An Archaeological Inventory Survey of TMK:4-5-2-21 :041-0001 and Portions of TMK: (4) 5-2-12:019, Kāhili Ahupua‘a, Ko‘olau District, Island of Kaua‘i.* Rechtman Consulting, LLC, Kea‘au, Hawai‘i.
- Cleghorn, Paul L.
 2001 *Letter to Mr. Mark Bullard concerning Archaeological Monitoring at Kīlauea Japanese Cemetery, Kīlauea, Kaua‘i (TMK: (4) 5-2-4:49).* Letter report prepared for Verizon Wireless. Pacific Legacy, Inc., Kailua, Hawai‘i.
- Condé, Jesse, and Gerald Best
 1973 *Sugar Trains: Narrow Gauge Rails of Hawaii.* Glenwood Publishers, Felton, California.
- Dagher, Cathleen A
 2007 *Archaeological Field Inspection of approximately 7 Acres at the Kilauea Town Center, Kilauea Ahupua‘a, Hanalei District, Island of Kaua‘i, Hawai‘i [TMK: (4) 5-2-023:027 and 028].* Scientific Consultant Services, Inc., Honolulu.
- Dagher, Cathleen A., and Michael F Dega
 2011 *An Archaeological Monitoring Report for the Emergency Kīlauea River/Wailapa Stream Debris and Sediment Removal Project in Portions of Pila‘a, East and West Waiakalua, and Kāhili Ahupua‘a, Hanalei District, Island of Kaua‘i, Hawai‘i [TMK: (4) 5-1-005: 005, 012, 016; 5-2-012:035; 5-2-004:047; 5-2-021:005 through 009].* Scientific Consultant Services, Inc., Honolulu.
- Daws, Gavan
 1974 *Shoal of Time.* University of Hawai‘i Press, Honolulu, Hawai‘i.
- Dorrance, William H., and Francis S. Morgan
 2000 *Sugar Islands, The 165-year Story of Sugar in Hawai‘i.* Mutual Publishing, Honolulu.
- Elmore, Michelle. and Joseph Kennedy
 2001 *An Archaeological Inventory Survey Report for a Property Located at TMK: 5-1-05: 05 in Kāhili Ahupua‘a, Hanalei District, Island of Kaua‘i.* Archaeological Consultants of the Pacific, Hale‘iwa, Hawai‘i.
 2002 *An Archaeological Inventory Survey Report for a Property Located at TMK: 5-1-05:16 (Por.) in Kāhili Ahupua‘a, Hanalei District, Island of Kaua‘i.* Archaeological Consultants of the Pacific, Hale‘iwa, Hawai‘i.
- Foote, D.E., E.L. Hill, S. Nakamura, and F. Stephens
 1972 *Soil Survey of the Islands of Kaua‘i, O‘ahu, Maui, Moloka‘i, and Lāna‘i, State of Hawai‘i.* USDA Soil Conservation Service, GPO, Washington, D.C.

Fornander, Abraham

- 1880 *An Account of the Polynesian Race, Its Origin and Migrations, Vol. 2.* Trübner and Co. London.
- 1916/1917 *Fornander Collection of Hawaiian Antiquities and Folk-Lore*, vol. 4. Bishop Museum Press. Honolulu.
- 1918/1919 *Fornander Collection of Hawaiian Antiquities and Folk-Lore*, vol. 5. Bishop Museum Press. Honolulu.

Fredericksen Demeris L., and Walter M. Fredericksen

- 1989 *An Archaeological Inventory Survey of Crater Hill and Mokolea Point of Kilauea Point National Wildlife Refuge, Kilauea, Kaua‘i, Hawaii (TMK: 5-2-04:9, 19).* Xamanek Researches, LLC, Pukalani, Hawai‘i.

Giambelluca, T.W., Q. Chen, A.G. Frazier, J.P. Price, Y.-L. Chen, P.-S. Chu, J.K. Eischeid, and D.M. Delparte.

- 2013 Online Rainfall Atlas of Hawai‘i. *Bull. Amer. Meteor. Soc.* 94, 313-316, doi: 10.1175/BAMS-D-11-00228.1. Accessed March 2022.

Giambelluca, T.W., X. Shuai, M.L. Barnes, R.J. Alliss, R.J. Longman, T. Miura, Q. Chen, A.G. Frazier, R.G. Mudd, L. Cuo, and A.D. Businger.

- 2014 *Evapotranspiration of Hawai‘i.* Final report submitted to the U.S. Army of Corps of Engineers – Honolulu District, and the Commission on Water Resource Management, State of Hawai‘i. Accessed March 2022.

Google Earth

- 2013 *Aerial photographs of Hawai‘i.* Google Inc., 1600 Amphitheatre Parkway, Mountain View, California. Available at (www.google.com/earth.html). Accessed May 2022.

Hammatt, Hallett H.

- 1997 *Archaeological Subsurface Testing and Assessment of a Shoreline Property in Kilauea, Kaua‘i (TMK 5-1-01:51)* Cultural Surveys Hawai‘i, Inc., Kailua, Hawai‘i.

Hammatt, Hallett H. and David W. Shideler

- 2014 *Archaeological Field Inspection Report for a 23.8-Acre Coastal Parcel at Namahana Ahupua‘a, Hanalei District, Kaua‘i Island, TMK [4] 5-2-005:036.* Cultural Surveys Hawai‘i, Inc., Kailua, Hawai‘i.

Hammatt, Hallett H. and Rodney Chiogioji

- 1992 *Archaeological Inventory Survey of a 15.17-Acre Property in the Ahupua‘a of Namahana and Kalihiwai, Hanalei District of Kaua‘i (TMK 5-2-17:28).* Cultural Surveys Hawai‘i, Inc., Kailua, Hawai‘i.

- Hammatt, Hallett H., William Folk and Gerald Ida
 1996 *Archaeological Inventory Survey Report at Kāhili, Ko‘olau, Kaua‘i (TMK 5-2-21:05)*. Cultural Surveys Hawai‘i, Inc., Kailua, Hawai‘i.
- Handy, Edward S. C., and Elizabeth G. Handy
 1972 *Native Planters in Old Hawaii: Their Life, Lore, and Environment*. Bernice P. Bishop Museum Bulletin 233. Bishop Museum Press, Honolulu.
- Hawaii Cooperative Park Service Unit
 1990 *Hawaii Stream Assessment: A Preliminary Appraisal of Hawaii’s Stream Resources*. Report R84, Hawaii Cooperative Park Service Unit, Western Region Natural Resources and Research Division, National Park Service, Honolulu.
- Hawaii Department of Transportation
 2022 “Lihue Airport” *Hawaii Aviation*. (<https://aviation.hawaii.gov/airfields-airports/kauai/lihue-airport/>) Accessed May 2022.
- Hawaii State Office of Planning
 2021 Ahupuaa Layer (Historic Land Divisions), including names with diacritical marks. *Hawaii Statewide GIS Program* (<https://histategis.maps.arcgis.com/home/item.html?id=07624815fc7d42d4b23c527d20ad2f58>) Accessed February 2022.
- Historic Hawai‘i Foundation
 2021 *Kauai Historic Properties* (<https://historichawaii.org/historic-properties/kauai-historic-properties/>) Accessed May 2022.
- Ida, Gerald and Hallett H. Hammatt
 1997 *Archaeological Inventory Survey of a an 89-Acre Parcel in Kāhili Ahupua‘a, Ko‘olau District, Kaua‘i (TMK: 4-5-1-5:52)*, Cultural Surveys Hawai‘i, Inc., Kailua, Hawai‘i.
- Juvik, Sonia P. and James O. Juvik, ed.
 1998 *Atlas of Hawai‘i, Third Edition*. University of Hawai‘i Press: Honolulu.
- Kamai, Nancy (“Missy”), and Hallett H. Hammatt
 2013 *Final Field Inspection and Letter Report for After-the-Fact permitting process related to the Smith Parcel in Kāhili Ahupua‘a, Kaua‘i [TMK: (4) 5-2-021:006]*. Cultural Surveys Hawai‘i, Inc., Kailua, Hawai‘i.
- Kamakau, Samuel
 1992 *Ruling Chiefs of Hawai‘i*. Honolulu: The Kamehameha Schools Press.
- Kamehameha Schools
 2013 “Nā Ahupua‘a a Moku o O‘ahu.” *Aloha ‘Āina Project*. (<https://blogs.ksbe.edu/alohaainaproject/mo‘olelo/>) Accessed April 2022.

Kauai Plantation Railway

2007 *Kauai Railroad History*. Accessed from archive (<https://web.archive.org/web/20180906124936/http://www.kauaiplantationrailway.com/rrhist.htm>), July 2022.

Kawelu, Kathleen L

2015 *Kuleana and Commitment: Working Toward a Collaborative Hawaiian Archaeology*. University of Hawai‘i Press, Honolulu.

Kikuchi, William K.

1987 *Proposed Visitor Center Archaeological Survey, Kilauea Point, National Wildlife Refuge Kalae O Kilauea, Kawaihau District, Island of Kaua‘i*. prepared for the U.S. Department of the Interior Fish and Wildlife Service, by William K. Kikuchi, Oma‘o, Kaua‘i.

Kirch, Patrick Vinton

1985 *Feathered Gods and Fishhooks: An Introduction to Hawaiian Archaeology and Prehistory*. University of Hawai‘i Press, Honolulu.

2011 “When Did the Polynesians Settle Hawai‘i? A Review of 150 Years of Scholarly Inquiry and a Tentative Answer,” in *Hawaiian Archaeology*. 12 (2011) 3-26.

Kirch, Patrick V. and Marshall Sahlins

1992 *Anahulu: The Anthropology of History in the Kingdom of Hawaii*. Vol. 1 and 2. University of Chicago Press, Chicago.

Kuykendall, Ralph S.

1938 *The Hawaiian Kingdom—Volume 1: Foundation and Transformation, 1778–1854*. University of Hawai‘i Press, Honolulu.

1953 *The Hawaiian Kingdom, Vol. 2: Twenty Critical Years, 1854-1874*. University of Hawai‘i Press. Honolulu.

1967 *The Hawaiian Kingdom, Vol. 3: The Kalakaua Dynasty, 1874-1893*. University of Hawai‘i Press, Honolulu, Hawai‘i.

Lucas, Paul F. Nahoia

1995 *A Dictionary of Hawaiian Legal Land-terms*. Native Hawaiian Legal Corporation. University of Hawai‘i Committee for the Preservation and Study of Hawaiian Language, Art and Culture. University of Hawai‘i Press, Honolulu.

Lyons, Curtis J.

1875 *Land Matters in Hawaii -No. 2*. The Islander, Vol. I, No. 19. Honolulu.

McGerty, Leann, and Robert L. Spear

1998 *An Archaeological Inventory Survey of a Proposed Driveway Corridor Acre Parcel, Kīlauea Ahupua‘a, Ko‘olau District, Island of Kaua‘i, Hawai‘i [TMK 5-2-11:33]*. Scientific Consultant Services, Inc., Honolulu.

2001 *An Inventory Survey on an Approximately Six-Acre Parcel in Kāhili Ahupua‘a, Hanalei District, Kaua‘i [TMK: 5-2-21:4]*.

- McGerty, Leann, William R. Fortini Jr., and Robert L. Spear
 1997 *An Archaeological Inventory Survey of a Portion of A 26 acre parcel, Kāhili Ahupua‘a, Ko‘olau District, Island of Kaua‘i, Hawai‘i [TMK 5-2-21:7]*. Scientific Consultant Services, Inc., Honolulu.
- McMahon, Nancy
 2003 *Archaeological Assessment Report on Damages to Historic Sites On TMK: 4-5-2-21: 7 unit4 and 5 and 4-5-2-21-6 unit 5*. Report not on file at SHPD Library, Kapolei, Hawai‘i. (Cited in Kamai and Hammatt 2013).
- Moffat, Riley M., and Gary L. Fitzpatrick
 1995 *Surveying the Mahele*, Editions Unlimited, Honolulu.
- Native Hawaiian Library (online)
 N.d. Nā Puke Wehewehe ‘Ōlelo Hawai‘i (Hawaiian Dictionaries) (<https://wehewehe.org/>) Accessed April 2022.
- Office of Hawaiian Affairs
 N.d. Kipuka Online Database (<http://kipukadatabase.com/kipuka>). Accessed April 2022.
- Parham, James E., Glenn R. Higashi, Eko K. Lapp, Darrell G.K. Kuamo‘o, Robert T. Nishimoto, Skippy Hau, J. Michael Fitzsimons, Daniel A. Polhemus, and William S. Devick
 2008 *Atlas of Hawaiian Watersheds & Their Aquatic Resources*. Hawaii Division of Aquatic Resources and Bernice Pauahi Bishop Museum, Honolulu. Accessed from (<https://www.hawaiiwatershedatlas.com/index.html>) July 2022.
- Putzi, Jeff, Milton Ching, Jim Powell, and Michael Dega
 2014 *Archaeological Inventory Survey of 5-acres for the LDS Meetinghouse in Kīlauea, Namahana Ahupua‘a, Ko‘olau District, Island of Kaua‘i, Hawai‘i [TMK: (4) 5-2-019:004]*. Scientific Consultant Services, Inc., Honolulu.
- Real Estate Data, Inc.
 1992 *REDI Realty Atlas of Hawaii. 28th Edition*. Real Estate Data, Inc., Auberdale, Florida.
- Rechtman, Robert B., Maria E. Ka‘imipono Orr, and Dennis S. Dougherty
 2001 *Archaeological Inventory Survey of the Halaulani Property (TMK: 4-5-2-02:11, 12) Kīlauea and Kalihi Wai Ahupua‘a, Ko‘olau and Halele‘a Districts, Island of Kaua‘i*. Rechtman Consulting, LLC, Kea‘au, Hawai‘i.

- Rhodes, Diane L., and Linda Wendel Greene
 1993 *A Cultural History of Three Traditional Hawaiian Sites on the West Coast of Hawai'i Island*. United States Department of the Interior, National Park Service, Denver Service Center. Available at (https://www.nps.gov/parkhistory/online_books/kona/history.htm) Accessed May 2022.
- Rice, William H.
 1923 *Hawaiian Legends*. Bernice P. Bishop Museum Bulletin 3. Bishop Museum Press, Honolulu.
- Shideler, David, Trevor Yucha and Hallett H. Hammatt
 2008 *Archaeological Inventory Survey of an Approximately 74-Acre Portion of the Kilauea Falls Ranch Property, Kīlauea Ahupua'a, Hanalei District, Kaua'i Island (TMK: [4] 5-2-012:035 por.)*. Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.
- Schmitt, Robert C.
 1973 *The Missionary Censuses of Hawai'i*. Department of Anthropology, Bernice Pauahi Bishop Museum, Honolulu.
- Soboleski, Hank
 2007 "The Kilauea Sugar Plantation Company railroad." *The Garden Island*, January 29. Līhu'e, Hawai'i.
- Soehren, Lloyd J.
 2002-19 *Hawaiian Place Names* (<http://www.ulukau.org/cgi-bin/hpn?l=en>) Accessed January 2022.
- Sroat, Ena. David W. Shideler, and Hallett H. Hammatt
 2010 *Archaeological Inventory Survey for the 75-Acre Kīlauea Agricultural Park Project, Kīlauea Ahupua'a, Hanalei District, Kaua'i Island TMK: [4] 5-2-004:099*. Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.
- Thrum, Thomas G.
 1907 "Heiaus and Heiau Sites Throughout the Hawaiian Islands." *Hawaiian Almanac and Annual for 1907*. Honolulu.
- Toenjes, James H. and Hallett H. Hammatt
 1990 *An Archaeological Inventory Survey of 94 Acres in Kilauea, Koolau District, Kaua'i (TMK: 5-2-04:102)*. Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.
- Tome, Guerin, and Michael Dega
 2009 *An Inventory Survey of Approximately for 6.8-Acres in Kilauea, Kāhili Ahupua'a, Hanalei District, Island of Kaua'i, Hawai'i [TMK (4) 5-2-021:007 POR. (UNIT D)]*. Scientific Consultant Services, Inc., Honolulu.

U. S. Department of Agriculture Natural Resource Conservation Service, and University of California, Davis California Soil Resource Lab
2017 Soilweb. (<https://casoilresource.lawr.ucdavis.edu/gmap/>) Accessed April 2022.

U.S. Geological Survey
1998 *Anahola Quadrangle Map*. (<https://www.usgs.gov/core-science-systems/ngp/tnm-delivery/topographic-maps>) Accessed April 2022.

Waihona ‘Āina
N. d. *Mahele Records* (<https://www.waihona.com/maheleSearch.asp>) Accessed July 2022.

Wichman, Frederick B.
1985 *Kauai Tales*. Bamboo Ridge Press and the Hawaii Ethnic Resource Center: Talk Story, Inc., Honolulu.
1991 *Polihale and Other Kaua‘i Legends*. Bamboo Ridge Press, Honolulu.
1998 *Kaua‘i: Ancient Place-Names and Their Stories*. University of Hawai‘i Press, Honolulu.
2003 *Nā Pua Ali‘i O Kaua‘i: Ruling Chiefs of Kaua‘i*. University of Hawai‘i Press, Honolulu.

Wilcox, Carol.
1996 *Sugar Water: Hawaii’s Plantation Ditches*. University of Hawai‘i Press, Honolulu.

**APPENDIX A: NATIVE CLAIMS AND NATIVE AND FOREIGN
TESTIMONY FOR THE AHUPUA‘A OF KĀHILI**

(excerpted from Ida and Hammatt 1997)

Kahili LCAs and Associated Claims with Kahili mentioned

No. 8559 C. Kanaina Honolulu, Feb. 14, 1848

N.R. 349v4

The Lands of William Lunalilo....

<u>Name of the Land</u>	<u>Ahupua'a</u>	<u>District</u>	<u>Island</u>
57. Kahili	"	Koolau	Kauai
58. Kumukumu	"	"	"
59. Pilaa Waipouli	"	Kapaa, Puna	"
60. Kamalamaloo	"	"	"
61. Kalihiwai	"	"	"
62. Manuahi 'Ili Hanapepe	"	Kona	"

.....

No. 8559B Lunalilo, Wm. C. Iliaina
(King Lunalilo) Manuahi Kona Kauai - 867 Ac. [Book 10, p. 490]

[8559B Kalihiwai R.P. 8173; Manuahi Hanapepe; Kahili R.P. 8323; Pilaa R.P. 7060; Waipouli R.P. 7373]

No. 9067 Keo

N.R. 403v9

The Land Commissioners, Greetings: I hereby state my claim for seven lo'i, two mala of wauke and the house lot.

Kahili, Kauai, January 17, 1848

KEO X

No. 9067 Keo Clt.

F.T. 165-166v12

Luakini sworn says I know Clt's lands in Kalihi. They are 7 Lois in three distinct pieces.

Kahili & a House Lot in Kilauea.

No. 1 Is House Lot in Kilauea

" 2 " 5 Lois & kula in Kanaele - Kahili

" 3 " 1 " "Uleulehu" [?] Makai

" " " " Mauka

No. 1 is bounded

M. by Govt kula

N. " Luahini's House Lot

M. " Govt kula

A. " " "

No. 2 is bounded

M. by Luakini's lois

N. " Kamalawai's "

M. " Hapahui's "

A. " Konohiki's kula

No. 3 is bounded

M. by Mamuaholono's [?] loi

N. " Kahili River

M. " Unclt lands

A. " Loko "Kaneio"

No. 4 is bounded

M. by my loko

N. " Konohiki's koele

M. " Apahu's loi

A. " My loko

These lands were given by the Konohiki to Clt. in the days of Kaumualii & have been held undisturbed till this time.

Inaole sworn says I know the lands of Kea & all that Luahini has testified is true.

No. 9067 Keo

N.T. 176-177v12

Kuakini sworn he has seen Keo's land in Kahili of seven lois and a house lot.

Section 1 - House lot

Mauka Government pasture

Napali Luakini's house lot

Makai Government pasture

Anahola Government pasture

Section 2 - Five lois and a pasture together

Mauka Luakini's loi

Napali Kanialauna's land

Makai Hapakua's land

Anahola Government pasture

Section 3 - One loi, Ulehulehu

Mauka Mamuakalono's land

Napali Kahili river

Makai With weeds, land

Anahola Kanaio, the konohiki's pond

Section 4 - One loi mauka of Ulehulehu

Mauka Luakini's land (Pond)

Napali Konohiki koele

Makai Apahu's land

Anahola Luakini's land

Land had been from Kaumualii I to Keo's parents and from them to Keo, all is peaceful to the present.

Inoale sworn he has seen Keo's land, the house lot, the five lois and the pasture. One loi is in section 3, in Ulehulehu and the other lois is mauka of Ulehulehu as section four.

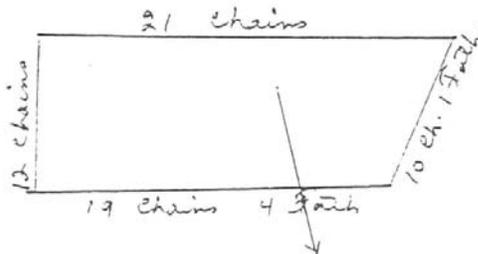
He has known in the same way as Luakini concerning Keo's land, the house lot and his lois. [Award 9067; R.P. 3486]

No. 10013 Leimanu Koloa, Kauai, January 16, 1848

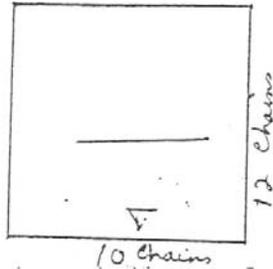
N.R. 251-252v9

The Land Commissioners, Greetings: We, Leimanu and Mokuhalii, are Hawaiian subjects living at Kahili on the Island of Kauai.

We hereby state our claims for land, some lo'is and a kula and a house claim. These are all within the diagram:



I Leimanu, a Hawaiian subject, hereby state my claim at Kahililalo, for a kula for planting wauke; its diagram is as follows:



Respectfully
LEIMANU

I, Mokuhalii, hereby state my claim in another place, as follows: 5 chains on two sides, 9 chains on another side and 30 in another side //sic/. I am respectfully,
MOKUHALII

No. 10013 Leimanu Clt

F.T. 227-228v12

Mokukalii sworn says I know the lands of Leimanu in Kahili. They are in 3 pieces as follows:

No. 1 Is House Lot, 3 lois & kula in "Kaukahiwai"
" 2 " 2 Lois "
" 3 " kula in "Manohala"

No. 1 is Bounded

M. by Lueili's lois

H. " Daniela's "

M. " Koalaiki's "

A. " " "

No. 2 is Bounded

M. by My lois

H. " Kahili river

M. " Alaiki's lois

A. " Keokea's "

No. 3 is Bounded

M. by Hapakui's kula

H. " Kahili River

M. " Daniela's kula

A. " Konohiki's "

These lands have been held peaceably since 1840. Clt. had them from his brother in law. They had been held by the Parents of the brother in law from the days of Kaumualii.

Pupu sworn says I know Clt's lands in Kahili. I have heard all that Mokukalii has testified. It is all true.

No. 10013 Leimanu, B

N.T. 233-234v12

Kumokuhalii sworn he has seen claimants land in Kahili.

Section 1 - House lot and a pasture in Kaiaakahiuunu

Mauka Two ili land

Halelea Daniela's land

Makai Koalaiki's land
Anahola Koalaiki's land

Section 2 - Two lois

Mauka Mokuhalii's land
Halelea Kahili river
Makai Alaiki's land
Anahola Keokea

Section 3 - Pasture at Namohala

Mauka Land
Halelea Kahili river
Makai Daniela's pasture
Anahola Konohiki pasture

Land from the konohiki to Leimanu's brother-in-law at the time of Kaumualii.

Leimanu received this land in 1844, no objections.

Kipu sworn verifies Mokuhalii's testimony is correct, he has known in the same way.

[Award 10013; R.P. 3879]

No. 10013 Leimanu Koloa, Kauai, January 16, 1848 N.R. 251-252v9

.... [see above]

[10013B]

I, Mokuhalii, hereby state my claim in another place, as follows: 5 chains on two sides, 9 chains on another side and 30 in another side /?sic/. I am respectfully,

MOKUHALII

No. 10013[B] Mokuhalii Clt /no claim in Index/

F.T. 161-162v12

Kauoha sworn says I know lands of Mokuhalii in Kahili in Ili "Hoopala" & some kula embracing a house Lot & an Orange Tree in "Kapunahoe" [?]

No. 1 Is House Lot & kula adj.

" 2 " 5 Lois in "Hoopala"

No. 1 is bounded

M. by Konohiki's kula

N. " Kalunaaina's loi

M. " Kahili River

K. " Kaleimanu's lois

No. 2 is bounded

M. by Kalunaaina's lois

N. " Kahili River

M. " Kaleimanu's lois

K. " Alaiki's lois

These lands have been held by Clt. & his parents from the days of Kaumualii. They came into the full possession of Clt. in 1844. No one has disputed his claim.

Kealawaa sworn says- I know clt's lands. I have hears the testimony of Kauoha. It is all true.

No. 10013 [B] Mokuhalii

N.T. 170-171v12

Kanoa sworn he has seen claimants land in the ili of Hapala, also the pasture in the koa growth.

Section 1 - Pasture and house lot

Mauka Konohiki pasture
Napali Landlord's lois
Makai Kahili river
K. Kaleimanu's lois

Section 2 - 5 lois in Hapala

Mauka Landlord's land
Napali Kahili river
Makai Kaleimanu's lois
K. Alaiki's lois

Land to Kumokuhalii from his parents at the time of Kaumualii 1.

Kumokuhalii as a son received it directly in 1844, title secured from parents.

Kealawaa sworn he has seen Kumokuhalii's land in Kahili of Hoopala ili land.

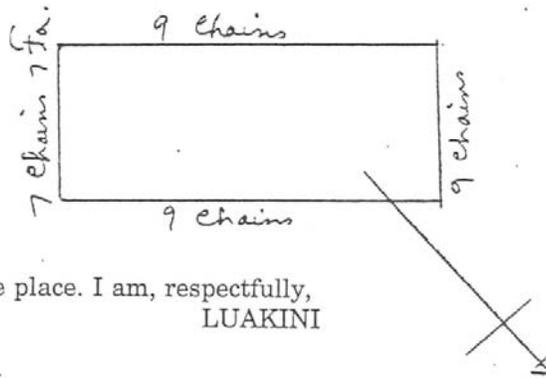
Verifies Kealawaa's statements as true and accurate, life has been peaceful.

[Award 10013B; R.P. 3880]

No. 10015 Luakini Koloa, Kauai, January 16, 1848

N.R. 253v9

The Land Commissioners, Greetings: I, Luakini, a Hawaiian subject living at Kahili on the Island of Kauai, hereby state my claim for land. The diagram follows:



My house is in a separate place. I am, respectfully,
LUAKINI

No. 10015 Luakini Clt

F.T. 165v12

Inaole sworn says I know Clt's lands in Kahole & Kilauea. They are in two pieces.

No. 1 Is House Lot in Kilauea

" 2 " 2 Lois & kula with 2 Orange trees

No. 1 is bounded

M. by konohiki's kula

N. " " "

M. " " "

A. " " "

No. 2 is bounded

M. by Papai's kula

N. " Kahili River

M. " My Lois

A. " " Kula

These lands were given Clt. in the days of Kaumualii & have been held in peaceable possession till this time.

Holokuhine sworn says I know Clt's lands as above described and have heard the testimony of Inaole. It is all true.

No. 10015 Luakini

N.T. 175-176v12

Inaole sworn he has seen Luakini's land of two lois, a pasture and a house lot all in one area in Kilauea. Two orange trees also are on this land. This claim has been absolutely secured since the beginning to the present time.

Section 1 Mauka and all around is government pasture

Section 2 Mauka Papai's pasture

Napali Kahili river

Makai Inoaole's land

Anahola Inoaole's land

Land from the konohiki at the time of Kaumualii, the first and this has been secured since that time to the present.

Holokukini sworn he has seen Luakini's land, the pasture, the two orange trees and the house lot, he has known in the same way as Inoaole.

[Award ; R.P. 10015]

No. 10082 Mamao

N.R. 262v9

The Land Commissioners, Greetings: I hereby state my claim for an 'ili named Makaihuwaa. The boundaries of this 'ili.* All the rights in this 'ili are mine, and that is my claim which is stated to you.

I also have a claim in the 'ili of Kapuka, for two lo'i and some scattered lo'i, a total of six.

Kahili, Kauai, January 17, 1848

MAMAO

*Not stated.

No. 10082 Mamao Clt

F.T. 229-230v12

Daniela sworn says I know the lands of Mamao in Kahili. It is an Ili called "Makaihuwaa."

This Ili was given by the Konohiki to Pipili at the close of the war of 1824. Pipili held it in peace till his death in 1837. His widow (Kupahu) then held the land in peaceable possession till 1847, when she gave it to her son the "Clt. who has held it in peace to the present time.

No one has disputed the claim:

Bounded as follows:

M. by Konohiki's kula

H. " "Kalama"

M. " Kahili River

A. " Pali of "Makaihuwaa"

Keo sworn says I know the lands of Mamao in Kahili. The Ili "Hokaihuwaa." It belongs to Mamao & to no one else.

Note: This claim embraces a whole Ili, but Clt relinquishes a larger part of the kula & takes that part that borders on his kalo land below the Pali.

No. 10082 Mamao

N.T. 233v12

Daniela sworn he has seen claimants land in Kahili of one section consisting of a whole ili and a house lot in Makaihuwaa.

Land from the konohiki to Pihili after the battle of Wahiawa, no objections.

Pihili died in 1837, land was given to Kupahu, the widow, no disputes. In 1847, the widow gave the ili land to her son Mamao.

Boundaries of that ili

Mauka	Konohiki pasture
Halelea	Kalama's land
Makai	Kahili river
Anahola	Konohiki pasture

Keo sworn he has seen Mamao's ili land and it is his (Mamao) own land just as Daniel, the witness has related. both Keo and Daniela have known in the same way.

[Award 10082; R.P. 4074]

No. 10083 Mamuakalono Kahili, Kauai, 17 January 1848

N.R. 262v9

The Land Commissioners, Greetings: I hereby state my claims for one lo'i, a mala of noni, a mala of wauke and the house lot.

MAMUAKALONO X

No. 10083 Mamuakalono Clt

F.T. 228v12

Keo sworn says I know Clt's land in Kahili. It is 1 Loi & I gave it to him previous to 1839 & it has been held in peaceable possession till now.

Bounded as follows

M. by Leiakunui's[?] loi

H. by Kahili River

M. " Keo's loi

A. " Koele "

[no more testimony here]

No. 60083 Mamuaakalono

N.T. 232v12

[should be 10083]

Keo sworn he has seen claimants land in Kahili of one piece with a loi in Kahili.

Mauka Luakini's land

Halelea Kahili river

Makai Keo's land

Anahola Koele

Land from the konohiki in 1839, no disputes to the present.

[Award 10083; R.P. 7754]

No. 10333 Naiamaneo Koloa, Kauai, 16 January 1848

N.R. 283v9

The Land Commissioners, Greetings: I, Naiamaneo, a subject of Hawaii living at Kahili, Island of Kauai, hereby state my claim: its diagram is as follows: The house is in another place. I am, respectfully,

NAIAMANEO

No. 10333 Naaimaneo (w) Clt

F.T. 229v12

Leimanu sworn says I know the lands of Naaimaneo in Kahili. They are a field of Kalo embracing a number of small lois & kula adj. in Ili "Kupa"

Bounded as follows

M. by Ahupuaa of Kilauea

H. " Kahili River

M. " Brook "Kilauea"

A. " Kahili River

These lands were given by the Konohiki to Clt's Husband, Oopu, in the days of Kamualii. Oopu died in 1847 & the lands fell to the widow (Clt). She has held them in peace till this time.

Mokuhalii sworn says I know Clt's lands in Kahili. I have heard the testimony of Leimanu. It is all true.

No. 10333 Naaimeneo

N.T. 232v12

Kaleimanu sworn he has seen Kaleimanu's (Naaimeneo) land in Kahili.

Mauka Kilauea ahupuaa

Halelea Kahili river

Makai Kilauea stream

Anahola Kahili river

Land from the konohiki to Opu at the time of Kaumualii I.

Opu died in 1847, the land was left to this wife Naaimeneo.

Kumokuohaliu sworn he has seen claimants land claim in Kahili. Kalaeimanu's statements were accurate and both have known in the same way. No disputes to the present time.

[Award 10333; R.P. 3370]

No. 10564 D. Oleloa

N.R. 294-295v9

To the Land Commissioners, Greetings: I hereby state my claims for land of Kauai. At Haiku Ahupua'a, at Huleia in the Puna District, here are the claims:

...

In the Ahupua'a of Kapaa in Puna there are these claims:

...

At Kahili Ahupua'a in Koolau are four taro lo'i, At Waioli ... At Wainiha. These land claims are on Kauai. These claims are of the same kind -- that is, the occupancy of them is under the people who dwell on the land. I request you to award the claims to me which I have described, in accordance with the law.

The witnesses to the claims are the people living on the land, who know of our cultivation and work. The witnesses of my occupation of konohiki are M. Kekuanaoa and M. Kekauonohi, the ones who appointed me. I am, respectfully,

Honolulu, Oahu, 5 February 1848 D. OLELOA

No. 10564 Daniela Oleloa

F.T. 6-9v12

...

The further hearing of this claim was postponed until witnesses could be procured for Clt's lands is Kahili.

M. " Oleola's lois

A. " Kahili River

These lands in Kilauea were given by Kaluahonui in 1842 & have been held unmolested to this time.

Kolale sworn says I know the lands of Clt. in Pilaa & Kilauea. I have heard the testimony of Kanaina. It is all true.

No. 6529 Holokukini

N.T. 172-173v12

Kanaina sworn he has seen claimants land in Pilaa and Kilauea consisting of 4 lois, of which 3 are small lois and 2 is a large loi.

There are only four lois in the ili of Puaa

Mauka and Napali	Konohiki pasture\
Makai	From the beach sand
Anahola	Hane's lois

Upai lived under Holokukini.

Land from Opukea to Holokukini in 1845, no objections.

There are 6 lois in Kilauea belonging to Holokukini called Maluawai ili.

There is also a house lot, a pasture and 2 tenants. There are two houses and the men are living under Holokukini who owns the land and house lot.

Mauka	Kahili river
Napali	Konohiki's pasture
Makai	Opeka's lois
Anahola	Kahili river

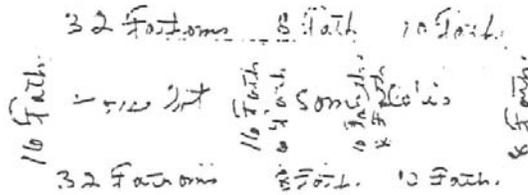
Land from Kekiahonui in 1842, title clear since the beginning to the present.

Kohale sworn he has seen Holokukini's land in Kalihi, also a house lot, the pasture and the four lois in Pilaa of the ili land of Puaa. He has known in the same ways as Kalaina.

[Award 6529]

No. 9260 Kea

N.R. 440-441v9



These are the measurements of my taro lo'is and my house lot, as shown on the diagram. The right was from the time of Kaumualii until the present. It is for you, the Commissioners to quiet land titles, to award it. The Witnesses are Ehuiki and Kauaole. KEA

No. 9260 Kea Clt.

F.T. 235-236v12

Nakaikuahine sworn says I know the lands of Clt. in Kalihiwai as follows -

- No. 1 Is House Lot
- " 2 " 2 Lois in "Auwailalo"
- " 3 " 1 " "

No. 1 is Bounded

- M. by Konohiki's kula
- N. " " "
- M. " River
- K. " "

No. 2 is Bounded

- M. by Kunihinihi's lois
- N. " Kekaululu's "
- M. " River
- K. " My lois

No. 3 is Bounded

- M. by Kunihinihi's lois
- N. " River
- M. " Kea's lois
- K. " My "

These lands were given Clt by the Konohiki in the days of Kamualii & have been held peaceably till now.

Makaimoku sworn says I know Clt's lands. I have heard all that Nakaikuahine has said. It is all true.

No. 9260 Kea

N.T. 240v12

Nakaikuahine sworn I know the kuleana lands of Kea in Kalihiwai.

- section 1 - House lot
 - Section 2 - 2 lois
 - Section 3 - A single loi in Kaauaelale?
- Those are his lands. They are quite settled.

Section 1

- M. Konohiki's kula
- N. Konohiki's kula
- M. Kalihiwai river
- K. Kalihiwai river

Section 2

- M. Kunihinihi's land

- N. Peke's loi
- M. Kalihiwai river
- K. Makaikuahiane's lois

Section 3

- M. Kunihinihi's loi
- N. Kahili river
- M. Kea's loi
- K. Kea's loi

These lands of Kea's came from the konohiki down to Kea. During the time of Kaumualii they were secured. They have not been contested until today.

Makaimoku sworn I know these lands of Kea, I have heard Nakaikuahine's testimony. Both have known in the same way. There is no opposition.

[Award 9260; R.P. 5342]

sole nae i nui na palapala pai i paa i ko kakou lima; no ka mea, sohe a lakou mea pai palapala, ma ia aina. Ua hooliloia ka kauoha hou a pau a ke Akua i olelo Rarotona; a ua laweia'ku ma Beritania. Malaila e paaia'i. Mamuli paha lako ko Rarotona, i ka buke kauoha hou a ke Akua.

I kuu lohe ana i keia mau mea, manao iho la au, he pomaiikai ko lakou noho ana malaila. Nui no nae na mea e pilikia ai i loa ia lakou i keia mau makahiki. Ua hai aku au i kekahi mamua—o ka mai i ka makahiki 1830. A eia hou mai kekahi mea a'u e hai aku nei. I ka wa mamua, o ka ulu ka lakou ai nui, a lako loa no lakou ia ai. Aka, i ka makahiki 1831, a me ka makahiki 1832, nou mai la kahi makani ino, ma ia mea aina. Eha nou ana mai o ua makani la, a pau loa no ka lakou laau ulu i ka hina ilalo; kakaikahi ka ulu i koe. Nolaila, nolo loa hou aku ka lakou ai malaila; a lilo koke no lakou i ke kanu kolo a me ka uwala. Oia ka lakou ai, mai ia manawa mai. Hiki wawe no nae ka laau ulu, ke kanuia malaila; a nolaila, ua kokoke hua na ulu i kanuia mahope mai o ka pau ana o na laau kahiko. Kokoke lako hou lakou i ka ulu. Ua hoonuia 'ku ko laila kanaka ma ka haa'au maoli ana, a like me ka'u hoakaka ana mamua; ua hoonuia lakaou iwaena kono o keia mau pilikia. Aole emi iki i ka wi—hoonuuia no. Pau keia manao i ko Rarotona.

Na'u NA BALUINA

NO LONO,

KEKAHI ALII KAHIKO O KAUAI.

He aupuni maikai ko Lono, aole ona pepehi kanaka. He malama no ia alii i kanaka a puni ka moku o Kauai nei. Ina make keiki iloko o ka opu o ka makuwahine, minamina no ke alii ia keiki; a no ka nui loa o ka minamina o Lono i ke keiki, uku aku la oia i ka ukana no na makua. Pela no kona leo i kauoha aku ai i kona mau hoahanau ma Kauai nei. Ue nui loa na kanaka o Kauai nei ia manawa, ma ia aina aku a ia aina aku. O Lono ma Kona—o Keaka o Kanaloa ma Wailua—o Luahiwa ma Koolau—o Halanikikaupua ko Nihoku—o Kaubane ko Hanalei—o Kanihokawala ko Kalalau. O Konaiaalee ke keiki a Lono: o Kuluia ke kaikamahine a Lono: o Kaikilanea kekahi keiki kane a Lono, no Niihau ia keiki. O Kolowahine kekahi kaikamahine a Lono. Holo o Lono i Oahu, a me kona mau hoahanau. Kauoha o Lono i ka aina i kana mau keiki, "E malama pono olua i ka aina, a me na kanaka—e noho pono olua." Holo o Lono i ka makaikai a Molakai, a Maui, a Hawaii. Holo no o Lono, aole i loa ka hewa i kona aupuni a hoi mai no oia me ka maikai. Kauoha mai o Alapai, ke 'lii o Hawaii, "E hoi no oe a Kauai noho." Holo o Konaiaalee, hookeekoe i ka aina—hookahi kanaha kanaka ia ia loa ka hewa. Alaila hoomakaukau iho la o Lono i na 'lii a me na kanaka; a holo aku la o Lono mahope, a loa o Konaiaalee i Oahu, e lana ana no na waa

i hai aole i pae iuka. Haawi mai la o ke alii i ka ai, i ka ia; oia ke alii o Oahu.

P.—

O KEKAHI MAU AINA NELE I KE KULA KAMALII.

O Kaunala kekahi, a me Waialea a me Pahipahielua a me Punaluulalo a me Kaa-wa, ua nele ia mau aina i na kula no na kamalii. Ma kekahi mau aina e ae, ua hema-hema wale no na kula; a kakaikahi wale no ka halawai ana o na kamalii e ao.

Malaila paha e kokua mai na alii e hooala i na kula ma keia mau aina, a e kokua mahope o kekahi poe kumu e like me ka Kaahumanu hana i kela wa mamua.

No kekahi kanaka ua lele i ka pali. Po akolu ua moe makou ma Kahana; a i ko makou manawa e puka aku ai malaila, ua lohe au i kekahi kanaka, o Wahapulu kona inoa, a hina ia ma ka pali a lele ilalo loa, a aneane make. Ua pahu au i kona lima, a kokua aku ia ia ma kekahi laau. Ua manao na hoalauna ona e malama nui ia ia. Aole paha hai kona iwi; aka ua eha loa kona poo, a me kona poohiwi. Ua ola paha ia, ua make paha, aole au i lohe. Ua pono i na kanaka e malama i ko lakou kapuai, ke hele lakou ma kahi pali.

Ka hoike ma Waialua. Ma ka poaha, hoi mai makou i Waialua, a malama i ko makou hoike no na kamalii ma ka poalima. Eia ka nui o na kamalii i hoikeia ma Waialua—144,—70 ka poe ike—74 ka poe ike i na hua heluhelu wale no. O kekahi poe, ua ike lakou i ka Helu kamalii a me na mokuna 10: ma ka Helunaau, a me ka Hoike Holoholona kekahi a me kekahi mau mea ma ka Olelo honua.

A pau ka hoike a na kamalii, ua hoike mai kekahi poe kumu, 30 o lakou. Ua pau ka Helunaau i kekahi poe o lakou; a kokoke pau i kekahi. O kekahi poe e, ua lilo lakou i kela mea i keia mea o ke kino, nolaila, aole holo wawe lakou.

Eia kekahi mea i olioli mai ai ia'u; ua ike hou mai ma keia hoike 22 mau keiki ike ole i kela hoike, 3 mau malama mamua aku nei; a o kekahi poe e ua kokoke ike lakou.

- O na kamalii a pau i hoikeia 358
- O ka poe ike, 130
- O ka poe hou, ua loa ia lakou ka ike, 34

J. S. E.

LAHAINALUNA, Maraki 2, 1836.

Pehea la e mahuhua hou ai na kanaka o keia pae aina?

I ko'u noonoo ana i ka mea e mahuhua hou ai na kanaka o keia pae aina; Eia ka mua, e haalele i ka moe kolohe, a me ka hookamakama, a me ka inu rama, a me ke koka, a me ka moe malu i keia wa hou. Eia ka lua, o ka noho pono o ke kane me kana wahine, o ka malama i ka pono, a me ka haalele i na hewa iwaena o laua, o ke alaka'i hoi i na keiki ma ka pono. Eia kekahi, o ke ao ikaika o na kumu i na haumana i ko oukou hoi ana aku e malama pono i na kamalii, e kuhikuhi pono aku i na haumana

i ike koke; alaila hooma mai ia nei. Eia kekahi, e hoi mai na kanaka a pau i ka mihi, e pule aku i ke Akua, e noi aku i kona Uhane i pau ai ka haumia o keia pae aina. Auhea oukou, e na kumu a me na 'lii a me na haumana a me na makaainana o keia pae aina; e noonoo oukou i ka mea e mahuhamahua hou ae ai na kanaka o keia mau aina; ina i loa, e hoolaha koke aku i na aina a pau onci. Na'u na OWALAWAHIE.

KALUAHIA, Maraki 5, 1836.

Auhea oe, e ka hoohanau. Ua ku mai ia nei kahi moku. Ahiahi e holo ana ia i Honolulu. Nolaila ka manao i loa ia'u e palapala aku ia oe.

Aole nae i loa ia'u na mea hou ke hai aku. He poe kuaaina no makou ma Molokai nei. Aole i ea pinepine mai na mea hou, a me na mea kaulana ia nei. Aole he ulumoku. Aole i ku mai na moku manawa; aole hoi na kohola, aole hoi na moku kalepa. Aole he awa maanei e pono ai o ia mau moku. Nolaila aole i pae pinepine ai na haole mai Kahiki mai e hai ia makou i na mea hou.

Aka, aole e ohumu ino ana makou i ke Akua no kona hoonele ana ia makou ia mau mea. E ae ana makou i kana hana ana he maikai. Ke manao nei makou ua pomaiikai makou i ke awa ole. No ka mea ua paleia kekahi mau mea ino e ka ino o ke awa. Aole e ku mai ia nei na moku kuai rama, aole hoi e hiki na malamamoku a me na luina hewa e naku ana i na wahine o makou e moekolohe pu me lakou. Nui no na mea ino, a me na mea hibia i loa ole ai ia makou no ka pilikia o ke awa kahi e lulu ai na moku nui.

Mai manao nze oe ea ua nele loa makou i na mea e lealea ai na maka, a me na pepeiao, e me na naau o makou, aole loa.

KEKAHI MEA LEALEA.

Eia kekahi mea lealea maikai a makou e ike ai i ka wa a makou i hoi mai ai mai Lahaina mai. Holo mai la makou i ke kaka-hiaka nui. He maikai ka moana, a ke Akua i hoomalie mai i ka makani a kokoke pohu. Me ka auwaa nui no hoi ko makou holo ana. O na hoe wale no ka makani. Pela makou i holo mai ai ma ka mouna a luhi na kanaka i ka hoe a wela i ka la, a pololi no hoi, a ake hoi hope ka waa; ia manawa no ea, ea mai na nana he lau a he lau, a puni na waa ia lakou. Ua paapu ko lalo o ka waa, a me ko hope a me ko mua, ko ka akau a me ko ka hema; aole wahi kaa-wale. Ike aku la na kanaka, kahaha iho la, a o ka holo wawe mai la no ia. Hookahi wale no ko makou ala me ko na naia. Hoohikiwawe mai na kanaka i ka hoe; manao ae la, o ko makou poe hoaholo paha na naia a hiki i kahi papau alaila e hopuia paha kekahi i ai na lakou. Holo lealea pu mai la makou me na ia. Me he poe puua nui eleele la. Launa nui ae la na kanaka ia lakou. E ake e paa kekahi ia makou i mea ola no ke kino. Ua kauli ka hoi ko makou naau—he make hewa no ko makou holo wawe ana; no ka mea i ka wa kokoke

Proposed Findings of Fact

Related to the identifying and scope of valued cultural, historical, or natural resources on the subject property or within the vicinity of the property, including the extent to which traditional and customary Native Hawaiian rights are exercised on the property.

1. Ahupua‘a. The subject property is located within the Kilauea Ahupua‘a.
2. Place Names. There are numerous notable places names in the vicinity of the project area, amongst them are Kilauea stream and Mokolea Point.
3. Wahi Pana. There are numerous wahi pana or legendary places within the Kilauea Ahupua‘a, amongst them are the celebrated chief Manokalanipō who is said to have commanded a supernatural mo‘o to open the mauka part of Kilauea, the ridge above the Kilauea stream was called Kamo‘okoa, and the three huge stones along the coast of Kilauea Ahupua‘a are said to be the three beautiful sisters named Kalama, Pua, and Lāhela that Pele turned into stones.
4. Mo‘olelo. There are numerous mo‘olelo or stories associated with the Kilauea Ahupua‘a, amongst them is the mo‘olelo of Chief Lonoikamakahiki’s journey to the famous tree of Kahiki-kolo, and along his journey he was befriended by a stranger Kapa‘ihiahilina, a Kaua‘i native. There is also mo‘olelo about the handsome ali‘i Kāhili who travels through Kilauea and is the prize in the kilu contest between Hina and Pele‘ula.
5. Lifestyle and subsistence. Kilauea was also a favored location for agriculture, including lo‘i kalo as evidenced by the terracing and ‘uala was also mentioned.
6. Cultural resources. In Kilauea Ahupua‘a there is a single recorded heiau called Pailio and is associated with Chief Halanikikaupua of Nihoku. However, some cultural resources in Kilauea Ahupua‘a are accessible through programs for preservation of historic locations and traditional culture, including the Daniel K. Inouye Kilauea Point Lighthouse located within the Kilauea Point National Wildlife Refuge (KPNWR) and Hawaiian cultural organizations such as Kaipuwai Foundation and Na Kia‘i Nihoku, that perform Native Hawaiian cultural practices and ceremonies at Nihoku summit on the summer and winter solstice and the spring and fall equinox, that partner with KPNWR.
7. Mahele Awards and Kanaina Testimony. There were several claims for kuleana lands in Kilauea Ahupua‘a, including Holokukini (No. 6529) and Kealawa‘a (No. 9217), although no claims were awarded.
8. Kilauea Sugar Company and Kilauea Railroad system. Kilauea Sugar Plantation Company Limited began in 1863. The first spike of the Kilauea railroad was driven by Lydia Kamaka‘eha Princess Regnant (later to become Queen Lili‘uokalani) on September 24, 1881. One archaeological site was designated as Temporary Site 1 (TS-1) and was comprised of two features: a railroad bridge culvert (Feature 1), and remnant section of railroad track (Feature 2) was found on the subject property.
9. Hunting. There are numerous accounts of Kilauea, in particular Nihoku, being a place where seabirds nested, and pheasants favored the protected area and local residents would hunt for birds and eat their eggs. Local residents also hunted for pigs through Kilauea, including Nihoku.

10. Water and marine resources. The Kilauea Ahupua‘a was also known for its offshore fishing grounds and fish at Makapili Rock and Point.
11. Kilauea Japanese Cemetery. Due to the immigrants working on the Kilauea Sugar Plantation, the cemetery was first established as a Chinese cemetery in 1870, then a Japanese cemetery, then Koreans were interred there, but more recently in 2000, a non-profit association has assumed ownership and accepted more burials.
12. Nihoku. Kama‘aina testimony from Gary Smith describes Nihoku as a place of cultural significance based upon several historical sources from *ka poe Kahiko*, including *nupepa Ke Kumu Hawaii*, *Ka Mo‘olelo no Hiiakaikapoliopole* by Hooulumahiehie, *1863 Royal Patent No 2896 Kamehameha IV to Charles Titcomb*, in *Ka mo‘olelo...kekahi Ali‘i Kahiko o Kaua‘i*. Dr. Mehana Blaich Vaughan, whose husband and children have ancestral ties to Kilauea Ahupua‘a, indicates that Nihoku is considered culturally significant for its association with *mo‘olelo, kilo (celestial navigation), hula & oli, visual landmark, fishing, hunting, Makahiki trail, cultural practices, and is considered a cultural landscape*.
13. Gullies. Dr. Vaughan indicated that the gully located on the subject parcel, *would have contained water, permitted agriculture and also bathing, or preparation for ceremony, either at Nihokū crest or at the Pailio heiau location thought to be nearby at the foot of Nihoku*.

Proposed Findings of Fact

Related to the extent to which these resources, including traditional and customary Native Hawaiian rights will be affected or impaired by the proposed action

14. Pre-contact features or sites. Based on the findings of the Archaeological Literature Review and Field Inspection, and onsite visit, a historic-era cultural resource was identified as a railroad bridge culvert and section of railroad track (TS-1) which could be impacted by the proposed action.
15. Gullies. Dr. Mehana Vaughan described the gully located on the subject property as a potential area that could contain culturally significant information or resources that could be impacted by the proposed action.
16. Although a majority of traditional burials within the vicinity have been discovered along the coastline and in sandy sediment, there remains the possibility that subsurface excavation could reveal iwi kupuna that could be impacted by the proposed action.
17. Although there is no current physical evidence on the subject property that an access trail or traditional and customary practices occurred on the subject property, there is an increasing sentiment by families who have lineal and cultural connections to the area and community members that while the proposed action may not individually impact traditional and customary practices, collectively the development within Seacliff Plantations has an impact on traditional and customary practices.

Proposed feasible action of reasonable mitigation measures
Related to the protection of Native Hawaiian rights and resources

1. Regarding the protection and preservation of the railroad bridge culvert and section of the railroad track (TS-1).

- Further documentation of the historic property (TS-1) should be prepared to determine its extent, age, function, and significance.
- Until the extent of TS-1 is confirmed to not extend onto the subject property through further documentation, the Landowner agrees to coordinate with Cultural Descendants and knowledgeable community members on the protection and preservation of the railroad bridge culvert and sections of the railroad track located on the subject property. The following are specific recommendations by the Cultural Descendants:
 - The stone culvert floor at intake should be repaired and the stone head walls be cleared of vegetative growth. Loose rocks should be secured in place and cemented if formerly affixed in that manner;
 - The drain way, at least up to 15 feet on either side of the lowest point where the water naturally flows should remain as it is with the existing buffalo grass as a bulwark against erosion. Ultimately the invasive grass can be kept in check by weed whacking, encroachment of naupaka and the shaded canopy of the new dry land forest;
 - Development in this area should contain a large buffer from the gully, control for erosion and runoff, not allow for substantial movement that changes the slope and shape of the terrain and contain sediment so as to avoid filling the railway tunnel further, as is already observable;
 - The rail crossing/bridge/culvert built circa 1890, should be placed on the State of Hawai'i Historic Registry;
 - Although the rail bed appears to have been altered by fill and grading, it still sufficiently documents the original path of the railway system. It should also be included in the registry process. Any subsequent work along the bed which reveals the original tracks and elevation should be documented by photos, survey elevations and GPS info, and updated in the registry;
 - The Landowner should place a commemorative plaque at the site and inform the Seacliff Plantation Owner's Association of the significance of the structure. The Owner's Association should inform other owners along the rail path to take pride in its presence by preserving any evidence of its path through their properties as well;
 - The Seacliff Plantation Subdivision storm drain exit on the property above the crossing should never be altered or extended and that the drainage field remain continually grassed to avoid soil erosion;
 - Lastly, the Landowner should make genuine efforts to accommodate up to four (4) annual field trips from school groups or historical organizations and researchers.

2. Regarding the planting of native plants.

- The Landowner shall consider the planting of native plants in gulch within the subject property. Native plants can include naupaka, Milo, Kukui, Noni and Kou to provide the basic canopy and ground cover. In addition, but not mandatory are plantings of Ohia and Koa which would be more challenging for the property owner to keep viable. Their inclusion and success would speak volumes to the Landowner's care and concern in the re-establishment of a true native dry land forest.

3. Regarding iwi kupuna.

- There remains the slight possibility that pre-Contact cultural resources such as habitation area could be documented in subsurface contexts below the plow zone. The same would hold true for iwi kupuna: only a slight possibility that such exist on this plateau area. The majority of traditional burials in the area have been documented near the direct coastline and in sandy sediment. However, cultural informants have referred to burial sites in the areas, therefore, grading and development in the area should be minimized to avoid inadvertent discovery of iwi kupuna. Although no iwi kupuna have been discovered on the subject property, in the event iwi kupuna are discovered, all work in the immediate area shall cease and the Landowner shall contact SHPD, and any Cultural Descendants recognized by the Kaua'i Ni'ihau Island Burial Council for the area.

4. Regarding “reasonable” mitigation impacts to Nihoku as a cultural landscape

- Cultural Descendants and members of the Kilauea community have raised concerns that although the Landowner's proposed project may not individually impact traditional and customary practices, the collective and cumulative impact from the past development and any proposed development, including the proposed project within Seacliff Plantation, has and will adversely impact the traditional and customary practices of Native Hawaiians' rights and resources associated with the cultural landscape of Nihoku and Kilauea. In the spirit of Article XII, Section 7 that seeks to find balance between preserving and protecting traditional and customary native Hawaiian rights and private landowners' right to develop, the Landowner agrees to request a meeting with the Seacliff Plantation Homeowner's Association to explore opportunities to engage, collaborate, and coordinate with the Cultural Descendants and Kilauea community to constructively address their concerns related to the adverse impacts of Seacliff Plantation's development on traditional and customary practices exercised by native Hawaiians rights and resources. These concerns include reasonable access to the ocean (especially for kupuna) to hunt pigs, fish, gather resources for subsistence and conduct education and ceremonies such as Makahiki, solstice and equinox observances and kilo events.

**ARCHAEOLOGICAL LITERATURE REVIEW AND
FIELD INSPECTION FOR A 6.851-ACRE PARCEL AT
SEACLIFF PLANTATION, KĪLAUEA AHUPUA‘A,
HANAIEI DISTRICT, ISLAND OF KAUA‘I, HAWAI‘I
[TMK: (4) 5-2-004:093]
LOT 20A UNITS 1 & 2**

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TABLE OF CONTENTS

INTRODUCTION	1
ENVIRONMENTAL SETTING	5
LOCATION	5
GEOLOGY AND TOPOGRAPHY.....	5
CLIMATE AND HYDROLOGY	5
SOILS.....	6
VEGETATION	6
TRADITIONAL BACKGROUND	8
TRADITIONAL LAND DIVISIONS	8
PLACE NAMES	9
WAHI PANA.....	9
MO‘OLELO.....	11
LIFESTYLE AND SUBSISTENCE	13
WATER AND MARINE RESOURCES	14
CULTURAL RESOURCES.....	15
HISTORICAL SETTING.....	15
PRE-CONTACT POLITICAL HISTORY	15
EARLY POST-CONTACT HISTORY	17
THE MĀHELE	19
LAND USE IN THE POST-CONTACT PERIOD TO THE PRESENT	22
PREVIOUS ARCHAEOLOGY IN THE PROJECT AREA VICINITY	25
EARLY ARCHAEOLOGICAL STUDIES (THRUM 1907, BENNETT 1931).....	25
KĪLAUEA POINT NATIONAL WILDLIFE REFUGE (KIKUCHI 1987, FREDERICKSEN AND FREDERICKSEN 1989)	30
TOENJES AND HAMMATT 1990.....	31
HAMMATT AND CHIOGIOJI 1992.....	31
HAMMATT ET AL. 1996	31
MCGERTY ET AL. 1997, CARSON ET AL. 1998, TOME AND DEGA 2009	32
BURGETT ET AL. 2000, KAMAI AND HAMMATT 2013	33
IDA AND HAMMATT 1997.....	33
MCGERTY AND SPEAR 1998.....	34
MCGERTY AND SPEAR 2001	34
ELMORE AND KENNEDY 2001.....	34
CLEGHORN 2001, SPEAR 2014, HULEN AND BARNA 2021	34
RECHTMAN ET AL. 2001.....	35
ELMORE AND KENNEDY 2002, BEVAN ET AL. 2004	35
DAGHER 2007	36
SHIDELER ET AL. 2008	36
CLARK AND RECHTMAN 2010, CLARK ET AL. 2011	37
SROAT ET AL. 2010	38
DAGHER AND DEGA 2011	38

HAMMATT AND SHIDELER 2014.....	38
PUTZI ET AL. 2014	38
METHODOLOGY	39
FIELD METHODOLOGY	39
LABORATORY METHODOLOGY AND CURATION	39
RESULTS OF THE FIELD INSPECTION	39
FINDINGS AND RECOMMENDATIONS.....	49
REFERENCES	50
APPENDIX A: NATIVE CLAIMS AND NATIVE AND FOREIGN TESTIMONY FOR THE AHUPUA‘A OF KĀHILI.....	A

LIST OF FIGURES

Figure 1: A portion of a 1998 USGS topographic map (Anahola, HI quadrangle; 1:25,000 scale) showing the location of the project area and the nearby Kilauea Stream.....	2
Figure 2: A portion of a Tax Map Key map showing the location of the project area in the context of zone 5, section 2, plat 4 (Real Estate Data, Inc., 1992).....	3
Figure 3: A Google Earth aerial photograph (imagery date: 12/16/2013) showing the location of the project area	4
Figure 4: Google Earth aerial photograph showing the soil series in the project area and in its vicinity (U. S. Department of Agriculture Natural Resource Conservation Service, and University of California, Davis California Soil Resource Lab 2017).....	7
Figure 5: TMK map (zone 5, section 2, plat 004) with LCA parcels labeled; adapted from Ida and Hammatt 1997	21
Figure 6: A portion of a 1998 USGS topographic map (Honolulu and Kaneohe, HI quadrangles; 1:25,000 scale) showing previous archaeology in the vicinity of the project area.....	26
Figure 7: GPS points for the two features of TS-1 in the context of the project area parcel (purple border)...	40
Figure 8: TS-1 railroad bridge culvert - northeast view	41
Figure 9: TS-1 railroad bridge culvert – east view	42
Figure 10: TS-1 railroad bridge culvert - northeast view	43
Figure 11: TS-1 railroad track - northeast view	43
Figure 12: Tunnel underneath TS-1 railroad bridge - inside culvert view	44
Figure 13: TS-1 railroad bridge culvert - southwest view.....	45
Figure 14: TS-1 Railroad Bridge culvert view to the northwest.....	46
Figure 15: TS-1 railroad bridge culvert - south view	47
Figure 16: TS-1 railroad bridge culvert wall - northwest view	48

LIST OF TABLES

Table 1: Soil types represented on Figure 5.	8
Table 2: Archaeological Studies in Nāmāhana, Kilauea, and Kāhili Ahupua‘a	27
Table 3: TS-1 component archaeological features.....	39

INTRODUCTION

At the request of Ku'iwalu Consulting, Scientific Consultant Services, Inc. (SCS) has conducted this archaeological Literature Review and Field Inspection (LRFI) for a 6.851-acre Parcel (Lot 20A, Units 1 & 2) in Seacliff Plantation, Kīlauea Ahupua'a, Hanalei District, Island of Kaua'i, Hawai'i [tax map key (TMK) parcel: (4) 5-2-004:093]. The project area is shown on a portion of a United States Geological Survey (USGS) topographical map, a Tax Map Key (TMK) map, and a Google aerial photograph (Figures 1 through 3).

The field inspection was conducted on June 1, 2022, by SCS Archaeologist Jason Stolfer, M.A. under the supervision of the Principal Investigator Michael F. Dega, Ph.D, and consisted of a 100% pedestrian survey across the project area.

During survey, a single archaeological site, designated Temporary Site 1 (TS-1) was identified. This site was comprised of a railroad bridge culvert, as well as a nearby section of railroad track. It is likely that TS-1 was part of the railroad built to haul sugar for the plantation operated by the Kilauea Sugar Company, and that other portions of that railroad may still be present in the vicinity.

This report is not intended to meet HAR §13-276 requirements for an Archaeological Inventory Survey (AIS), but aims to identify potential cultural resources in the project area and its vicinity, and to provide in brief the history of relevant archaeological research within Kīlauea Ahupua'a. Thus, the scope of work for the current investigation includes the following two aspects:

- Literature review consisting of a study of previous archaeological reports pertaining to the project area and its vicinity. This research is conducted in order to determine 1) known archaeological and cultural sites that have been recorded in the project area, 2) features, sites, or cultural resources that may be associated with the subject property adjacent to it, if any, to assist in the *Ka Pa'akai* Assessment, and 3) support appropriate recommendations to State Historic Preservation Division (SHPD).
- Field inspection via pedestrian survey of the project area. This inspection is conducted in order (1) to identify any surface archaeological features and (2) to investigate and assess the potential for impact to such sites. This assessment will also identify any sensitive areas that may require further investigation or mitigation before work on the project proceeds.

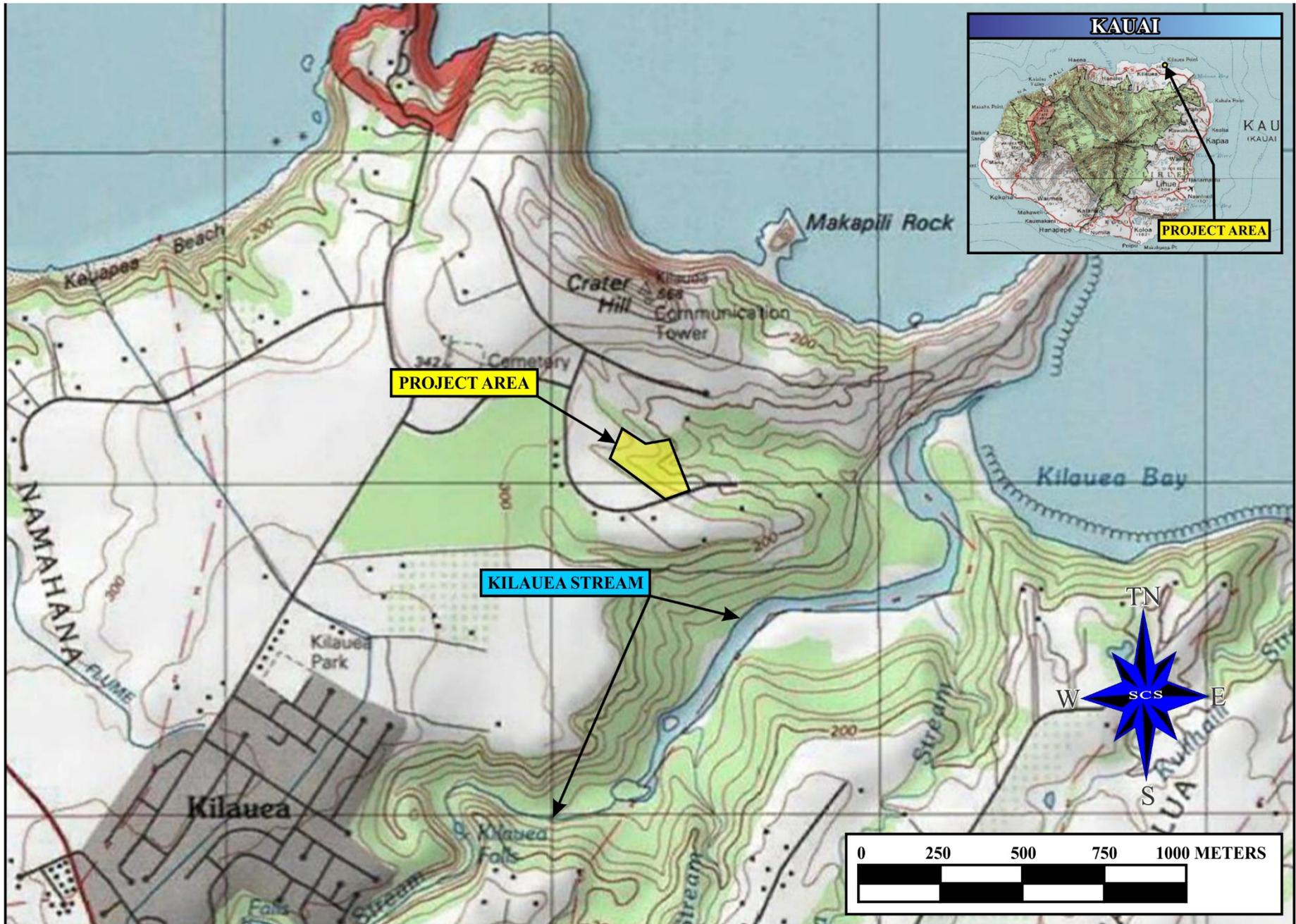


Figure 1: A portion of a 1998 USGS topographic map (Anahola, HI quadrangle; 1:25,000 scale) showing the location of the project area and the nearby Kilauea Stream

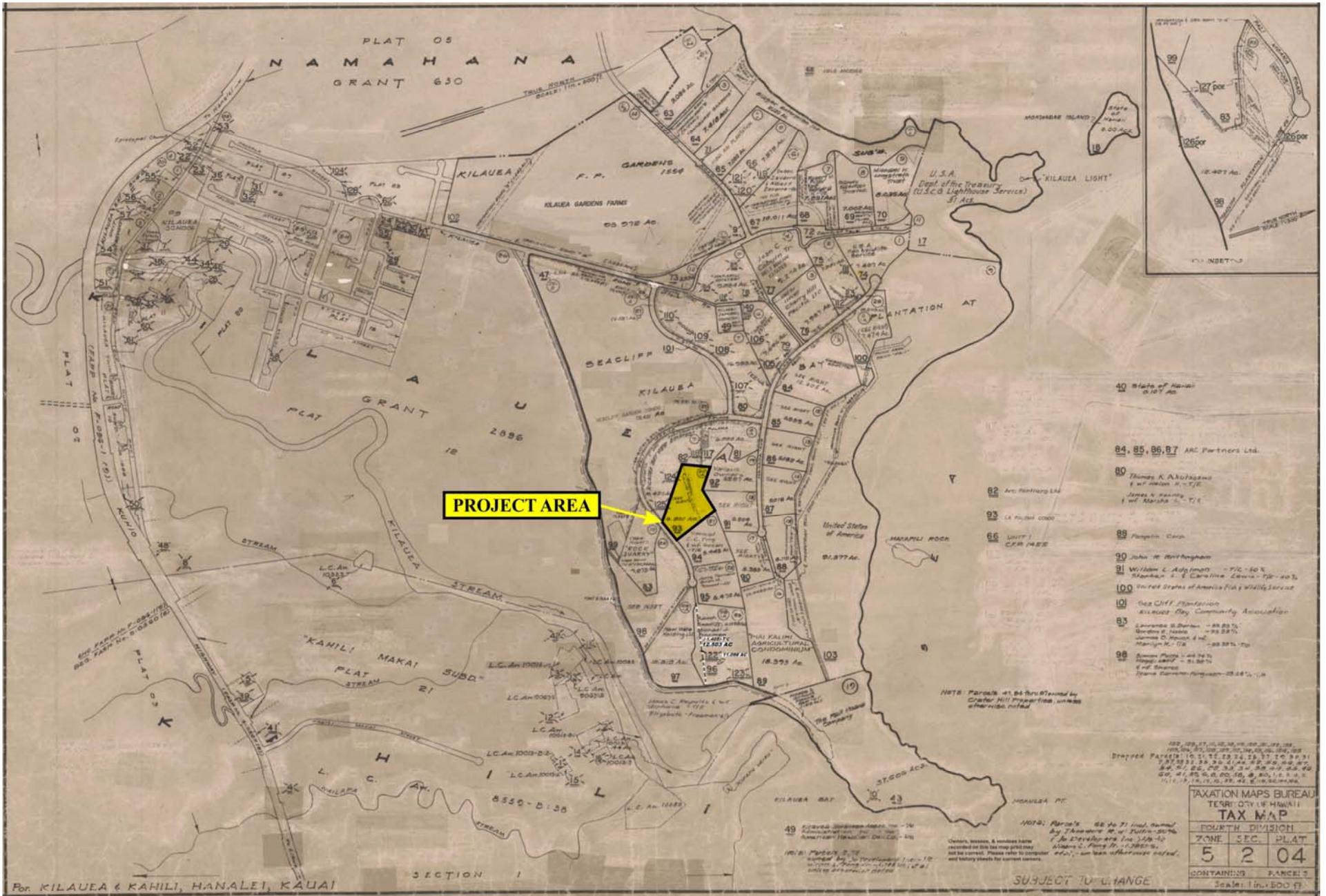


Figure 2: A portion of a Tax Map Key map showing the location of the project area in the context of zone 5, section 2, plat 4 (Real Estate Data, Inc., 1992)

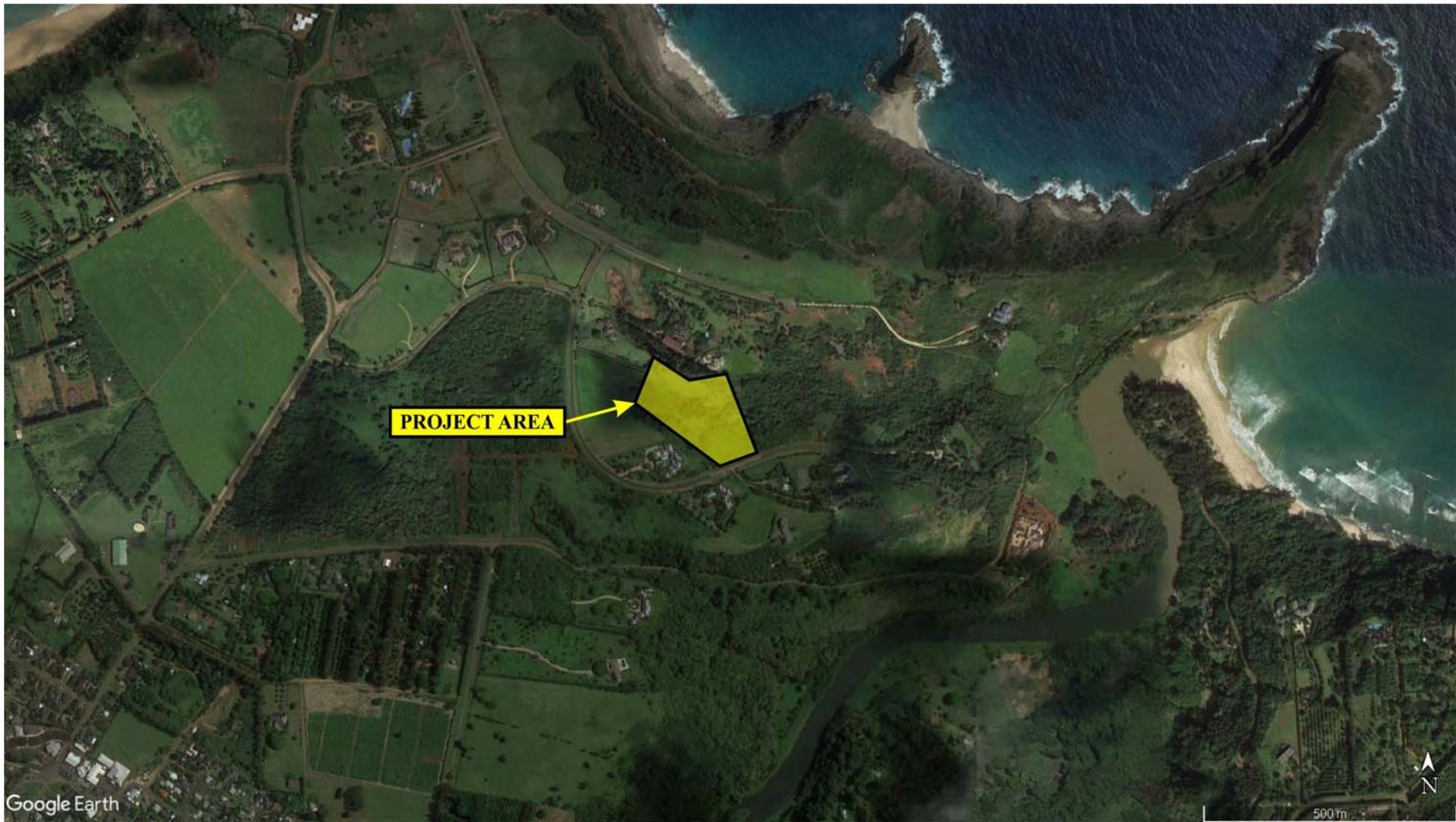


Figure 3: A Google Earth aerial photograph (imagery date: 12/16/2013) showing the location of the project area

ENVIRONMENTAL SETTING

LOCATION

The field inspection occurred within a project area consisting of TMK parcel (4) 5-2-004:093, which encompasses 6.851 acres divided between two Condominium Property Regime (CPR) units, with the northern CPR (Unit 1) comprising 3.216 acres, while the southern (Unit 2) is 3.635 acres. This parcel is Lot 20A of the Seacliff Plantation gated community, and is surrounded on all sides by other lots within Seacliff Plantation. The project area is bordered by Pali Moana Place on the south. Seacliff Plantation is bordered by Kīlauea Point National Wildlife Refuge on the north, while other notable places nearby include Kīlauea Agricultural Park across Pali Moana Place to the west, and the mouth of Kīlauea Stream not far east (the stream is approximately 665 m east from the project area). This location would colloquially be referred to as being located in Kīlauea, after the Census Designated Place (CDP) of Kīlauea, since addresses in the State of Hawai‘i are typically given using CDP in place of city or county.

The project area falls within contemporary Kīlauea Ahupua‘a, which is part of Hanalei District (Hawaii State Office of Planning 2021). Hanalei is one of the five judicial districts dividing Kaua‘i County and occupies most of the north coast of Kaua‘i Island and a rough pie-wedge inland from the coast.

GEOLOGY AND TOPOGRAPHY

Kaua‘i is the oldest and fourth largest of the eight main Hawaiian Islands. It was formed from a single great shield volcano (Macdonald et al. 1983:453). At one time that volcano was the largest caldera in the islands, extending 15 to 20 kilometers across. Mount Wai‘ale‘ale, which forms the central hub of the island, rises 1,598 meters above mean sea level (amsl). Topographically, Kaua‘i is a product of heavy erosion as it features broad, deep valleys and large alluvial plains. Its land area is approximately 1,432 square kilometers.

The elevation of the project area ranges from approximately 60 to 80 m above mean sea level (amsl). It is located in a region of relatively flat terrain between the coast and Kīlauea Stream.

CLIMATE AND HYDROLOGY

The project area is located near the northern shore of Kaua‘i, facing the northeastern trade winds that bring precipitation. However, the near-coastal location means it does not much benefit from orographic lift effects from those trade winds hitting Mount Wai‘ale‘ale. Therefore, the project area still sees moderate rainfall, higher than leeward lowlands but lower than other windward locales further upland.

Mean annual rainfall over the project area is 1460 mm (57.5 in). Rainfall is higher in winter and spring, with a peak of 185 mm (7.3 in) in November, and a low in June of 76 mm (3.0 in) (Giambelluca et al. 2013).

Average annual air temperature in the project area is 22.9 °C (73.2 °F). August is the hottest month with an average of 24.7 °C (76.4 °F), while February is the coolest with an average at 21.1 °C (69.9 °F) (Giambelluca et al. 2014).

Kīlauea Stream to the east is the nearest major water feature (see Figure 1). The stream runs on a roughly southwest to northeast axis, with its mouth emptying into Kīlauea bay. The *Hawaii Stream Assessment* (Hawaii Cooperative Park Service Unit 1990:36) classifies it as a perennial stream. Kīlauea Stream is sometimes also referred to as Kīlauea River.

SOILS

According to Foote et al. (1972: Sheet 25) and the U. S. Department of Agriculture Natural Resource Conservation Service, and University of California, Davis California Soil Resource Lab (2017), the project area topsoils are of the Lihue series, primarily Lihue silty clay, 25 to 40 percent slopes, eroded (LhE2), with a region of Lihue silty clay, 15 to 25 percent slopes (LhD) in the southeast, and a slight sliver of Lihue silty clay, 0 to 8 percent slopes (LhB) on the northwest. Figure 5 is a soil map of the vicinity of the project area, and Table 1 summarizes the soil types.

The Lihue series “consists of well-drained soils on uplands” and are “developed in material weathered from basic igneous rock” (Foote et al. 1972:82). LhB has slow runoff and slight erosion hazard, and is “used for sugarcane, pineapple, pasture, truck crops, orchards, wildlife habitat, and homesites” (Foote et al. 1972:82-83). LhD has medium runoff and moderate erosion hazard, and is “used for sugarcane, pineapple, pasture, wildlife habitat, and woodland” (Foote et al. 1972:83). LhE2 has rapid runoff and severe erosion hazard, and is “used for pasture, woodland, and wildlife habitat,” with “small areas are used for pineapple and sugarcane” (Foote et al. 1972:83).

VEGETATION

According to Sonia and James Juvik (1998:122, 127) before human settlement the native ecosystem of the area would have been ‘lowland dry and mesic forest, woodland, and shrubland.’ Indigenous flora that may persist in this environment include ‘*a‘ali‘i* (hopbush, *Dodonaea viscosa*), ‘*ākia* (*Wikstroemia* sp.), ‘*elama* (*Diospyros hillebrandii*), ‘*kāwelu* (variable lovegrass *Eragrostis variabilis*) ‘*koa* (*Acacia koa*), ‘*ko‘oko‘olau* (*Bidens* sp.) ‘*ohi‘a* (*Metrosideros macropus*), ‘*pili* (black speargrass, *Heteropogon contortus*), ‘*ūlei* (Hawaiian hawthorn *Osteomeles anthyllidifolia*), and ‘*wiliwili* (*Erythrina sandwicensis*).



Figure 4: Google Earth aerial photograph showing the soil series in the project area and in its vicinity (U. S. Department of Agriculture Natural Resource Conservation Service, and University of California, Davis California Soil Resource Lab 2017)

Table 1: Soil types represented on Figure 5.

Abbrev.	Full (Soil) Name	Abbrev.	Full (Soil) Name
BS	Beaches	Mr	Mokuleia fine sandy loam
DL	Dune land	Mta	Mokuleia clay loam, poorly drained variant
IoB	Ioleau silty clay loam, 2 to 6 percent slopes	MZ	Marsh
IoC	Ioleau silty clay loam, 6 to 12 percent slopes	PnC	Puhi silty clay loam, 8 to 15 percent slopes
IoE2	Ioleau silty clay loam, 20 to 30 percent slopes, eroded	PnE	Puhi silty clay loam, 25 to 40 percent slopes
LhB	Lihue silty clay, 0 to 8 percent slopes	QU	Quarry
LhC	Lihue silty clay, 8 to 15 percent slopes	rRO	Rock outcrop
LhD	Lihue silty clay, 15 to 25 percent slopes	rRR	Rough broken land

TRADITIONAL BACKGROUND

Archaeological data indicate that initial settlement of the Hawaiian Islands occurred on the windward shoreline areas around 10th century C.E. (Kirch 2011:22), with populations eventually settling into drier leeward areas at later periods (Kirch 1985:103). In the next few centuries coastal settlement was still dominant, while populations were beginning to expand to upland *kula* (pasture) zones from the 12th to the 16th century C.E. (Kirch 1985:103). Large scale or intensive agricultural endeavors were implemented in association with habitation. Settlers preferred coastal lands, but cultivated taro both near the shores and in the uplands.

TRADITIONAL LAND DIVISIONS

The islands of Hawai‘i were traditionally divided into *moku* (districts) and *ahupua‘a* (subdistricts). On Kauai this occurred during the reign of Manokalanipō (Wichman 1998:102). These divisions were meant to incorporate all of the natural and cultural resources necessary for subsistence, stretching from the ocean to the mountain peaks and providing access to ecosystems at various elevations (Lyons 1875:111). The *moku* were likely consolidated approximately 600 years ago, when the native population had expanded to a point where large political districts could be formed (Lyons 1875:29, Kamakau 1961:54, 55; Moffat and Fitzpatrick 1995:28). Kaua‘i traditionally consisted of six *moku* (Kona, Puna, Ko‘olau, Halele‘a, Napali, and Waimea), each comprised of constituent *ahupua‘a*. The etymology of the word *ahupua‘a* may be traced to the practice of marking the boundary with a heap (*ahu*) of stones surmounted by an image of a pig (*pua‘a*) or of laying a pig on an altar as a tax to the chief (Native Hawaiian Library n.d.).

These ancient land divisions are still commonly used to locate and refer to geographical features of the islands, and the State of Hawai‘i still uses *ahupua‘a* as administrative land divisions, although their modern boundaries may differ from the traditional ones. *Ahupua‘a* were often subdivided into smaller land divisions called *‘ili*, administered by *ali‘i* (chiefs), but unlike the larger units *‘ili* were not meant to encompass a broad selection of resource areas (Lucas 1995:40). The land holding of a *hoa‘āina* (tenant) under an *ali‘i* was called a *kuleana* (right, privilege), a term that eventually came to mean “property” or “land title” as well (Lucas 1995:61).

PLACE NAMES

Kamehameha Schools’ (n.d.) *Aloha ‘Āina Project* indicates that Kīlauea Ahupua‘a (where the project area is located) was traditionally a part of Ko‘olau Moku, and suggest boundaries similar to the modern demarcation. Kīlauea means “spewing” or “mush spreading”, in reference to the movement of lava during volcanic eruptions, and on Kaua‘i may refer to a tuff cone (not to be confused with the active volcano on Hawai‘i island). Ko‘olau means “windward,” appropriate to the *moku*’s location on the north shore of Kaua‘i, facing the prevailing trade winds.

A number of notable geographic features occur in the vicinity of the project area. Kīlauea stream, which flows from the south of the project area to the west before emptying into the ocean, strongly influences not only the natural landscape but human settlement on and use of it. The stream serves as the boundary between Kīlauea Ahupua‘a and Kāhili Ahupua‘a, and (surviving) terraces for traditional-style agriculture often follow its curve. Kāhili means “feather standard” (carried by attendants to herald royalty). The name Mōkōlea (or Mōkōlea Point) refers to a promontory north of the mouth of Kīlauea stream, and means “plover island (*mō* here being short for *moku*)” as it is a key seabird nesting location (albeit not strictly an island). Another important nesting area for seabirds can be found north of Kīlauea Point, on a small island named Moku‘ae‘ae, which John Clark (2003) interprets as simply meaning “fine [i.e. small] island.” The name Nihokū is associated with Crater Hill, but there seems to be little if any historical usage of this name, so it is possible that it is a modern naming convention rather than a traditional Hawaiian name. North of Crater Hill and Kāhili Quarry Beach there is also a tied island called Makapili Rock that is connected to the shore by a tombolo (sandy isthmus). Makapili means “squinting eyes.”

WAHI PANA

There are stories or traditions associated with some of the *wahi pana* (legendary places) in Kīlauea Ahupua‘a. Frederick Wichman (1998:104) relates a story of how the *Menehune* (legendary race of small people), upon discovering Moku‘ae‘ae, “tried to bridge the channel between this island and the mainland with rocks.” However, the Menehune were not able to completed this task due to its length and complexity. William Hyde Rice explains:

The Menehune were a small people, but they were broad and muscular and possess of great strength. Contrary to common belief they were not possessed of any supernatural powers, but it was solely on account of their tremendous strength and energy and their great numbers that they were able to accomplish the wonderful things they did....

One curious thing about the Menehune was that they never worked in daylight, as they never wanted to be seen. It was their rule that any enterprise they undertook had to be finished in a single night. If this could not be done, they never returned to that piece of work. [Rice 1923:34-35]

The Menehune's attempt to build a causeway between Moku'ae'ae and Kīlauea Point failed because "just as they were able to touch bottom with their paddles, daylight interrupted their task" (Wichman 1998:104), and it was therefore abandoned. Although this tale records the Menehune acting of their own accord, others speak of *ali'i* bargaining with the Menehune to apply their prowess to construct great works elsewhere on Kaua'i (Wichman 2003:9-11).

While Menehune are associated with the *makai* (oceanward) portion of Kīlauea's, not only as builders but as fishermen plying the waters offshore Kīlauea from a settlement at Hanalei bay to the west (Wichman 1985:36), the *mauka* (mountainward) portion of the *ahupua'a* is also home to a great work said to have been accomplished by non-human prowess. The celebrated chief Manokalanipō was said to have commanded a supernatural *mo'o* (lizard) to open up the *mauka* part of Kīlauea, where the land was good for planting but water was lacking, for agriculture. Three long irrigation ditches on slopes of Kīlauea *mauka* resembled the claw marks of a *mo'o*, and the ridge above Kīlauea stream was called Kamo'okoa, meaning "brave lizard" (Wichman 1998:102).

Wichman (1998:103) also relates a story that purports to explain the "volcanic cone open to the ocean" resulting in the "long beach unprotected by any reef" at the coast of Kīlauea Ahupua'a, as well as "three huge stones" that once stood atop the cone but "have since been moved, with great difficulty, to make room for sugarcane." These features were attributed to the actions of the volcano goddess Pele:

Pele had come to Kaua'i and fallen in love with Lohi'au, a chief of Hā'ena. She promised to find a home for the two of them, but when ever she struck her staff, she was met by water, for her sister Nā-maka-o-kaha'i, goddess of the sea, was her enemy. Pele caused an eruption here, but it was soon extinguished when the sea goddess broke down the walls of the crater, drowning the fire with the ocean. [Wichman 1998:103]

Already frustrated by her sister's sabotage, Pele is enraged when "three beautiful sisters" named "Kalama, Pua, and Lāhela" laughed at the failure of her efforts, and she promptly turns all three into stone, leaving them in place as an object lesson of why she should not be ridiculed.

MO'OLELO

The *mo'olelo* (*lit.* stories; *also:* oral history) of Kaua'i include many legends and tales of great events, but few that occur in Kīlauea. It is also notable that these tales speak of the fruit-bearing trees of Kīlauea providing food, rather than a cultivated staple crop, which is consistent with the difficulties the terrain in Kīlauea Ahupua'a could present to flat field agriculture (see Lifestyle and Subsistence, below).

Kīlauea Ahupua'a is mentioned as part of the long journey of Hawai'i island chief Lonoikamakahiki to see for himself "the famous trunkless *koa* [*Acacia koa*] tree of Ka-hiki-kolo, a tree from which earlier warriors had fashioned war clubs" (Wichman 2003:67). This journey began with Lonoikamakahiki accompanied by "his favorites, his warriors as companions and also his servants" but this retinue soon abandoned him, and when he "happened to look back to see where the rest of his people were" he found "only a solitary man following him... a stranger with whom he had no acquaintance" (Fornander 1916-17, Vol 4:352). The stranger was Kapa'ihiahilina, a Kaua'i native who had heard that the Hawai'i *ali'i* had been deserted by his followers, and brought "a calabash of *poi* [a Hawaiian dish made from the fermented root of the taro which has been baked and pounded to a paste] with some 'o'opu [general name for fishes included in the families Eleotridae, Gobiidae, and Blennidae] fish" as provisions for Lonoikamakahiki (Wichman 2003:68). Lonoikamakahiki was determined to press on to his destination, and observing that Kapa'ihiahilina scrupulously observed the *kapu* (taboos, prohibitions) that were accorded to royalty, told his faithful companion that they would proceed as equals:

Lonoikamakahiki said to him: "do not hold me in sacredness because you are my own brother. I have nothing dearer than yourself, therefore, where I sleep there will you sleep also. Do not hold me aloof, because all that is good has passed and we are now travelling in the region of the gods." In consequence of this, the king's wishes were observed, and they sat down together.
[Fornander 1916-17, Vol 4:352]

The food that Kapa'ihiahilina had brought ran out, but he foraged *hala* (screwpine. *Pandanus tectorius*) fruit for food, and also braided ferns into garments to replace the *malo* (male's loincloth) made of *tapa* (bark cloth) they wore, which had been damaged by rain. With the aid of this skilled friend, Lonoikamakahiki achieved his wish to see the trunkless *koa* tree, and returned safely home, where he made his new trusted confidante his prime minister.

The meteoric rise of this outsider [Wichman (2003:67) characterizes the Kaua‘i man as a chief himself, but Fornander (1916-17, Vol 4:352) does not give him any rank] led to jealousy from Lonoikamakahiki’s subordinate chiefs, who began plotting against Kapa‘ihiahilina. The plotters eventually convinced Lonoikamakahiki to bar his friend from his presence by spreading rumors that Kapa‘ihiahilina had slept with his wife. Kapa‘ihiahilina then composed a chant reminding Lonoikamakahiki of their friendship, and how they had faced adversity together in their passage through the wilderness of Kīlauea (and other parts of Kaua‘i), a part of which says:

We ate of the ripe pandanus in our
wanderings,
Thus were our days of hunger
appeased, my companion,
My companion of the tall pandanus,
From Kilauea to Kalihi;
The pandanus that had been partly
eaten,
Of Pooku in Hanalei.

*Hala ia mao a ka ua ilaila, e ke hoae,
Hele aku a ai i ka pua pala o ka hala
Hala ia la pololi o ka ua ilaila, e ke
hoa.
He hoa i ka nahele la uhala loloa,
Mai Kilauea a Kalihi la;
O ka hala i aina kepaia,
O Pooku i Hanalei-la.*
[Fornander 1916-17, Vol 4:358-359]

This chant reminded Lonoikamakahiki of his affection for his friend and all that Kapa‘ihiahilina had done for him, and he gave orders that his friend be restored to the prime minister position and the plotters be executed.

Kīlauea Ahupua‘a is also mentioned as the place where an *ali‘i* named Kāhili ruled, but the *mo‘olelo* that speaks of him actually takes place in Kīpū Ahupua‘a, near the Hulē‘ia River and Mount Hā‘upu. Kahili arrives in Kīpū at the court of the *ali‘i nui* (high chief) Hina, famed for her beauty, just in time to become the subject of a rivalry between the Kaua‘i *ali‘i nui* and a rival beauty visiting from O‘ahu, Pele‘ula. Pele‘ula had heard that “Kaua‘i women were the most beautiful” while holding court at her home of Waialua, and proud of the splendor of her court and her own charms, had made up her mind to visit Kaua‘i to settle the question of where the greatest beauty lay (Wichman 1991:110). Hina welcomed the visiting Pele‘ula, and invited all her own subordinate *ali‘i* to present themselves, all the better to show off Kaua‘i. When Kāhili arrived, both Hina and Pele‘ula saw that he was exceptionally handsome, and agreed to make him the prize in a contest between them, initially ten rounds of *kilu* (a throwing game; *also*: the a small gourd or coconut shell, usually cut lengthwise, used to play the game of *kilu*). A game of *kilu* ordinarily featured many players who threw at targets placed in front of other participants to pick a partner for a kiss (or more), comparable in this respect to the contemporary game of spin-the-bottle. So enamoured were the two female *ali‘i nui*, however, that they instead asked Kāhili to be the sole target in a direct *kilu* contest between the two of them.

The handsome young *ali'i* was all too happy to be the center of attention, showing his value as stakes by performing a dance and chant in which he declared “Here are the bones of Ko‘olau, / The ‘ulu, breadfruit tree [*Artocarpus altilis*] and warrior of Kilauea” (Wichman 1991:114). The two women proved to be equally adroit at *kilu*, and instead decided to have a beauty contest, letting Kāhili pick which of them he found to show her charms to best advantage. Both women prepared themselves with their best adornments and present their own dances and chants before the court. Pele‘ula showed off well, but Hina’s performance evoked not only her own beauty but the natural wonder of Kaua‘i. Even her rival had to admit that “the beauties of Kaua‘i are beyond compare” (Wichman 1991:119). To commemorate this, a profile of Hina, called Hinaiuika, was carved on the face of Hā‘upu.

LIFESTYLE AND SUBSISTENCE

The Pre-Contact (e.g. prior to western contact, which is generally considered to begin with the arrival of Captain James Cook in 1778) Hawaiian economy was largely based on subsistence agriculture and aquaculture, supplemented by collection of natural resources, including marine and avifaunal organisms and undomesticated flora. Patrick Kirch notes that the economy was productive and diverse enough to support “considerable craft specialization... canoe-makers, adz-makers, bird-catchers, wood-carvers and tattooing experts” (Kirch 1985:3). The existence of specialized artisans and artists implied a sophisticated society with a bounty of both surplus food and spare labor to support many cultural practices and non-subsistence activities.

Settlements often concentrated in river valleys most amenable to wet *kalo* (taro, *Colocasia esculenta*) cultivation, incorporating *lo'i* (pond fields, irrigated terraces) and *‘auwai* (ditches, irrigation canals). Areas with higher precipitation permitted cultivation of *kō* (sugar cane, *Saccharum officinarum*) and *mai'a* (banana, *Musa* spp.). However, dryland agriculture centering on *‘uala* (sweet potato, *Ipomoea batatas*) as the staple crop was also prevalent, especially on drier, leeward areas of the islands, where they were cultivated along with dryland varieties of *kalo*.

Edward and Elizabeth Handy (1972) note that Kīlauea has long been a favorable location for agriculture, and naturally became a population center as well:

On the island of Kauai there were five areas where development of food resources produced concentration of population. One of the best deep-sea fishing areas was along the windward or Napali coast. Adjoining this to the southward were localities where irrigated taro was cultivated extensively in terraces, termed *lo'i*, at Ha'ena, Hanalei, and Kīlauea. [Handy and Handy 1972:269]

Handy and Handy (1972) also note that the tendency for relatively steep terrain in this region, especially upland, inhibited terracing for wet *kalo* agriculture. Agriculture was likely on *kula* (*lit.* plain, pasture, *in context*: dryland suitable for dry cultivation in contrast to wet cultivation in *lo'i*) lands with *'uala* as the favored staple crop.

Kīlauea is watered by a small river whose headwaters take the flow of streams above Kalihiwai as well as those coming down sloping *kula* lands above Kīlauea. This is a peculiar terrain, with terraces along the north side of the river toward its seaward end belonging to Kīlauea and those on the south side to the small *ahupua'a* named Kāhili. A mile upstream is a small terraced area, but beyond this there were no terraces, for the main stream flows in a narrow gulch, and so do other side streams which flow into the Kīlauea River. Hawaiians evidently never developed *lo'i* here because the neighboring *kula* land is too high above the streams for irrigation. This *kula* would have been excellent sweet-potato land. On the whole, Kīlauea, despite a sizable river flowing through it, was a relatively small producer of taro because of the nature of its hinterland. [Handy and Handy 1972:421]

While the immediate vicinity of the project area has, in the current day, been rendered flat enough to be amenable to both agriculture and contemporary residential development, the soil map (see Figure 4 and Table 1) certainly shows that the terrain of this area varies greatly.

WATER AND MARINE RESOURCES

The project area is part of what the State of Hawai'i Division of Aquatic Resources (Parham et al. 2008) categorizes as the Kīlauea, Kaua'i Watershed, which is supplied with water by the perennial Kīlauea Stream, as well as ample rain (see Climate and Hydrology, above).

As Handy and Handy (1972) note (see Lifestyle and Subsistence, above), the (often steep) terrain near the river made it difficult to harness that water for *lo'i* agriculture. However, the ancient irrigation ditches attested by Wichman (1998) (see Wahi Pana, above) are evidence of substantial Pre-Contact agriculture, largely inland and *mauka* of the current project area.

Wichman's (1985:36) account of the Menehune favoring fishing grounds offshore of Kīlauea indicates that marine resources were ample, despite the lack of a reef in the collapsed cinder cone that shapes the beach. Mōkōlea and Moku'ae'ae are now part of a nature reserve (see Cultural Resources, below), but these seabird nesting sites were also a source of food. "In the interview of a local resident, Kwai Chew Lung (Chow) ... he recalls that the Hawaiians used to pick up baby chicks on Moku'ae'ae Rock... he also remembers going fishing there and hunting for eggs to eat" (Fredericksen and Fredericksen 1989:15).

CULTURAL RESOURCES

Thomas Thrum (1907) recorded a single *heiau* named Pailio in Kīlauea Ahupua‘a, as well as another *heiau* named Kipapa in Kāhili Ahupua‘a, but based on later investigations, it would appear that both *heiau* have been destroyed by subsequent activity (see Previous Archaeology, below). There is considerable amount of remnant Pre-Contact Hawaiian terracing near Kīlauea Stream (on private lands), southwest of the current project area, especially where the terrain is steep and uninviting to Post-Contact development.

In some cases (see Previous Archaeology, below), Post-Contact agricultural and habitation features have been found built over or reusing the Pre-Contact terracing. While the native Hawaiian population decreased in the 19th century, immigration brought in new settlement, including many Asian workers employed by the Kilauea Sugar Company plantation. Asian-style rice pond fields that were likely developed from remains of older native Hawaiian *lo‘i* (to the south of the project area Clark and Rechtman 2010, Clark et al. 2011), and the presence of a Japanese Cemetery to the west (Cleghorn 2001, Spear 2014, Hulen and Barna 2021), speak to the historical demographic changes in Kīlauea Ahupua‘a.

In the present day, some cultural resources in Kīlauea Ahupua‘a are accessible through programs for preservation of historic locations and traditional culture. A number of structures have been placed on the National Register of Historic Places (NRHP). This includes several buildings associated with the Kīlauea plantation, as well as the Daniel K. Inouye Kilauea Point Lighthouse located within the Kilauea Point National Wildlife Refuge (KPNWR). A number of Hawaiian cultural organization partner with the KPNWR to provide access to the coastal region for traditional cultural practices (see Land Use in the Post-contact Period to the Present).

HISTORICAL SETTING

PRE-CONTACT POLITICAL HISTORY

Wichman (2003:55) writes that “the genealogy of Kaua‘i *ali‘i* was considered the most ancient and impeccable in all the Hawaiian islands” and that “*Ali‘i* from other islands were eager to introduce the Kaua‘i bloodline into their own” because of the prestige of the noble lineages of Kaua‘i. Yet despite the high regard in which Kaua‘i *ali‘i* were once held, significant portions of their history have been largely inaccessible to western historians due to limited written records and *mo‘olelo* that have been preserved (Abraham Fornander 1880, Vol 2:291). Nonetheless, folklore associated with Kaua‘i provides some context for Kauai’s Pre-Contact history.

Martha Beckwith (1970) chronicles the venerable bloodlines from which most Hawaiian *ali‘i* claimed descent, originating from the god Wākea and his wife Papahānaumoku:

From Ulu and Nana-ulu, sons of Ki'i, twelfth in succession from Wakea and Papa, all high chief families count descent. Hikapoloa, as well as the Waha-nui and Keikipaanea families of early legend, belong to the Nanaulu line. The important Maweke family is, according to Kamakau, the first of that line from whom men today trace ancestry. Their contemporaries are the Paumakua of Oahu, the Kuhiailani of Hawaii, Puna of Kauai, Hua of Maui, and the Kamauaua of Molokai. To the Ulu line belongs the late migration of chiefs introduced by Paoa to the island of Hawaii from whom most families of that island trace descent. Both legends, that of Paoa and that of Maweke, are believed to have bearing upon early colonization of the Hawaiian group...

The coming of Maweke and his sons to the Hawaiian group is dated sometime between the eleventh and twelfth centuries. [Beckwith 1970:352]

Based on his being a contemporary of Māweke, whose reign is estimated to the 11th century C.E., Puna, the progenitor of Kaua'i's prestigious bloodlines, can be dated to roughly that time period. Perhaps the most famous descendants of Puna, as attested by the genealogies compiled by Samuel Kamakau (1992:448), are Kukona and his son Manokalanipō, respective the 7th and 8th *ali'i aimoku* (*lit.* chief who eats the land; *in context:* ruling chief of an island) of Kaua'i. Fornander (1980, Vol 2) highlights Kukona as being particular in his notability – he is a major figure in the legends where his forefathers are largely unmentioned:

Indigenous Kauai legends referring to this period have perished, and up to *Kukona's* time naught but the royal genealogy remains. But the war with the Hawaii chief, and the terrible defeat and capture of the latter, as well as *Kukona's* generous conduct towards the Oahu, Molokai, and Maui chiefs who fell into his hands after the battle, brought Kauai back into the family circle of the other islands, and with an *eclat* and superiority which it maintained to the last of its independence. [Fornander 1980, Vol 2:93]

The battle Fornander (1980, Vol 2:93) refers to also contributed to Kaua'i's prestige. In the early 15th century, Hawaii Island chief Kalaunuiohua launched an invasion of Kaua'i, accompanied by subordinate chiefs from other islands: Kanialuohua (Maui), Kahakuohna (Moloka'i), and Huakapouleilei (O'ahu). According to David Malo (1898:331-332), Kukona was able to win over these subordinate chiefs after defeating this invasion. Wichman (2003:55) characterizes the subsequent peaceful and prosperous times under Kukona's son Manokalanipō as a 'golden age':

Under Mano-ka-lani-pō, more and more land was opened for agriculture, and the population flourished. Warriors became more athletes than soldiers. So peaceful was this Golden Age that Palekaluhi, twin brother of Mano-ka-lani-pō, died in bed of old age. Such a passing was, after so many years of war, something to be noted. [Wichman 2003:55-56]

Although Manokalanipō led his father's warriors to war to capture the enemy chiefs Kukona was famous for winning over, he apparently had few worries about needing to fight during his own reign. Chiefs in this line of descent would subsequently rule Kaua'i for many generations.

EARLY POST-CONTACT HISTORY

Captain James Cook made the first recorded contact with the Hawaiian Islands when he landed at Waimea on the southern coast of Kaua'i on January 20, 1778 (Beaglehole 1967; Daws 1974:1–2). After Cook's HMS *Resolution* and HMS *Discovery*, other ships began frequenting the islands to take on provisions and to partake in the sandalwood industry. Soon after, missionaries, visitors, and entrepreneurs also began arriving. Introduction of new technologies, religions, and political systems would play a major role in the eventual unification of the Hawaiian Islands.

A political consolidation of the Hawaiian Islands was already underway, but was accelerated by contact and the introduction of gunpower weapons. Maui chief Kahekili II (c. 1737–1794) was able to bring not only O'ahu, but also Lāna'i and Moloka'i under his rule in addition to his native Maui, and was engaged in warfare with his Hawai'i Island rival Kalani'ōpu'u at the time of contact. Kahekili also seems to have considered Kaua'i to be within his sphere of influence since his half brother Kaeokulani was married to Kaua'i's ruler, Kamakahelei. While Kahekili came closer to unifying the island chain than any before him, after his death at Waikīkī in 1794, his realm fell to conflicts between his heirs and invasion from his traditional rivals on Hawai'i.

According to Fornander (1880, Vol 2:262) Kahekili's son Kalanikūpule was his official heir, but his uncle Kaeokulani (who co-ruled Kaua'i) was in *de facto* control of the majority of his inheritance after the passing of Kahekili. Kalanikūpule was initially only able to secure direct control over O'ahu: "*Kalanikupule*, at his father's death, was recognised as the Moi [king] of Maui and its dependencies, Lanai, Molokai, and Oahu, yet the previous arrangement between *Kahekili* and *Kaeokulani* remained in force for some time, the latter governing Maui and the adjacent islands, while *Kalanikupule* ruled over Oahu." This was not a stable state of affairs, and nephew and uncle were soon at odds with each other. Kalanikūpule would strike a bargain with Captain William Brown for military assistance in this civil war with his uncle, and the firepower provided by Brown's ships proved decisive, delivering him victory over Kaeokulani.

However, Kalanikūpule subsequently tried to seize Brown's ships and firearms to use against Kamehameha, who was now the ruler of Hawai'i Island, the primary rival center of power. While this betrayal was initially successful, the surviving Western crew were able to retake their ships, and promptly replenished their supplies by selling the weapons Kalanikūpule coveted to his rival (Kamakau 1992:170–171). Having secured an invaluable military advantage, Kamehameha established his presence on Maui with an invasion of Lāhainā in February of 1795, his large fleet of war canoes covering the coast from Launiupoko to Mala (Kamakau 1961:171). Kalanikūpule fled to O'ahu, but Kamehameha's forces pursued, and ended the war with the battle of Nu'uuanu on O'ahu in 1795. This left Kaua'i as the only significant political force in the island chain unconquered, and Edward Joesting (1984:58) notes that at this time it was undergoing its own civil war between two of Kaekulani's sons, Keawe and Kaumuali'i. However, Kamehameha's first invasion attempt in 1796 was foiled by bad weather while his fleet tried to cross the Kaieie Waho Channel between O'ahu and Kaua'i, with many canoes sunk (Joesting 1984:59).

Kamehameha was prevented from swiftly making a second attempt by the need to put down rebellions in his own territory, and while Keawe triumphed in the civil war on Kaua'i, he died soon after, and rulership defaulted back to Kaumuali'i. Kamehameha's second try at an invasion in 1804, gathered "an army consisting of about 7,000 Hawaiian men ... eight cannons. forty swivel guns. and six mortars," to be carried by not only canoes but "twenty-one armed schooners" (Joesting 1984:62). This invasion force was struck by an illness called *ma'i 'ōku'u* (*lit.* squatting sickness; possibly cholera). The loss to illness of many of his most "trusted counselors and chiefs. some of whom had served Kamehameha for twenty years or more" made the invasion impossible (Joesting 1984:62). Joesting (1984:62-63) states that the loss of loyal subordinates was so severe that Kamehameha worried about attempts to overthrow him. This may have motivated Kamehameha to shift towards negotiations, with an eventual agreement reached in 1810 for Kaumuali'i to become his vassal, officially completing the unification of the islands while allowing Kaumuali'i to continue to rule Kaua'i as a (largely autonomous) subordinate chief.

Christian missionaries had arrived on Kaua'i in 1820, some of them accompanying Humehume's return home after his father had earlier sent him to the United States (Mills 2002: 127). According to Robert Schmitt (1973:2-3), the missionaries organized Kaua'i's first censuses, beginning in 1831, and would provide the main source of population data until the first comprehensive government census in 1850. Kauai's population was recorded as 10,977 in 1832, thereafter declining to 8,934 in 1836 and 6,956 in 1850 (Schmitt 1973:8). A more detailed regional enumeration in 1835 counted 88 adults and 29 children for a total of 117 individuals in Kīlauea Ahupua'a (Schmitt 1973:25).

THE MĀHELE

In the 1840s, during the reign of Kāiūkeaouli, massive change in land tenure occurred, commonly referred to as the *Māhele* (division) because the *‘āina* (land) was legally divided between owners (Daws 1974:128). The term may also refer to the idea of the Hawaiian *maka‘āinana* (commoners, residents; *lit.* on the land) being dispossessed of the *‘āina*; separated from something that was once integral to their identity.

Formalizing land ownership had long been suggested by western advisors to the king and chiefs, but the five-month occupation of the islands by British naval officer George Paulet in 1843 may have added urgency to the issue, since privatization offered the hope that *ali‘i* might retain control over their lands as property even if national sovereignty were lost (Daws 1974:112-117). The Board of Commissioners to Quiet Land Titles (often shortened to “the Land Commission”) was established in 1845 to oversee land titles, and this Land Commission would hear claims during the Māhele.

The Māhele of 1848 divided Hawaiian lands between the the king, the chiefs, and the *aupuni* (government). The parcels awarded by the Land Commission were called Land Commission Awards (LCAs). Initially, this only established crown lands owned by the king, *aupuni* lands owned by the government and private lands owned by the *ali‘i*, which were often referred to as *konoiki* (*ahupua‘a* headman) lands after the title given to land agents or stewards that managed *ahupua‘a* and *‘ili*. The subsequent Kuleana Act of 1850 allowed *maka‘āinana* to file claims for land parcels and house lots on which they had been living or cultivating.

In order to file claims, however, the *maka‘āinana* first had to be aware of the awarding of *kuleana* lands and LCAs, procedures that were largely foreign to them. Many of the *maka‘āinana* could not afford the costs associated with filing. People claiming urban house lots in Honolulu, Hilo, and Lāhainā were required to pay commutation to the government before obtaining a Royal Patent on their awards (Chinen 1961:16). Rural *kuleana* claims required a survey, which could be quite costly, assuming that the services of one of the few surveyors present in the islands at the time could be obtained (Moffat and Fitzpatrick 1995:50). Furthermore, awards of rural *kuleana* lands often only encompassed land under active cultivation, without including other locations necessary for traditional survival strategies, such as previously cultivated but presently fallow lands, or resource gathering areas such as *‘okipu‘u* (swidden gardens) and stream fisheries (Kame‘eleihiwa 1992:295; Kirch and Sahlins 1992:23, 110). These factors may have contributed to the relatively low number and size of claims, as only 8421 *kuleana* awards were issued, totaling only 28,658 acres (Moffat and Fitzpatrick 1995:50).

Some contemporary scholars have disputed the notion that the Māhele was the chief instrument of dispossession of the *kanaka maoli* (native Hawaiians). Beamer and Tong (2016:130) point out that although the claims system appears to have awarded the *maka ‘āinana* little, records show that they were able to purchase an estimated 167,290 acres of land between 1850 and 1893, often *aupuni* lands sold to them at relatively low cost. Beamer and Tong (2016:136) also argue that many *ali ‘i* leased or sold land to *hui* (associations) of *kanaka*, keeping some semblance of the former *ali ‘i - hoā ‘āina* relationship. In these ways, land not awarded to *maka ‘āinana* during the Māhele were still made available to them. Nonetheless, once foreigners were allowed to acquire land through the Alien Land Ownership Act of 1850, they quickly came to control much of it. By the end of the 19th century “white men owned four acres of land for every one owned by a native” (Daws 1975:125).

The *Indices of Awards Made by the Board of Commissioners to Quiet Land Titles in the Hawaiian Islands* (Land Commission 1929) do not list any LCAs in Kīlauea Ahupua‘a. Lloyd Soehren’s (2002-2019) *Hawaiian Place Names* database notes that Kīlauea Ahupua‘a was “returned by Kekauonohi, retained by *aupuni* at the Mahele.” The Office of Hawaiian Affairs (n.d.) *Kipuka Online Database* suggests a slightly more complex transaction in which Kīlauea Ahupua‘a was “relinquished by Mikahela Kekauonohi to Kamehemeha III” and “relinquished by Kamehemeha III to Government.” It should be noted that LCA No. 8559-B, the claim for the crown lands of Hawaii in the name of William C. Lunalilo, includes Kāhili and Kalihiwai Ahupua‘a, the *ahupua‘a* east and west of Kīlauea Ahupua‘a, whereas Nāmāhana Ahupua‘a to the northwest was claimed by Keahikuni Kekau‘ōnohi (also called Mikahela or Miriam) as part of LCA No. 11216. It makes geographic sense that the King, Kekau‘ōnohi, or both once had a claim on Kīlauea Ahupua‘a given their claims on adjacent *ahupua‘a*.

It is clear, however, that Kīlauea Ahupua‘a was declared *aupuni* lands during the Māhele, and that no *kuleana* awards are listed for the *ahupua‘a*. The *Indices* (Land Commission 1929) do list seven other LCAs in Kāhili Ahupua‘a and 28 other LCA in Kalihiwai Ahupua‘a aside from those of the Crown (LCA No. 8559-B; Lunalilo); these are presumably *kuleana* claims. The seven *kuleana* claims in Kāhili Ahupua‘a are the *kuleana* awards closest to the current project area, and cluster on the east bank of Kīlauea stream, mostly near the stream mouth. LCA No. 10333, claimed by Naaimeneo on behalf of her deceased husband Oopu, and confirmed by Royal Patent Grant No. 3370 in 1856, sits on the present border with Kīlauea Ahupua‘a (Waihona ‘Āina N. d.). The other six LCAs in Kāhili Ahupua‘a are LCA Numbers 9067, 10013, 10013-B, 10015, 10082, and 10083. These seven awards are shown on Figure 5, and records for Kāhili Ahupua‘a LCA (excerpted from Ida and Hammatt 1997) are also included in Appendix A.

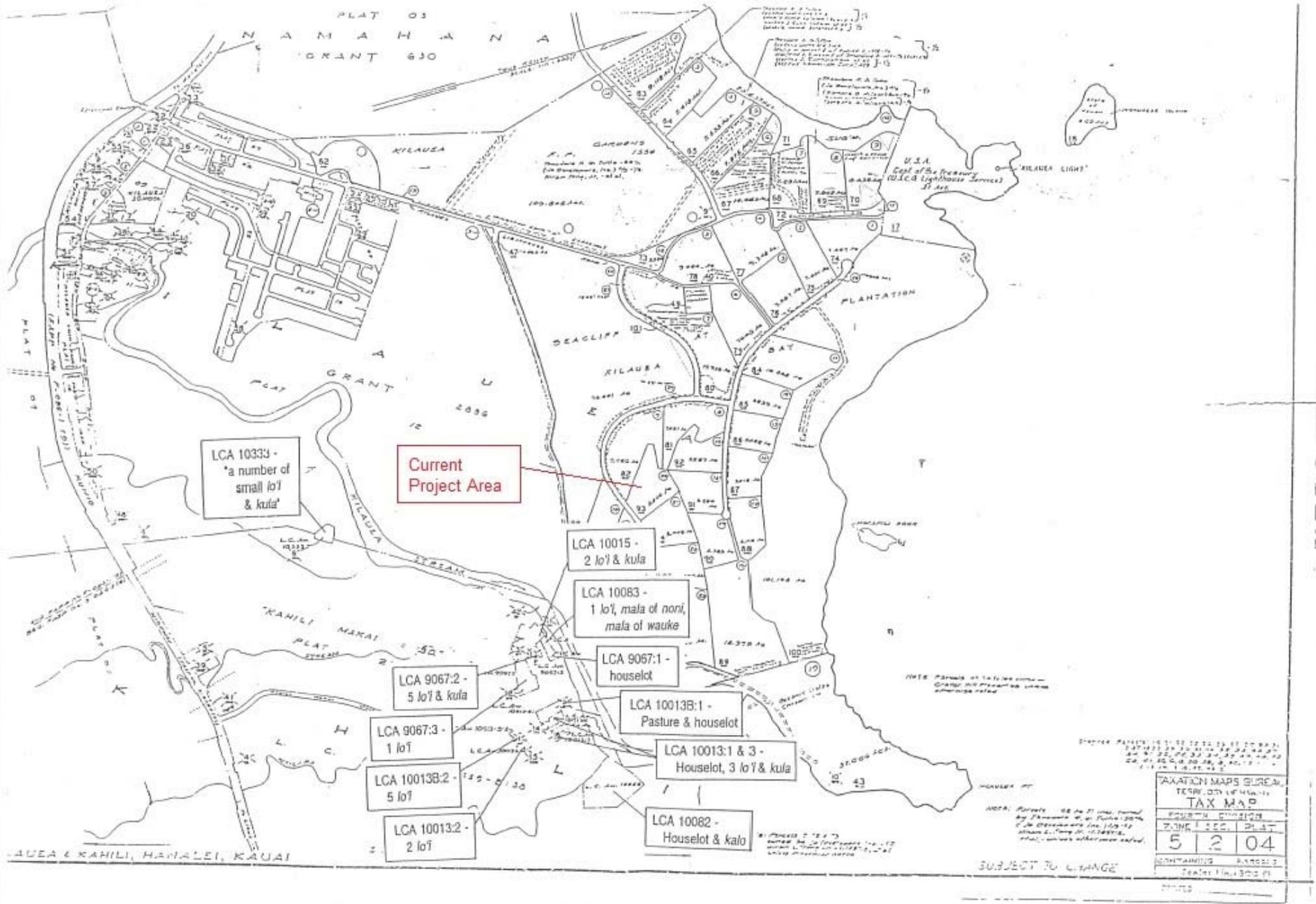


Figure 5: TMK map (zone 5, section 2, plat 004) with LCA parcels labeled; adapted from Ida and Hammatt 1997

Māhele records indicated that there were other claims made for lands in Kīlauea Ahupua‘a during the Māhele, but none were awarded. This includes a claim (No. 6529) by Holokukini, on the basis that he served as *konohiki* for Kīlauea Ahupua‘a under Aaron Keali‘iahonui (husband of Kekau‘ōnohi), and six other claims, all of which were rejected or abandoned. Among the *kuleana* claims was one (No. 9217) that gained some later notoriety for (the claimant) Kealawa‘a complaining that “I returned my claim to land of Kilauea to the Konohiki for the land is being filled with cattle & I have no desire to combat them [*sic*]” (Waihona ‘Āina 2005).

LAND USE IN THE POST-CONTACT PERIOD TO THE PRESENT

Whaling declined in the late 19th century, and commercial agriculture and ranching came to the forefront of Hawaiian economy, in part because the Māhele had allowed the consolidation of lands into vast and now privately owned plantations and ranches. The Reciprocity Treaty of 1875 permitting duty-free trade of agricultural products between the Kingdom of Hawai‘i and the United States turned Hawaiian sugar into an immensely profitable commodity. Kuykendall (1967, Vol 3:46-48) credited the sugar industry with cementing commercial agriculture as the economic mainstay of the Hawaiian economy for the rest of the century and beyond.

Commercial sugar production on Kaua‘i began as early as 1835, when the firm Ladd and Company, affiliated with Christian missionaries, secured the first land lease in Hawaiian history, for 980 acres at Koloa for a sugar plantation (Joesting 1984:131). Joesting (1984:147) notes that “optimistic reports of progress in cultivating sugarcane at Koloa plantation raised interest in other agricultural crops,” such as a venture by Sherman Peck and Charles Titcomb to try to raise silkworms. While this plan failed, Titcomb would eventually go on to purchase the whole of Kīlauea Ahupua‘a in 1863 and start a plantation there. Jesse Condé and Gerald Best (1983:150) indicate the plantation was sold to Captain John Ross and Edward P. Adams in 1877.

According to the Kaua‘i Historical Society (N.d.), the plantation was subsequently incorporated as a company, Kilauea Sugar Company Limited, in 1880 and would remain in operation for over 90 years:

It became known as Kilauea Sugar Plantation Company after purchase by a California corporation in April 1899. Headquarters were in San Francisco, California, with local operations in Kīlauea, Kaua‘i, Hawai‘i. In 1955, C. Brewer and Company Ltd., the company’s Honolulu sugar factor (agent), purchased a majority of stock, and the company reverted to its original name, Kilauea Sugar Company Limited. All sugar operations were terminated on December 31, 1971. [Kaua‘i Historical Society N.d.:2]

William Dorrance and Francis Morgan (2000:32) note that “Kilauea Sugar Company was among the smallest in the Islands,” which, given that they indicate it reached “5,000 acres” suggests the economy of scale required for success during the heyday of commercial sugar in Hawai‘i. Carol Wilcox (1996:84) explains that the plantation “had to make the best of marginal conditions. Plagued by rocky terrain, small size, few water resources, and its remote, windward location, it never enjoyed the success of other, better situated plantations.” While the plantation was not as massive as some of its peers, it boasted its own railroad to haul sugar to the mill. The Kauai Plantation Railway (2008) website recorded that railroads on Kaua‘i island used unusually narrow gauge, but the railroad at Kilauea, the first on the island of Kaua‘i, was even narrower:

In late 1881 management of the Kilauea Plantation ordered rail equipment from the John Fowler Co, of Leeds, England. Rail, spikes, a locomotive and cars arrived on Kauai late in 1881 and by the end of 1882 the line was in operation. Track gauge was 2' and the tiny (likely 6 tons) 0-4-2 Fowler locomotive could move up to ten loaded cars of cut cane in one train.

While the original line at Kilauea Plantation remained at 2' gauge to the end, all the other lines on Kauai chose 30" gauge, the only Island in the Hawaiian Chain to run with this gauge.

Condé and Best (1983:150) report that “rail equipment for Kilauea was duly shipped to Kauai and by a curious twist was not only the first railroad built on that island, but it had its first spike driven by an [*sic*] Hawaiian Princess” on September 24, 1881. This dignitary was Princess Regnant Lydia Kamaka‘eha, who would in a decade be crowned as Queen Lili‘uokalani, the last monarch of the Kingdom of Hawai‘i. She was visiting Kaua‘i, and had not been aware of the railroad, but upon arriving at Kilauea Village, she was greeted by employees of the Plantation:

...she was informed that at that moment the first piece of track for the first railway on Kauai was about to be laid, and it would be considered an honor if Her Royal Highness would drive the first spike, which she kindly consented to do. Proceeding to the plantation... a large crowd had collected, the Royal Standard having been hoisted on a temporary staff. Her Royal Highness... took great interest in all these particulars, and expressed her great satisfaction at being able to be present at the laying of the first railway on the Island of Kauai, and trusted it might soon gird the whole island and so develop its resources and promote the industry of its people. [Pacific Commercial Advertiser 1881 *in* Condé and Best 1983:151]

By November of 1881, the railroad at the Kilauea Sugar Company plantation was operational, with three miles of track laid. Both sugar operations and the railroad grew over the next several decades, and “in 1910, Kilauea’s railroad system was comprised of 12 ½ miles of permanent track, 5 miles of portable track, 200 cane cars, six sugar cars and four locomotives” (Soboleski 2017).

Much of the infrastructure built up for the Kīlauea plantation did not survive to the current day. The railroad was phased out first: “Kahili Landing and its railroad track was abandoned beginning in 1928, when sugar from the mill was trucked to Ahukini Landing instead, and by the spring of 1942, trucks had replaced railroad locomotives and cane cars as the means of hauling sugarcane to the Kilauea mill” (Soboleski 2017). Wilcox (1996) states that the land continued to see some agricultural use after sugar operations ended in 1971, but there was no upkeep of the plantation irrigation system, and parts of it were destroyed while others were simply abandoned:

.. no mechanism was established to secure the easements or maintain the old system. Over the years the connections between reservoirs and delivery systems were destroyed by roads, pasture, development, neglect, and intent. The Hanalei Ditch was abandoned, its flumes and siphon no longer operable. The connection from the Kalihiwai Reservoir to Stone Dam was destroyed, as was that between Puu Ka Ele and Morita reservoirs. Puu Ka Ele and Koloko reservoirs' delivery systems were gone. C. Brewer established Kīlauea Irrigation Company, a public utility, to administer the surviving sections that service its guava farming operation. By the mid-1990s, some reservoirs stood alone with little utilitarian purpose. [Wilcox 1996:85]

Several structures associated with the Kīlauea plantation were nominated for the NRHP. This includes the Kilauea Plantation Head Bookkeeper's House, Kilauea Plantation Head Luna's House, Kilauea Plantation Manager's House, Kilauea School, and Kilauea Plantation Stone Buildings. According to the Historic Hawai‘i Foundation (2021), these NRHP properties are located in Kīlauea Town, southwest of the current project area. Aside from plantation buildings, only one other NRHP site occurs within Kīlauea Ahupua‘a: the Daniel K. Inouye Kilauea Point Lighthouse (see Previous Archaeology, below), a set of stone structures located within the present-day Kilauea Point National Wildlife Refuge (KPNWR).

KPNWR occupies Kīlauea Point peninsula, Mōkōlea Point peninsula, Crater Hill, and the coastline north of the project area. The wildlife refuge was established in 1985 and expanded to its current extent in 1988. KPNWR is administered by the US Fish and Wild Life Service (FWS), and is open to visits (and thus serves as a tourist attraction).

The FWS maintains the refuge to protect and preserve not only flora and fauna, especially migratory seabirds and the endangered *nēnē* (Hawaiian goose, *Nesochen sandvicensis*), but also the Daniel K. Inouye Kīlauea Point Lighthouse and Light Station. The FWS also partners with local native Hawaiian organizations such as Kaipuwai Foundation and Na Kia‘i Nihoku, that “perform Native Hawaiian cultural practices and ceremonies at Nihoku summit on the summer and winter solstice and the spring and fall equinox” (Fish and Wild Life Service N.d.). Additionally, portions of KPNWR are open to fishing, and “native Hawaiian fishing at Kīlauea (East) Cove” is recognized as a cultural practice (Fish and Wild Life Service N.d.).

With the closure of the sugar plantation, some farming continued in Kīlauea, but much like the rest of Hawai‘i, the economy shifted toward tourism as the primary industry. The construction of Lihue Airport in 1948-49 had made Kaua‘i accessible for tourism, and “by 1955, the... airport was served by Hawaiian Airlines, Ltd. and Trans-Pacific Airlines, Ltd. on a scheduled basis” (Hawaii Department of Transportation 2022). Based on 2010 census data, the Cedar Lake Ventures, Inc. (2018) *Statistical Atlas* reports that 19.6% “of the civilian employed population aged 16 and older” on Kaua‘i is in the hospitality industry, making it the island’s largest sector of employment.

PREVIOUS ARCHAEOLOGY IN THE PROJECT AREA VICINITY

There has been a significant amount of previous archaeological work in the region, although much of it has concentrated on the coast, or on the far bank of Kīlauea Stream (in Kāhili Ahupua‘a). Conversely, Kīlauea Town to the southwest and the Seacliff Plantation community where the project area is located do not seem to have seen much investigation. Figure 8 shows the location of archaeological work in the vicinity of the project area. Note that several project areas adjoin or overlap Kīlauea Stream (also called Kīlauea River; see Figure 1 above for its location). These previous studies are also summarized on Table 2. While some early work was conducted (based heavily on recording oral accounts and checking for the features described in those accounts), the bulk of archaeological work in the State of Hawai‘i occurred after the U.S. Congress passed the National Historic Preservation Act (NHPA) in 1966 (Kawelu 2015:30).

EARLY ARCHAEOLOGICAL STUDIES (THRUM 1907, BENNETT 1931)

Thomas Thrum (1907) made an early attempt to list all of the *heiau* (*lit.* places of worship; *in context:* temples for native Hawaiian religious practice) in the Hawaiian Islands. The *heiau* he noted on Kaua‘i are described in an article in the 1907 edition of his *Hawaiian Annual* almanac. Thrum (1907:42) recorded one *heiau* named Pailio in Kīlauea Ahupua‘a, as well as one *heiau* named Kipapa in Kāhili Ahupua‘a.

Table 2: Archaeological Studies in Nāmāhana, Kīlauea, and Kāhili Ahupua‘a

Author(s), Date	Research Type	Location	Results
Thrum 1907	Almanac Listing	Kaua‘i Island	Kipapa Heiau (SIHP Site 50-30-04-00132); Pailio Heiau (SIHP Site 50-30-04-00133)
Bennett 1931	Island-wide Survey	Kaua‘i Island	Kipapa Heiau (SIHP Site 50-30-04-00132); Pailio Heiau (SIHP Site 50-30-04-00133)
Kikuchi 1987	Archaeological Survey	Kīlauea Point [TMK: (4) 5-2-004:017]	Kīlauea Point Lighthouse (SIHP Site 50-30-04-00300)
Toenjes & Hammatt 1990	Archaeological Survey	[TMK: (4) 5-2-004:102]	no findings.
Hammatt & Chiogioji 1992	Archaeological Inventory Survey	[TMK: (4) 5-2-017:028]	no findings.
Hammatt et al. 1996	Archaeological Inventory Survey	[TMK: (4) 5-2-021:005]	agricultural complex (SIHP Site 50-30-04-00625); charcoal kiln, enclosure (SIHP Site 50-30-04-00998); cattle fence (SIHP Site 50-30-04-00999)
McGerty et al. 1997	Archaeological Inventory Survey	[TMK: (4) 5-2-021:007]	permanent habitation complex (SIHP Site 50-30-04-00974); garden area & burials (SIHP Site 50-30-04-00975); habitation site (SIHP Site 50-30-04-00976); agricultural area (SIHP Site 50-30-04-00977)
Carson et al. 1998	Data Recovery	[TMK: (4) 5-2-021:007]	confirmed assessment of Site -00974; no cultural material found at Site -00975
Ida & Hammatt 1997	Archaeological Inventory Survey	[TMK: (4) 5-1-005:052 & 102 through 113]	irrigation flume (SIHP Site 50-30-04-00640); Pu‘uka‘ele Ditch remnants (SIHP Site 50-30-04-00641); partially buried culvert (SIHP Site 50-30-04-00642); swale tunnel (SIHP Site 50-30-04-00643)
McGerty & Spear 1998	Archaeological Inventory Survey	[TMK: (4) 5-2-011:033]	agricultural complex (SIHP Site 50-30-04-00625)

Author(s), Date	Research Type	Location	Results
Burgett et al. 2000	Archaeological Inventory Survey	[TMK: (4) 5-2-021:006]	dryland agricultural site (SIHP Site 50-30-04-00632); unmarked grave (SIHP Site 50-30-04-00633); floodplain soil deposits (SIHP Site 50-30-04-01993)
McGerty and Spear 2001	Archaeological Inventory Survey	[TMK: (4) 5-2-021:005]	additional features of Sites -00625, -00998, and -00999
Elmore and Kennedy 2001	Archaeological Inventory Survey	[TMK: (4) 5-1-005:005]	agricultural complex (SIHP Site 50-30-04-00515)
Cleghorn 2001	Archaeological Monitoring	Kilauea Japanese Cemetery [TMK: (4) 5- 2-004:049 por.] telecommunications installation	no findings.
Rechtman et al. 2001	Archaeological Inventory Survey	Hālaulani Property [TMK: (4) 5-2-002:011]	dam on Kīlauea Stream (SIHP Site 50-30-03-02060); dam on Pu‘uka‘ele Steam (SIHP Site 50-30-03-02062); ditch and flume remnants (SIHP Site 50-30-03-02063); irrigation tunnel and flume supports (SIHP Site 50-30-03-02064)
Elmore and Kennedy 2002	Archaeological Inventory Survey	[TMK: (4) 5-1-005:016]	additional features of Site -00515; unable to locate Kipapa Heiau (Site -00132)
Bevan et. al 2004	Archaeological Monitoring	[TMK: (4) 5-1-005:016]	additional feature of Site -00515
Dagher 2007	Field Inspection	[TMK: (4) 5-2-023:027 & 028]	no findings.
Shideler et al. 2008	Archaeological Inventory Survey	Kilauea Falls Ranch [TMK: (4) 5-2-012:035 por.]	agricultural terrace (SIHP Site 50-30-03-00579); agricultural complex (SIHP Site 50-30-03-00580); retaining wall, ramp, and trail (SIHP Site 50-30-03-00581); terraces (SIHP Site 50-30-03-00582); terraces (SIHP Site 50-30-03-00583)
Tome & Dega 2009	Archaeological Inventory Survey	[TMK: (4) 5-2-021:007]	agricultural site (SIHP Site 50-30-04-05028)

Author(s), Date	Research Type	Location	Results
Clark and Rechtman 2010	Archaeological Inventory Survey	[TMK: (4) 5-2-012:019]	terraced (rice) fields, SIHP Site 50-30-04-02011); Post-Contact (concrete) structure (SIHP Site 50-30-04-02011)
Sroat et al. 2010	Archaeological Inventory Survey	Kīlauea Agricultural Park [TMK (4) 5-2- 004:099]	Post-Contact habitation site (SIHP Site 50-30-03-02123); plantation-era structures (SIHP Site 50-30-03-02124); Pre-Contact agricultural terrace (SIHP Site 50-30-03-02125); plantation-era drainage (SIHP Site 50-30-03-02126)
Dagher and Dega 2011	Archaeological Monitoring	Kīlauea River Cleanup	insolated finds of human skeletal remains and Post-Contact artifacts; no sites identified
Clark et al. 2011	Archaeological Inventory Survey	[TMK: (4) 5-2-21:041, CPR 0001; (4) 5-2- 12:035 por.; and (4) 5-2- 021:004 por.]	expanded scope of Site -02011 to 4.5 acres; additional features of Site -02012
Kamai & Hammatt 2013	After-the-fact Assessment	[TMK: (4) 5-2-021:006]	no further damage found to Sites -00632 & -00633
Hammatt & Shideler 2014	Field Inspection	[TMK: (4) 5-2-005:036]	no findings.
Spear 2014	Field Inspection	telecommunications facility [TMK: (4) 5-2- 004:049 por.]	no findings.
Putzi et al. 2014	Archaeological Inventory Survey	LDS meetinghouse [TMK: (4) 5-2-019:004]	buried fire pit (SIHP Site 50-30-04-02237)
Hulen and Barna 2021	Archaeological Monitoring	telecommunications facility [TMK: (4) 5-2- 004:049 por.]	no findings.

Wendell Bennett's (1931) *Archaeology of Kauai* attempted to provide a comprehensive overview of archaeological sites on Kaua'i, based on both prior records and his own fieldwork in 1928-29; his site numbers were later converted to State Inventory of Historic Places (SIHP) site numbers. Bennett (1931:133) assigned Pailio Heiau as Site 133 (later SIHP Site Number 50-30-04-00133), and Kipapa Heiau as Site 132 (later SIHP Site No. 50-30-04-00132). He was not able to locate Pailio, noting "nothing remains of the heiau to-day," but attested that Kipapa stood "on the end of the first bluff east of Kilauea River in Kāhili" (Bennett 1931:133).

KĪLAUEA POINT NATIONAL WILDLIFE REFUGE (KIKUCHI 1987, FREDERICKSEN AND FREDERICKSEN 1989)

William Kikuchi (1987) conducted an archaeological survey of Kīlauea Point [TMK: (4) 5-2-004:017] (as well as several other nearby coastal regions) on behalf of the U.S. Fish and Wildlife Service, which was planning to construct a visitor center for the wildlife refuge. The survey, which included excavation of a test pit to gauge the likelihood of cultural layers being present, found "no sign of any [Pre-Contact] use of the Kilauea Point National Wildlife Refuge area by native Hawaiians" (Kikuchi 1987:3, 11). However, Kikuchi (1987:1) did note that the lighthouse on Kīlauea Point "was placed on the Hawai'i Register of Historic Sites on November 4, 1974, and on the National Register of Historic Sites on October 18, 1979" and "was officially given the State of Hawai'i site number 50-30-04-300 [*sic*, SIHP Site No. 50-30-04-00300]."

In 1988, Xamanek Researches, LLC (XRL) (Fredericksen and Fredericksen 1989) conducted an Archaeological Inventory Survey (AIS) of the approximately 96-acre Crater Hill parcel [TMK: (4) 5-2-004:103] and the approx. 38-acre Mōkōlea Point parcel [TMK: (4) 5-2-004:043], which had just been added to the Kīlauea Point National Wildlife Refuge (previously only approx. 33 acres). Fredericksen and Fredericksen (1989:20) conducted a pedestrian survey of the project area, reporting that "there were no features or artifacts discovered during the course of the survey from either the Hawaiian [Pre-Contact] or [Post-Contact] periods." However, they documented a number of (non-Hawaiian) historic properties that would latter be designated as sites: a radar installation site (later assigned SIHP Site No. 50-30-04-01810) a sugar-loading complex at Mōkōlea Point (SIHP Site No. 50-30-04-01811) the Kīlauea plantation railroad (the railroad build by the Kilauea Sugar Company connecting their plantation to the dock; SIHP Site No. 50-30-04-01812), and a old quarry on Mōkōlea Point (SIHP Site No. 50-30-04-01813).

TOENJES AND HAMMATT 1990

In 1990, Cultural Surveys Hawai‘i, Inc. (CSH) (Toenjes and Hammatt 1990), conducted an archaeological survey on 94 acres of former Kilauea Sugar Plantation Company land north of Kīlauea town [TMK: (4) 5-2-004:102]. The area was “checked for coral, lithic and bone and shell midden remains” that might indicate a cultural deposit, but although “two loci suggesting previous traditional Hawaiian activity were found and tested for subsurface deposits” Toenjes and Hammatt (1990:14) found only a few coral and basalt fragments. Toenjes and Hammatt (1990:1) reported “no structural remains or in situ deposits of historic or archaeological significance.”

HAMMATT AND CHIOGIOJI 1992

In 1992, CSH (Hammatt and Chiogioji 1992) conducted an AIS on a 15.17-acre property for a proposed subdivision on the border of Nāmāhana and Kalihiwai Ahupua‘a [TMK: (4) 5-2-017:028]. In addition to the main project area, a proposed alternative well site “150 to 200 feet south of the south property boundary along the slope of a gully was surveyed” Hammatt and Chiogioji (1992:21). Hammatt and Chiogioji (1992:21) conducted a pedestrian survey of the parcel and excavated a test trench where “a thin scatter of marine sand, coral pebbles and fossil marine shell was observed.” The subsurface testing found only the plow zone from former commercial agricultural use of the parcel, and the marine material was interpreted as originating from the “liming of fields with quarried marine sand deposits” during sugarcane cultivation, and no archaeological sites were reported (Hammatt and Chiogioji 1992:21).

HAMMATT ET AL. 1996

In 1995, CSH (Hammatt et al. 1996) conducted an AIS on an approx. 5-acre portion of a 24.87-acre property parcel [TMK: (4) 5-2-021:005] where a single-family residence was proposed. Pedestrian survey and excavation of two test units and five shovel probes identified three archaeological sites. SIHP Site No. 50-30-04-00625 was an agricultural complex consisting of seven surface features (walls and terraces) and a subsurface cultural layer. Charcoal from the cultural layer was sent for radiocarbon analysis and returned a date range of 1410-1650 Common Era (C.E.) at 2-sigma (95% confidence). This charcoal was interpreted as originating from burning for land clearing purposes, suggesting that agricultural development in this region began around 1400 C.E. SIHP Site No. 50-30-04-00998 consisted of a charcoal kiln, as well as an adjacent terrace area and enclosure that may have been associated with the kiln. SIHP Site No. 50-30-04-00999 consist of two stacked boulder walls that were interpreted as a cattle fence. Hammatt et al. (1996) reported that “the owner of the property, has designed the access road and the location of his single-family residence to minimize impact to the archaeological sites,” allowing preservation through avoidance.

McGERTY ET AL. 1997, CARSON ET AL. 1998, TOME AND DEGA 2009

In 1996, SCS (McGerty et al. 1997) conducted an AIS on a portion of a 26.19-acre parcel on the east bank of Kīlauea stream [TMK: (4) 5-2-021:007]. The survey focused on the flat bench (also called a ‘natural terrace’) portion of the property parcel, above the floodplain. Pedestrian survey and excavation of seven trenches and nine test units identified four archaeological sites with a total of 47 component features. SIHP Site No. 50-30-04-00974 was comprised of ten terraces, ten (rock) alignments, an enclosure, a wall, two fire pits, a hearth, and an *imu* (underground oven). Two charcoal samples from the subsurface features were sent for radiocarbon analysis and both returned date ranges (at 2-sigma) from the late 1600s C.E. to the mid 1900s C.E. Site -00974 was interpreted as a Late Pre-contact to Early Post-Contact permanent habitation complex. SIHP Site No. 50-30-04-00975 was located west of Site -00974, and was comprised of two small enclosures, four alignments, two terraces, a wall, and a pathway. The Site -00975 enclosures were interpreted as possible burials, and the rest of the site as a small garden area. SIHP Site No. 50-30-04-00976 was located south of Site -00975, and was comprised of three enclosures, three terraces, and a possible posthole. A charcoal sample from the posthole was sent for radiocarbon analysis and returned a date range (at 2-sigma) from 1400 C.E. to 1520 C.E. or 1600 C.E. to 1620 C.E. Site -00976 was interpreted as a Pre-Contact habitation site. SIHP Site No. 50-30-04-00977 was located to the west of Site -00975, and consisted of two terraces and an alignment. Site -00977 was interpreted as a probable extension of the agricultural area of Site -00975, separated due to 20th century grading and grubbing in the area between them. As the location of Site -00974 was planned for development, McGerty et al. (1997) recommended that data recovery be conducted.

Subsequently, SCS (Carson et al. 1998) conducted data recovery at SIHP Site Numbers 50-30-04-00974 and 50-30-04-00975. Subsurface testing consisted of four backhoe and one manually excavated trench. Testing at Site -00974 yielded total of 111 artifacts interpreted as traditional Hawaiian, compared to only five artifacts that were distinctly Post-Contact. No cultural material was recovered from Site -00975. Radiocarbon analysis of a charcoal sample produced results consistent with previous samples from Site -00974: late 17th century to 20th century. The results of this data recovery support the prior assessment of Site -00974 (Carson et al. 1998).

In 2009, SCS (Tome and Dega 2009) conducted an AIS on a 6.8-acre portion of the floodplain at TMK: (4) 5-2-021:007. Pedestrian survey and excavation of 12 trenches identified an agricultural site, consisting of a rock walled *lo ‘i* and a rock alignment, that was designated as SIHP Site No. 50-30-04-05028. Tome and Dega (2009) postulated that this agricultural site was associated with the habitation sites previous identified by McGerty et al. (1997).

BURGETT ET AL. 2000, KAMAI AND HAMMATT 2013

In 1997, SCS (Burgett et al. 2000) conducted an AIS on a 27.56-acre parcel on the east bank of Kīlauea stream [TMK: (4) 5-2-021:006], immediately southwest of the parcel where a previous survey had been conducted by McGerty et al. (1997). Unlike the previous survey, this AIS included the floodplain as well as the leveled, upper portion (bench and slope) of the parcel. Pedestrian survey and subsurface testing via four trenches and four shovel probes identified three archaeological sites. SIHP Site No. 50-30-04-00632 consisted of 56 features on the slopes, including terraces, alignments, walls, and upright stones, as well as bedrock boulder overhangs and cupboards. Site -00632 was interpreted as a dryland, or *kula*, agricultural site. SIHP Site No. 50-30-04-00633 was an unmarked grave that a local informant, Kaipō Chandler, pointed out as the resting place of his uncle Thomas Goodman, who died in 1929. Site -00633 was located behind a house that Chandler helped build in the 1960s. SIHP Site No. 50-30-04-01993 consisted of soil deposits identified in the floodplain, which were associated with the construction of berms for *lo'i*. Sites -00632 and -01993 were assessed as representing Late Pre-contact to Early Post-Contact agricultural activity.

In 2012, CSH (Kamai and Hammatt 2013) conducted an after-the-fact assessment on a portion of the parcel [TMK: (4) 5-2-021:006] surveyed by Burgett et al. (2000), and submitted a letter report. The assessment was intended “to determine whether violations that occurred in November and December 2007 had an adverse effect to historic properties” Kamai and Hammatt (2013:2). This letter notes an earlier report regarding a previous violation in 2003, but that earlier report (McMahon 2003) was not on file at the State Historic Preservation Division (SHPD). Kamai and Hammatt (2013) concluded that there was no further damage to Sites -00632 and -00633 since 2003. As the earlier report is called a “damage assessment report,” it is presumed that these sites were indeed adversely affected during the 2003 violations (Kamai and Hammatt 2013:3).

IDA AND HAMMATT 1997

In 1997, CSH (Ida and Hammatt 1997) conducted an AIS on an 89-acre parcel for a proposed subdivision in Kāhili Ahupua‘a [then TMK: (4) 5-1-005:052; now TMK: (4) 5-1-005:052 & 102 through 113]. Full pedestrian survey and limited subsurface testing did not find any archaeological sites associated with native Hawaiian cultural activity, but did identify four historic properties associated with the former Kilauea Sugar Plantation Company, all which consisted of water control features. SIHP Site No. 50-30-04-00640 was an irrigation flume across Wailapa stream gulch. SIHP Site No. 50-30-04-00641 consisted of an irrigation ditch and tunnel that were interpreted as remnants of Pu‘uka‘ele Ditch. SIHP Site No. 50-30-04-00642 was a partially buried culvert near a swale connected to Kulihā‘ili stream gulch. SIHP Site No. 50-30-04-00643 was a 16m long tunnel at the end of a swale of the same gulch (Ida and Hammatt 1997).

McGERTY AND SPEAR 1998

In 1997, SCS (McGerty and Spear 1998) conducted an AIS on a proposed driveway corridor and associated buffer zones in Kīlauea town [TMK: (4) 5-2-011:033]. A single archaeological site was identified during survey. SIHP Site No. 50-30-04-00644 consisted of five terraces and a rock alignment, and was assessed as a Post-Contact agricultural complex (McGerty and Spear 1998).

McGERTY AND SPEAR 2001

In 2000, SCS conducted an AIS (McGerty and Spear 2001) on a parcel at TMK: (4) 5-2-021:004, on the east bank of Kīlauea stream. This is the parcel immediately south of the one [TMK: (4) 5-2-021:005] where Hammatt et al. (1996) previously conducted an AIS. McGerty and Spear (2001:1) indicate a project area of approx. 6 acres, yet the acreage of TMK: (4) 5-2-021:004 is considerably greater, so the survey likely only encompassed a portion of the parcel, probably in the northwest. McGerty and Spear (2001:19) state that “site numbers previously established by the 1996 study... were applied to similar features within the present project area,” effectively extending the sites previously identified by Hammatt et al. (1996) in neighboring parcel 004 into parcel 005. Therefore, a second charcoal kiln was added to SIHP Site No. 50-30-04-00998, while a section of pavement was added to SIHP Site No. 50-30-04-00999. Almost 50 new features, mostly terraces, were added to the SIHP Site No. 50-30-04-00625 agricultural complex. A charcoal sample from Site -00625 returned a radiocarbon result of 1440 C.E. to 1690 C.E., consistent with the previous analysis (McGerty and Spear 2001).

ELMORE AND KENNEDY 2001

In 2000-01, Archaeological Consultants of the Pacific, Inc. (ACP), conducted an AIS (Elmore and Kennedy 2001) on a 5.69-acre parcel [TMK: (4) 5-1-005:005] on the east bank of Kīlauea stream for the proposed construction of a private residence. Pedestrian survey and six shovel probes identified a single archaeological site. SIHP Site No. 50-30-04-00515 consisted of seven terraces along Wailapa stream, an *auwai* (ditch), the remnant foundation of a Post-Contact house, a stone alignment, and two stone mounds. Radiocarbon analysis of a sample from the terraces returned a date range (at 2-sigma) of 1660 C.E. to 1904 C.E. While no clear evidence of Pre-Contact activity at Site -00515 was found, Elmore and Kennedy (2001) considered it possible that initial agricultural use began Pre-Contact.

CLEGHORN 2001, SPEAR 2014, HULEN AND BARNA 2021

In 2001, Pacific Legacy, Inc. conducted archaeological monitoring (Cleghorn 2001) for the installation of a telecommunications compound at Kilauea Japanese Cemetery [TMK: (4) 5-2-004:049 por.]. No cultural materials were identified during monitoring.

In 2014, SCS conducted a field survey (Spear 2014) of the same project area [TMK: (4) 5-2-004:049 por.] for the proposed Kilauea Relo AT&T Facility upgrade. No historic properties were identified, but Spear (2014) recommended archaeological monitoring due to the possibility of unmarked burials in the vicinity.

In 2021, ASM Affiliates, Inc. conducted archaeological monitoring (Hulen and Barna 2021) during upgrades to the telecommunications station (Verizon KILAUEA_GRAVEYARD A) at [TMK: (4) 5-2-004:049 por.], the same facility previously monitored by Cleghorn (2001). No historic properties were identified during monitoring (Hulen and Barna 2021).

RECHTMAN ET AL. 2001

In 2001, Rechtman Consulting, LLC (RCL) conducted an AIS (Rechtman et al. 2001) of the Hālaulani Property, an approx. 1400-acre area inland of Kīlauea town [then TMK: (4) 5-2-002:011 & 012; now TMK: (4) 5-2-002:011]. Because of the very large project area, it was agreed in consultation with SHPD “that the margins of the streams and the Kamo‘okoa Ridge area would be surveyed at 100% intensive coverage and that the former and current sugarcane and orchard areas would be surveyed less intensively” (Rechtman et al. 2001:27). The survey identified four Post-Contact historic properties. SIHP Site No. 50-30-03-02060 was a basalt and concrete dam on Kīlauea Stream. Rechtman et al. (2001:30) noted that the site had been documented by an archaeological study in Kalihiwai Ahupua‘a to the east, as “majority of the ancillary dam features exist off property on the western bank,” but re-recorded it since it was partially within the project area. Based on a newspaper article about the opening of the reservoir formed by the dam, it was dated to 1881. SIHP Site No. 50-30-03-02062 was a dam complex on Pu‘uka‘ele Steam, also of basalt and concrete construction. SIHP Site No. 50-30-03-02063 was a water control complex extending from Pu‘uka‘ele Steam, consisting of a ditch and the remnant portions and scattered pieces of a flume. SIHP Site No. 50-30-03-02064 consist of an irrigation tunnel and two flume supports on Kīlauea Stream, approx. 150 m downstream from Site -02060. (Rechtman et al. 2001)

ELMORE AND KENNEDY 2002, BEVAN ET AL. 2004

In 2002, ACP conducted an AIS (Elmore and Kennedy 2002) of most of the property parcel at TMK: (4) 5-1-005:016 (excluding the northernmost thumb - shaped portion at the very mouth of Kīlauea stream). Elmore and Kennedy (2002:6) noted that “current TMK maps... depict Kipapa Heiau at the base of the bluff east of Kilauea River,” which would put Kipapa Heiau (SIHP Site No. 50-30-04-00132) within the project area. However, no sign of the heiau was found during the survey, and Elmore and Kennedy (2002:6) pointed out that the location indicated on the map was “a sandy location at which it is unlikely a commercially operated sugar cane field would be found.”

The survey did identify nineteen more features of SIHP Site No. 50-30-04-00515, which had previously been documented on an adjacent parcel [TMK: (4) 5-1-005:005] previously surveyed by Elmore and Kennedy (2001). A new sample sent for radiocarbon analysis from Site -00515 returned a date range (at 2-sigma) of 1475 C.E. to 1652 C.E., entirely predating the result from the earlier study. This may have been due to the sample being taken from a greater depth and different soil layer. Additionally, two new archaeological sites were identified. SIHP Site No. 50-30-04-01035 consisted of a terrace and a subsurface pit, and was interpreted as a habitation site. A sample from site -01035 returned a radiocarbon date range (at 2-sigma) of 1262 C.E. to 1523 C.E., which (if accurate) would make the site “one of the earliest occupations along the northern coast of Kauai” (Elmore and Kennedy 2002:44). SIHP Site No. 50-30-04-01036 was a stone wall that likely functioned as a boundary marker.

In 2003, ACP conducted archaeological monitoring (Bevan et. al 2004) at the same parcel [TMK: (4) 5-1-005:016] that had previously been surveyed by Elmore and Kennedy (2002). Monitoring was conducted during installation of utility lines and grading for driveways, and subsurface construction activities were kept a minimum of 25 ft away from any features if the previously identified Sites -00515 and -01035. During monitoring, “an isolated, previously unrecorded, non-irrigated terrace feature located on a steep slope below Rock Quarry Road” was identified, and due to similar context, added as yet another feature of SIHP Site No. 50-30-04-00515, but no sites were newly identified (Bevan et. al 2004:20).

DAGHER 2007

In 2007, SCS (Dagher 2007) conducted a Field Inspection (FI) of an approx. seven-acre property at the western end of Kilauea Town, on the border with Nāmāhana Ahupua‘a [TMK: (4) 5-2-023:027 & 028]. No historic properties were identified during the FI (Dagher 2007).

SHIDELER ET AL. 2008

In 2007, CSH conducted an AIS (Shideler et al. 2008) on a 74-acres portion of the Kilauea Falls Ranch property [TMK: (4) 5-2-012:035 por.], including land proposed for a private residence, an agroforestry area, and a region of tablelands suitable for development located near Kīlauea town. The survey identified a total of 62 archaeologically significant features comprising five sites within the agroforestry area. SIHP Site No. 50-30-04-00579 was an isolated agricultural terrace near the eastern end of the project area. SIHP Site No. 50-30-04-00580 was a complex consisting of 53 agricultural terraces and 2 enclosures that may have served as field shelters (temporary habitation), located west of Site -00579 and northwest of a bend in Kīlauea stream.

SIHP Site No. 50-30-04-00581 consisted of a retaining wall with a connected rock alignment that served as a ramp, a smaller second stone wall nearby, and a rock faced trail parallel to the retaining wall. Site -00581 is located near -00580, but is interpreted as a Post-Contact permanent habitation site, likely associated with Japanese occupants based on recovered artifacts. SIHP Site No. 50-30-04-00582 was a pair of terraces separate from, and located south of, the dense cluster of terraces comprising Site -00579. SIHP Site No. 50-30-04-00583 was another pair of terraces, located even further south from Site -00582. Unlike the *lo'i* terraces on the east bank of Kīlauea stream identified in other studies, the agricultural terraces identified by Shideler et al. (2008) are distant from the stream rather than on the floodplain. Shideler et al. (2008:69) note that “the vagaries of hurricane, tsunami, and flood may have made such planting down by the stream precarious” and that “cultivation upon the steep slope may have been more secure.”

CLARK AND RECHTMAN 2010, CLARK ET AL. 2011

In 2009, RCL conducted an AIS (Clark and Rechtman 2010) of a 0.735-acre parcel along the southeast bank of Kīlauea stream [TMK: (4) 5-2-012:019]. This parcel is the same land awarded to Naiamaneō with LCA No. 10333 (see The Māhele, above); although this is the only nearby example, it is not unknown for contemporary TMK parcels to match the boundaries of a plot awarded in the Māhele. Pedestrian survey and excavation of three trenches identified two historic properties. SIHP Site No. 50-30-04-02011 consists of nine terraced fields, which collectively occupying the entire parcel. These were interpreted as pond fields for Post-Contact rice cultivation, built on previous *lo'i* and *kula* land. SIHP Site No. 50-30-04-02012 is a partially-intact concrete slab along the southeast border of the parcel, interpreted as the foundation of a Post-Contact structure, likely a shed or other outbuilding (Clark and Rechtman 2010).

In 2011, RCL conducted an AIS (Clark et al. 2011) of a roughly 21-acre area comprising portions of several properties [TMK: (4) 5-2-21:041, CPR 0001; (4) 5-2-12:035 por.; and (4) 5-2-021:004 por.] surrounding the parcel previously surveyed by Clark and Rechtman (2010). Although Clark et al. (2011) identified new features, these were added as components of the two archaeological sites previously identified by Clark and Rechtman (2010). SIHP Site No. 50-30-04-02011 was expanded to cover approx. 4.5 acres and include a total of 69 discrete Post-Contact rice fields. In addition to the previously documented concrete slab, SIHP Site No. 50-30-04-02012 was revised to include a water retention pond, a cobble-lined trench for a water wheel, and four concrete basins with stone and concrete troughs (Clark et al. 2011).

SROAT ET AL. 2010

In 2010, CSH conducted an AIS (Sroat et al. 2010) of 75 acres at TMK (4) 5-2-004:099 for the planned Kīlauea Agricultural Park, located to the east of Pali Moana Place. The survey identified four archaeological sites, all of which were located in the southeast portion of the project area, where the terrain is more sloped and uneven. SIHP Site No. 50-30-04-02123 was a terrace interpreted as a Post-Contact habitation site. SIHP Site No. 50-30-04-02124 consisted of two concrete wall structures, one linear and one U-shaped, of uncertain function but assessed as likely associated with plantation-era infrastructure. SIHP Site No. 50-30-04-02125 was a terrace interpreted as a likely Pre-Contact agricultural site. SIHP Site No. 50-30-04-02126 was a machine-excavated ditch that was interpreted as a drainage feature for flood control. Sroat et al. (2010) concluded that Sites -02124 and -02126 were associated with Kilauea Sugar Company.

DAGHER AND DEGA 2011

In 2010-11, SCS conducted archaeological monitoring (Dagher and Dega 2011) of the Kīlauea River cleanup in 2010 to 2011, which was a follow up to the 2006 emergency cleanup after the Ka Loko Dam breach. During monitoring two separate isolated finds of human skeletal elements occurred, and a few Post-Contact artifacts were recovered, but no archaeological sites were identified (Dagher and Dega 2011).

HAMMATT AND SHIDELER 2014

In 2010, CSH conducted an FI (Hammatt and Shideler 2014) of 23.8-acre coastal parcel in Nāmāhana Ahupua‘a [TMK: (4) 5-2-005:036]. The FI did not identify any historic properties, but Hammatt and Shideler (2014) noted that the presence of *kalo* plants growing on steep *pali* (cliff, steep hill or slope) likely originated from shoots washed over the cliff from pre-contact *kalo* cultivation efforts, suggesting that pre-contact agriculture occurred nearby.

PUTZI ET AL. 2014

In 2014, SCS conducted an AIS (Putzi et al. 2014) on a approx. 5-acre parcel in Nāmāhana Ahupua‘a owned by The Church of Jesus Christ of Latter-Day Saints [TMK: (4) 5-2-019:004], ahead of the proposed construction of a meetinghouse for the Church. Full pedestrian survey and excavation of ten trenches identified a single archaeological site. SIHP Site No. 50-30-04-02237 consisted of a fire pit located 0.48 m below the surface. Charcoal recovered from Site -02237 was sent for radiocarbon analysis and returned a date range (at 2-sigma) of 1440 C.E. to 1530 C.E., establishing that the fire pit was Pre-Contact. Putzi et al. (2014) noted that although the parcel had once been owned by the Kīlauea Sugar Company, subsurface testing found no sign of a plow zone, suggesting it had been used for pasture instead of planting.

METHODOLOGY

FIELD METHODOLOGY

The archaeological field inspection was conducted on June 1, 2022, by SCS Archaeologist Jason Stolfer, M.A., under the supervision of primary investigator Michael F. Dega, Ph.D. Field methods consisted of a 100% pedestrian survey of the project area and documentation via digital photographs taken at various locations throughout the project area. Sites located were assigned a Temporary Site Number (TS#) as necessary, pending the assignment of a SIHP Site Number.

LABORATORY METHODOLOGY AND CURATION

Since no artifacts were identified during this project, laboratory work consisted of cataloging field notes and photographs. All field notes and digital photographs have been curated and are now stored at the SCS laboratory in Honolulu. All measurements were recorded in the metric system.

RESULTS OF THE FIELD INSPECTION

One archaeological site was identified during the field inspection on June 1. The site was designated as Temporary Site 1 (TS-1), and was comprised of two features: a railroad bridge culvert (Feature 1), and remnant section of railroad track (Feature 2) found nearby. The on-site archaeologist determined that the site was Post-Contact in nature recorded it with photographs and two GPS points taken at the center points of its two features. Figure 7 shows these GPS points superimposed on a client-provided construction map.

Feature 1 (Fe. 1; railroad bridge culvert) was built using basalt and mortar construction and is in good overall condition, protected by thick vegetation that surrounds it. Both ends of the culvert tunnel are exposed and the interior is passable. Feature 2 (Fe. 2; piece of old railroad track) was discovered approximately 12 m east of Fe. 1, by using a metal detector to allow detection through the dense vegetation. Figures 8 through 16 are photographs of the features, and Table 3 summarizes the location and condition of the features.

Table 3: TS-1 component archaeological features

Feature Number	UTM (converted) Zone 4Q	Lat Long +4 meters	Description	Status
Fe. 1	459316 E, 2457039 N	22°13'05.8 N, 159°23'41.1 W	culvert of a Plantation-era railroad bridge	Good condition
Fe. 2	459339 E, 2457048 N	22°13'06.0 N, 159°23'40.3 W	section of railroad track	Poor condition (rusted)

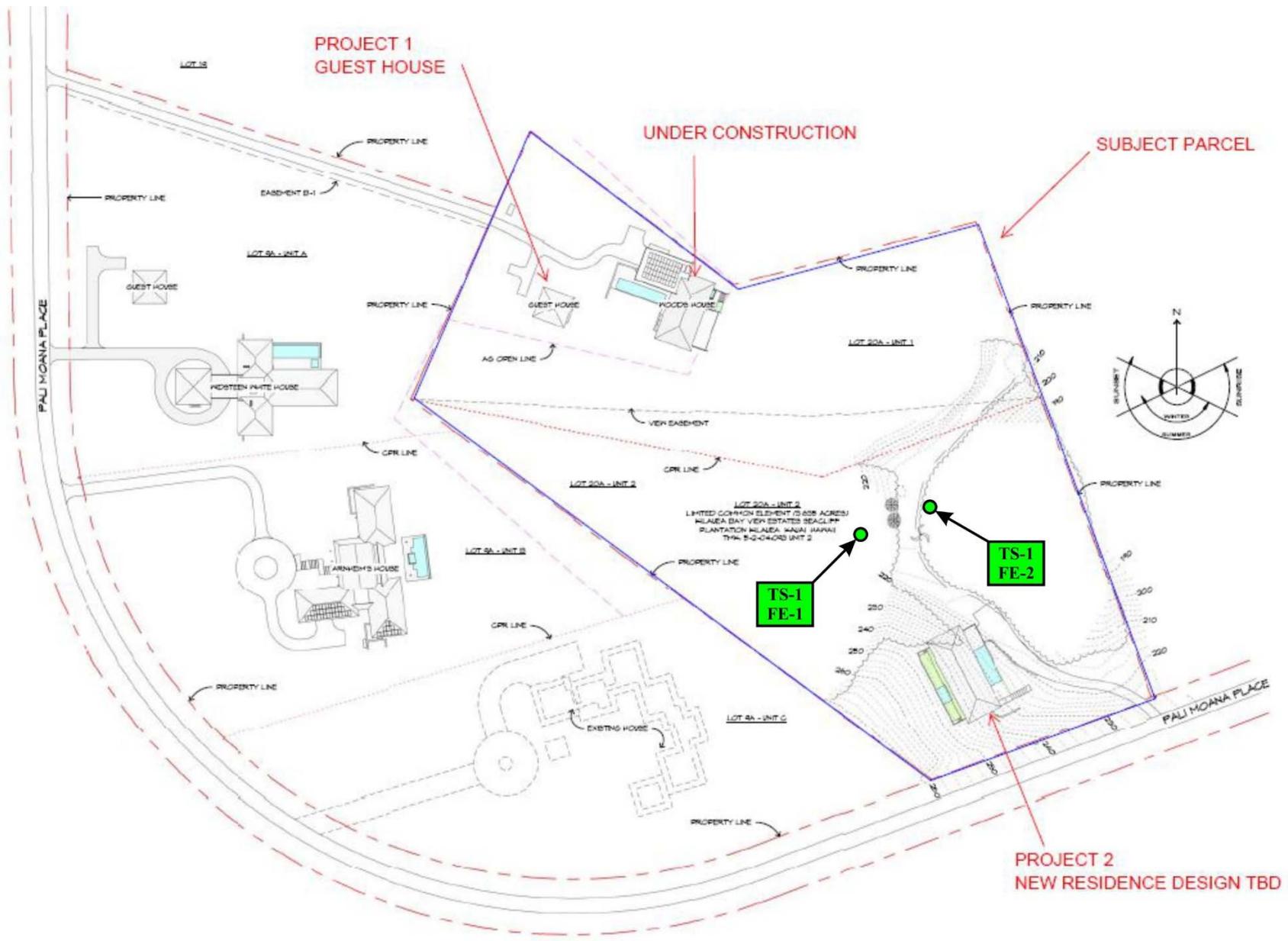


Figure 7: GPS points for the two features of TS-1 in the context of the project area parcel (purple border).

The southwest end (northeast view, Figures 8 through 10) of the railroad bridge culvert (Fe. 1) has an exposed face that measures 6.2 m long and varies in height from .4 m to 1.5 m.

The railroad track (Fe. 2) is difficult to see amidst the vegetation, but is highlighted by the meter bar and tape measure in Figure 10. The railroad track was partially exposed and appears to extend further east (away from the project area) beneath the dense vegetation.

The interior of the railroad bridge culvert (Fe. 1) consists of a horseshoe shaped tunnel with dimensions of 1.45 m high, 1.5 m wide, and 23 m long (Figure 11). Like the exterior faces, the interior exhibits basalt and mortar construction.

The northeast end (southwest view, Figures 12 through 15) of the culvert (Fe. 1) has guards on either side of the tunnel opening and extends out 1.3 m from the hillside that it is built into. The total height of the bridge culvert on this end is 2.3 m. The exposed portion of the culvert face extends sideways at least 2.5 m to northwest, but the stonework appears to extend further beneath the foliage. The culvert face is more visible from the south and extends sideways 10.5 m to the southeast before disappearing into the dense vegetation.



Figure 8: TS-1 railroad bridge culvert - northeast view



Figure 9: TS-1 railroad bridge culvert – east view



Figure 10: TS-1 railroad bridge culvert - northeast view



Figure 11: TS-1 railroad track - northeast view



Figure 12: Tunnel underneath TS-1 railroad bridge - inside culvert view



Figure 13: TS-1 railroad bridge culvert - southwest view



Figure 14: TS-1 Railroad Bridge culvert view to the northwest



Figure 15: TS-1 railroad bridge culvert - south view



Figure 16: TS-1 railroad bridge culvert wall - northwest view

This culvert and railroad bridge were likely constructed as a part of the railroad built to haul sugar for the plantation operated by the Kilauea Sugar Company (see Land Use in the Post-contact Period to the Present). A portion of this railroad located at Mōkōlea Point (approx. 800 m west northwest of the project area) was previously recorded as SIHP Site No. 50-30-04-01812. This railroad was the first to be built on the Island of Kaua‘i, and famously had its first spike ceremonially driven in by Princess Regnant Lydia Kamaka‘eha, (later Queen Lili‘uokalani) in 1881 (see Land Use in the Post-contact Period to the Present, above).

FINDINGS AND RECOMMENDATIONS

The general pattern seen in the previous archaeological work in the vicinity (see Previous Archaeology, above) is one that is common to many regions of the Hawaiian Islands where commercial sugar or pineapple agriculture occurred. Remaining Pre-Contact sites are largely found within gullies or other areas of uneven ground, especially near water features. Relatively flat areas, such as tablelands have been subject to considerable ground disturbance for large scale commercial cultivation and Pre-Contact features that may (likely) have been present there have been removed or destroyed.

The sole feature of archaeological significance (TS-1) identified during the present field inspection consisted of a railroad bridge culvert and section of railroad track. These features were constructed as a part of the railroad built to haul sugar for the plantation operated by the Kilauea Sugar Company. Another portion of that railroad located to the northwest was previously designated as SIHP Site No. 50-30-04-01812. It is possible that other remnant portions of the railroad may be found under the foliage or even under the ground surface of other nearby property parcels. Since a historic property has been identified within the project area, SCS recommends that an AIS be conducted to fully document the historic property (TS-1) and determine its extent, age, function, and significance. SHPD should be consulted both in regards to the AIS and to determine if TS-1 should receive a new SIHP number or be recorded as an additional portion of Site -01812.

Based on the findings of this LRFI, only an historic-era cultural resource was identified. Note that portions of the project area were heavily overgrown and more intensive survey during AIS could lead to the identification of additional historical-era resources associated with the railway line. No excavations were conducted during this LRFI and thus, there remains the slight possibility that pre-Contact cultural resources such as habitation area could be documented in subsurface contexts below the plow zone. The same would hold true for *iwi kupuna* (ancestor bones): only a slight possibility that such exist on this plateau area. The majority of traditional burials in the area have been documented near the direct coastline and in sandy sediment.

REFERENCES

- Beamer, Kamanamaikalani and N. Wahine‘aipoahu Tong
2016 “The Māhele Did What? Native Interest Remains” in *Hūlili: Multidisciplinary Research on Hawaiian Well-Being*, Vol. 10. Shawn Kana‘iaupuni, Brandon Ledward, and RaeDeen Keahiolalo, eds. 125-145. Kamehameha Publishing, Honolulu.
- Bevan, Amy S., Michelle Elmore and Joseph Kennedy
2004 *An Archaeological Monitoring Report for a Property Located at TMK: 5-1-05: 16 (Por.) in Kāhili Ahupua‘a, Hanalei District, Island of Kaua‘i*. Archaeological Consultants of the Pacific, Hale‘iwa, Hawai‘i.
- Burgett, Berdena, Leann McGerty, and Robert L. Spear
2000 *An Archaeological Inventory Survey of an Approximately 27.56 Acre Parcel, Kāhili Ahupua‘a, Ko‘olau District, Island of Kaua‘i, Hawai‘i [TMK 5-2-21: 6]*. Scientific Consultant Services, Inc., Honolulu.
- Carson, Mike T., Michael Dega and Robert L. Spear
1998 *Data Recovery For A Portion of Sites 50-03-04-974 & 975, Kāhili Ahupua‘a, Ko‘olau District, Island of Kaua‘i, Hawai‘i [TMK 5-2-21: Por. 7]*. Scientific Consultant Services, Inc., Honolulu.
- Cedar Lake Ventures, Inc.
2018 “Industries in Kauai County, Hawaii” *Statistical Atlas*. Cedar Lake Ventures, Inc., Excelsior, Minnesota (<https://www.staradvertiser.com/2021/07/02/breaking-news/historic-kauai-resort-in-blue-hawaii-to-be-auctioned-this-month/>) Accessed May 2022.
- Chinen, Jon J.
1961 *Original Land Titles in Hawaii*. Library of Congress Catalogue Card No. 61-17314. (<http://www.llmc.com/openaccess/docdisplay5.aspx?textid=39920489>) Accessed March, 2022.
- Clark, John R. K.
2003 *Hawaii Place Names: Shores, Beaches, and Surf Sites*. University of Hawai‘i Press, Honolulu.
- Clark, Matthew R., Ashton Dircks Ah Sam, and Robert B. Rechtman,
2011 *An Archaeological Inventory Survey of TMK:4-5-2-21 :041-0001 and Portions of TMKs:4-5-2-12:035 and 4-5-2-21 :004 Kāhili and Kīlauea Ahupua‘a, Ko‘olau District, Island of Kaua‘i*. Rechtman Consulting, LLC, Kea‘au, Hawai‘i.

- Clark, Matthew R., and Robert B. Rechtman,
 2010 *An Archaeological Inventory Survey of TMK:4-5-2-21 :041-0001 and Portions of TMK: (4) 5-2-12:019, Kāhili Ahupua‘a, Ko‘olau District, Island of Kaua‘i.* Rechtman Consulting, LLC, Kea‘au, Hawai‘i.
- Cleghorn, Paul L.
 2001 *Letter to Mr. Mark Bullard concerning Archaeological Monitoring at Kīlauea Japanese Cemetery, Kīlauea, Kaua‘i (TMK: (4) 5-2-4:49).* Letter report prepared for Verizon Wireless. Pacific Legacy, Inc., Kailua, Hawai‘i.
- Condé, Jesse, and Gerald Best
 1973 *Sugar Trains: Narrow Gauge Rails of Hawaii.* Glenwood Publishers, Felton, California.
- Dagher, Cathleen A
 2007 *Archaeological Field Inspection of approximately 7 Acres at the Kilauea Town Center, Kilauea Ahupua‘a, Hanalei District, Island of Kaua‘i, Hawai‘i [TMK: (4) 5-2-023:027 and 028].* Scientific Consultant Services, Inc., Honolulu.
- Dagher, Cathleen A., and Michael F Dega
 2011 *An Archaeological Monitoring Report for the Emergency Kīlauea River/Wailapa Stream Debris and Sediment Removal Project in Portions of Pila‘a, East and West Waiakalua, and Kāhili Ahupua‘a, Hanalei District, Island of Kaua‘i, Hawai‘i [TMK: (4) 5-1-005: 005, 012, 016; 5-2-012:035; 5-2-004:047; 5-2-021:005 through 009].* Scientific Consultant Services, Inc., Honolulu.
- Daws, Gavan
 1974 *Shoal of Time.* University of Hawai‘i Press, Honolulu, Hawai‘i.
- Dorrance, William H., and Francis S. Morgan
 2000 *Sugar Islands, The 165-year Story of Sugar in Hawai‘i.* Mutual Publishing, Honolulu.
- Elmore, Michelle. and Joseph Kennedy
 2001 *An Archaeological Inventory Survey Report for a Property Located at TMK: 5-1-05: 05 in Kāhili Ahupua‘a, Hanalei District, Island of Kaua‘i.* Archaeological Consultants of the Pacific, Hale‘iwa, Hawai‘i.
 2002 *An Archaeological Inventory Survey Report for a Property Located at TMK: 5-1-05:16 (Por.) in Kāhili Ahupua‘a, Hanalei District, Island of Kaua‘i.* Archaeological Consultants of the Pacific, Hale‘iwa, Hawai‘i.
- Foote, D.E., E.L. Hill, S. Nakamura, and F. Stephens
 1972 *Soil Survey of the Islands of Kaua‘i, O‘ahu, Maui, Moloka‘i, and Lāna‘i, State of Hawai‘i.* USDA Soil Conservation Service, GPO, Washington, D.C.

Fornander, Abraham

- 1880 *An Account of the Polynesian Race, Its Origin and Migrations, Vol. 2.* Trübner and Co. London.
- 1916/1917 *Fornander Collection of Hawaiian Antiquities and Folk-Lore*, vol. 4. Bishop Museum Press. Honolulu.
- 1918/1919 *Fornander Collection of Hawaiian Antiquities and Folk-Lore*, vol. 5. Bishop Museum Press. Honolulu.

Fredericksen Demeris L., and Walter M. Fredericksen

- 1989 *An Archaeological Inventory Survey of Crater Hill and Mokolea Point of Kilauea Point National Wildlife Refuge, Kilauea, Kaua‘i, Hawaii (TMK: 5-2-04:9, 19).* Xamanek Researches, LLC, Pukalani, Hawai‘i.

Giambelluca, T.W., Q. Chen, A.G. Frazier, J.P. Price, Y.-L. Chen, P.-S. Chu, J.K. Eischeid, and D.M. Delporte.

- 2013 Online Rainfall Atlas of Hawai‘i. *Bull. Amer. Meteor. Soc.* 94, 313-316, doi: 10.1175/BAMS-D-11-00228.1. Accessed March 2022.

Giambelluca, T.W., X. Shuai, M.L. Barnes, R.J. Alliss, R.J. Longman, T. Miura, Q. Chen, A.G. Frazier, R.G. Mudd, L. Cuo, and A.D. Businger.

- 2014 *Evapotranspiration of Hawai‘i.* Final report submitted to the U.S. Army of Corps of Engineers – Honolulu District, and the Commission on Water Resource Management, State of Hawai‘i. Accessed March 2022.

Google Earth

- 2013 *Aerial photographs of Hawai‘i.* Google Inc., 1600 Amphitheatre Parkway, Mountain View, California. Available at (www.google.com/earth.html). Accessed May 2022.

Hammatt, Hallett H.

- 1997 *Archaeological Subsurface Testing and Assessment of a Shoreline Property in Kilauea, Kaua‘i (TMK 5-1-01:51)* Cultural Surveys Hawai‘i, Inc., Kailua, Hawai‘i.

Hammatt, Hallett H. and David W. Shideler

- 2014 *Archaeological Field Inspection Report for a 23.8-Acre Coastal Parcel at Namahana Ahupua‘a, Hanalei District, Kaua‘i Island, TMK [4] 5-2-005:036.* Cultural Surveys Hawai‘i, Inc., Kailua, Hawai‘i.

Hammatt, Hallett H. and Rodney Chiogioji

- 1992 *Archaeological Inventory Survey of a 15.17-Acre Property in the Ahupua‘a of Namahana and Kalihiwai, Hanalei District of Kaua‘i (TMK 5-2-17:28).* Cultural Surveys Hawai‘i, Inc., Kailua, Hawai‘i.

- Hammatt, Hallett H., William Folk and Gerald Ida
 1996 *Archaeological Inventory Survey Report at Kāhili, Ko‘olau, Kaua‘i (TMK 5-2-21:05)*. Cultural Surveys Hawai‘i, Inc., Kailua, Hawai‘i.
- Handy, Edward S. C., and Elizabeth G. Handy
 1972 *Native Planters in Old Hawaii: Their Life, Lore, and Environment*. Bernice P. Bishop Museum Bulletin 233. Bishop Museum Press, Honolulu.
- Hawaii Cooperative Park Service Unit
 1990 *Hawaii Stream Assessment: A Preliminary Appraisal of Hawaii’s Stream Resources*. Report R84, Hawaii Cooperative Park Service Unit, Western Region Natural Resources and Research Division, National Park Service, Honolulu.
- Hawaii Department of Transportation
 2022 “Lihue Airport” *Hawaii Aviation*. (<https://aviation.hawaii.gov/airfields-airports/kauai/lihue-airport/>) Accessed May 2022.
- Hawaii State Office of Planning
 2021 Ahupuaa Layer (Historic Land Divisions), including names with diacritical marks. *Hawaii Statewide GIS Program* (<https://histategis.maps.arcgis.com/home/item.html?id=07624815fc7d42d4b23c527d20ad2f58>) Accessed February 2022.
- Historic Hawai‘i Foundation
 2021 *Kauai Historic Properties* (<https://historichawaii.org/historic-properties/kauai-historic-properties/>) Accessed May 2022.
- Ida, Gerald and Hallett H. Hammatt
 1997 *Archaeological Inventory Survey of a an 89-Acre Parcel in Kāhili Ahupua‘a, Ko‘olau District, Kaua‘i (TMK: 4-5-1-5:52)*, Cultural Surveys Hawai‘i, Inc., Kailua, Hawai‘i.
- Juvik, Sonia P. and James O. Juvik, ed.
 1998 *Atlas of Hawai‘i, Third Edition*. University of Hawai‘i Press: Honolulu.
- Kamai, Nancy (“Missy”), and Hallett H. Hammatt
 2013 *Final Field Inspection and Letter Report for After-the-Fact permitting process related to the Smith Parcel in Kāhili Ahupua‘a, Kaua‘i [TMK: (4) 5-2-021:006]*. Cultural Surveys Hawai‘i, Inc., Kailua, Hawai‘i.
- Kamakau, Samuel
 1992 *Ruling Chiefs of Hawai‘i*. Honolulu: The Kamehameha Schools Press.
- Kamehameha Schools
 2013 “Nā Ahupua‘a a Moku o O‘ahu.” *Aloha ‘Āina Project*. (<https://blogs.ksbe.edu/alohaainaproject/mo‘olelo/>) Accessed April 2022.

Kauai Plantation Railway

2007 *Kauai Railroad History*. Accessed from archive (<https://web.archive.org/web/20180906124936/http://www.kauaiplantationrailway.com/rrhist.htm>), July 2022.

Kawelu, Kathleen L

2015 *Kuleana and Commitment: Working Toward a Collaborative Hawaiian Archaeology*. University of Hawai‘i Press, Honolulu.

Kikuchi, William K.

1987 *Proposed Visitor Center Archaeological Survey, Kilauea Point, National Wildlife Refuge Kalae O Kilauea, Kawaihau District, Island of Kaua‘i*. prepared for the U.S. Department of the Interior Fish and Wildlife Service, by William K. Kikuchi, Oma‘o, Kaua‘i.

Kirch, Patrick Vinton

1985 *Feathered Gods and Fishhooks: An Introduction to Hawaiian Archaeology and Prehistory*. University of Hawai‘i Press, Honolulu.

2011 “When Did the Polynesians Settle Hawai‘i? A Review of 150 Years of Scholarly Inquiry and a Tentative Answer,” in *Hawaiian Archaeology*. 12 (2011) 3-26.

Kirch, Patrick V. and Marshall Sahlins

1992 *Anahulu: The Anthropology of History in the Kingdom of Hawaii*. Vol. 1 and 2. University of Chicago Press, Chicago.

Kuykendall, Ralph S.

1938 *The Hawaiian Kingdom—Volume 1: Foundation and Transformation, 1778–1854*. University of Hawai‘i Press, Honolulu.

1953 *The Hawaiian Kingdom, Vol. 2: Twenty Critical Years, 1854-1874*. University of Hawai‘i Press. Honolulu.

1967 *The Hawaiian Kingdom, Vol. 3: The Kalakaua Dynasty, 1874-1893*. University of Hawai‘i Press, Honolulu, Hawai‘i.

Lucas, Paul F. Nahoia

1995 *A Dictionary of Hawaiian Legal Land-terms*. Native Hawaiian Legal Corporation. University of Hawai‘i Committee for the Preservation and Study of Hawaiian Language, Art and Culture. University of Hawai‘i Press, Honolulu.

Lyons, Curtis J.

1875 *Land Matters in Hawaii -No. 2*. The Islander, Vol. I, No. 19. Honolulu.

McGerty, Leann, and Robert L. Spear

1998 *An Archaeological Inventory Survey of a Proposed Driveway Corridor Acre Parcel, Kīlauea Ahupua‘a, Ko‘olau District, Island of Kaua‘i, Hawai‘i [TMK 5-2-11:33]*. Scientific Consultant Services, Inc., Honolulu.

2001 *An Inventory Survey on an Approximately Six-Acre Parcel in Kāhili Ahupua‘a, Hanalei District, Kaua‘i [TMK: 5-2-21:4]*.

- McGerty, Leann, William R. Fortini Jr., and Robert L. Spear
1997 *An Archaeological Inventory Survey of a Portion of A 26 acre parcel, Kāhili Ahupua‘a, Ko‘olau District, Island of Kaua‘i, Hawai‘i [TMK 5-2-21:7]*. Scientific Consultant Services, Inc., Honolulu.
- McMahon, Nancy
2003 *Archaeological Assessment Report on Damages to Historic Sites On TMK: 4-5-2-21: 7 unit4 and 5 and 4-5-2-21-6 unit 5*. Report not on file at SHPD Library, Kapolei, Hawai‘i. (Cited in Kamai and Hammatt 2013).
- Moffat, Riley M., and Gary L. Fitzpatrick
1995 *Surveying the Mahele*, Editions Unlimited, Honolulu.
- Native Hawaiian Library (online)
N.d. Nā Puke Wehewehe ‘Ōlelo Hawai‘i (Hawaiian Dictionaries) (<https://wehewehe.org/>) Accessed April 2022.
- Office of Hawaiian Affairs
N.d. Kipuka Online Database (<http://kipukadatabase.com/kipuka>). Accessed April 2022.
- Parham, James E., Glenn R. Higashi, Eko K. Lapp, Darrell G.K. Kuamo‘o, Robert T. Nishimoto, Skippy Hau, J. Michael Fitzsimons, Daniel A. Polhemus, and William S. Devick
2008 *Atlas of Hawaiian Watersheds & Their Aquatic Resources*. Hawaii Division of Aquatic Resources and Bernice Pauahi Bishop Museum, Honolulu. Accessed from (<https://www.hawaiiwatershedatlas.com/index.html>) July 2022.
- Putzi, Jeff, Milton Ching, Jim Powell, and Michael Dega
2014 *Archaeological Inventory Survey of 5-acres for the LDS Meetinghouse in Kīlauea, Namahana Ahupua‘a, Ko‘olau District, Island of Kaua‘i, Hawai‘i [TMK: (4) 5-2-019:004]*. Scientific Consultant Services, Inc., Honolulu.
- Real Estate Data, Inc.
1992 *REDI Realty Atlas of Hawaii. 28th Edition*. Real Estate Data, Inc., Auberdale, Florida.
- Rechtman, Robert B., Maria E. Ka‘imipono Orr, and Dennis S. Dougherty
2001 *Archaeological Inventory Survey of the Halaulani Property (TMK: 4-5-2-02:11, 12) Kīlauea and Kalihi Wai Ahupua‘a, Ko‘olau and Halele‘a Districts, Island of Kaua‘i*. Rechtman Consulting, LLC, Kea‘au, Hawai‘i.

- Rhodes, Diane L., and Linda Wendel Greene
 1993 *A Cultural History of Three Traditional Hawaiian Sites on the West Coast of Hawai'i Island*. United States Department of the Interior, National Park Service, Denver Service Center. Available at (https://www.nps.gov/parkhistory/online_books/kona/history.htm) Accessed May 2022.
- Rice, William H.
 1923 *Hawaiian Legends*. Bernice P. Bishop Museum Bulletin 3. Bishop Museum Press, Honolulu.
- Shideler, David, Trevor Yucha and Hallett H. Hammatt
 2008 *Archaeological Inventory Survey of an Approximately 74-Acre Portion of the Kilauea Falls Ranch Property, Kīlauea Ahupua'a, Hanalei District, Kaua'i Island (TMK: [4] 5-2-012:035 por.)*. Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.
- Schmitt, Robert C.
 1973 *The Missionary Censuses of Hawai'i*. Department of Anthropology, Bernice Pauahi Bishop Museum, Honolulu.
- Soboleski, Hank
 2007 "The Kilauea Sugar Plantation Company railroad." *The Garden Island*, January 29. Līhu'e, Hawai'i.
- Soehren, Lloyd J.
 2002-19 *Hawaiian Place Names* (<http://www.ulukau.org/cgi-bin/hpn?l=en>) Accessed January 2022.
- Sroat, Ena. David W. Shideler, and Hallett H. Hammatt
 2010 *Archaeological Inventory Survey for the 75-Acre Kīlauea Agricultural Park Project, Kīlauea Ahupua'a, Hanalei District, Kaua'i Island TMK: [4] 5-2-004:099*. Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.
- Thrum, Thomas G.
 1907 "Heiaus and Heiau Sites Throughout the Hawaiian Islands." *Hawaiian Almanac and Annual for 1907*. Honolulu.
- Toenjes, James H. and Hallett H. Hammatt
 1990 *An Archaeological Inventory Survey of 94 Acres in Kilauea, Koolau District, Kaua'i (TMK: 5-2-04:102)*. Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.
- Tome, Guerin, and Michael Dega
 2009 *An Inventory Survey of Approximately for 6.8-Acres in Kilauea, Kāhili Ahupua'a, Hanalei District, Island of Kaua'i, Hawai'i [TMK (4) 5-2-021:007 POR. (UNIT D)]*. Scientific Consultant Services, Inc., Honolulu.

U. S. Department of Agriculture Natural Resource Conservation Service, and University of California, Davis California Soil Resource Lab
2017 Soilweb. (<https://casoilresource.lawr.ucdavis.edu/gmap/>) Accessed April 2022.

U.S. Geological Survey
1998 *Anahola Quadrangle Map*. (<https://www.usgs.gov/core-science-systems/ngp/tnm-delivery/topographic-maps>) Accessed April 2022.

Waihona ‘Āina
N. d. *Mahele Records* (<https://www.waihona.com/maheleSearch.asp>) Accessed July 2022.

Wichman, Frederick B.
1985 *Kauai Tales*. Bamboo Ridge Press and the Hawaii Ethnic Resource Center: Talk Story, Inc., Honolulu.
1991 *Polihale and Other Kaua‘i Legends*. Bamboo Ridge Press, Honolulu.
1998 *Kaua‘i: Ancient Place-Names and Their Stories*. University of Hawai‘i Press, Honolulu.
2003 *Nā Pua Ali‘i O Kaua‘i: Ruling Chiefs of Kaua‘i*. University of Hawai‘i Press, Honolulu.

Wilcox, Carol.
1996 *Sugar Water: Hawaii’s Plantation Ditches*. University of Hawai‘i Press, Honolulu.

**APPENDIX A: NATIVE CLAIMS AND NATIVE AND FOREIGN
TESTIMONY FOR THE AHUPUA‘A OF KĀHILI**

(excerpted from Ida and Hammatt 1997)

Kahili LCAs and Associated Claims with Kahili mentioned

No. 8559 C. Kanaina Honolulu, Feb. 14, 1848

N.R. 349v4

The Lands of William Lunalilo....

<u>Name of the Land</u>	<u>Ahupua'a</u>	<u>District</u>	<u>Island</u>
57. Kahili	"	Koolau	Kauai
58. Kumukumu	"	"	"
59. Pilaa Waipouli	"	Kapaa, Puna	"
60. Kamalamaloo	"	"	"
61. Kalihiwai	"	"	"
62. Manuahi 'Ili Hanapepe	"	Kona	"

.....

No. 8559B Lunalilo, Wm. C. Iliaina
(King Lunalilo) Manuahi Kona Kauai - 867 Ac. [Book 10, p. 490]

[8559B Kalihiwai R.P. 8173; Manuahi Hanapepe; Kahili R.P. 8323; Pilaa R.P. 7060; Waipouli R.P. 7373]

No. 9067 Keo

N.R. 403v9

The Land Commissioners, Greetings: I hereby state my claim for seven lo'i, two mala of wauke and the house lot.

Kahili, Kauai, January 17, 1848

KEO X

No. 9067 Keo Clt.

F.T. 165-166v12

Luakini sworn says I know Clt's lands in Kalihi. They are 7 Lois in three distinct pieces.

Kahili & a House Lot in Kilauea.

No. 1 Is House Lot in Kilauea

" 2 " 5 Lois & kula in Kanaele - Kahili

" 3 " 1 " "Uleulehu" [?] Makai

" " " " Mauka

No. 1 is bounded

M. by Govt kula

N. " Luahini's House Lot

M. " Govt kula

A. " " "

No. 2 is bounded

M. by Luakini's lois

N. " Kamalawai's "

M. " Hapahui's "

A. " Konohiki's kula

No. 3 is bounded

M. by Mamuaholono's [?] loi

N. " Kahili River

M. " Unclt lands

A. " Loko "Kaneio"

No. 4 is bounded

- M. by my loko
- N. " Konohiki's koele
- M. " Apahu's loi
- A. " My loko

These lands were given by the Konohiki to Clt. in the days of Kaumualii & have been held undisturbed till this time.

Inaole sworn says I know the lands of Kea & all that Luahini has testified is true.

No. 9067 Keo

N.T. 176-177v12

Kuakini sworn he has seen Keo's land in Kahili of seven lois and a house lot.

Section 1 - House lot

- Mauka Government pasture
- Napali Luakini's house lot
- Makai Government pasture
- Anahola Government pasture

Section 2 - Five lois and a pasture together

- Mauka Luakini's loi
- Napali Kanialauna's land
- Makai Hapakua's land
- Anahola Government pasture

Section 3 - One loi, Ulehulehu

- Mauka Mamuakalono's land
- Napali Kahili river
- Makai With weeds, land
- Anahola Kanaio, the konohiki's pond

Section 4 - One loi mauka of Ulehulehu

- Mauka Luakini's land (Pond)
- Napali Konohiki koele
- Makai Apahu's land
- Anahola Luakini's land

Land had been from Kaumualii I to Keo's parents and from them to Keo, all is peaceful to the present.

Inoale sworn he has seen Keo's land, the house lot, the five lois and the pasture. One loi is in section 3, in Ulehulehu and the other lois is mauka of Ulehulehu as section four.

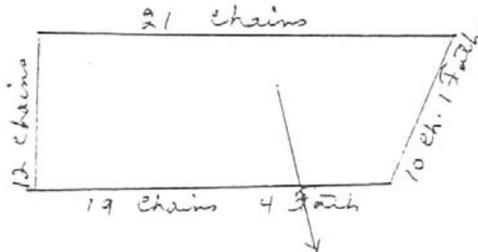
He has known in the same way as Luakini concerning Keo's land, the house lot and his lois. [Award 9067; R.P. 3486]

No. 10013 Leimanu Koloa, Kauai, January 16, 1848

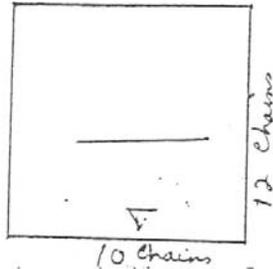
N.R. 251-252v9

The Land Commissioners, Greetings: We, Leimanu and Mokuhalii, are Hawaiian subjects living at Kahili on the Island of Kauai.

We hereby state our claims for land, some lo'is and a kula and a house claim. These are all within the diagram:



I Leimanu, a Hawaiian subject, hereby state my claim at Kahililalo, for a kula for planting wauke; its diagram is as follows:



Respectfully
LEIMANU

I, Mokuhalii, hereby state my claim in another place, as follows: 5 chains on two sides, 9 chains on another side and 30 in another side //sic/. I am respectfully,
MOKUHALII

No. 10013 Leimanu Clt

F.T. 227-228v12

Mokukalii sworn says I know the lands of Leimanu in Kahili. They are in 3 pieces as follows:

No. 1 Is House Lot, 3 lois & kula in "Kaukahiwai"

" 2 " 2 Lois "

" 3 " kula in "Manohala"

No. 1 is Bounded

M. by Lueili's lois

H. " Daniela's "

M. " Koalaiki's "

A. " " "

No. 2 is Bounded

M. by My lois

H. " Kahili river

M. " Alaiki's lois

A. " Keokea's "

No. 3 is Bounded

M. by Hapakui's kula

H. " Kahili River

M. " Daniela's kula

A. " Konohiki's "

These lands have been held peaceably since 1840. Clt. had them from his brother in law. They had been held by the Parents of the brother in law from the days of Kaumualii.

Pupu sworn says I know Clt's lands in Kahili. I have heard all that Mokukalii has testified. It is all true.

No. 10013 Leimanu, B

N.T. 233-234v12

Kumokuhalii sworn he has seen claimants land in Kahili.

Section 1 - House lot and a pasture in Kaiakahiunu

Mauka Two ili land

Halelea Daniela's land

Makai Koalaiki's land
Anahola Koalaiki's land

Section 2 - Two lois

Mauka Mokuhalii's land
Halelea Kahili river
Makai Alaiki's land
Anahola Keokea

Section 3 - Pasture at Namohala

Mauka Land
Halelea Kahili river
Makai Daniela's pasture
Anahola Konohiki pasture

Land from the konohiki to Leimanu's brother-in-law at the time of Kaumualii.

Leimanu received this land in 1844, no objections.

Kipu sworn verifies Mokuhalii's testimony is correct, he has known in the same way.

[Award 10013; R.P. 3879]

No. 10013 Leimanu Koloa, Kauai, January 16, 1848 N.R. 251-252v9

.... [see above]

[10013B]

I, Mokuhalii, hereby state my claim in another place, as follows: 5 chains on two sides, 9 chains on another side and 30 in another side /?sic/. I am respectfully,

MOKUHALII

No. 10013[B] Mokuhalii Clt /no claim in Index/

F.T. 161-162v12

Kauoha sworn says I know lands of Mokuhalii in Kahili in Ili "Hoopala" & some kula embracing a house Lot & an Orange Tree in "Kapunahoe" [?]

No. 1 Is House Lot & kula adj.

" 2 " 5 Lois in "Hoopala"

No. 1 is bounded

M. by Konohiki's kula

N. " Kalunaaina's loi

M. " Kahili River

K. " Kaleimanu's lois

No. 2 is bounded

M. by Kalunaaina's lois

N. " Kahili River

M. " Kaleimanu's lois

K. " Alaiki's lois

These lands have been held by Clt. & his parents from the days of Kaumualii. They came into the full possession of Clt. in 1844. No one has disputed his claim.

Kealawaa sworn says- I know clt's lands. I have hears the testimony of Kauoha. It is all true.

No. 10013 [B] Mokuhalii

N.T. 170-171v12

Kanoa sworn he has seen claimants land in the ili of Hapala, also the pasture in the koa growth.

Section 1 - Pasture and house lot

Mauka Konohiki pasture
Napali Landlord's lois
Makai Kahili river
K. Kaleimanu's lois

Section 2 - 5 lois in Hapala

Mauka Landlord's land
Napali Kahili river
Makai Kaleimanu's lois
K. Alaiki's lois

Land to Kumokuhalii from his parents at the time of Kaumualii 1.

Kumokuhalii as a son received it directly in 1844, title secured from parents.

Kealawaa sworn he has seen Kumokuhalii's land in Kahili of Hoopala ili land.

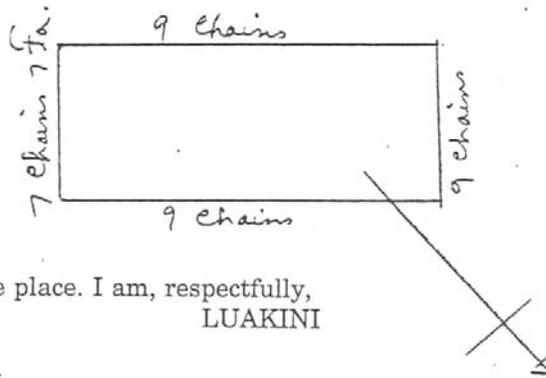
Verifies Kealawaa's statements as true and accurate, life has been peaceful.

[Award 10013B; R.P. 3880]

No. 10015 Luakini Koloa, Kauai, January 16, 1848

N.R. 253v9

The Land Commissioners, Greetings: I, Luakini, a Hawaiian subject living at Kahili on the Island of Kauai, hereby state my claim for land. The diagram follows:



My house is in a separate place. I am, respectfully,
LUAKINI

No. 10015 Luakini Clt

F.T. 165v12

Inaole sworn says I know Clt's lands in Kahole & Kilauea. They are in two pieces.

No. 1 Is House Lot in Kilauea

" 2 " 2 Lois & kula with 2 Orange trees

No. 1 is bounded

M. by konohiki's kula

N. " " "

M. " " "

A. " " "

No. 2 is bounded

M. by Papai's kula

N. " Kahili River

M. " My Lois

A. " " Kula

These lands were given Clt. in the days of Kaumualii & have been held in peaceable possession till this time.

Holokuhine sworn says I know Clt's lands as above described and have heard the testimony of Inaole. It is all true.

No. 10015 Luakini

N.T. 175-176v12

Inaole sworn he has seen Luakini's land of two lois, a pasture and a house lot all in one area in Kilauea. Two orange trees also are on this land. This claim has been absolutely secured since the beginning to the present time.

Section 1 Mauka and all around is government pasture

Section 2 Mauka Papai's pasture

Napali Kahili river

Makai Inoaole's land

Anahola Inoaole's land

Land from the konohiki at the time of Kaumualii, the first and this has been secured since that time to the present.

Holokukini sworn he has seen Luakini's land, the pasture, the two orange trees and the house lot, he has known in the same way as Inoaole.

[Award ; R.P. 10015]

No. 10082 Mamao

N.R. 262v9

The Land Commissioners, Greetings: I hereby state my claim for an 'ili named Makaihuwaa. The boundaries of this 'ili.* All the rights in this 'ili are mine, and that is my claim which is stated to you.

I also have a claim in the 'ili of Kapuka, for two lo'i and some scattered lo'i, a total of six.

Kahili, Kauai, January 17, 1848

MAMAO

*Not stated.

No. 10082 Mamao Clt

F.T. 229-230v12

Daniela sworn says I know the lands of Mamao in Kahili. It is an Ili called "Makaihuwaa."

This Ili was given by the Konohiki to Pipili at the close of the war of 1824. Pipili held it in peace till his death in 1837. His widow (Kupahu) then held the land in peaceable possession till 1847, when she gave it to her son the "Clt. who has held it in peace to the present time.

No one has disputed the claim:

Bounded as follows:

M. by Konohiki's kula

H. " "Kalama"

M. " Kahili River

A. " Pali of "Makaihuwaa"

Keo sworn says I know the lands of Mamao in Kahili. The Ili "Hokaihuwaa." It belongs to Mamao & to no one else.

Note: This claim embraces a whole Ili, but Clt relinquishes a larger part of the kula & takes that part that borders on his kalo land below the Pali.

No. 10082 Mamao

N.T. 233v12

Daniela sworn he has seen claimants land in Kahili of one section consisting of a whole ili and a house lot in Makaihuwaa.

Land from the konohiki to Pihili after the battle of Wahiawa, no objections.

Pihili died in 1837, land was given to Kupahu, the widow, no disputes. In 1847, the widow gave the ili land to her son Mamao.

Boundaries of that ili

Mauka	Konohiki pasture
Halelea	Kalama's land
Makai	Kahili river
Anahola	Konohiki pasture

Keo sworn he has seen Mamao's ili land and it is his (Mamao) own land just as Daniel, the witness has related. both Keo and Daniela have known in the same way.

[Award 10082; R.P. 4074]

No. 10083 Mamuakalono Kahili, Kauai, 17 January 1848

N.R. 262v9

The Land Commissioners, Greetings: I hereby state my claims for one lo'i, a mala of noni, a mala of wauke and the house lot.

MAMUAKALONO X

No. 10083 Mamuakalono Clt

F.T. 228v12

Keo sworn says I know Clt's land in Kahili. It is 1 Loi & I gave it to him previous to 1839 & it has been held in peaceable possession till now.

Bounded as follows

M. by Leiakunui's[?] loi

H. by Kahili River

M. " Keo's loi

A. " Koele "

[no more testimony here]

No. 60083 Mamuaakalono

N.T. 232v12

[should be 10083]

Keo sworn he has seen claimants land in Kahili of one piece with a loi in Kahili.

Mauka Luakini's land

Halelea Kahili river

Makai Keo's land

Anahola Koele

Land from the konohiki in 1839, no disputes to the present.

[Award 10083; R.P. 7754]

No. 10333 Naiamaneo Koloa, Kauai, 16 January 1848

N.R. 283v9

The Land Commissioners, Greetings: I, Naiamaneo, a subject of Hawaii living at Kahili, Island of Kauai, hereby state my claim: its diagram is as follows: The house is in another place. I am, respectfully,

NAIAMANEO

No. 10333 Naaimaneo (w) Clt

F.T. 229v12

Leimanu sworn says I know the lands of Naaimaneo in Kahili. They are a field of Kalo embracing a number of small lois & kula adj. in Ili "Kupa"

Bounded as follows

M. by Ahupuaa of Kilauea

H. " Kahili River

M. " Brook "Kilauea"

A. " Kahili River

These lands were given by the Konohiki to Clt's Husband, Oopu, in the days of Kamualii. Oopu died in 1847 & the lands fell to the widow (Clt). She has held them in peace till this time.

Mokuhalii sworn says I know Clt's lands in Kahili. I have heard the testimony of Leimanu. It is all true.

No. 10333 Naaimeneo

N.T. 232v12

Kaleimanu sworn he has seen Kaleimanu's (Naaimeneo) land in Kahili.

Mauka Kilauea ahupuaa

Halelea Kahili river

Makai Kilauea stream

Anahola Kahili river

Land from the konohiki to Opu at the time of Kaumualii I.

Opu died in 1847, the land was left to this wife Naaimeneo.

Kumokuohaliu sworn he has seen claimants land claim in Kahili. Kalaeimanu's statements were accurate and both have known in the same way. No disputes to the present time.

[Award 10333; R.P. 3370]

No. 10564 D. Oleloa

N.R. 294-295v9

To the Land Commissioners, Greetings: I hereby state my claims for land of Kauai. At Haiku Ahupua'a, at Huleia in the Puna District, here are the claims:

...

In the Ahupua'a of Kapaa in Puna there are these claims:

...

At Kahili Ahupua'a in Koolau are four taro lo'i, At Waioli ... At Wainiha. These land claims are on Kauai. These claims are of the same kind -- that is, the occupancy of them is under the people who dwell on the land. I request you to award the claims to me which I have described, in accordance with the law.

The witnesses to the claims are the people living on the land, who know of our cultivation and work. The witnesses of my occupation of konohiki are M. Kekuanaoa and M. Kekauonohi, the ones who appointed me. I am, respectfully,

Honolulu, Oahu, 5 February 1848 D. OLELOA

No. 10564 Daniela Oleloa

F.T. 6-9v12

...

The further hearing of this claim was postponed until witnesses could be procured for Clt's lands is Kahili.

(See Page 80)

Waioli Mar. 11 1850

No. 10564 Daniela Oleloa Clt finished (See page 64)

F.T. 80-81v12

...

Land from Kauonohi at the time of Kinau, no objections.
The claim in Kahili is incomplete-postponed.

William Lunalilo (20, 22)

...
Kahili Ahupua'a Koolau Kauai
The Great Mahele 1848, 1989:104

Barrère, Dorothy B. compiler
1994 *The King's Mahele: The Awardees and Their Lands*, Honolulu, HI: p. 432-433.
Willaim Charles Lunalilo, Alii Award LCA 8559B
Mahele Book 17-18 (22-23) Received
Probate 2413, 1414 (AH) Lunalilo died February 3, 1874 without issue.
Left personal property to his father Kanaina, and his real estate for the founding of
Lunalilo Home.

[Kahili River]

No. 6529 Holokukini

N.R. 193v9

To the Land Commissioners, Greetings: I hereby state my claim at Kilauea. I am the konohiki, under A. Keliiahonui. My claims are for all the rights and benefits pertaining to the konohiki, being the Po'alimas and the Po'ahas, the protected fish, and the protected trees. Those are my claims, under A. Keliiahonui ma. Respectfully,
HOLOKUKINI

N.R. 193v9

The Land Commissioners, Greetings: I hereby tell you of my three lo'i and also a house lot - those are my claims.

HOLOKUKINI

No. 6529 Holokukini Clt

F.T. 162-163v12

Kanaina sworn says I know the lands of Holokukini in Pilaa & Kilauea. He has 4 Lois in "Puaa" Pilaa all in one piece.

Bounded as follows

M. by Konohiki's kula

N. " " "

M. " Sea Beach

A. " Kane's lois

These lois were given by the Konohiki in 1845 & have been held undisturbed till this time.

Clt. has also 6 Lois in Kilauea, Ili "Maluawai" & some kula adjoining a House Lot.

bounded as follows

M. by Kahili River

N. " Konohiki's kula

M. " Oleola's lois

A. " Kahili River

These lands in Kilauea were given by Kaluahonui in 1842 & have been held unmolested to this time.

Kolale sworn says I know the lands of Clt. in Pilaa & Kilauea. I have heard the testimony of Kanaina. It is all true.

No. 6529 Holokukini

N.T. 172-173v12

Kanaina sworn he has seen claimants land in Pilaa and Kilauea consisting of 4 lois, of which 3 are small lois and 2 is a large loi.

There are only four lois in the ili of Puaa

Mauka and Napali Konohiki pasture\

Makai From the beach sand

Anahola Hane's lois

Upai lived under Holokukini.

Land from Opukea to Holokukini in 1845, no objections.

There are 6 lois in Kilauea belonging to Holokukini called Maluawai ili.

There is also a house lot, a pasture and 2 tenants. There are two houses and the men are living under Holokukini who owns the land and house lot.

Mauka Kahili river

Napali Konohiki's pasture

Makai Opeka's lois

Anahola Kahili river

Land from Kekiahonui in 1842, title clear since the beginning to the present.

Kohale sworn he has seen Holokukini's land in Kalihi, also a house lot, the pasture and the four lois in Pilaa of the ili land of Puaa. He has known in the same ways as Kalaina.

[Award 6529]

- N. Peke's loi
- M. Kalihiwai river
- K. Makaikuahiane's lois

Section 3

- M. Kunihinihi's loi
- N. Kahili river
- M. Kea's loi
- K. Kea's loi

These lands of Kea's came from the konohiki down to Kea. During the time of Kaumualii they were secured. They have not been contested until today.

Makaimoku sworn I know these lands of Kea, I have heard Nakaikuahine's testimony. Both have known in the same way. There is no opposition.

[Award 9260; R.P. 5342]

DEPARTMENT OF PLANNING

KA'ĀINA HULL, DIRECTOR
 JODI A. HIGUCHI SAYEGUSA, DEPUTY DIRECTOR



DEREK S.K. KAWAKAMI, MAYOR
 REIKO MATSUYAMA, MANAGING DIRECTOR

DIRECTOR'S REPORT

I. SUMMARY

Action Required by Planning Commission: Consideration of a Special Management Area Use Permit for the construction of a two (2) story farm dwelling and a swimming pool.

Permit Application Nos. Class IV Zoning Permit Z-IV-2024-1
 Use Permit U-2024-1
 Special Management Area Use Permit SMA(U)-2024-5

Name of Applicant(s) BRYAN MADANI and KIANA BUCKLEY
 Laurel Loo of McCorriston Miller Mukai MacKinnon LLP, Authorized Agent

II. PERMIT INFORMATION

PERMITS REQUIRED	
<input checked="" type="checkbox"/> Use Permit	Pursuant to Article 11, section 8-11.3 of the KCC, 1987 as amended, a use permit is required to allow any development, structures or uses within the Special Treatment District (ST)
<input type="checkbox"/> Project Development Use Permit	
<input type="checkbox"/> Variance Permit	
<input type="checkbox"/> Special Permit	
<input checked="" type="checkbox"/> Zoning Permit Class <input checked="" type="checkbox"/> IV <input type="checkbox"/> III	Pursuant to Section 8-3.1 of the KCC, 1987 as amended, a Class IV Zoning permit is procedural requirements in applying for a Use Permit.
<input checked="" type="checkbox"/> Special Management Area Permit <input checked="" type="checkbox"/> Use <input type="checkbox"/> Minor	Pursuant to Section 205A of the Hawaii Revised Statutes (HRS) and the Special Management Area Rules and Regulations of the County of Kaua'i, and Act 229, Session Laws of Hawai'i 2023, a SMA Use permit is required as defined in Section 7.3(C) of the SMA Rules and Regulations where the Director finds that the proposal (1) is a "Development" and (5) may have significant adverse effect on the Special Management area.
AMENDMENTS	
<input type="checkbox"/> Zoning Amendment	
<input type="checkbox"/> General Plan Amendment	

<input type="checkbox"/> State Land Use District Amendment	
--	--

Date of Receipt of Completed Application: September 27, 2023

Date of Director's Report: October 18, 2023

Date of Public Hearing: November 14, 2023

Deadline Date for PC to Take Action (60TH Day): November 26, 2023

III. PROJECT DATA

PROJECT INFORMATION	
Parcel Location:	The project site is located within the Sea Cliff Plantation Subdivision, 1400 feet south of Iwalani Lane and Pali Moana Place intersection.
Tax Map Key(s):	(4) 5-2-004:093
Area:	6.8510 acres
ZONING & DEVELOPMENT STANDARDS	
Zoning:	Agriculture (A)/ Open Special Treatment Resource (O/ST-R)
State Land Use District:	Agricultural (A)
General Plan Designation:	Agricultural (A)
Height Limit:	Twenty-five (25) feet
Max. Land Coverage:	(A) Sixty percent (60%) (O/ ST-R) 3,000 s.f. maximum or not to exceed 10% of the parcel or lot area
Front Setback:	10'-0"
Rear Setback:	Five (5) feet or ½ the wall plate height whichever is greater
Side Setback:	Five (5) feet or ½ the wall plate height whichever is greater
Community Plan Area:	North Shore Development Plan
Community Plan Land Use Designation:	N/A
Deviations or Variances Requested:	N/A

IV. LEGAL REQUIREMENTS

Section 8-3.1 (f), KCC:	This report is being transmitted to the Applicant and Planning Commission in order to satisfy the requirements of Section 8-3.1 (f), relating to the provision of the Planning Director’s report and recommendation on the subject proposal within sixty (60) days of the filing of a completed application. The application was received on September 27, 2023, and the Applicant, through its authorized agent, was notified accordingly of the Planning Department’s intent to commence permit processing.
Public Hearing Date:	November 14, 2023

V. PROJECT DESCRIPTION AND USE

The subject property is within the Sea Cliff Plantation, an existing subdivision approved under S-82-73. The property consists of an area of 6.8510 acres and is further identified as Tax Map Key Number 5-2-004:093. Additionally, it is part of a Condominium Property Regime (CPR) comprising of two (2) units, with the applicant holding ownership of CPR Unit 2.

The applicant is proposing the construction of a two (2) story farm dwelling consisting of four (4) bedrooms, Three and a half (3-1/2) baths, covered lanais, swimming pool with spa, outdoor shower, and a barbecue area. Other improvements include a concrete driveway, water feature, retaining walls, and landscaping. The farm dwelling house displays a modest pitched hip roof line with standing seam metal roof finish. The exterior siding finish of the farm dwelling is concrete board-form concrete and landscaping walls consists of Kaua’i mixed rock.

VI. APPLICANT’S REASONS/JUSTIFICATION

(Refer to Application)

VII. ADDITIONAL FINDINGS

1. The project site is in the Sea Cliff Plantation subdivision and access to the property is off Pali Moana Road.
2. The State Land Use District (SLUD) designation for the subject parcel is “Agriculture,” which allows for agricultural growth in a specific area. The Kaua’i County General Plan (GP) designation is “Agriculture”. Agriculture lands are reserved for agriculture purposes with little residential development.
3. The property is situated within the North Shore Planning area and will be subjected to the objectives and goals of the North Shore Development Plan (NSDP), that includes the following:

- Goal A: To preserve the unique natural beauty of the North Shore Planning Area.
- Goal B: To preserve the special rural charm of the North Planning area.
- Goal C: To provide for the safety and welfare of the people, of their property of the North Shore Planning Area.
- Goal D: To provide for economic development of the North Shore planning area.
- Goal E: To preserve the wildlife and flora and the North Shore, recognizing man's dependence upon this preservation for his own health and welfare.
- Goal F: To ensure the preservation of historic-archaeological sites in the North Shore Planning Area.
- Goal G: To create a development for evolutionary growth that depends upon a planning process whereby conflicts can be resolved through the establishment of priorities and community participation.
- Goal H: To provide for recreational opportunities that are compatible with the unique qualities and natural features of the North.
4. The proposed farm dwelling is located within Zone "X" of Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map. FEMA had identified these areas to be outside of the 0.2% floodplain and is far enough inland to be vulnerable to coastal erosion or impact coastal waters.
5. The subject site slopes down gradually from the northwestern edge of the property towards the southeastern section and a cross directional slope down from the western to the easterly portion of CPR Unit 2. All grading and drainage run-off resulting from construction activities shall be managed on-site.
6. CZO Development Standards
The proposed development is subjected to standards prescribed in Sections 8-4.3, 8-4.5, 8-9.2, 8-11.3, and 10-2.4:
- a. Setback Requirements: Front property line setbacks are ten feet (10'-0") with a side and rear property line setback of five feet (5'-0") or half the distance of the wall plate height whichever is greater.
 - b. Setback between buildings: The distance between buildings shall be ten (10) feet minimum.
 - c. Parking Requirements: The applicant shall provide a minimum of two (2) off-street parking spaces for each of the dwelling units.

- d. Land/ Lot Coverage: The proposed development (CPR Unit 2) is entirely within the Open Special Treatment Resource (O/ST-R) zoning district. The allowable land coverage should not exceed more than 10% of the parcel size within its respective zoning area.
- e. Building Height: Pursuant to Section 10-2.4(e)(1) of the CZO, referred to as the NSDP. It allows structures to be no higher than twenty-five (25) feet.

VIII. AGENCY COMMENTS

See Exhibit "A".

IX. PRELIMINARY EVALUATION

In evaluating the Applicant's request to allow the construction of the proposed development, the following are being considered.

1. North Shore Development Plan Standards
The proposed development is a new two (2) story farm dwelling with swimming pool in the Seacliff Plantation subdivision in Kīlauea and aligns with the housing goals of the Northshore Development Plan (NDP). Prior to building permit application, the applicant shall work closely with the Planning Department to ensure the dwelling does not exceed the height limitations as outlined in the NSDP.
2. Native Hawaiian Traditional and Cultural Rights- The analysis conducted interviews with cultural descendants and knowledgeable community members and examined archival research relying on prior archaeological records and recent inspections. The archaeological documentation revealed the presence of significant cultural, historical, and/or natural resources both within and outside the subject property (see Exhibit "B" section II).

The Ka Pa'akai identified resources, including traditional and customary Native Hawaiian rights that will be affected or impaired by the proposed action, including:

- Pre-contact features or sites- Pre contact sites are mostly situated in gullies or uneven terrain, particularly near water features, as flat areas like tablelands.
- Railroad bridge culvert and section of the railroad track- The Archaeological Literature Review and Field Inspection (LRFI) conducted on the property identified a railroad track (TS-1) as shown in Figure 7 of attachment "A", that may be affected by construction activities on the property. The railroad bridge culvert is not only a post-contact historic feature, but it also has cultural significance because of its association with Princess Lydia Kamaka'eha Princess Regnant, later to become Queen Lili'uokalani.

- Impacts to the cultural landscape of Nihoku, including the ability to exercise traditional and customary practices associated with Nihoku and Kīlauea- Members of the Kīlauea community, particularly Native Hawaiians with ancestral ties to the area, strongly believe that the Seacliff Plantation subdivision, as a whole, has had and will continue to have a negative impact on the cultural landscape of Nihoku.

The Ka Paʻakai analysis provides recommendations, feasible actions, and mitigation measures to reasonably protect Native Hawaiian rights and resources. This includes the following recommendations:

- The protection and preservation of the railroad bridge culvert and section of railroad tracks (see figure 7 of Attachment “A” of the LRFI).
- Planting of native plants.
- Minimal development and grading of the project area to avoid inadvertent findings of Iwi Kupuna.
- Reasonable mitigation impacts to Nihoku as a cultural landscape.

Please refer to Exhibit “B” Section III of the Ka Paʻakai for detailed implementation actions related to the recommendations stated above.

3. SMA Rules and Regulations

The COK SMA Rules and Regulations contain objectives, policies and guidelines designed to protect coastal resources. Within the SMA, special consideration is given to recreational opportunities, cultural and historic resources, scenic qualities and open space, coastal ecosystems, and coastal hazards. In evaluating the proposed development relative to the goals and objectives of the SMA Rules and Regulations, the following aspects are taken into consideration:

- Public Access and Coastal Recreation- The subject development has no public access on site. Public access to Kīlauea bay and Kahili Beach is approximately a half mile (1/2) mile southwest off Kīlauea road and another access approximately one (1) mile southeast off Wailapa Road.
- Cultural/ Historical Resources- Archeological Literature Review and Filed Inspection (LRFI) of Parcel 93 (Attachment A) prepared by Scientific Consultant Services, INC. identified a designated site as Temporary Site 1 (TS-1) and was comprised of two features: a railroad bridge culvert (Feature 1, FE-1), and a remnant section of railroad track (Feature 2, FE-2) found nearby. As shown in Figure 7 of the LRFI shows FE-1 and FE-2 located on CPR Unit 2. The proposed farm dwelling house is approximately 150 feet from TS-1. The applicant has agreed to work and coordinate with Cultural Descendants and knowledgeable community members on the protection and preservation of the railroad bridge culvert and sections of the railroad track located on the subject property.

The archaeological significance of the current field inspection lies in the identification of a railroad bridge culvert and a section of railroad track (TS-1), associated with the Kīlauea Sugar Company's sugar cane transportation. Another part of this railroad nearby has already been designated as SIHP Site No. 50-30-04-0182. There is a possibility of discovering additional remnants of the railroad under foliage or even below the surface of nearby property parcels. Given the historic property identification, the consultant (Scientific Consultant Services, INC.) recommends conducting an Archaeological Inventory Survey (AIS) to thoroughly document TS-1, determining its extent, age, function, and significance. Additionally, consultation with SHPD is advised for both the AIS and to decide whether TS-1 should receive a new SIHP number or be recorded as an additional portion of Site-01812.

The LRFI identified only one historic-era cultural resource in the project area. However, due to overgrowth, more extensive surveys during the AIS could reveal additional historical-era resources linked to the railroad. The study did not involve excavations, leaving the possibility of undiscovered pre-Contact cultural resources, like habitation areas, beneath the plow zone. The likelihood of finding iwi kupuna on the plateau area is slight, with most traditional burials documented near the coastline and in sandy sediment.

- c. Scenic and Open Space Resources- The subject parcel is located approximately half a mile (1/2) east of the entry of Sea Cliff Plantation subdivision. The subject site area (CPR Unit 2) is within a view plane easement dedicated to neighboring Lot 9, to maintain an unobstructed view of the shoreline of Kīlauea Bay. Improvements, structures, and plantings are prohibited within the view plan easement area that would interfere with the views of the shoreline from a 275 feet elevation on anywhere of Lot 9.
 - d. Coastal Ecosystems- The project site is approximately a quarter (1/4) mile of the Kīlauea Wildlife Refuge, U.S. Fish and Wildlife Service and located on a high cliff rocky bluff. The project site has been previously developed with a Farm dwelling and a swimming pool. As represented in the application according to the University of Hawai'i Rare Species database, there are no known or reported threatened and endangered species within or adjacent property.
 - e. Coastal Hazards- The project area/ site is not located within the extreme tsunami evacuation area. The project area/ site is located within Zone "X", as shown on Federal Insurance Rate Maps. (FIRM 150002-0060E) The project will not be impacted by any coastal hazards.
4. CZO Development Standards
As proposed the project complies with the land coverage, setback, and off-street parking requirements for development within the Open (O) zoning district, as specified in Sections 8-4.3, 8-4.5, and 8-9.2 of the Comprehensive Zoning Ordinance (CZO).

- a. The subject is located within the North Shore Development Plan Area (NSDP) Pursuant to Sec.10-2.4(e)(1) of the CZO, commonly referred to as the NSDP. Structures should be no higher than twenty-five (25) feet. The Applicant should work closely with the Planning Department to ensure that the proposed development is in compliance with the height limitations of the North Shore Development Plan (NSDP).

Finally, it is uncertain as to whether the Applicant has made provisions for night illumination with the project, based on the preliminary plans that have been submitted. If so, night illumination should be designed to minimize adverse impacts on the Federally Listed Threatened Species, Newell's Shearwater and other seabirds. Night lighting should be shielded from above and directed downwards and shall be approved by the U.S. Dept. of the Interior Fish and Wildlife Service. If external lighting is to be used in connection with the proposed project, all external lighting should be only of the following type: *downward-facing shielded lights*. Spotlights aimed upward or spotlighting of structures is prohibited.

5. Use Permit

- a. Pursuant to Article 3 of the Comprehensive Zoning Ordinance (CZO), Chapter 8 of the Kauai county Code (1987), the purpose of the Use Permit Procedure is to assure the proper integration into the community of uses which may be suitable only in specific locations of a district, or only under certain conditions, or only if the uses are designed, arranged or conducted in a particular manner, and to prohibit the uses if proper integration cannot be assured. Section 8-3.2 of the CZO specifies a Use Permit may be granted only if the Planning Commission finds that the use meets the following criteria:

- 1) The use must be a compatible use;
- 2) The use must not be detrimental to persons or property in the area;
- 3) The use must not cause substantial environmental consequences; and
- 4) The use must not be inconsistent with the intent of the Comprehensive Zoning Ordinance (CZO).

- b. Based on the foregoing, the following aspects are considered:

- 1) **Compatible Use** – The proposed development is designed to be integrated with the surrounding residential uses within Kīlauea Town. As noted in the Director's Report, the project site is within the Seacliff Plantation of the Kīlauea Bay Subdivision and the proposed use is compatible with the surrounding uses and is not expected to impact urban activities in the area.
- 2) **Community Input** - The Kīlauea Neighborhood Association (KNA) Board and members of the community voted to approve the forthcoming SMA Use permit application.

X. PRELIMINARY CONCLUSION

Bases on the foregoing, it is concluded that through proper mitigative measures, the proposed development can be considered, and it complies with the policies and guidelines of the Special Management Area Rules and Regulations in that:

1. The development should not have any substantial adverse environmental or ecological effect.
2. The proposed development should not have any detrimental impact to the environment or the surrounding area and be in compliance with the criteria outlined for the granting of a Special Management Area Use Permit. The Applicant should institute the "Best Management Practices" to ensure that the operation of this facility does not generate impacts that may affect the health, safety, and welfare of those in the surrounding area of the proposal.

Furthermore, the proposal DOES NOT:

- involve dredging, filling, or otherwise altering any bay, estuary, salt march, river mouth, slough or lagoon;
- reduce the size of any beach or other area usable for public recreation;
- reduce or impose restrictions upon public access to tidal and submerged lands, beaches, rivers or streams within the special management area; and
- adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, estuarine sanctuaries or existing agricultural uses of land.

XI. PRELIMINARY RECOMMENDATION

Based on the foregoing evaluation and conclusion, it is hereby recommended that the construction of a a two (2) story farm dwelling, swimming pool, and associated site improvements Class IV Zoning Permit Z-IV-2024-1, Use Permit U-2024-1, and Special Management Area Use Permit SMA(U)-2024-5 be **approved** with the following conditions:

1. The proposed development shall be constructed as represented. Any changes to the operation of the respective structure shall be reviewed by the County of Kaua'i, Department of Planning to determine whether Planning Commission review and approval is required.
2. In order to ensure that the project is compatible with its surroundings and to minimize the visual impact of the structures, the external color of the proposed dwelling and rock wall shall be of moderate to dark earth-tone color. The proposed color and landscape plan should be submitted to the County of Kaua'i, Department of Planning for review and acceptance prior to building permit submittal.

3. The following feasible actions or mitigation measures should be taken to reasonably protect Native Hawaiian rights and resources:
 - a. Regarding the protection and preservation of the railroad bridge culvert and section of the railroad track (TS-1).
 1. The applicant shall consider preparing further documentation of the historic property (TS-1) to determine its extent, age, function, and significance.
 2. Until the extent of TS-1 is confirmed to not extend onto the subject property through further documentation, the applicant shall coordinate with Cultural Descendants and knowledgeable community members on the protection and preservation of the railroad bridge culvert and sections of the railroad track located on the subject property. Actions and specific recommendations by the Cultural Descendants that the applicant shall consider implementing include:
 - i. The stone culvert floor at intake should be repaired and the stone head walls be cleared of vegetative growth. Loose rocks should be secured in place and cemented if formerly affixed in that manner;
 - ii. The drain way, at least up to 15 feet on either side of the lowest point where the water naturally flows should remain as it is with the existing buffalo grass as a bulwark against erosion. Ultimately, the invasive grass shall be kept in check by weed whacking, encroachment of naupaka and the shaded canopy of the new dry land forest;
 - iii. A large buffer from the gully and control for erosion and runoff shall be kept; the applicant shall not allow for substantial movement that changes the slope and shape of the terrain and contain sediment so as to avoid filling the railway tunnel further;
 - iv. The applicant shall consider placing the rail crossing/bridge/culvert built circa 1890 on the State of Hawai'i Historic Registry;
 - v. The applicant shall also consider including the rail bed (despite some of its alterations from fill and grading) and its original path of the railway system, as part of the registry process. If placed on the register, any subsequent work along the bed which reveals the original tracks and elevation should be documented by photos, survey elevations and GPS info, and updated in the registry;
 - vi. The applicant should consider placing a commemorative plaque at the site and inform the Seacliff Plantation Owner's Association of the significance of the structure. The applicant should consider working

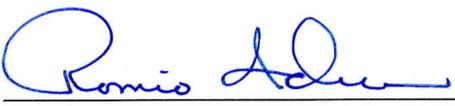
with the Owner's Association to inform other owners along the rail path to take pride in its presence by preserving any evidence of its path through their properties as well;

- vii. The applicant should acknowledge that the Seacliff Plantation Subdivision storm drain exit on the property above the crossing should not be altered or extended and that the drainage field remain continually grassed to avoid soil erosion;
 - viii. The applicant should make genuine effort to work with Cultural Descendants to accommodate up to four (4) annual field trips from school groups or historical organizations and researchers.
- b. Regarding the planting of native plants.
- 1. The applicant shall consider the planting of native plants in gulch within the subject property. Native plants can include naupaka, Milo, Kukui, Noni and Kou to provide the basic canopy and ground cover. In addition, but not mandatory are plantings of Ohia and Koa.
- c. Regarding iwi kupuna.
- 1. Because there remains the possibility that pre-Contact cultural resources such as habitation area could be documented in subsurface contexts below the plow zone. The same would hold true for iwi kupuna: a slight possibility that such exist on this plateau area. Thus, grading and development in the area should be minimized to avoid inadvertent discovery of iwi kupuna.
- d. Regarding "reasonable" mitigation impacts to Nihokū as a cultural landscape
- 1. Applicant shall work with and meet with the Seacliff Plantation Homeowner's Association to explore opportunities to engage, collaborate, and coordinate with the Cultural Descendants and Kilauea community to constructively address their concerns related to the adverse impacts of Seacliff Plantation's development on traditional and customary practices exercised by native Hawaiians rights and resources. These concerns include reasonable access to the ocean (especially for kupuna) to hunt pigs, fish, gather resources for subsistence and conduct education and ceremonies such as Makahiki, solstice and equinox observances and kilo events.
4. The applicant is advised that should any archaeological or historical resources be discovered during ground disturbing/ construction work, all work in the area of the archaeological/ historical findings shall immediately cease and the applicant shall contact the State Department of Land and Natural Resources, Historic Preservation Division and the County of Kaua'i, Department of Planning to determine mitigation measures.

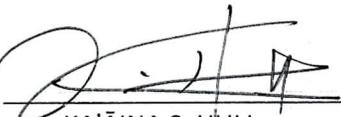
5. In order to minimize adverse impacts on the Federally Listed Threatened Species, Newell's Shearwater and other seabirds, if external lighting is to be used in connection with the proposed project, all external lighting shall be only of the following types: downward facing, shielded lights, spotlights aimed upward or spotlighting of structures shall be prohibited.
6. The applicant shall develop and utilize Best Management Practices (B.M.P's) during all phases of development in order to minimize erosion, dust, and sedimentation impacts of the project to abutting properties.
7. The applicant shall resolve and comply with the applicable standards and requirements set forth by the State Health Department, State Historic Preservation Division-DLNR, Office of Hawaiian Affairs, and County Department of Public Works, Fire, Transportation, and Water.
8. To the extent possible within the confines of union requirements and applicable legal prohibitions against discrimination in employment, the Applicant shall seek to hire Kauai contractors as long as they are qualified and reasonably competitive with other contractors and shall seek to employ residents of Kauai in temporary construction and permanent resort-related jobs. It is recognized that the Applicant may have to employ non-Kauai residents for particular skilled jobs where no qualified Kauai residents possesses such skills. For the purposes of this condition, the Commission shall relieve the Applicant of this requirement if the Applicant is subjected to anti-competitive restraints on trade or other monopolistic practices.
9. The Applicant shall implement to the extent possible sustainable building techniques and operational methods for the project, such as Leadership in Energy and Environmental Design (L.E.E.D.) standards or another comparable state-approved, nationally recognized, and consensus-based guideline, standard, or system, and strategies, which may include but is not limited to recycling, natural lighting, extensive landscaping, solar panels, low-energy fixtures, low-energy lighting and other similar methods and techniques. All such proposals shall be reflected on the plans submitted for building permit review.
10. The Planning Commission reserves the right to revise, add or delete conditions of approval in order to address or mitigate unforeseen impacts the project may create, or to revoke the permits through the proper procedures should conditions of approval not be complied with or be violated.
11. Unless otherwise stated in the permit, once permit is issued, the applicant must make substantial progress, as determined by the Director, regrading the development or activity within two (2) years, or the permit shall be deemed to have lapsed and be no longer in effect.

The Planning Commission is further advised that this report does not represent the Planning Department's final recommendation in view of the forthcoming public hearing process scheduled for November 14, 2023 whereby the entire record should be considered prior to decision-making. The entire record should include but not be limited to:

- a. Pending government agency comments;
- b. Testimony from the general public and interested others; and
- c. The Applicant's response to staff's report and recommendation as provided herein.

By 
ROMIO IDICA
Planner

Approved & Recommended to Commission:

By 
KA'AINA S. HULL
Director of Planning

Date: 10/18/2023

EXHIBIT “A”

(Agency comments)



County of Kaua'i
 Planning Department
 4444 Rice St., Suite A473 Lihue, HI 96766
 (808) 241-4050

FROM: Kaaina S. Hull, Director

Planner: Romio Idica

9/27/2023

SUBJECT: Zoning Class IV Z-IV-2024-1
 Use Permit U-2024-1
 Special Mgt Area Permit SMA(U)-2024-5
 Tax Map Key: 520040930002
 Applicant: Bryan Madani & Kiana Buckley
 Single-Family Residence with Pool

TO:

- | | |
|--|---|
| <input type="checkbox"/> State Department of Transportation - STP | <input checked="" type="checkbox"/> County DPW - Engineering |
| <input type="checkbox"/> State DOT - Highways, Kauai (info only) | <input type="checkbox"/> County DPW - Wastewater |
| <input type="checkbox"/> State DOT - Airports, Kauai (info only) | <input type="checkbox"/> County DPW - Building |
| <input type="checkbox"/> State DOT - Harbors, Kauai (info only) | <input type="checkbox"/> County DPW - Solid Waste |
| <input checked="" type="checkbox"/> State Department of Health | <input type="checkbox"/> County Department of Parks & Recreation |
| <input type="checkbox"/> State Department of Agriculture | <input checked="" type="checkbox"/> County Fire Department |
| <input type="checkbox"/> State Office of Planning | <input checked="" type="checkbox"/> County Housing Agency |
| <input type="checkbox"/> State Dept. of Bus. & Econ. Dev. Tourism | <input type="checkbox"/> County Economic Development |
| <input type="checkbox"/> State Land Use Commission | <input checked="" type="checkbox"/> County Water Department |
| <input checked="" type="checkbox"/> State Historic Preservation Division | <input type="checkbox"/> County Civil Defense |
| <input type="checkbox"/> State DLNR - Land Management | <input checked="" type="checkbox"/> County Transportation Agency |
| <input type="checkbox"/> State DLNR - Forestry & Wildlife | <input type="checkbox"/> KHPRC |
| <input type="checkbox"/> State DLNR - Aquatic Resources | <input type="checkbox"/> U.S. Postal Department |
| <input type="checkbox"/> State DLNR - Conservation & Coastal Lands | <input type="checkbox"/> UH Sea Grant |
| <input type="checkbox"/> Office of Hawaiian Affairs | <input checked="" type="checkbox"/> Other: Office of Hawaiian Affairs |

FOR YOUR COMMENTS (pertaining to your department)

This matter is scheduled for a public hearing before the County of Kauai Planning Commission on 11/14/2023 at the Lihue Civic Center, Moikeha Building, Meeting Room 2A-2B, 4444 Rice Street, Lihue, Kauai, at 9:00 am or soon thereafter. If we do not receive your agency comments within one (1) month from the date of this request, we will assume that there are no objections to this permit request. Mahalo!

Romio Idica

From: Kamakana Ferreira <kamakanaf@oha.org>
Sent: Wednesday, October 11, 2023 11:12 AM
To: Romio Idica
Cc: Jodi Higuchi Sayegusa
Subject: OHA Comment Re: SMA U-2024-4 and 2024-5, 3839 Pali Moana Place
Attachments: SMA 2024-4, Guest House with Kitchen and Lanai at 3839F Pali Moana Place, Kilauea, Kauai.pdf; SMA Use Permit, 2024-5, and Zoning Class IV Permit, Z-IV-2024-1, Single Family Residence with Pool at 3839 Pali Moana Place, Kilauea, Kauai.pdf

CAUTION: This email originated from outside the County of Kauai. Do not click links or open attachments even if the sender is known to you unless it is something you were expecting.

Aloha Romio,

The Office of Hawaiian Affairs (OHA) is in receipt of two Special Management Area (SMA) use permit applications, #s 2024-4 and 2024-5, for improvements at 3839 Pali Moana Place, Kilauea, Kauai. SMA U-2024-4, for Nathaniel Carden and Beth Woods, will add a new guest house with kitchen and pool at Unit 1. SMA U-2024-5, for Bryan Madani and Kiana Buckley, will develop a farm dwelling and a swimming pool at Unit 2. A Ka Pa'akai Analysis for Unit 2 was prepared by Dawn Chang of Ku'iwalu in December 2022 and was utilized in both SMA application packets. Similarly, an archaeological literature review prepared by SCS in 2022 for Units 1 and 2 was included in both SMA application packets as well.

In review of the archaeological literature review, we observe that only a single historic culvert was located during a field inspection. Informants from the Ka Pa'akai Analysis indicated a desire to preserve the historic railroad culvert, which the applicant appears to have committed to. It was suggested that other remnant portions of the railroad may be found under the foliage or even under the ground surface as vegetation was severely overgrown, which made ground visibility difficult. In this regard, a full archaeological inventory survey (AIS) was recommended to fully document the historic culvert. SCS did further concede that subsurface deposits could exist and that there could be benefit to doing an AIS in this regard. It was suggested that there is a slight possibility for pre-Contact cultural resources such as habitation areas to be documented in subsurface contexts below the plow zone.

SCS also states that the State Historic Preservation Division (SHPD) should be consulted. OHA agrees that SHPD should be provided with an opportunity to review and comment on these projects pursuant to Hawaii Revised Statutes (HRS) Chapter 6E-42. OHA would certainly not object to an AIS given that the parcels are overgrown with vegetation and given that there is a possibility of encountering subsurface deposits. If an AIS cannot be done, then monitoring should be pursued to address SCS's concerns. Should SHPD provide comment, please provide copies of them to OHA.

Mahalo for the opportunity to comment. We look forward to seeing our comments addressed and receiving any SHPD comments. Please let me know if you have any questions.

Mahalo,
Kamakana C. Ferreira, M.A.

Lead Compliance Specialist
Office of Hawaiian Affairs
560 N. Nimitz Hwy
Honolulu, Hi. 96817

(808)594-0227



County of Kauai
 Planning Department
 4444 Rice St., Suite A473 Lihue, HI 96766
 (808) 241-4050

FROM: Kaaina S. Hull, Director

Planner: Romio Idica

10/2/2023

SUBJECT: Special Management Area (Minor) SMA(M)-2024-5
 Tax Map Key: 530060450000
 Applicant: Belles Graham LLP c/o PRW Development Co. LLC
 Fence

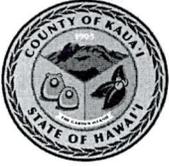
TO:

- | | |
|--|---|
| <input type="checkbox"/> State Department of Transportation - STP | <input checked="" type="checkbox"/> County DPW - Engineering |
| <input type="checkbox"/> State DOT - Highways, Kauai (info only) | <input type="checkbox"/> County DPW - Wastewater |
| <input type="checkbox"/> State DOT - Airports, Kauai (info only) | <input type="checkbox"/> County DPW - Building |
| <input type="checkbox"/> State DOT - Harbors, Kauai (info only) | <input type="checkbox"/> County DPW - Solid Waste |
| <input checked="" type="checkbox"/> State Department of Health | <input type="checkbox"/> County Department of Parks & Recreation |
| <input type="checkbox"/> State Department of Agriculture | <input checked="" type="checkbox"/> County Fire Department |
| <input type="checkbox"/> State Office of Planning | <input type="checkbox"/> County Housing Agency |
| <input type="checkbox"/> State Dept. of Bus. & Econ. Dev. Tourism | <input type="checkbox"/> County Economic Development |
| <input type="checkbox"/> State Land Use Commission | <input checked="" type="checkbox"/> County Water Department |
| <input checked="" type="checkbox"/> State Historic Preservation Division | <input type="checkbox"/> County Civil Defense |
| <input type="checkbox"/> State DLNR - Land Management | <input checked="" type="checkbox"/> County Transportation Agency |
| <input type="checkbox"/> State DLNR - Forestry & Wildlife | <input type="checkbox"/> KHPRC |
| <input type="checkbox"/> State DLNR - Aquatic Resources | <input type="checkbox"/> U.S. Postal Department |
| <input type="checkbox"/> State DLNR - Conservation & Coastal Lands | <input type="checkbox"/> UH Sea Grant |
| <input type="checkbox"/> Office of Hawaiian Affairs | <input checked="" type="checkbox"/> Other: Office of Hawaiian Affairs |

FOR YOUR COMMENTS (pertaining to your department)

*Access shall be provided for
 emergency services*

If we do not receive your agency comments within 21 days from the date of this request, we will assume there are no objections/comments for this permit request. Mahalo!



County of Kauai
 Planning Department
 4444 Rice St., Suite A473 Lihue, HI 96766
 (808) 241-4050

FROM: Kaaina S. Hull, Director

Planner: Romio Idica

10/2/2023

SUBJECT: Special Management Area (Minor) SMA(M)-2024-5
 Tax Map Key: 530060450000
 Applicant: Belles Graham LLP c/o PRW Development Co. LLC
 Fence

TO:

- | | |
|--|---|
| <input type="checkbox"/> State Department of Transportation - STP | <input checked="" type="checkbox"/> County DPW - Engineering |
| <input type="checkbox"/> State DOT - Highways, Kauai (info only) | <input type="checkbox"/> County DPW - Wastewater |
| <input type="checkbox"/> State DOT - Airports, Kauai (info only) | <input type="checkbox"/> County DPW - Building |
| <input type="checkbox"/> State DOT - Harbors, Kauai (info only) | <input type="checkbox"/> County DPW - Solid Waste |
| <input checked="" type="checkbox"/> State Department of Health | <input type="checkbox"/> County Department of Parks & Recreation |
| <input type="checkbox"/> State Department of Agriculture | <input checked="" type="checkbox"/> County Fire Department |
| <input type="checkbox"/> State Office of Planning | <input type="checkbox"/> County Housing Agency |
| <input type="checkbox"/> State Dept. of Bus. & Econ. Dev. Tourism | <input type="checkbox"/> County Economic Development |
| <input type="checkbox"/> State Land Use Commission | <input checked="" type="checkbox"/> County Water Department |
| <input checked="" type="checkbox"/> State Historic Preservation Division | <input type="checkbox"/> County Civil Defense |
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| <input type="checkbox"/> State DLNR - Aquatic Resources | <input type="checkbox"/> U.S. Postal Department |
| <input type="checkbox"/> State DLNR - Conservation & Coastal Lands | <input type="checkbox"/> UH Sea Grant |
| <input type="checkbox"/> Office of Hawaiian Affairs | <input checked="" type="checkbox"/> Other: Office of Hawaiian Affairs |

FOR YOUR COMMENTS (pertaining to your department)

If we do not receive your agency comments within 21 days from the date of this request, we will assume there are no objections/comments for this permit request. Mahalo!



OCT 12 '23 PM 1:20
PLANNING DEPT

STATE OF HAWAII
DEPARTMENT OF HEALTH
3040 Umi St. Lihue
Hawaii 96766

DATE: Oct 10, 2023
TO: To whom it may concern
FROM: Ellis Jones
District Environmental Health Program Chief
SUBJECT: RESPONSE_PRW Develop Co. LLC_SMA(U)-2024-5

In most cases, the District Health Office will no longer provide individual comments to agencies or project owners to expedite the land use review and process.

Agencies, project owners, and their agents should apply Department of Health "Standard Comments" regarding land use to their standard project comments in their submittal. Standard comments can be found on the Land Use Planning Review section of the Department of Health website: <https://health.hawaii.gov/epo/landuse/>. Contact information for each Branch/Office is available on that website.

Note: Agencies and project owners are responsible for adhering to all applicable standard comments and obtaining proper and necessary permits before the commencement of any work.

General summary comments have been included for your convenience. However, these comments are not all-inclusive and do not substitute for review of and compliance with all applicable standard comments for the various DOH individual programs.

Clean Air Branch

1. All project activities shall comply with the Hawaii Administrative Rules (HAR), Chapters 11-59 and 11-60.1.
2. Control of Fugitive Dust: You must reasonably control the generation of all airborne, visible fugitive dust and comply with the fugitive dust provisions of HAR §11-60.1-33. Note that activities that occur near existing residences, businesses, public areas, and major thoroughfares exacerbate potential dust concerns. It is recommended that a dust control management plan be developed which identifies and mitigates all activities that may generate airborne and visible fugitive dust and that buffer zones be established wherever possible.

3. Standard comments for the Clean Air Branch are at:
<https://health.hawaii.gov/epo/landuse/>

Clean Water Branch

1. All project activities shall comply with the HAR, Chapters 11-53, 11-54, and 11-55. The following Clean Water Branch website contains information for agencies and/or project owners who are seeking comments regarding environmental compliance for their projects with HAR, Chapters 11-53, 11-54, and 11-55:
<https://health.hawaii.gov/cwb/clean-water-branch-home-page/cwb-standardcomments/>.

Hazard Evaluation & Emergency Response Office

1. A Phase I Environmental Site Assessment (ESA) and Phase II Site Investigation should be conducted for projects wherever current or former activities on site may have resulted in releases of hazardous substances, including oil or chemicals. Areas of concern include current and former industrial areas, harbors, airports, and formerly and currently zoned agricultural lands used for growing sugar, pineapple or other agricultural products.
2. Standard comments for the Hazard Evaluation & Emergency Response Office are at:
<https://health.hawaii.gov/epo/landuse/>.

Indoor and Radiological Health Branch

1. Project activities shall comply with HAR Chapters 11-39, 11-45, 11-46, 11-501, 11-502, 11-503, 11-504.
2. Construction/Demolition Involving Asbestos: If the proposed project includes renovation/demolition activities that may involve asbestos, the applicant should contact the Asbestos and Lead Section of the Branch at <https://health.hawaii.gov/irhb/asbestos/>.

Safe Drinking Water Branch

1. Agencies and/or project owners are responsible for ensuring environmental compliance for their projects in the areas of: 1) Public Water Systems; 2) Underground Injection Control; and 3) Groundwater and Source Water Protection in accordance with HAR Chapters 11-19, 11-20, 11-21, 11-23, 11-23A, and 11-25. They may be responsible for fulfilling additional requirements related the Safe Drinking Water program:
<https://health.hawaii.gov/sdwb/>.
2. Standard comments for the Safe Drinking Water Branch can be found at:
<https://health.hawaii.gov/epo/landuse/>.

Solid & Hazardous Waste Branch

1. Hazardous Waste Program - The state regulations for hazardous waste and used oil are in HAR Chapters 11-260.1 to 11-279.1. These rules apply to the identification, handling, transportation, storage, and disposal of regulated hazardous waste and used oil.
2. Solid Waste Programs - The laws and regulations are contained in HRS Chapters 339D, 342G, 342H and 342I, and HAR Chapters 11-58.1, and 11-282. Generators and handlers of solid waste shall ensure proper recycling or disposal at DOH-permitted solid waste management facilities. If possible, waste prevention, reuse and recycling are preferred options over disposal. The Office of Solid Waste Management also oversees the

electronic device recycling and recovery law, the glass advanced disposal fee program, and the deposit beverage container program.

3. Underground Storage Tank Program – The state regulations for underground storage tanks are in HAR Chapter 11-280.1. These rules apply to the design, operation, closure, and release response requirements for underground storage tank systems, including unknown underground tanks identified during construction.
4. Standard comments for the Solid & Hazardous Waste Branch can be found at: <https://health.hawaii.gov/epo/landuse/>.

Wastewater Branch

By Revised Statute 11-62-31.1 If the parcel is less than 10,000sq feet, an individual onsite waste-water unit may not be possible for future construction. Please contact Sina Pruder at the DOH waste-water branch at 808-586-4288 for further information. For comments, please email the Wastewater Branch at doh.wwb@doh.hawaii.gov.

Sanitation / Local DOH Comments:

1. Noise may be generated during demolition and/or construction. The applicable maximum permissible sound levels, as stated in Title 11, HAR, Chapter 11-46, "Community Noise Control," shall not be exceeded unless a noise permit is obtained from the Department of Health.
2. According to HAR §11-26-35, No person, firm, or corporation shall demolish or clear any structure, place, or vacant lot without first ascertaining the presence or absence of rodents that may endanger public health by dispersal from such premises. Should any such inspection reveal the presence of rodents, the rodents shall be eradicated before demolishing or clearing the structure, site, or vacant lot. A demolition or land clearing permit is required prior to demolition or clearing.

Other

1. [CDC - Healthy Places - Healthy Community Design Checklist Toolkit](#) recommends that state and county planning departments, developers, planners, engineers, and other interested parties apply these principles when planning or reviewing new developments or redevelopment projects.
2. If new information is found or changes are made to your submittal, DOH reserves the right to implement appropriate environmental health restrictions as required. Should there be any questions on this matter, please contact the Department of Health, Kauai District Health Office at 808-241-3492.

Ellis Jones

Ellis Jones

District Environmental Health Program Chief
Office Phone: (808) 241-3326



PLANNING COMMISSION

KAAINA S. HULL, CLERK OF COMMISSION

FRANCIS DEGRACIA, CHAIR
DONNA APISA, VICE CHAIR
GERALD AKO, MEMBER
HELEN COX, MEMBER
GLENDA NOGAMI-STREUFERT, MEMBER
JERRY ORNELLAS, MEMBER
LORI OTSUKA, MEMBER

MEMORANDUM

To: Honorable Commissioners
Kauai Planning Commission

Fr: Kaaina S. Hull
Clerk of the Commission

Date: September 12, 2023

RE: Clerk of the Commission's Recommendation to Refer an Appeal of the Planning Director's Decision Related to the Planning Director's Cease and Desist and Forfeiture of TVRNCU #1184 ('Ae Kai Le'a) for the Failure to timely renew by March 6, 2023, **Charles Smith and Deani Higashi**, 2652-A Puuholo Road, TMK 26007012, Kauai, appeal received on September 8, 2023, for referral to Board and Commissions as Contested Case File No. CC-2024-3. The renewal packet was hand delivered to the Department on April 19, 2023, and Denied on that date.

Please refer this appeal filed as CC-2024-3 to Boards & Commissions to conduct the required analysis and contested case hearing, as necessary.

Services should include but not be limited to: procure the services of a hearings officer, conduct the hearing, consolidate appeals where necessary, dispose of all pre-hearing motions, receive and record all evidence including subpoenaing any witness, and render a recommended filings of fact, conclusions of law, decision and order for the Planning Commission's Action.

H.1.

October 24, 2023

1003 Bishop Street, Suite 1600
Honolulu, Hawaii 96813-6452
Telephone (808) 531-8031
Facsimile (808) 533-2242
E-Mail: gwk@hawaiilawyer.com
www.hawaiilawyer.com

September 6, 2023

VIA E-MAIL: khull@kauai.gov; planningdepartment@kauai.gov
& U.S. MAIL

David H. Abitbol
Nicholas K. Ernst
Matthew T. Evans
Tred R. Eyerly
Clint K. Hamada
Diane D. Hastert
Max J. Kimura
Christine A. Kubota
Gregory W. Kugle
Kenneth R. Kupchak
Na Lan
Megan L.M. Lim
Jonathan N. Marchuk
David P. McCauley
Casey T. Miyashiro
Mark M. Murakami
Anna H. Oshiro
Christopher H. Pang
Laurel E. Pepe
Douglas C. Smith
Ross Uehara-Tilton
Toren K. Yamamoto
Amber M. Yonamine
Michael A. Yoshida
Madeleine M.V. Young

Mr. Ka'aina S. Hull
Director of Planning
Planning Department
County of Kauai, State of Hawaii
4444 Rice Street, Suite A-473
Lihue, Hawaii 96766

Ms. Jodi A. Higuchi Sayegusa
Deputy Planning Director
Kauai Planning Commission
County of Kauai, State of Hawaii
4444 Rice Street, Suite A-473
Lihue, Hawaii 96766

Re: **Notice of Appeal and Demand for Contested Case Hearing**

Of Counsel
Jed Kurzban

Dear Mr. Hull and Ms. Sayegusa:

Denis C.H. Leong
(1942-2023)
R. Charles Bocken
(1921-2020)
C. F. Damon, Jr.
(1926-2017)
Charles W. Key
(1929-2008)

This firm represents Charles Smith and Deani Higashi ("Appellants"), members of 'AE KAI LE'A, LLC, a Hawaii limited liability company, which owns that certain property at Tax Map Key ("TMK") No.: (4)2-6-007:012, 2652-A Puuholo Road, Kauai, Hawaii 96756 (Non-Conforming Use Certificate No. 1184). This letter constitutes a notice of appeal and demand for a contested case hearing pursuant to Chapter 9 of the Rules of Practice and Procedure of the Kauai Planning Commission ("Kauai Planning Commission Rules"). Appellants are appealing from the Planning Department decision dated August 7, 2023 entitled Cease & Desist, and Forfeiture of TVRNCU ("Forfeiture Letter") and the denial of the TVNCU renewal application. The Forfeiture Letter states that Appellants allegedly violated Section 8-17-10(h)(1) of the Kauai County Code, 1987, as Amended.

There are several reasons why the appeal should be granted. Importantly, the County does not have authority to order a forfeiture of the nonconforming use due to a missed renewal deadline. The County of Kauai derives its "zoning powers from HRS § 46-4(a)[], referred to as the Zoning Enabling Act." *Ferris Tr. v. Planning Comm'n of Kaua'i*, 138 Haw. 307, 312, 378 P.3d 1023, 1028 (App. 2016) (citation omitted). The Zoning Enabling Act provides: "Neither this section nor any ordinance enacted pursuant to this section shall prohibit the continued lawful use of any building or premises for any trade, industrial, residential, agricultural, or other purpose for which the building or premises is used at the time this section or the ordinance takes effect[.]" Haw. Rev. Stat. § 46-4(a). Thus, in this case, the



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and exceptional service.

Mr. Ka'aina S. Hull
Ms. Jodi A. Higuchi Sayegusa
September 6, 2023
Page 2

County of Kauai does not have the statutory authority to “forfeit” the lawful nonconforming use of this property.

The Forfeiture Letter also violates County Ordinance because Appellants use was continuous. Under the CZO, “[i]f any nonconforming use ceases for any reason for continuous period of twelve (12) calendar months . . . then the use shall not be resumed. . . .” CZO § 8-13.2(b). Here, the Planning Department did not make any findings that Appellants had discontinued their use. In fact, the Appellants continue to use their property under the nonconforming use certificate.

Further, nonconforming uses are vested property rights. “The statutory protection of lawfully existing uses and structures ‘prior to the effective date of a zoning restriction is grounded in constitutional law.’” *Ferris*, 138 Haw. at 312, 378 P.3d at 1028 (citation omitted). “Under the United States and Hawai‘i Constitutions, ‘preexisting lawful uses of property are generally considered to be vested rights that zoning ordinances may not abrogate.’” *Id.* (citation omitted). The “zoning law concept of ‘non-conforming use’ protects landowners who have vested rights to use their land in a fashion later prohibited by restrictive zoning regulations.” *Young v. Planning Comm’n*, 89 Haw. 400, 410, 974 P.2d 40, 50 (1999) (citation and emphasis omitted). Therefore, Appellants’ non-conforming use certificate is a vested right and is considered a property right for purposes of the Federal and State Constitutions, which cannot be forfeited because of a missed ministerial deadline to reapply.

The Director’s decision to terminate a nonconforming use certificate because the “renewal” deadline was missed also violates Appellants’ constitutional right to due process under the law. Both the Federal and State Constitutions provide that “No person shall be deprived of life, liberty or property without due process of law....” Haw. Const. Art. I, § 5; *see* U.S. Const. amend. XIV cl. 1. Due process provides both substantive and procedural protections. “The basic elements of procedural due process are notice and an opportunity to be heard at a meaningful time and in a meaningful manner.” *Mauna Kea Anaina Hou v. Bd. of Land & Nat. Res.*, 136 Haw. 376, 389, 363 P.3d 224, 237 (2015). “The requirement of procedural due process exists to protect individuals against the state’s deprivation

Mr. Ka'aina S. Hull
Ms. Jodi A. Higuchi Sayegusa
September 6, 2023
Page 3

of liberty and property interests.” *Brown v. Thompson*, 91 Haw. 1, 9, 979 P.2d 586, 594 (1999). The Forfeiture Letter directs the property owner to cease and desist from the otherwise lawful conduct immediately, with no opportunity for a hearing until months later, if not longer.¹ However, Appellants are entitled to notice and a hearing prior to the permanent deprivation of their protected property interests.

Substantive due process “guards against arbitrary and capricious government action, even when the government takes that action pursuant to a facially constitutional law. *In re Herrick*, 82 Haw. 329, 349, 922 P.2d 942, 962 (1996). For substantive due process, “an aggrieved person must prove that the government’s action was clearly arbitrary and unreasonable, having no substantial relation to the public health, safety, morals, or general welfare.” *Id.* The Planning Department acted erroneously, arbitrarily, and manifestly abused its discretion when it issued the Forfeiture Letter, demanding forfeiture of a vested property right without due process and in violation of the zoning ordinance, state law, and the State and Federal Constitutions.

For the foregoing reasons, and such others that may be shown at the hearing – Appellants reserve the right to amend, supplement and assert further objections – Appellants respectfully demand a contested case hearing pursuant to Chapter 9 of the Kauai Commission Rules.

Very truly yours,

DAMON KEY LEONG KUPCHAK HASTERT



Gregory W. Kugle
Toren K. Yamamoto

GWK/TKY:rp
80432

¹ Requiring the immediate cessation of lawful income-producing activity while the property owner waits months or years for a hearing is a further denial of due process and exposes the County to significant damages. It also exposes the Planning Department staff and Planning Commissioners to liability under 42 U.S.C. § 1983 and attorneys’ fees and costs under 42 U.S.C. § 1988.

DEPARTMENT OF PLANNING

KA'ĀINA HULL, DIRECTOR

JODI A. HIGUCHI SAYEGUSA, DEPUTY DIRECTOR



DEREK S.K. KAWAKAMI, MAYOR
REIKO MATSUYAMA, MANAGING DIRECTOR

CEASE & DESIST, AND FORFEITURE OF TVRNCU

August 7, 2023

Certified Mail

Charles Smith and Deani Higashi
P.O. Box 1582
Koloa, HI 96756

COPY

**Subject: CEASE & DESIST, and FORFEITURE of Non-Conforming Use
Certificate TVNCU #1184
TMK 26007012, Kaua'i
2652-A Puuholo Road ('Ae Kai Le'a)
Charles Smith and Deani Higashi, applicant**

Your TVNCU was to be renewed by **March 6, 2023** as required by Sec.8-17-10 (h)(1) of the codified Kauai County Code 1987, as amended, which was the annual date of issuance of the non-conforming use certificate. The Department received the renewal packet which was hand delivered on **April 19, 2023**.

Further Section 8-17.10(h)(1) reads:

"Each application to renew shall include proof that there is a currently valid State of Hawaii general excise tax license and transient accommodations tax license for the nonconforming use and shall be received by the Department prior to the expiration date of a held Nonconforming Use Certificate. **Failure to meet this condition will result in the automatic denial of the application for renewal of the Nonconforming Use Certificates.**"

Since you failed to submit a renewal packet prior to March 6, 2023, you are hereby ordered to **Cease & Desist** the transient vacation rental use of the property. The following elements shall be instituted immediately:

- a. Cease and desist the use of the single family residence as a vacation rental;
- b. Remove all advertisements (tv, radio, worldwide web, outdoor signage, etc) related to the existing Vacation Rental use of the property;
- c. Suspend or cancel the GE and TAT licenses for the Vacation Rental use;

- d. Immediately cancel all Transient Vacation rental commitments for the property.

Documentation shall be submitted to the Department confirming the above actions have been implemented.

You have the right to appeal this decision and any appeal must be filed with the Planning Commission within 30 days after the date of this decision to provide you an opportunity for a hearing before the Planning Commission. The appeal must conform to Chapter 9 of the Rules of Practice and Procedure of the Planning Commission. The Rules of Practice and Procedure of the Planning Commission are available on the Department's website.

Should you fail to Cease & Desist the vacation rental use of the property within the time period noted above and it is confirmed by the Department, you will be issued a Notice of Violation, \$10,000.00 civil fine, and the matter forwarded to the Prosecutor's Office for criminal prosecution. Should you appeal this forfeiture, the vacation rental use must still cease.

Should you have any questions regarding this matter, please contact Enforcement Supervisor Michael Laureta at 808-241-4071 or milaureta@kauai.gov.



JODI A. HIGUCHI-SAYEGUSA
Deputy Director of Planning

CC: Real Property Div.

Encl



COUNTY OF KAUA'I PLANNING DEPARTMENT • (808) 241-4050
4444 Rice Street, Suite A473 • Lihu'e, HI 96766

2023 TRANSIENT VACATION RENTAL RENEWAL APPLICATION FORM

I. CONTACT INFORMATION

Applicant: Check here if this is a new Owner*:

Charles Smith/Deani Higashi

NAME OF OWNER / LESSEE (required)

Contact Name of Owner (First Name) (Last Name)
PO Box 1582 Koloa HI 96756 4/19/2023

Owner's Current Mailing Address
same

City	State	Zip Code
deanilani@yahoo.com	808-	635-3847

Owner's Email Address Owner's Phone Number

Applicant's authorized representative, if different from above:

Tori Higashi

MANAGING AGENT CONTACT NAME (if applicable)
N/A

Management Company (if applicable)
deanilani@yahoo.com 808 634-2239

Agent's Email Address Agent's Phone Number

Deani Higashi or Tori Higashi

24/7 ON-ISLAND CONTACT NAME (required)
deanilani@yahoo.com 808 635-3847

24/7 Email Address 24/7 Phone Number

**New owner information should be provided to the Planning Department in writing if the Property is sold or transferred.*

II. PROPERTY INFORMATION

TVNC#1184 '23 APR 19 P2:34

TVR Registration Number (TVNC)
N/A PLANNING DEPT.

Special Permit # (if AG TVR)
N/A

The Annual Renewal Due Date (MM/DD/YY)
03/06/2023

Name of TVR
'Ae Kai Le'a, LLC

Street Address of Property
2652 Puuholo Rd. Koloa, HI 96756

City	Zip code
Hawaii	

Resident State of Owner (ie. Hawai'i, California, etc.)
2-6-007-012-0000

(4) - _____
TMK: _____

III. STATE OF HAWAII TAT INFO

Provide the valid Transient Accommodations Tax License #

TA - 056-258-0608-01
and the name it is filed under
Deani Higashi

IV. FOR TVR'S IN THE TSUNAMI ZONE

Check here that your website advertising and rental contracts contain notifications that this transient vacation rental is located in the tsunami evacuation zone and that you have attached copies to this application. (AZR&R, Rule 1-A)

I hereby acknowledge that this TVNC Use Certificate is valid for only one (1) structure as listed above. I also certify that my 24/7 On-Island Contact lives on Kaua'i year round. I declare under penalty of perjury that the information I have provided is true and correct. I understand that providing false information may be a violation of Federal and State law.

Signature of Applicant
Charles Smith/Deani Higashi

Dated
04/17/2023

Print Name Legibly