



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'
DEPARTMENT OF LAND AND NATURAL RESOURCES | KA 'OIHANA KUMUWAIWAI 'ĀINA
COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO
P.O. BOX 621
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT
November 19, 2024
Honolulu, Hawaii'i

Derrick's Well Drilling & Pump Services, LLC
APPROVAL OF WELL CONSTRUCTION AND PUMP INSTALLATION PERMIT APPLICATIONS
Da Well (State Well No. 8-4205-001), Hilo Aquifer System Area, Hawaii, TMK (3) 2-3-036:018

CONTRACTOR

Derrick's Well Drilling & Pump Services, LLC
P.O. Box 2187
Keaau, HI 96749

LANDOWNER:

The Food Basket, Inc.
40 Holomua Street
Hilo, HI 96720

SUMMARY OF REQUEST:

The applicant requests Commission approval of well construction and pump installation permits for the Da well (State Well No. 8-4205-001).

APPLICATION

The application is attached as Exhibit A. The well will be drilled to a depth of 155 feet, cased with 6" diameter polyvinyl chloride (pvc) plastic casing, and outfitted with a 45 gallon per minute (gpm) pump.

The proposed well will be part of the development of the Ho'olako Agricultural Innovation Park & Food Systems Campus, which is a proposed multi-phase development project with five facilities. The project is to support a range of programs and services including native plant libraries, cultivatable lands, educational programs, crop processing and community events. This project will help small farms by offering resources for harvesting, processing, and packaging produce. The total farm development area is 24.945 acres.

AQUIFER INFORMATION

The proposed well is located in the Hilo Aquifer System area, which has a sustainable yield of 349 million gallons per day (mgd).

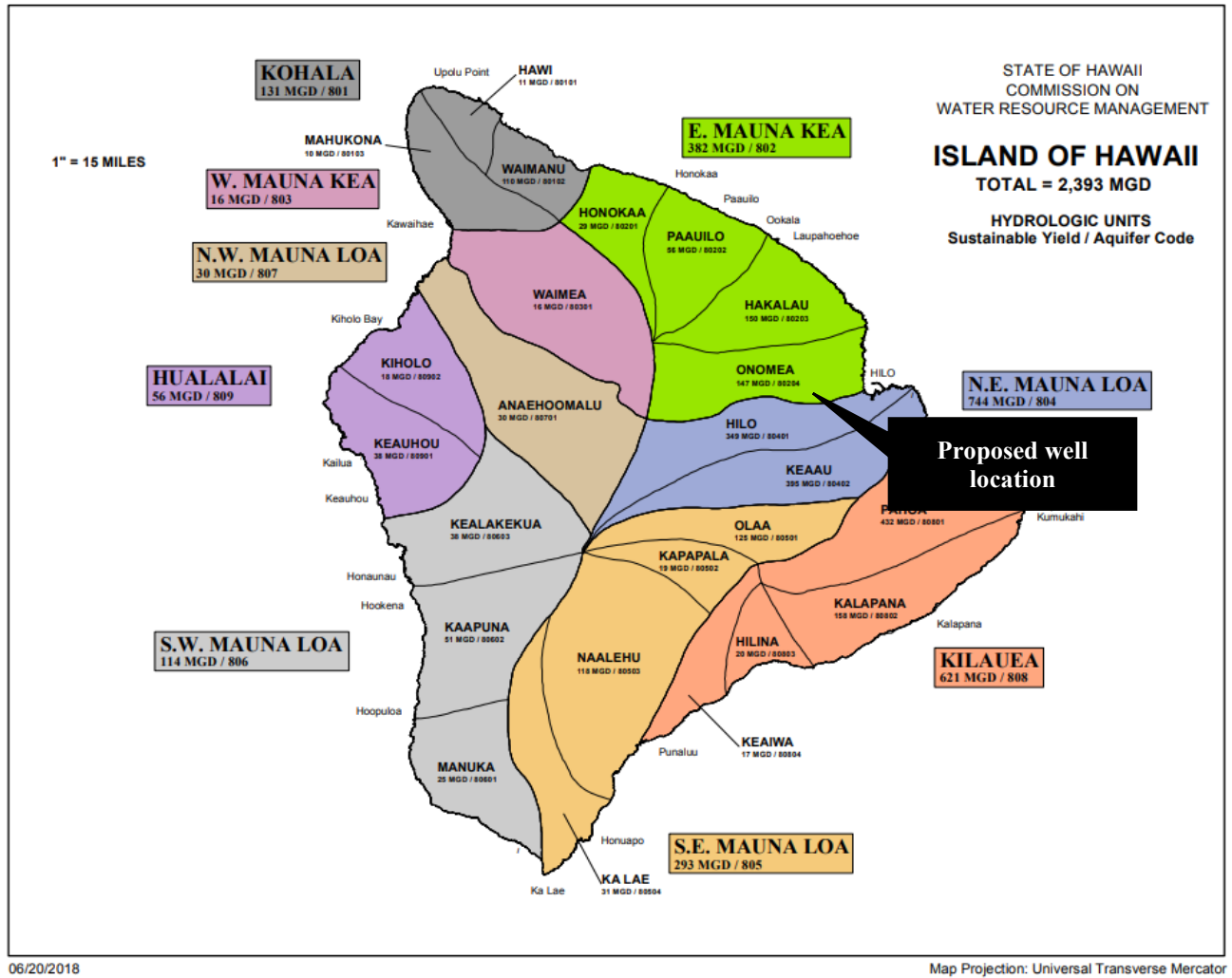
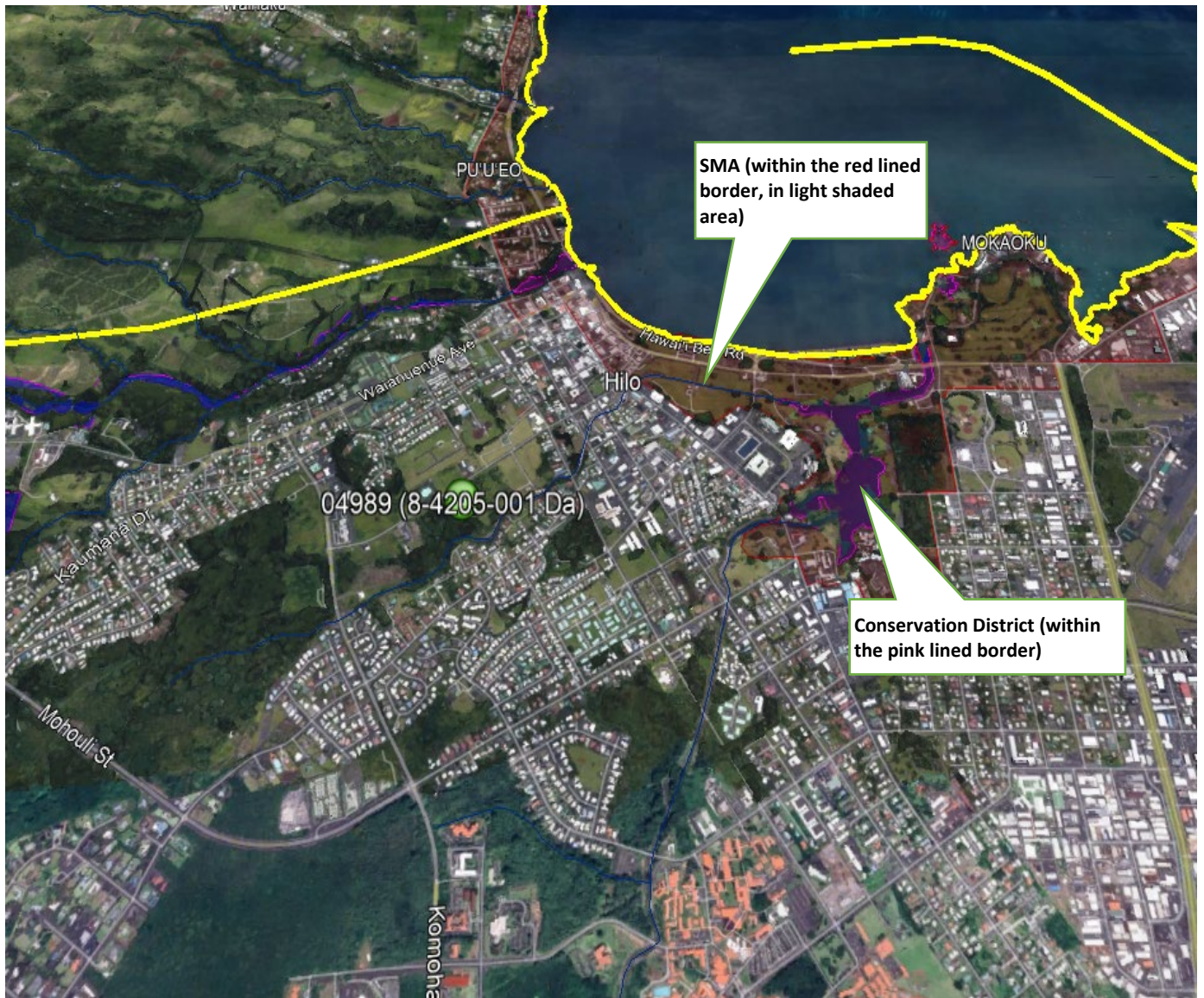
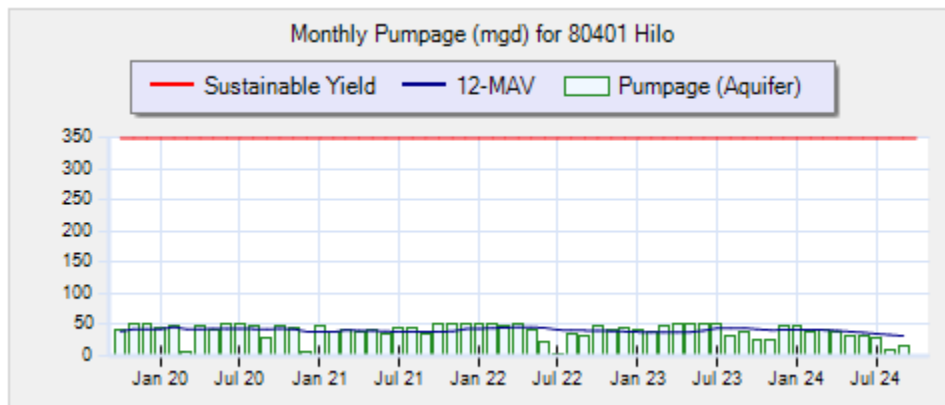


Figure 1 – Location Map



The parcel that the well is located on is not in the special management area or conservation district.

Reported pumpage for the wells reporting within the Hilo Aquifer System is 30.93 mgd on a 12-month moving average as of 7/31/2024.



There are 22 production wells in the aquifer. Of these, 16 are reporting water use and are the basis for the above graph. The maximum capacity of the 6 non-reporting wells pumping 24 hours per day is 43.75 mgd. Adding this unreported maximum quantity to the current 30.93 mgd, the moving average pumping is estimated at 74.68 mgd or 21% of sustainable yield.

STAFF REVIEW

Well design review

Staff typically runs a check of the well design through a spreadsheet that identifies key compliance requirements (attached as Exhibit 2), and found that this well is in compliance with the Hawai'i Well Construction and Pump Installation Standards.

The well design indicates that the well will draw from the basal lens. For basal lenses, well depths are limited to a ¼ of the theoretical thickness of the aquifer, which optimizes aquifer use overall. This well complies with this requirement.

Proximity of well to streams or other resources

The proposed well is flanked by the Wailuku River, approximately 0.72 miles northwest, and Waiakea Stream, approximately 0.82 miles southeast. As the bottom of either stream flanking the well is approximately 84' relative to mean sea level (msl), and groundwater is estimated to be 3' msl, the streams are not fed by basal groundwater and therefore pumpage of this proposed well will not impact streamflow.

Additionally, there are 3 other wells within a mile of the proposed well. Pump tests are not required for pumps less than 50 gallons per minute, because the results for relatively small pumping rates are difficult to filter out from other factors such as tidal influence. Additionally, because the closest well is a half mile away, pumpage at 45 gallons per minute should not produce a cone of depression extending to those wells.

Impacts to historic properties

Initial assessment of the TMK on the Office of Hawaiian Affairs' Kipuka website indicates no significant features on the property. Additionally, State Historic Preservation Division was consulted, and concur with staff's assessment that no historic properties will be impacted.

SMA or CDU permits

The well is not located within a Special Management Area or Conservation District.

AGENCY COMMENTS

Staff routed the application to the following agencies, and, if comments were received, the comments are summarized for each respective agency (see Exhibit 4).

- **Department of Health Safe Drinking Water Branch (DOH SDWB)** This well is not a source for a public water system as defined by DOH SDWB. Commission staff routinely forwards standard DOH SDWB Private Water Wells comments to the driller and copies the well and land owner.
- **Department of Health Wastewater Branch (DOH WWB)** DOH WWB indicated that there is no waste disposal located adjacent to the proposed well. DOH WWB comments are transmitted to the well owner / land owner.
- **Department of Health Clean Water Branch (DOH CWB)** DOH CWB comments are consistent for all well applications. The Commission staff routinely forwards standard National Pollutant Discharge Elimination System (NPDES) comments to the driller and copies the well and land owner. These comments pertain to the disposal of drilling fluids associated with the construction of the well.
- **Department of Land and Natural Resources (DLNR), Land Division (LD)** DLNR LD was sent a copy of the application but did not comment.
- **DLNR State Historic Preservation Division (SHPD)** Commission staff made an initial assessment that "no historic properties are affected" by the proposed well construction / pump installation, and DLNR SHPD concurred with this finding.
- **DLNR, Aha Moku** Aha Moku was sent a copy of the application but did not comment.

CHAPTER 343 – ENVIRONMENTAL ASSESSEMENT (EA) COMPLIANCE

EA Triggers

In accordance with §HRS 343-5(a), the applicant's proposed action does not trigger the need for an EA, as none of the items below are a trigger for the proposed well.

Potential triggers: (1) use of state land; (2) use of county land; (3) use of state funds; (4) use of county funds; (5) use of conservation district lands; (6) use with shoreline setback area; (7) use of historic site designated on the National register; (8) use of historic site designated on the Hawaii register; (9) use of land in the Waikiki Special District; (10) amendment to county general plan which results in designations other than agriculture, conservation or preservation not initiated by the county; (11) proposes any reclassification of conservation land by LUC; (12) relationship to the construction/modification of helicopter facilities that may affect conservation district lands/a shoreline setback area/a historic site; (13) proposal to build (a) wastewater treatment units (except IWS or WTU serving <50 SFR dwellings or the equivalent, (b) waste-to-energy facility (c) landfill, (d) oil refinery, (e) power generating facility.

Consulted party:

The Food Basket, Inc., will receive federal funding for the proposed project. Therefore, the proposed development will need to prepare a National Environmental Policy Act (NEPA) Environmental Assessment (EA). According to the landowner, "...The NEPA EA that will need to comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulations (36 CFR 800). The federal grant monies for the undertaking will be administered through the U.S. Department of Housing and Urban Development (HUD) through the County of Hawai'i Office of Housing and Community Development (OHCD). The Hawai'i County Mayor's Office, with the support of the OHCD, will act as the Responsible Entity overseeing the NEPA EA process."]

TRADITIONAL AND CUSTOMARY PRACTICES

Ka Pa'akai Analysis

In *Ka Pa'akai O Ka 'Āina v. Land Use Commission*, the Hawai'i Supreme Court recognized that the State has an obligation to protect Hawaiian traditional and customary practices to the extent feasible, and that the proponent of an action must show sufficient evidence that these types of practices are protected, if they exist in the location in question. This "Ka Pa'akai framework" was created by the Court "to help ensure the enforcement of traditional and customary native Hawaiian rights while reasonably accommodating competing private development interests." The Commission is obligated to conduct a "Ka Pa'akai analysis" of a proposed action requiring CWRM approval independent of the entity proposing the action. This analysis should be used to inform any decision on the impact of the proposed action on traditional and customary practices.

Consequently, the Court required an assessment of 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;"*

A Ka Pa'akai Analysis and the 2006 Phase 1 Environmental Site Assessment (ESA) are attached as Exhibit 1 and 1a.

The applicant states that the phase 1 Environmental Site Assessment from 2006 found no indication of Native Hawaiian archaeological, historical or cultural significance.

Staff's analysis: The 2006 Phase 1 ESA indicated no features of Native Hawaiian archaeological, historical, or cultural significance in the petition area. Additionally, the Food Basket Inc. has hired an archaeologist to conduct an Archaeological Inventory Survey (AIS) to be completed in 2025. The AIS consultant is currently reaching out to Native Hawaiian organizations for additional consultation. This archaeological assessment report is intended to support the NEPA EA and the Section 106 consultation process. The AIS report will be prepared in accordance with the Rules Governing Minimal Standards for Archaeological Inventory Surveys and Reports contained in HAR §13-276.

(2) *“the extent to which those resources -- including traditional and customary native Hawaiian rights -- will be affected or impaired by the proposed action;” and*

The applicant states that the proposed action will not have an impact on traditional or customary Native Hawaiian Rights or practices.

Staff's analysis: On September 4, 2024, DLNR SHPD's determination is no historic properties affected for the worked described under this well permit. As a previously cleared site, the development of the well site will not impair any traditional and customary practices. The landowner also indicated that significant efforts will be made to remove invasive species from the land and restore it to its previous agricultural state.

The proposed daily demand estimate is about 0.065 mgd to service a farm development totaling 24.495 acres. The proposed well is located in the Hilo Aquifer System Area, which has a sustainable yield (SY) of 349 mgd. Based on the proportion of the well's use in relation to sustainable yield (less than 1%), staff agrees with the applicant's assessment that impacts will be negligible.

(3) *“the feasible action, if any, to be taken ... to reasonably protect native Hawaiian rights if they are found to exist.”*

The applicant states that “no proactive measures are required to safeguard native Hawaiian rights”

Staff's analysis: Staff concurs with the applicant that the well will have no effect on no impact on Native Hawaiian rights. The planned well is intended for beginning farmers, and is meant to advance indigenous farming practices and provide culturally oriented agricultural education. Additionally, the proposed agricultural well will enable the development to fulfill peak operating demands without straining the current municipal water system.

Additionally, standard condition 7 of the well construction permit and standard condition 8 of the pump installation permit state that pumpage may need to be reduced in the future should there be impacts on any legal uses such as traditional & customary practices.

RECOMMENDATION:

Staff recommends that the Commission approve the issuance of well construction and pump installation permits for the Da Well (State Well No. 8-4205-001), subject to the standard well construction permit conditions listed in Exhibit 5 and the standard pump installation conditions listed in Exhibit 6.

Respectfully submitted,



CIARA W.K. KAHAHANE
Deputy Director

- Exhibits:
- 1 (Application)
 - 1a (Phase I Environmental Site Assessment)
 - 2 (Well Design Check)
 - 3 (1-mile Radius Map)
 - 4 (Agency Comments)
 - 5 (Well Construction Permit Standard Conditions)
 - 6 (Pump Installation Permit Standard Conditions)

APPROVED FOR SUBMITTAL:



DAWN N. S. CHANG
Chairperson



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
APPLICATION FOR A WELL CONSTRUCTION /
PUMP INSTALLATION PERMIT

For Official Use Only:

Instructions: Please print in ink or type and e-mail PDF of completed application with attachments. A non-refundable filing fee of \$300.00 must be mailed to the Commission, payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-0225. For further information and updates to this application form, visit <http://www.hawaii.gov/dlnr/cwrm>.

WELL LOCATION INFORMATION

1. STATE WELL NO. (if assigned)	2. WELL NAME Da Well	3. ISLAND Hawaii	4. TMK island (3) zone 2 sec 3 plat 036 parcel 018 lot
5. WELL COORDINATES (latitude and longitude, referenced to NAD 83, degrees, minutes, seconds to 1 decimal place) and ADDRESS (street, city, zip code) 19° 42' 54.90" N 155° 05' 30.21" W Ponahawai Street, Hilo, HI 96720			
The following must be attached before this application is accepted as complete: • Property tax map, showing well location referenced to established property boundaries • Photograph of the proposed well site • A photo or schematic diagram showing the well site, access road and proposed well infrastructure • Attach written permission from the landowner listed below, that acknowledges the work proposed by this application. If the landowner changes during construction, a new permission statement is required.			
6. WELL OPERATOR'S NAME/COMPANY Justin Clayton / The Food Basket		Well Operator's Contact Justin Clayton	7. LANDOWNER'S NAME/COMPANY The Food Basket Inc.
Well Operator's Mailing Address 40 Holomua St. Hilo, HI 96720		Landowner's Mailing Address 40 Holomua St. Hilo, HI 96720	
Well Operator's Phone 808-796-0222	Well Operator's Fax	Well Operator's E-mail justin@hawaiifoodbasket.org	Landowner's Phone 808-933-6080
			Landowner's Fax
			Landowner's E-mail kristin@hawaiifoodbasket.org

PROPOSED WELL CONSTRUCTION

8. Proposed Work <input checked="" type="checkbox"/> Construct New Well <input type="checkbox"/> Modify Existing Well <input type="checkbox"/> Abandon/Seal Well	9. Construction Type <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Dug <input type="checkbox"/> Shaft <input type="checkbox"/> Tunnel
10. Is this well part of a battery of wells? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

PROPOSED PUMP INSTALLATION

11. Proposed Work <input checked="" type="checkbox"/> Install New Pump <input type="checkbox"/> Replace Pump	13. Proposed Pump Capacity, gpm (gallons per minute) 45
12. Method of flow measurement <input checked="" type="checkbox"/> Totalizer flowmeter <input type="checkbox"/> Other (explain)	14. Proposed Amount of Withdrawal, gpd (gallons per day) 20,000

15. Proposed Surveyor name and license number (a surveyor is required for all Well Construction Permits and may be required for some Pump Installation Permits)
Deferred

PROPOSED USE If the well water will be treated, please describe how (reverse osmosis, ultra violet, etc.) and disposal method of resulting effluent, reject water, etc.

<input type="checkbox"/> 16. Municipal (water systems serving greater than 25 individuals or 15 service connections)
<input type="checkbox"/> 17. Domestic Number of units to be served: _____
<input type="checkbox"/> 18. Industrial (describe)
<input checked="" type="checkbox"/> 19. Irrigation (describe crop and no. of acres) Plants / 24.495 acres
<input type="checkbox"/> 20. Military (describe)
<input type="checkbox"/> 21. Other (describe)

OTHER LEGAL REQUIREMENTS If required, items 22. and 23. must be obtained before the Commission can legally issue a permit:

22. Conservation District Use Permit (CDUP) <input type="checkbox"/> Well is in Conservation District <input type="checkbox"/> Required, CDUP # _____ date approved _____ <input type="checkbox"/> Not Required (attach documentation from OCCL) <input checked="" type="checkbox"/> Well is not in Conservation District	23. Special Management Area Permit (SMAP) <input type="checkbox"/> Well is in the Special Management Area <input type="checkbox"/> Required, SMA # _____ date approved _____ <input type="checkbox"/> Not Required (attach documentation from applicable County agency) <input checked="" type="checkbox"/> Well is not in the Special Management Area
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24. State Historic Preservation Division (SHPD) of the Department of Land and Natural Resources (Hawaii Revised Statute, Chapter 6E, Section 106)
 I understand that after CW/RM sends me a copy of the "SHPD concurrence request", that I must create a HICRIS record and upload the required documents described in the attached instructions.

25. Chapter 343
 An Environmental Assessment was completed, and
 An Environmental Impact Statement was required and has been accepted (attach letter of acceptance). Publication date in The Environmental Notice: _____
 A Finding of No Significant Impact has been determined (attach letter). Publication date in The Environmental Notice: _____

This project proposes:

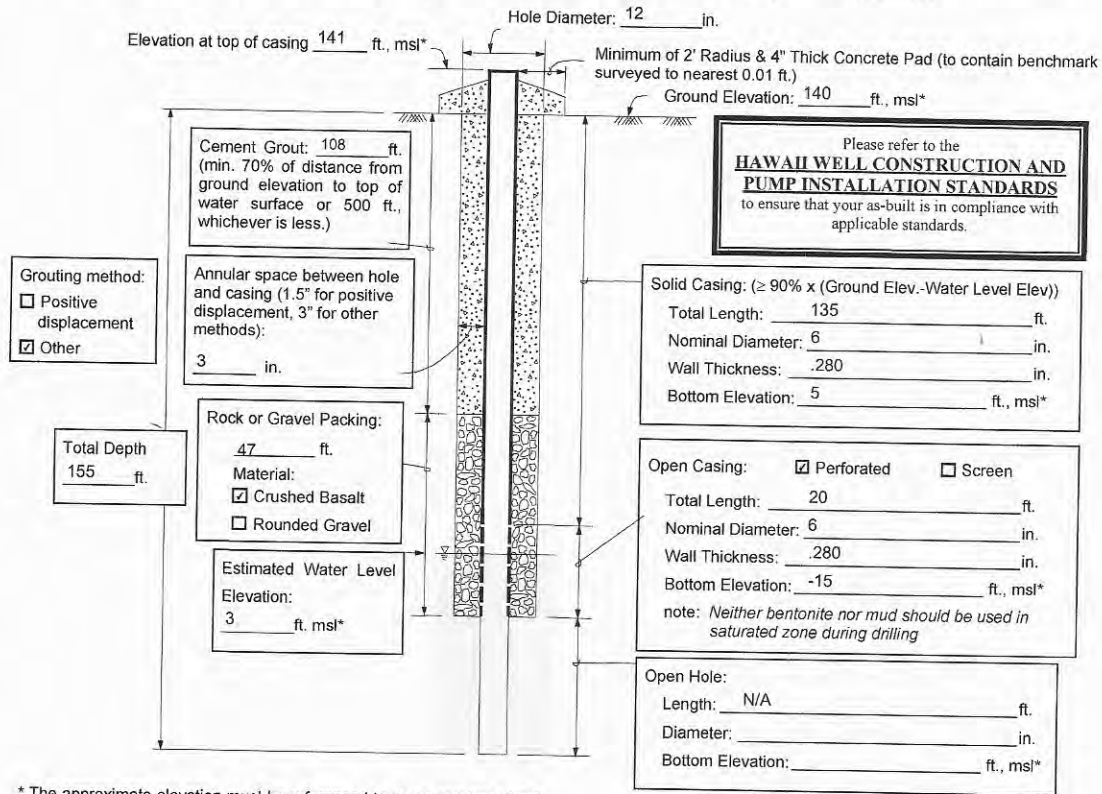
<input type="checkbox"/> Use of state or county lands, or use of state or county funds	<input type="checkbox"/> A wastewater treatment unit
<input type="checkbox"/> Use within a state conservation district	<input type="checkbox"/> Waste-to-energy facility
<input type="checkbox"/> Use within a shoreline setback area	<input type="checkbox"/> Landfill
<input type="checkbox"/> Use within a national or Hawaii registered historic site	<input type="checkbox"/> Oil refinery
<input type="checkbox"/> Use within the Waikiki Special District	<input type="checkbox"/> Power-generating facility
<input type="checkbox"/> The construction, expansion or modification of helicopter facility	<input checked="" type="checkbox"/> None of the above 11 items

26. Water Use Permit No. (if applicable): N/A
 Additional remarks, explanations, etc. (attach additional sheet if more space is needed)

NOTE: Signing below indicates that the signatories understand and swear that the information provided is accurate and true to the best of their knowledge. Further, the signatories understand that upon permit approval: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/abandonment report within 30 days after the completion date of the permitted work; 3) if the landowner changes during construction, a new permission statement is required; 4) in the event that the application is not completed correctly, any permit may be suspended until the item is brought in to compliance, and any work done while the permit is in suspension may result in fines of up to \$5000/day.

27. WELL DRILLER (Must be filled out if application is for Well Construction) Derrick's Well Drilling & Pump Services, LLC C-28001 Licensee business name C-57 License No. <i>Derrick Moreira</i> Derrick Moreira 5/14/2024 Signature Print Date P.O. Box 2187 Kea'au, HI 96749 Address 808-982-7627 808-982-7698 derrickswelldrilling07@gmail.com Phone Fax E-mail	28. PUMP INSTALLER (Must be filled out if application is for Pump Installation) Derrick's Well Drilling & Pump Services, LLC C-28001 Licensee business name C-57/C-57a/A License No. <i>Derrick Moreira</i> Derrick Moreira 5/14/2024 Signature Print Date P.O. Box 2187 Kea'au, HI 96749 Address 808-982-7627 808-982-7698 derrickswelldrilling07@gmail.com Phone Fax E-mail
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PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below. Also, if this proposed well is a dug well, attach a grading plan with cross section profiles showing existing and finished grades)



* The approximate elevation must be referenced to mean sea level (msl) at the time of application filing. Final elevations of well components shall be submitted in the Well Completion/Well Abandonment reports and referenced to a benchmark which has been established by a surveyor licensed by the State.

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,

$$\text{Bottom Elevation of Well Limit} = \left(\text{Water Elevation} - \frac{41 \times \text{Water Level Elevation}}{4} \right)$$

Example: Estimated + 2 ft. Water Level Elev. → Bottom Elevation of Well Limit = $\left(2 - \frac{41 \times (2)}{4} \right) = -18.5$ ft.

Note: Unless a variance is requested and approved, if the well is greater than 1/4 of the theoretical aquifer thickness, the well may have to be backfilled to bring the depth into compliance.

Solid Casing Material:

Carbon Steel: compliant with (check one or more): ANSI/AWWA C200 API Spec. 5L ASTM A53 ASTM A139
And compliant with (check one or more): ASTM A242 (or A606) Type E Type S Grade B Other

Stainless Steel: (check one): ASTM A409 (production wells) ASTM A312 (monitor wells)

ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) Schedule 40 Schedule 80

PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one): Schedule 40 Schedule 80 Schedule 120

Thermoset Plastic: (check one) Filament Wound Resin Pipe conforming to ASTM D2996
 Centrifugally Cast Resin Pipe conforming to ASTM D2997
 Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
 Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
 PTFE Fluorocarbon Tubing conforming to ASTM D3296
 FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:

Carbon Steel: compliant with (check one or more): ANSI/AWWA C200 API Spec. 5L ASTM A53 ASTM A139
And compliant with (check one or more): ASTM A242 (or A606) Type E Type S Grade B Other

Stainless Steel: (check one): ASTM A409 (production wells) ASTM A312 (monitor wells)

ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) Schedule 40 Schedule 80

PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one): Schedule 40 Schedule 80 Schedule 120

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 FEP Fluorocarbon Tubing conforming to ASTM D3296

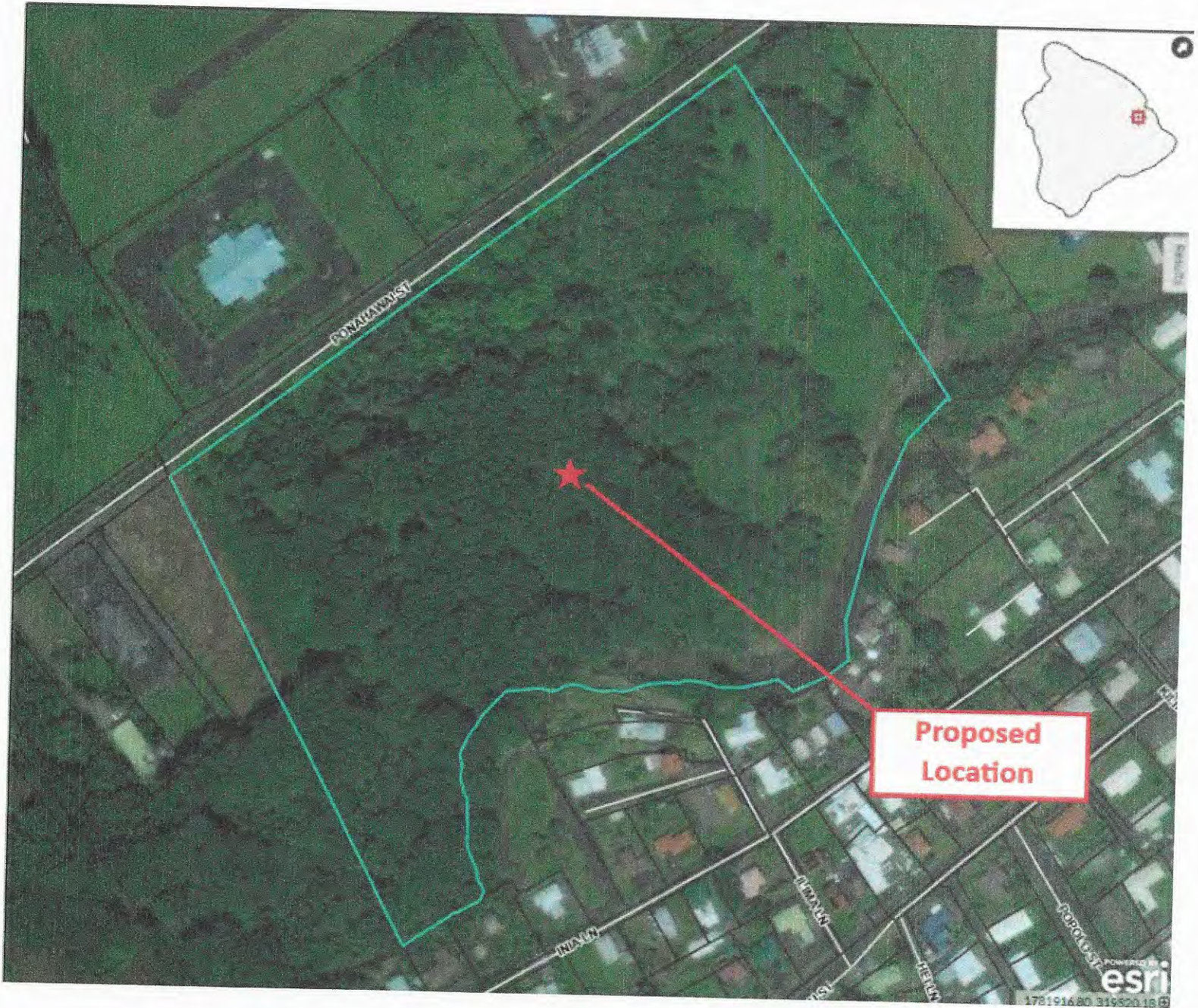


Exhibit 1 Application



Derrick's Well Drilling and Pump Services, LLC.

P.O. Box 2187 Kea'au, HI 96749

16-150 Wiliama Place Kea'au, HI 96749

Office: (808) 982-7627 • Fax: (808) 982-7698 • Cell: 557-5309 • derrickswelldrilling07@gmail.com

Derrick's Well Drilling & Pump Services, LLC
P.O. Box 2187
Kea'au, HI 96749

To: Commission on Water Resource Management:

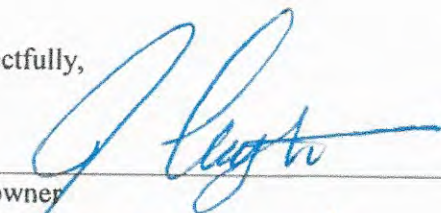
This letter is to inform you that I

JUSTIN CLAYTON

(landowner) give permission to Derrick's Well Drilling & Pump Services, LLC, to perform work as stated in the accompanied Well Construction and Pump Installation application on the noted TMK.

TMK:

Respectfully,


Landowner

— THE FOOD BASKET INC.

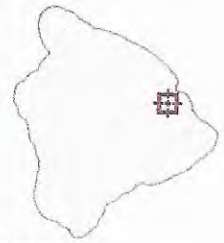
4/10/2024
Date



Derrick's Well Drilling & Pump Services, LLC a BBB Accredited Business



Overview



Legend

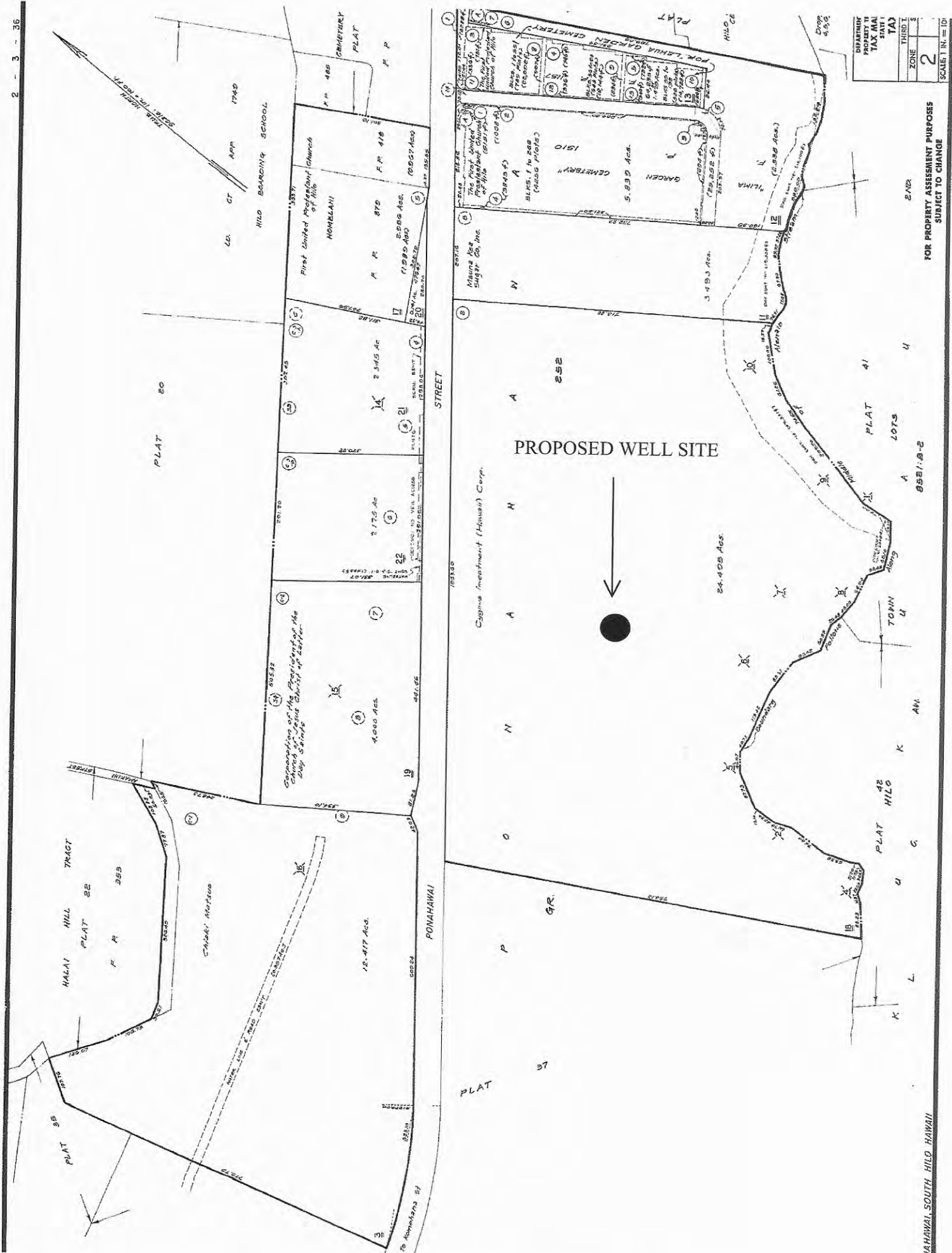
□ Parcels

Parcel ID	230360180000	Situs/Physical Address	505 PONAHAHAWAI STREET	Market Land Value	\$1,844,700	Last 2 Sales Date	4/15/2022	Price	\$1,600,000	Reason	ARMS LENGTH TRANSACTION RELATED	Qual	Q
Acreage	24.495	Mailing Address	THE FOOD BASKET INC 40 HOLOMUA ST HILO HI 96720 5102	Dedicated Use Value	\$0						INDIVIDUALS OR CORPORATIONS		U
Class	COMMERCIAL; AGRICULTURAL			Exemption			2/27/2008	0					
				Net Taxable Land Value	\$1,844,700								
				Assessed Building Value	\$0								
				Building Exemption	\$0								
				Net Taxable Building Value	\$0								
				Total Taxable Value	\$907,500								

Brief Tax Description PARCEL 2 24.495 AC DES POR RP GR 2525 SUBJ/ESMTS

(Note: Not to be used on legal documents)

*Hawaii County makes every effort to produce the most accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use or interpretation. The assessment information is from the last certified taxroll. All data is subject to change before the next certified taxroll. The 'parcels' layer is intended to be used for visual purposes only and should not be used for boundary interpretations or other spatial analysis beyond the limitations of the data. The 'parcels' data layer does not contain metes



DEPARTMENT	TAX MAP
PROPERTY	TAX MAP
TAJ	TAJ
ZONE	ZONE
THIRD I	THIRD I
2	2
SCALE 1 IN. = 10'	

FOR PROPERTY ASSESSMENT PURPOSES
SUBJECT TO CHANGE

PONAHAHAWAI, SOUTH HILO, HAWAII

Exhibit 1 Application

505 Ponahawai St, Hilo, HI, 96720



Search result
505 Ponahawai St, Hilo, Hawaii, 96720

Esri, HERE, Garmin, NGA, USGS | Counties of Hawaii, Honolulu, Kauai and Maui; Hawaii Statewide GIS Program

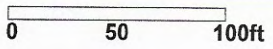


Exhibit 1 Application

Well Proposal

Justin Clayton <Justin@hawaiifoodbasket.org>
To: Derrick Moreira <derrickswelldrilling07@gmail.com>

Tue, May 7, 2024 at 11:59 AM

Aloha Cynthia—

Sorry for the delay in getting back with you, but I was off island last week. Please see the following narrative for the Ka Pa'akai Analysis:

- a. The land was previously utilized for sugar cane cultivation and operated by the Mauna Kea Sugar mill until 1973. Following this, the property changed hands several times between 1974 and 2022, when it was acquired by The Food Basket Inc. Throughout this time frame, the property remained undeveloped. A phase 1 Environmental Site Assessment was completed in 2006 which found no indication of Native Hawaiian archaeological, historical, or cultural significance. Furthermore, The Food Basket is currently engaged in an Environmental Assessment that will include an examination of the archaeological and historical importance of the property before any land disturbance occurs.
- b. The proposed action will not have an impact on traditional or customary Native Hawaiian Rights or practices. Significant efforts will be made to remove invasive species from the land and restore it to its previous agricultural state. The proposed development will serve as the new headquarters for The Food Basket (Hawai'i Island's food bank), featuring a food distribution center. Additionally, it will offer subsidized agricultural leases tailored for beginning farmers, spaces dedicated to agriculture and education initiatives, and facilities for the cultivation of native Hawaiian canoe crops alongside cultural education programs.

The agricultural well will provide water for 16 acres of farmland, which will be leased by beginning farmers. This initiative aims to promote sustainable farming practices rooted in Native Hawaiian traditions, fostering greater food resilience, and reducing the island's reliance on external food sources. The project will aid small farms by offering resources for harvesting, processing, and packaging produce. Additionally, the agricultural well will enable the development to fulfill peak operating demands without straining the current municipal water system.

- c. No proactive measures are required to safeguard native Hawaiian rights. The project aims to advance Native Hawaiian rights by promoting indigenous farming practices, cultivating Hawaiian canoe crops, and providing culturally oriented agricultural education.

Could you let me know if the above is sufficient for the application?

[Quoted text hidden]



Derrick's Well Drilling and Pump Services, LLC.

P.O. Box 2187 Kea'au, HI 96749

16-150 Wiliama Place Kea'au, HI 96749

Office: (808) 982-7627 • Fax: (808) 982-7698 • Cell: 557-5309 • derrickswelldrilling07@gmail.com

Derrick's Well Drilling & Pump Services, LLC
P.O. Box 2187
Kea'au, HI 96749

To: Commission on Water Resource Management:

This letter is to inform you that I Kristin Frost-Albrecht
(landowner) give permission to Derrick's Well Drilling & Pump Services, LLC, to perform work as
stated in the accompanied Well Construction and Pump Installation application on the noted TMK.
TMK: (3) 5-3-036:018

Respectfully,

Landowner

July 17, 2024

Date



Derrick's Well Drilling & Pump Services, LLC a BBB Accredited Business

Exhibit 1 Application

**Phase I Environmental Site
Assessment**

24.495-Acre Ponahawai Property
(TMK No.: [3] 2-3-36: Parcel 18)
Hilo, Hawaii

October 31, 2006
Clayton Project No. 17006-006460.00

Prepared for:

**MATSUNO ENTERPRISES, LIMITED AND
SUISAN PROPERTIES, LIMITED**
1965 Kamehameha Avenue
Hilo, Hawaii 96720

Prepared by:

CLAYTON GROUP SERVICES, INC.
A Bureau Veritas Company
970 N. Kalaheo Avenue, Suite C-316
Kailua, Hawaii 96734
808.531.6708
www.us.bureauveritas.com



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Executive Summary

Matsuno Enterprises, Limited and Suisan Properties, Limited (MEL/SPL) retained Clayton Group Services, Inc. (Clayton), a Bureau Veritas company, to conduct a Phase I Environmental Site Assessment (ESA) of the 24.495-Acre Ponahawai property (Tax Map Key [TMK] [3] 2-3-036: Parcel 018), located in Hilo, Hawaii (the "subject property"). The objective of the assessment was to provide an independent, professional opinion regarding recognized environmental conditions, as defined by ASTM, associated with the subject property. This assessment was requested in association with the acquisition of a portion of the subject property (Lot 1).

This ESA was performed under the conditions of, and in accordance with Clayton's Proposal Number 1703.06.827, dated October 9, 2006, using ASTM E 1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* as a guideline. Any exceptions to, additions to, or deletions from the ASTM guidelines are described in the report. Details of the work performed, sources of information, and findings are presented in the report. Limitations of the assessment are described in Sections 1.2 and 1.3.

The subject property, currently owned by Matsuno Enterprises Ltd. and Suisan Properties Ltd., comprises an irregular-shaped, 24.495-acre parcel of undeveloped land, located along the southeastern side of Ponahawai Street, bordering the northwestern bank of the Alenaio Stream, in Hilo, Hawaii. The subject property is situated in a mixed commercial neighborhood and agricultural setting.

At the time of Clayton's October 2006 site visit, the subject property consisted of heavily vegetated raw land covered with dense thickets of trees, bushes, vines and tall grasses above an uneven ground surface. Clayton accessed various portions of the subject property through narrow trails that were mostly overgrown with vegetation. These trails appeared to be hunters' trails or possibly remnants of former cane haul roads remaining from the former sugar cane fields. The Alenaio Stream that borders the subject property on the southeast side was dry at the time of Clayton's site visit, and appeared as an intermittent stream bed. One abandoned car and one abandoned truck were observed in the northwest-central area, near Ponahawai Street. No other evidence of unauthorized dumping was observed on the subject property.

The historical research conducted for this assessment has established the use of the subject property since at least December of 1914. According to the 1914 topographic map, most of the subject property was depicted as undeveloped land; however, ten small structures (most likely houses) were depicted throughout the subject property. The next available map, from 1940, showed no changes to the subject property. The earliest available aerial photographs, from 1954, 1965, and 1974, showed the subject property as agricultural land (most likely sugar cane), with a road and a few small structures (houses) along the northwest boundary. In the next available aerial photographs, from 1985 and 1992, the subject property appeared as undeveloped, heavily vegetated land with various types of trees, shrubs and grasses.

Ownership records indicate that the subject property was formerly owned by Mauna Kea Sugar Company, since at least 1969. In 1973, Pepeekeo Sugar Company merged into Mauna Kea Sugar Company, and the subject property was deeded to Bob Mueller Realty Inc. (CEB Inc.) the same year. Ownership of the subject property was transferred to various entities between 1974 and 2004, when the subject property was deeded to the current owners: Matsuno Enterprises, Ltd., a Hawaii Corporation and Suisan Properties Limited, a Hawaii Corporation.



This assessment has revealed no evidence of *recognized environmental conditions*, as defined by ASTM, in connection with the subject property.

The following environmental condition, which is not considered to be a *recognized environmental condition*, as defined by ASTM, was revealed during this assessment:

- The subject property was formerly used for agricultural purposes, according to historical aerial photographs and past ownership records. Past use of agricultural chemicals such as pesticides and herbicides may have the potential to impact the subject property. However, there is no evidence that the storage or mixing of agricultural chemicals was ever conducted at the subject property. Moreover, according to Hawaii Administrative Rules (HIAR) Chapter 128D Environmental Response Law, the presence of agricultural chemicals does not constitute a release of a hazardous substance. Section 128D-1 of the HIAR, excludes "any release resulting from the legal application of a pesticide product registered under the Federal Insecticide, Fungicide, and Rodenticide Act."

This finding is not considered a recognized environmental condition because there is no evidence of significant pesticide and/or herbicide releases on the subject parcel/property. In addition, according to HIAR Chapter 128D, the presence of agricultural chemicals does not constitute a release. However, if the subject property is developed for residential use in the future, soil sampling with laboratory analyses for agricultural chemicals of concern is recommended.

- At the time of Clayton's site inspection, the subject property was covered by dense, impenetrable vegetation, which prevented a thorough inspection of the ground surface. No evidence of waste disposal was observed, except for one abandoned car and one abandoned truck located in the northwest-central area, near Ponahawai Street. No staining or evidence of releases was observed in the vicinity of these vehicles, and no other evidence of unauthorized dumping was observed on the subject property. However, the subject property may contain additional abandoned items and/or stained soils that were obscured from view by the dense vegetation.

This finding is not considered a recognized environmental condition because there is no evidence of hazardous substance releases at the subject property. However, the two abandoned vehicles should be removed and properly disposed to prevent nuisance attraction (i.e. additional dumping). Following removal, the ground beneath the vehicles should be inspected for evidence of automotive fluid releases. In addition, the subject property should be carefully monitored during clearing and grubbing activities for future development. If chemical containers, stained soils, or evidence of subsurface structures are discovered, environmental cleanup work may be warranted.

- Clayton observed a pole-mounted, Hawaii Electric Light Company (HELCO) transformer (HELCO ID number 6568) atop utility pole number 28, which is located by the north corner of the subject property. This transformer unit did not include any "No PCBs" labeling. According to HELCO, there is no PCB test data available for this unit. Although no staining or other evidence of releases was observed around the transformer, there is a potential for future releases of dielectric fluid from this transformer to impact the subject property. A letter received from HELCO states that all leaking transformers are replaced, and any associated oil spills are remediated (at HELCO's expense) in accordance with all applicable EPA and State DOH guidelines. In addition, all older transformers which fail in the field are tested, and HELCO-owned transformers may be tested at the customer's request.



This finding is not considered a recognized environmental condition because there is no evidence of releases from the transformer. However, Clayton recommends that PCB testing of the unlabeled transformer be requested from HELCO. According to HELCO, the testing must be paid for by the requesting entity. If PCBs are found, the testing fee will be refunded and the transformer will be retrofitted or replaced at no cost. If no PCBs are found, HELCO retains the testing fee.



1.0 INTRODUCTION

Matsuno Enterprises, Limited and Suisan Properties, Limited (MEL/SPL) retained Clayton Group Services, Inc. (Clayton), a Bureau Veritas company, to conduct a Phase I Environmental Site Assessment (ESA) of the 24.495-Acre Ponahawai property (Tax Map Key [TMK] [3] 2-3-036: Parcel 018), located in Hilo, Hawaii (the "subject property"). The objective of the assessment was to provide an independent, professional opinion regarding recognized environmental conditions, as defined by ASTM, associated with the subject property. This assessment was requested in association with the acquisition of a portion of the subject property (Lot 1).

1.1 PURPOSE

The objective of this environmental site assessment is to provide an independent, professional opinion regarding *recognized environmental conditions*, as defined by ASTM, associated with the subject property. The term *recognized environmental conditions* (RECs) is defined as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not RECs.

1.2 METHODOLOGY AND EXCEPTIONS

This Phase I ESA was performed under the conditions of, and in accordance with Clayton's Proposal Number 1703.06.827, dated October 9, 2006, which includes a description of the *Environmental Due Diligence Scope of Work*. As a guideline, Clayton used ASTM Designation E 1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. Resumes of Clayton environmental professionals involved with this project are included as Appendix A. The assessment included the following components:

- A site walkthrough inspection of the property for visual evidence of potential environmental concerns including existing or potential soil and groundwater contamination, as evidenced by soil or pavement staining or discoloration, stressed vegetation; indications of waste dumping or burial, pits, ponds, or lagoons; containers of hazardous substances or petroleum products; electrical and hydraulic equipment that may contain polychlorinated biphenyls (PCBs), such as electrical transformers and hydraulic hoists; and underground storage tanks (USTs) and aboveground storage tanks (ASTs).
- An investigation of historical use of the site by examining locally available aerial photographs (one source) and other readily available historical information such as fire insurance maps for evidence of prior land use that could have led to RECs.
- A review of information available on general geology and topography of the subject property, local groundwater conditions, sources of water, power, and sewer, and proximity to ecologically sensitive receptors, such as streams, that might be impacted by RECs and environmental issues.
- A review of environmental records available from the property owner or site contact including regulatory agency reports, permits, registrations, and consultants' reports for evidence of RECs.



- A site property line visual assessment of adjacent properties for evidence of potential offsite environmental conditions that may adversely affect the subject property.
- A review of a commercial database summary of federal and state regulatory agency records pertinent to the subject property and offsite facilities located within specified search distances from the subject property.
- Interviews with key site personnel, as available, regarding current and previous uses of the property, particularly activities involving hazardous substances and petroleum products.
- Evaluation of information gathered and development of this report.

This ESA did not include sampling or analysis of soil, groundwater or other materials.

Mr. Tim Swartz, Project Manager with Clayton's Honolulu Regional Office, conducted the site inspection portion of this assessment on October 16, 2006. Mr. Swartz was accompanied by Mr. Harvey Taira, Properties Manager with MEL/SPL, during the initial portion of the site inspection. Photographs taken at the time of the assessment are included behind the *Photographs* Tab.

1.3 LIMITING CONDITIONS OF ASSESSMENT

Information for the assessment was obtained from sources listed in Appendix B. This information, to the extent it was relied on to form our opinion, is assumed to be correct and complete. Clayton is not responsible for the quality or content of information from these sources.

Most of the subject property was covered with dense, impenetrable vegetation that obscured the ground surface. Therefore, the ground surface could not be thoroughly inspected. No opinion regarding environmental conditions in areas that were not inspected can be formed. However, lack of access to the heavily vegetated areas of the subject property did not prevent an evaluation of the subject property with respect to recognized environmental conditions.

The information and opinions rendered in this report are exclusively for use by MEL/SPL. Clayton will not distribute or publish this report without their consent, except as required by law or court order. The information and opinions expressed in this report are given in response to a limited assignment and should be considered and implemented only in light of that assignment. The services provided by Clayton in completing this project were consistent with normal standards of the profession. No other warranty, expressed or implied, is made.

2.0 SUBJECT PROPERTY/PARCEL DESCRIPTION

2.1 SUBJECT PROPERTY/PARCEL LOCATION

The subject property is located along the southeastern side of Ponahawai Street, bordering the northwestern bank of the Alenaio Stream, in the town of Hilo, approximately 3,500 feet south of Hilo Bay, on the central-eastern coastal sector of the Big Island of Hawaii. The subject property consists of an irregular-shaped parcel of land that encompasses 24.495 acres of undeveloped land. According to Mr. Taira, the north corner of the subject property is demarcated by utility pole number 28, located along Ponahawai Street, and the west corner is demarcated by utility pole number 28, also located along Ponahawai Street.



The subject property is further defined by the County of Hawaii Real Property Tax Assessment Office as the land lying in Tax Map Key (TMK) number: (3) 2-3-36: Parcel 18. According to the Hawaii County Planning and Zoning Department, there is a split zoning designation for the subject property. The approximately eight-acre rectangular-shaped portion in the north-northeast corner of the parcel (Lot 1) is zoned "CN-10, Commercial Neighborhood" and the remaining 16.495 acres (Lot 2) are zoned "Agricultural". A site location map is depicted as Figure 1, behind the *Figures* tab.

2.2 CURRENT USE OF SUBJECT PROPERTY/PARCEL

The subject property encompasses 24.495 acres of heavily vegetated raw land covered with dense thickets of trees, bushes, vines and tall grasses above an uneven ground surface. The subject property is accessible from Ponahawai Street, which is located along the northeast side of the subject property. Clayton accessed various portions of the subject property through narrow trails that were mostly overgrown with vegetation. These trails appeared to be hunters' trails or possibly remnants of former cane haul roads remaining from the former sugar cane fields. The Alenaio Stream that borders the subject property on the southeast side was dry at the time of Clayton's site visit, and appeared as an intermittent stream bed. One abandoned car and one abandoned truck were observed in the northwest-central area, near Ponahawai Street. No other evidence of unauthorized dumping was observed on the subject property.

2.3 CURRENT USES OF ADJOINING PROPERTIES

Adjoining properties were observed from the subject property or from public access areas for indications of activities with the potential to pose an environmental concern to the subject property. The general uses and relative location of the adjoining properties are depicted in Figure 2, behind the *Figures* tab. The uses and features of adjoining properties are described below:

Northwest: Ponahawai Street, beyond which is a newly constructed Church of Jesus Christ of Latter-Day Saints church building, David Matsuura's farm, and Homelani Memorial Park (cemetery)

Northeast: Undeveloped, heavily vegetated parcel, beyond which is the Homelani Memorial Park (cemetery)

Southeast: Alenaio Stream (intermittent stream bed), beyond which are residential properties

Southwest: Undeveloped, heavily vegetated land, beyond which is a new house under construction

Adjoining properties do not appear to present an environmental concern to the subject property, based on visual observations and information obtained during the assessment, except as noted below.

- Homilani Memorial Park, Inc., which is associated with the Homilani Memorial Park cemetery on the northwest and northeast adjoining properties, is listed in the Department of Health (DOH) database as an underground storage tank (UST) site, with one 500-gallon gasoline UST listed as "Permanently Out of Use," and one 500-gallon gasoline UST listed as "Currently In Use." However, there are no reported releases for this facility, and no evidence of USTs was observed near the subject property during Clayton's site visit. Therefore, the USTs listed for this adjoining property have a low potential to impact the subject property.



2.4 PHYSICAL SETTING

The subject property comprises parcel of heavily vegetated, undeveloped land located along Ponahawai Street, approximately 3,500 feet south of the Pacific Ocean (Hilo Bay), on the central eastern coastal sector of the Big Island of Hawaii. According to the U.S. Geological Survey, Hilo, Hawaii, 7.5-minute topographic quadrangle map, the elevation across the subject property ranges from approximately 100 to 160 feet above mean sea level (msl).

2.4.1 Physiography

The subject property is located in the Hilo Lava Plain Physiographic Region on the central eastern coastal sector of the Big Island of Hawaii. The general area is characterized as the eastern slopes of the Mauna Loa shield volcano. The slopes decrease in elevation toward the east with little established drainage. The Alenaio Stream runs along the southeastern property boundary (USGS 1995). The elevation across the subject property is approximately 100 to 160 feet above mean sea level (msl). The approximate latitude and longitude at the center of the subject property is 19.7153° North and 155.0915° West (WGS84/NAD83), respectively.

2.4.2 Geology

The main soil type found on and around the subject property parcels is Keaukaha series extremely rocky muck, with 6 to 20 percent slopes (mapping unit *rKFD*). The Keaukaha Series soils consist of well-drained, thin organic soils overlying pahoehoe lava bedrock. These soils occupy the low areas of Mauna Loa.

The *rKFD* soil type is found near the city of Hilo. It is undulating to rolling and follows the topography of the underlying pahoehoe lava. Rock outcrops occupy approximately 25 percent of the area. In a representative profile, the surface layer is very dark brown muck about eight inches thick, underlain by pahoehoe lava bedrock. The soil is strongly acid. The soil above the lava is rapidly permeable. The pahoehoe lava is very slowly permeable but water moves rapidly through the cracks. Runoff is medium, and the erosion hazard is slight.

2.4.3 Hydrology

Clayton reviewed the Aquifer Identification and Classification Technical Report No. 191, published by the Water Resources Research Center at the University of Hawaii, for information on groundwater conditions below the subject property. The report describes the aquifer below the subject property as part of the Hilo aquifer system in the Northeast Mauna Loa sector.

The groundwater aquifer is described as an unconfined basal aquifer of the flank type, occurring in horizontally extensive lavas. The aquifer is listed as an irreplaceable fresh drinking water source with salinity (less than 250 milligrams of chloride per liter) that is currently used. The aquifer is highly vulnerable to contamination.

The regional shallow groundwater flow direction is inferred to be north toward Hilo Bay, based on surface topography. However, topography is not always a reliable basis for predicting groundwater flow direction. The local gradient under the subject property may be influenced naturally by tidal influxes, zones of higher or lower permeability, or artificially by nearby pumping or recharge, and may deviate from the regional trend. Based on topography, the depth to first groundwater is expected to be approximately 90 to 150 feet below ground surface (bgs).



3.0 HISTORICAL AND AGENCY REVIEW

3.1 AERIAL PHOTOGRAPHS

Aerial photographs, including the subject and adjoining properties, were reviewed at the State Archives building in Honolulu, Hawaii, and from Clayton's aerial photograph collection. Photographs reviewed are summarized as follows:

- **October 14, 1954; Flight #8-08**

The subject property and adjoining properties to the northwest, northeast, and southwest appeared as agricultural land, most likely sugar cane. A road and a few small structures (most likely houses) appeared along the northwest boundary of the subject property. Several trees and small structures (most likely houses) appeared on the southeast adjoining area.

- **January 16, 1965; Flight #EKL-6CC-114**

The subject property and surrounding properties appeared similar to the 1954 aerial photograph.

- **1974 (Flight Number Unknown)**

This aerial photograph is an infrared image, making the details in the photograph difficult to discern. However, the subject property and surrounding properties appeared similar to the 1954 aerial photograph.

- **1985 (Flight Number Unknown)**

The subject property and adjoining areas to the northwest, northeast, and southwest no longer appeared as agricultural land. These areas appeared as undeveloped, heavily vegetated land with various types of trees, shrubs and grasses. The current structures that occupy David Matsuura's Farm were observed on the northwest adjoining property, and the Homelani Memorial Park cemetery was observed to the northwest and northeast. No significant changes were observed on the southeast adjoining area.

- **1992 (Flight Number Unknown)**

The subject property and surrounding properties appeared similar to the 1985 aerial photograph.

No readily apparent evidence of environmental concerns at the subject parcel or adjoining properties was noted in the aerial photographs reviewed, except for the following:

- The area of the subject property was formerly used for agricultural purposes, according to aerial photographs from 1954 to 1974. Past use of agricultural chemicals such as pesticides and herbicides may have the potential to impact the subject property. However, there is no evidence that the storage or mixing of agricultural chemicals was ever conducted at the subject property. Moreover, according to Hawaii Administrative Rules (HIAR) Chapter 128D Environmental Response Law, the presence of agricultural chemicals does not constitute a release of a hazardous substance. Section 128D-1 of the HIAR, excludes "any release resulting from the legal application of a pesticide product registered under the Federal Insecticide, Fungicide, and Rodenticide Act."



This finding is not considered a recognized environmental condition because there is no evidence of significant pesticide and/or herbicide releases on the subject parcel/property. In addition, according to HIAR Chapter 128D, the presence of agricultural chemicals does not constitute a release. However, if the subject property is developed for residential use in the future, soil sampling with laboratory analyses for agricultural chemicals of concern may be warranted.

3.2 FIRE INSURANCE MAPS

Fire insurance maps typically depict either the locations of manufacturing and industrial facilities within the city limits or potential fire hazards existing within individual building structures. In many cases areas of environmental concern, such as locations of USTs, can be found by reviewing fire insurance maps.

Clayton attempted to review Sanborn Fire Insurance Maps of the subject site at Hamilton Library, located at the University of Hawaii, Manoa Campus in Honolulu, Hawaii. Map coverage of the subject site and immediate surrounding areas was not available.

3.3 TOPOGRAPHIC MAPS

Topographic maps published by the USGS that include the subject parcel and surrounding vicinity were reviewed. Maps reviewed are summarized as follows:

USGS 7.5-Minute Hilo, Hawaii Topographic Quadrangle Map

- 1914:** Most of the subject property was depicted as undeveloped land; however, ten small structures (most likely houses) were depicted throughout the subject property. Similar small structures were depicted on the surrounding areas. An improved roadway was depicted along the northwest side of the subject property, and the Alenaio Stream bordered the subject property on the southeast side.
- 1940:** The subject property and surrounding areas appeared similar to the 1914 topographic map.
- 1963:** The area of the subject property and surrounding areas was shaded white. A few small structures were depicted on the subject property, along the roadway adjacent to the northwest property boundary. The "Homelani Cemetery" was depicted beyond the roadway to the northwest. Several houses and associated roadways were depicted beyond Alenaio Stream to the southeast of the subject property. This area was labeled "Kukuau 2". The "Haili Congressional Cemetery" was depicted northeast of the subject property. The southwestern adjacent property was shown as undeveloped land.
- 1981:** No structures were depicted on the subject property on this map. The "Haili Congressional Cemetery" was no longer depicted northeast of the subject property. The southeast adjoining area, beyond Alenaio Stream, was shaded to depict development, but no structures were shown. In addition, the "Homelani Cemetery" depicted to the northwest was relabeled "Homelani Memorial Park." No other significant changes were noted on this map.
- 1995:** The subject property and surrounding areas appeared similar to the 1981 topographic map, except the subject property was shaded green to depict vegetation, and the "Homelani Memorial Park" was shown on the northwest and northeast adjacent areas.



No readily apparent evidence of environmental concerns at the subject or adjoining properties was noted on the topographic maps reviewed.

3.4 AGENCY CONTACTS

3.4.1 Building, Planning, and/or Zoning Departments

According to the Hawaii County Planning and Zoning Department, there is a split zoning designation for the subject property. The approximately eight-acre rectangular-shaped portion in the north-northeast corner of the parcel (Lot 1) is zoned "CN-10, Commercial Neighborhood" and the remaining 16.495 acres (Lot 2) are zoned "Agricultural".

No building permit records were available for review in the online tax assessment records.

3.4.2 Department of Health/Solid and Hazardous Waste Branch

Clayton performed a database review of the State of Hawaii Department of Health (DOH), Solid and Hazardous Waste Branch (SHWB) records regarding Underground Storage Tanks (USTs) and Leaking Underground Storage Tanks (LUSTs) at the subject property.

The subject property was not listed in the UST or LUST databases reviewed.

3.4.3 Department of Health/Hazard Evaluation and Emergency Response Branch

Clayton performed a database review of the State of Hawaii Department of Health (DOH), Hazard Evaluation and Emergency Response (HEER) records regarding environmental concerns or violations at the subject property.

The subject property was not listed in the HEER database reviewed.

3.4.4 Prior Ownership

Readily available records from the County of Hawaii Real Property Tax Assessment Office were reviewed to assess past ownership, lease activities, and uses of the subject property. The subject property consists of the parcel of land lying in Tax Map Key numbers (TMKs): (3) 2-3-036: Parcel 018. Historical information for these parcels is summarized below:

Tax Map Key	Year	Property Transaction
TMK: (3) 2-3-036: Parcel 018	1969	New parcel created from a portion of TMK: (3) 2-3-036: Parcel 003, owned by Mauna Kea Sugar Company. Total area listed as 35.332 acres.
	1972	4.026 acres dropped into Parcel 12. Total area listed as 31.306 acres.
	1973	Merger: Pepeekeo Sugar Company merged into Mauna Kea Sugar Company.
	1973	3.493 acres dropped into Parcel 11 and 3.048 acres dropped into TMK: (3) 2-3-37: Parcel 6. Total area listed as 24.495 acres. Owner listed as Bob Mueller Realty Inc. (CEB Inc.).



Tax Map Key	Year	Property Transaction
TMK: (3) 2-3-036: Parcel 018 (continued)	1974	Owner listed as Aina Kulana Associates.
	1977	Owner listed as Nippon Shinpan Company, Ltd.
	1979	Parcel deeded to Cygnus Investment (Hawaii) Corp.
	1995	Final order of condemnation: from Cygnus Investment (Hawaii) Corp., "Defendants" to County of Hawaii, "Plaintiff."
	1996	Quitclaim Deed: Property transferred ownership from Cygnus Investment (Hawaii) Corporation to Gamlon Corporation, a Delaware Corporation.
	1999	Quitclaim Deed: Property transferred ownership from Gamlon Corporation to Blue Chip Corporation, a Japan Corporation.
	2000	Warranty Deed: Property transferred ownership from Blue Chip Corporation to Frank De Luz III.
	2000	Warranty Deed: Property transferred ownership from Frank De Luz III to MKN Inc., a Hawaii Corporation.
	2004	Warranty Deed: Property transferred ownership from MKN Inc. to the current owners, Matsuno Enterprises, Ltd., a Hawaii Corporation and Suisan Properties Limited, a Hawaii Corporation.

No readily apparent evidence of recognized environmental conditions at the subject property was noted in the ownership records reviewed, except for the following:

- The subject property was formerly leased to several agricultural companies, including Mauna Kea Sugar Company and Pepeekeo Sugar Company. Past use of agricultural chemicals such as pesticides and herbicides may have the potential to impact the subject property. However, based on other historical data reviewed (aerial photographs), there is no evidence that the storage or mixing of agricultural chemicals was ever conducted at the subject property. Moreover, according to Hawaii Administrative Rules (HIAR) Chapter 128D Environmental Response Law, the presence of agricultural chemicals does not constitute a release of a hazardous substance. Section 128D-1 of the HIAR, excludes "any release resulting from the legal application of a pesticide product registered under the Federal Insecticide, Fungicide, and Rodenticide Act."

This finding is not considered a recognized environmental condition because there is no evidence of significant pesticide and/or herbicide releases on the subject parcel/property. In addition, according to HIAR Chapter 128D, the presence of agricultural chemicals does not constitute a release. However, if the subject property is developed for residential use in the future, soil sampling with laboratory analyses for agricultural chemicals of concern may be warranted.

3.5 SUMMARY OF HISTORICAL REVIEW

The historical research conducted for this assessment has established the use of the subject property since at least December of 1914.



According to the 1914 topographic map, most of the subject property was depicted as undeveloped land; however, ten small structures (most likely houses) were depicted throughout the subject property. The next available map, from 1940, showed no changes to the subject property. The earliest available aerial photographs, from 1954, 1965, and 1974, showed the subject property as agricultural land (most likely sugar cane), with a road and a few small structures (houses) along the northwest boundary. In the next available aerial photographs, from 1985 and 1992, the subject property appeared as undeveloped, heavily vegetated land with various types of trees, shrubs and grasses.

Ownership records indicate that the subject property was formerly owned by Mauna Kea Sugar Company, since at least 1969. In 1973, Pepeekeo Sugar Company merged into Mauna Kea Sugar Company, and the subject property was deeded to Bob Mueller Realty Inc. (CEB Inc.) the same year. Ownership of the subject property was transferred to various entities between 1974 and 2004, when the subject property was deeded to the current owners: Matsuno Enterprises, Ltd., a Hawaii Corporation and Suisan Properties Limited, a Hawaii Corporation.

4.0 STANDARD ENVIRONMENTAL RECORD SOURCES, FEDERAL, STATE, AND LOCAL

Available government database information prepared by Environmental Data Resources, Inc., (EDR Radius Map Report; October 11, 2006) was reviewed to evaluate the subject property and any offsite facilities located within the ASTM- recommended search distances referenced in the *Environmental Due Diligence Scope of Work*.

The subject property was not listed in the databases reviewed, and no environmental cleanup liens appear to be on record against the subject property, based on the EDR report.

The EDR report identified a total of 15 sites of potential environmental concern within the ASTM- recommended search distances to the subject property, including: 11 State Hazardous Waste Sites (SHWS); one underground storage tank (UST) site; one leaking UST (LUST) site; one Institutional Controls (INST CONTROL) site; and, one Manufactured Gas Plant site. The two nearest sites were evaluated in detail, as follows:

- Homilani Memorial Park, Inc., which is associated with the Homilani Memorial Park cemetery on the northwest and northeast adjoining properties, is listed as an UST site, with one 500-gallon gasoline UST listed as "Permanently Out of Use," and one 500-gallon gasoline UST listed as "Currently In Use." However, there are no reported releases for this facility, and no evidence of USTs was observed near the subject property during Clayton's site visit. Therefore, the USTs listed for this adjoining property have a low potential to impact the subject property.
- Halai Hill Radio Station, which is located approximately 1,800 feet northwest (cross-gradient) of the subject property, is listed as a LUST site with a status of "Site Cleanup Completed" as of August 23, 1999. Based on its status, distance, and cross-gradient location, this LUST site has a low potential to impact the subject property.

The remaining sites within ASTM- recommended search distances have a low potential to impact the subject property because they hold an operating permit (which does not imply a problem), require no further action, or based on Clayton's review, are located too distant and topographically down-gradient relative to the subject property to reasonably affect it.



In addition, a total of 13 unmapped sites of potential environmental concern were identified within the EDR database report. Unmapped orphan sites are sites that cannot be plotted with confidence, but can be located by zip code or city name. In general, sites cannot be geocoded due to inaccurate or missing information in the environmental database record provided by its applicable agency. Cross-referencing addresses and site names, as well as a visual reconnaissance of surrounding properties, has been completed for the unmapped facility sites.

The subject property and adjacent properties were not identified on the unmapped sites listing in the EDR environmental database report. Based on our review, there were no unmapped sites of potential environmental concern identified within the ASTM-recommended search distances to the subject property.

5.0 SITE RECONNAISSANCE AND INTERVIEWS

Summarized in the table below is a site inspection and findings overview. All items that are, or are known to have been present at the subject property are noted in the table. The table also notes items that may present concerns to the subject property. Additional information about items noted can be found in the referenced section of this report.

Onsite Environmental Features	Currently/ Historically Present (Y/N)	Possible Environmental Condition (Y/N)	Report Section
Hazardous Substances or Petroleum Products	N	N	
Underground Storage Tanks	N	N	
Aboveground Storage Tanks	N	N	
Odors	N	N	
Air Emissions (stacks, hoods, other point sources)	N	N	
Pools of Liquid	N	N	
Drums	N	N	
Unidentified Substance Containers	N	N	
Electrical Equipment/Possible PCBs	N	N	
Hydraulic Equipment/Possible PCBs	N	N	
Stains or Corrosion	N	N	
Drains	N	N	
Sumps	N	N	
Pits, Ponds, or Lagoons	N	N	
Stained Soil or Pavement	N	N	
Stressed Vegetation	N	N	
Evidence of Spills or Releases	N	N	
Artificially Filled Areas/Solid Waste Disposal	Y	N	5.1, 5.3
Waste Water	N	N	



Onsite Environmental Features	Currently/ Historically Present (Y/N)	Possible Environmental Condition (Y/N)	Report Section
Wells	N	N	
Septic Systems	N	N	
Dry Cleaning Operations	N	N	
Agricultural Use (Pesticides/herbicides)	Y	N	3.1, 3.4.4
Oil/Gas Production or Exploration	N	N	
Railroad Spur	N	N	
Remedial Activities	N	N	

5.1 GENERAL OBSERVATIONS

At the time of Clayton's October 16, 2006 site inspection, the subject property consisted of heavily vegetated raw land covered with dense thickets of trees, bushes, vines and tall grasses above an uneven ground surface. The subject property was accessible from Ponahawai Street, which is located along the northeast side of the subject property. Clayton accessed various portions of the subject property through narrow trails that were mostly overgrown with vegetation. These trails appeared to be hunters' trails or possibly remnants of former cane haul roads remaining from the former sugar cane fields. The Alenaio Stream that borders the subject property on the southeast side was dry at the time of Clayton's site visit, and appeared as an intermittent stream bed. One abandoned car and one abandoned truck were observed in the northwest-central area, near Ponahawai Street. No other evidence of unauthorized dumping was observed on the subject property.

5.2 INTERVIEWS

Clayton attempted to interview the owner(s), key onsite manager(s), and occupants of the subject property for information and documents reflecting uses and conditions of the subject property. During this assessment, the following individual was interviewed for information regarding the subject parcel/property:

- Mr. Harvey Taira, Properties Manager with MEL/SPL, was interviewed during the initial portion of the site inspection. In Clayton's opinion, Mr. Taira was forthcoming with information for which he had knowledge. According to Mr. Taira, the north corner of the subject property is demarcated by utility pole number 28, located along Ponahawai Street, and the west corner is demarcated by utility pole number 28, also located along Ponahawai Street. Mr. Taira stated that the subject property was reportedly used for sugar cane cultivation in the past, but he did not know any specific information about its former use as agricultural land. Mr. Taira was unaware of any USTs, hazardous material releases, or other environmental issues at the subject parcel/property.

5.3 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS

The subject property was inspected for indications (e.g., drums, containers, unusual vegetation patterns, staining) of current or historic use, storage, or disposal of hazardous substances and petroleum products.



Hazardous substances and petroleum products were not observed at or around the subject property, except for one abandoned car and one abandoned truck, which were observed in the northwest-central area, near Ponahawai Street. No other evidence of unauthorized dumping was observed on the subject property.

It should be noted that the subject property is covered by dense, impenetrable vegetation, which prevented a thorough inspection of the ground surface. The subject property may contain abandoned items and/or stained soils that were obscured from view during Clayton's site visit.

5.4 STORAGE TANKS

5.4.1 Underground Storage Tanks (USTs)

The subject property was inspected for indications of underground storage tanks (USTs), including vent piping, dispensing equipment, pavement variations, and fill ports.

Physical evidence of USTs was not observed during the assessment. In addition, no features were observed at the subject property that would have required USTs to be present (such as standby generators or boilers), and the subject property is not listed in the DOH database of registered USTs.

5.4.2 Aboveground Storage Tanks (ASTs)

The subject property was inspected for indications of aboveground storage tanks (ASTs) (e.g., concrete bolts, containers, reservoirs, generators, etc.).

No physical evidence of ASTs was observed on the subject property.

5.5 INDICATIONS OF SOLID WASTE DISPOSAL

The subject property was inspected for indications of solid waste disposal.

At the time of Clayton's site inspection, the subject property was undeveloped and covered with dense vegetation. No evidence of solid waste disposal was observed, except for one abandoned car and one abandoned truck located in the northwest-central area, near Ponahawai Street. No staining or evidence of releases was observed in the vicinity of these vehicles, and no other evidence of unauthorized dumping was observed on the subject property. However, the subject property may contain additional abandoned items and/or stained soils that were obscured from view by the dense vegetation.

5.6 DISCHARGE SOURCES

The subject property was inspected for indications of discharge sources (e.g., sumps, drains, clarifiers). No evidence of discharge sources was observed at the subject property.

Based on observations made during the site inspection, storm water runoff typically flows via sheet flow along natural contours into the underlying ground and toward the Alenaio Stream, which borders the subject property on the southeast side. This stream bed was dry at the time of Clayton's site visit and appeared as an intermittent stream.



5.7 INDICATIONS OF POLYCHLORINATED BIPHENYLS (PCBs)

The subject property was inspected for the presence of liquid-cooled electrical units (transformers, light ballasts, and capacitors), and major sources of hydraulic fluid (elevators and lifts). Such units are notable because they may be potential PCB sources.

All unlabeled transformers are considered (Federal Regulation 40 CFR 761.40) to be PCB-contaminated (i.e., containing between 50 and 500 parts per million [ppm] PCB). Federal Regulations (40 CFR 761. Subpart G) require any release of material containing greater than 50 ppm PCB and occurring after May 4, 1987, be cleaned up by the owner following the United States Environmental Protection Agency's (USEPA) PCB spill cleanup policy.

Clayton observed two pole-mounted, Hawaii Electric Light Company (HELCO) transformers located along Ponahawai Street, immediately adjacent to the northwestern boundary of the subject property. One transformer (HELCO ID number 38112) is atop utility pole number 32, which is located centrally along the northwest property boundary, and was labeled "No PCBs." The second transformer (HELCO ID number 6568) is atop utility pole number 28, which is located by the north corner of the subject property, and did not include the "No PCBs" labeling.

Clayton contacted HELCO for information regarding the PCB content of the unlabeled transformer. According to a letter from Mr. Dave Okamura, Assistant Technical Superintendent of HELCO, dated October 22, 2006, there is no PCB test data or other pertinent information available for HELCO Transformer #6568. The letter stated that HELCO's transformer purchases have always specified mineral oil, rather than PCB, as the insulating material; however, it is possible that incidental contamination may have occurred prior to the PCB prohibition in 1979.

The HELCO letter also stated that all leaking transformers are replaced, and any associated oil spills are remediated (at HELCO's expense) in accordance with all applicable EPA and State DOH guidelines. In addition, all older transformers which fail in the field are tested, and HELCO-owned transformers may be tested at the customer's request. The letter from HELCO is included as Appendix D.

5.8 WELLS

The subject property was inspected for indications of wells (e.g., dry, irrigation, injection, abandoned, monitor, supply). Physical evidence of wells was not observed or reported at the subject property. Moreover, according to the DLNR water well map and index (2006), there are no water wells located on or near the subject property.

6.0 NON-ASTM ISSUES

6.1 ASBESTOS-CONTAINING MATERIAL (ACM)

During the assessment, the subject property was inspected for the presence of suspect asbestos-containing materials (ACM).

There are no permanent structures located on the subject property. Therefore, no suspect ACM was observed at the subject property.



6.2 LEAD-BASED PAINT (LBP)

During the assessment, the subject property was inspected for the presence of suspect lead-based paint (LBP).

There are no permanent structures located on the subject property. Therefore, no suspect LBP was observed at the subject property.

6.3 RADON

Radon is a naturally occurring radioactive gas formed by the decay of uranium in bedrock and soil. The potential adverse health effects associated with radon gas depend on various factors, such as the concentration of the gas and duration of exposure. The concentration of radon gas in a building depends on subsurface soil conditions, the integrity of the building's foundation, and the building's ventilation system.

Due to the relatively young geological age (less than five million years) of the southernmost islands of the Hawaiian archipelago, radon gas does not occur at elevated levels in Hawaii. Therefore, no further investigation of radon is recommended for the subject property.

6.4 WETLANDS

The subject property was inspected for the presence of sensitive ecological areas by noting environmental indicators (e.g., wetlands vegetation, floodplains) located on, or immediately adjoining, the subject property.

No sensitive ecological areas were observed on the subject property. In addition, the USGS 7.5-Minute topographic Hilo, Hawaii quadrangle map (1995), which includes the subject and adjoining properties, does not depict creeks or delineated wetlands located on the subject property. However, the subject property is bordered on the southeast side by Alenaio Stream. This stream bed was dry at the time of Clayton's site visit and appeared as an intermittent stream.

According to the Federal Emergency Management Agency flood insurance rate map (FEMA/FIRM Map No. 155166-0880 C, revised September 16, 1988), the majority of the subject property lies within Flood Zone X, which denotes areas determined to be outside the 500-year flood plain. However, the southeastern portion of the subject property, located along Alenaio Stream, lies within Flood Zone AE, which denotes floodway areas inundated by the 100-year flood, with base flood elevations ranging from approximately 100 to 125 feet above msl.

7.0 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-00 of the 24.495-Acre Ponahawai property (Tax Map Key [TMK] [3] 2-3-036: Parcel 018), located in Hilo, Hawaii (the "subject property"). Any exceptions to, or deletions from, this practice are described in Sections 1.2 and 1.3 of this report.

This assessment has revealed no evidence of *recognized environmental conditions*, as defined by ASTM, in connection with the subject property.



The following environmental condition, which is not considered to be a *recognized environmental condition*, as defined by ASTM, was revealed during this assessment:

- The subject property was formerly used for agricultural purposes, according to historical aerial photographs and past ownership records. Past use of agricultural chemicals such as pesticides and herbicides may have the potential to impact the subject property. However, there is no evidence that the storage or mixing of agricultural chemicals was ever conducted at the subject property. Moreover, according to Hawaii Administrative Rules (HIAR) Chapter 128D Environmental Response Law, the presence of agricultural chemicals does not constitute a release of a hazardous substance. Section 128D-1 of the HIAR, excludes "any release resulting from the legal application of a pesticide product registered under the Federal Insecticide, Fungicide, and Rodenticide Act."

This finding is not considered a recognized environmental condition because there is no evidence of significant pesticide and/or herbicide releases on the subject parcel/property. In addition, according to HIAR Chapter 128D, the presence of agricultural chemicals does not constitute a release. However, if the subject property is developed for residential use in the future, soil sampling with laboratory analyses for agricultural chemicals of concern is recommended.

- At the time of Clayton's site inspection, the subject property was covered by dense, impenetrable vegetation, which prevented a thorough inspection of the ground surface. No evidence of waste disposal was observed, except for one abandoned car and one abandoned truck located in the northwest-central area, near Ponahawai Street. No staining or evidence of releases was observed in the vicinity of these vehicles, and no other evidence of unauthorized dumping was observed on the subject property. However, the subject property may contain additional abandoned items and/or stained soils that were obscured from view by the dense vegetation.

This finding is not considered a recognized environmental condition because there is no evidence of hazardous substance releases at the subject property. However, the two abandoned vehicles should be removed and properly disposed to prevent nuisance attraction (i.e. additional dumping). Following removal, the ground beneath the vehicles should be inspected for evidence of automotive fluid releases. In addition, the subject property should be carefully monitored during clearing and grubbing activities for future development. If chemical containers, stained soils, or evidence of subsurface structures are discovered, environmental cleanup work may be warranted.

- Clayton observed a pole-mounted, Hawaii Electric Light Company (HELCO) transformer (HELCO ID number 6568) atop utility pole number 28, which is located by the north corner of the subject property. This transformer unit did not include any "No PCBs" labeling. According to HELCO, there is no PCB test data available for this unit. Although no staining or other evidence of releases was observed around the transformer, there is a potential for future releases of dielectric fluid from this transformer to impact the subject property. A letter received from HELCO states that all leaking transformers are replaced, and any associated oil spills are remediated (at HELCO's expense) in accordance with all applicable EPA and State DOH guidelines. In addition, all older transformers which fail in the field are tested, and HELCO-owned transformers may be tested at the customer's request.



This finding is not considered a recognized environmental condition because there is no evidence of releases from the transformer. However, Clayton recommends that PCB testing of the unlabeled transformer be requested from HELCO. According to HELCO, the testing must be paid for by the requesting entity. If PCBs are found, the testing fee will be refunded and the transformer will be retrofitted or replaced at no cost. If no PCBs are found, HELCO retains the testing fee.

This report prepared by:

Tim Swartz
Project Manager
Environmental, Health, and Safety

This report reviewed by:

Daniel P. Ford, R.G.
Regional Chief Executive
Environmental, Health, and Safety

October 31, 2006
Clayton Project No. 17006-006460.00

Well Check Program

3/23/21 - Revised for update to Well Standards (February 2004)

Data Input			
Date	8/6/2024		
Well Number	8-4205-001		
Well Name	Da		
Ground Elevation (msl, feet)	140		
Cement Grout (feet)	108		
Grouting Method	other		
Hole Diameter (inches)	12		
Total Depth (feet)	155	155	okay
Water Level Elevation (feet msl)	3	Depth to water	137
Public Water Supply Well?	no		
Solid Casing Material	pvc plastic	plastic	
Solid Casing Specification	Schedule 40		
Solid Casing Length (feet)	135		
Solid Casing Diameter (inches)	6		
Solid Casing Wall Thickness (inches)	0.280		
Open / Perforated / Screen Casing Length (feet)	20		
Open Hole Length (feet)	0		
Results			
Well Depth (1/4 thickness)			
Theoretical Thickness of Aquifer	123		
1/4 Aquifer Thickness	30.75		
Elevation of 1/4 thickness (msl)	-27.75		
<i>Elevation of total well depth</i>	-15	okay	Section 2.2
Well Depth (1/2 thickness)			
Theoretical Thickness of Aquifer	123		
1/2 Aquifer Thickness	61.5		
Elevation of 1/2 thickness (msl)	-58.5		
<i>Elevation of total well depth</i>	-15	okay	
Well Casing			
Minimum Wall Thickness			
Material	pvc plastic		
Minimum Thickness per standards	no requirement		
<i>Wall Thickness Provided</i>	0.28	no standard	Section 2.4(b)
Minimum Length of Solid Casing			
90% of ground to top of aquifer	123.3		
<i>Length of solid casing Provided</i>	135	okay	Section 2.4(c)
<i>Casing Material</i>	Schedule 40	in compliance	Section 2.4(d)
<i>(for pvc only - check for 200' limit)</i>		okay	Section 2.4(d)
Annular Space			
Depth of Grouting			
Calculated Depth of Grouting	95.9		
<i>Depth of Grouting provided</i>	108	okay	Section 2.6(c)
Minimum Annular Space required	2		
<i>Thickness of Annular Space</i>	3	okay	Section 2.6(d)

Exhibit 2 Well Design Check

WRIMS

Water Resource Information Management System
 Commission on Water Resource Management, State of Hawaii

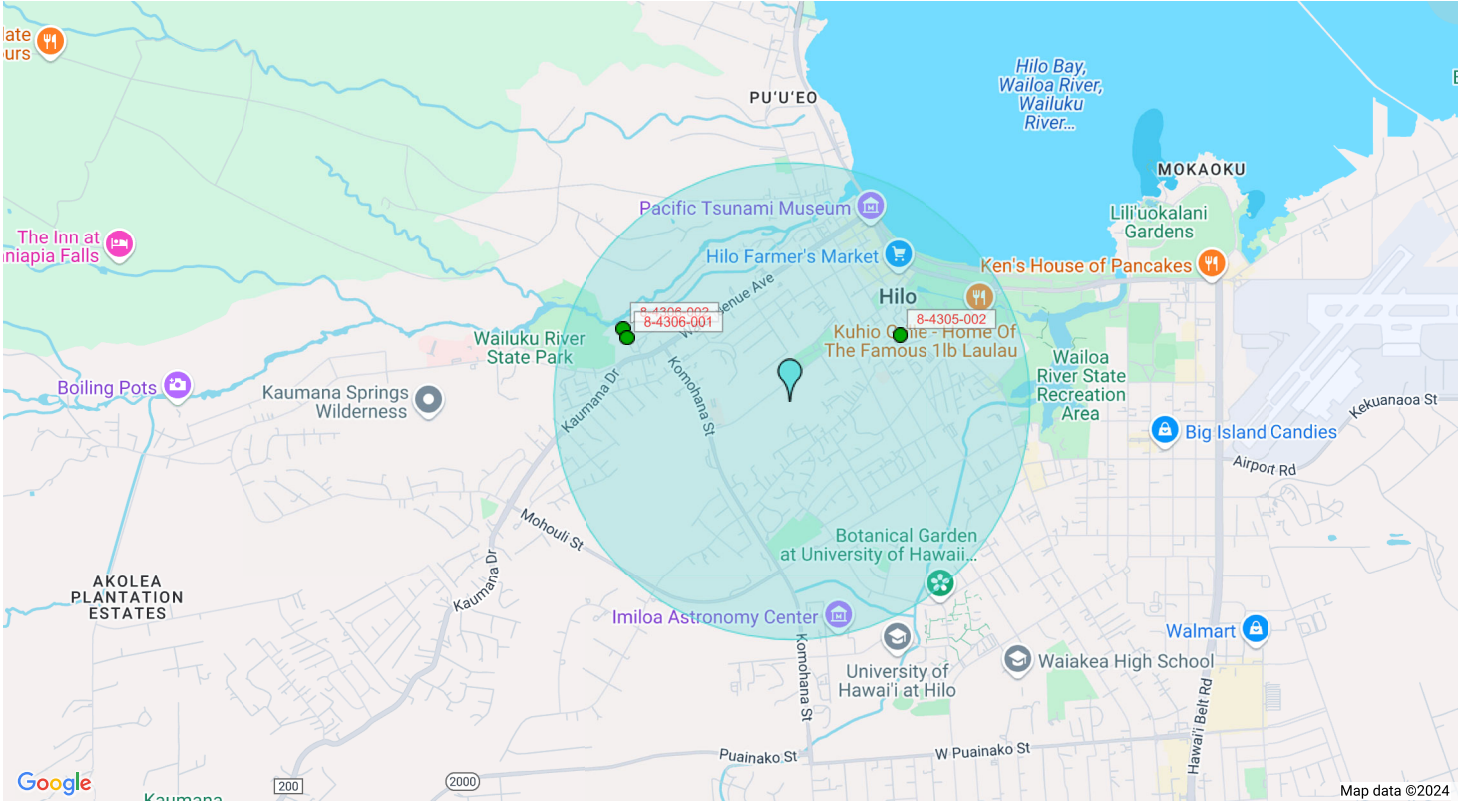
Main Menu | Contacts | Well Index | Well Application | Water Use Permit | SWIM System | General Files | Reports | Converter | Links ▶

1-Mile Radius Tool

1. Move the blue pin or right click on the map to select a center position.
2. Click on "Go" button to find a well within the specified radius from the center position.

Latitude: Longitude: Radius: mile Include 12-MAV

3 wells found. [Download KML](#) | [Download Excel](#)



3 matching results found.

Sort By: Well Number

Well Number	Aquifer System	Well Name	Well Owner/Operator	Water Use Reporter	Land Owner	TMK	Use	Year Drilled	Latest 12-MAV	Last Reported Date
8-4305-002	80401 Hilo	Del Mar II	HJC Development Corporation	Rowena Austria (Hank Correa Realty, LLC)	HJC Development Corporation	(3) 2-2-009:022	DOM	2014	0.000	9/30/2024
8-4306-001	80401 Hilo	Piihonua #3 Well A	Department of Water Supply Hawaii - Hilo, HDWS	Dillon Kodama (Department of Water Supply Hawaii - Hilo, HDWS)	Department of Water Supply Hawaii - Hilo, HDWS	(3) 2-3-026:009	MUNCO	1973	0.854	6/30/2024
8-4306-002	80401 Hilo	Piihonua #3 Well B	Department of Water Supply Hawaii - Hilo, HDWS	Dillon Kodama (Department of Water Supply Hawaii - Hilo, HDWS)	Department of Water Supply Hawaii - Hilo, HDWS	(3) 2-3-026:009	MUNCO	1987	1.151	6/30/2024

Exhibit 3 1-mile Radius Map



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

In reply, please refer to:
EMD/CWB

05023PDCL.18

May 10, 2018

MEMORANDUM

SUBJECT: Clean Water Branch Standard Project Comments

TO: Agencies and Project Owners

FROM: ALEC WONG, P.E., CHIEF *Alec Wong*
Clean Water Branch

This memo is provided for your information and sharing. You are encouraged to share this memo with your project partners, team members, and appropriate personnel.

The Department of Health (DOH), Clean Water Branch (CWB) will no longer be responding directly to requests for comments on the following documents (Pre-consultation, Early Consultation, Preparation Notice, Draft, Final, Addendums, and/or Supplements):

- Environmental Impact Statements (EIS)
- Environmental Assessments (EA)
- Stream Channel Alteration Permits (SCAP)
- Stream Diversion Works Permits (SDWP)
- Well Construction/Pump Installation Permits
- Conservation District Use Applications (CDUA)
- Special Management Area Permits (SMAP)
- Shoreline Setback Areas (SSA)

For agencies or project owners requiring DOH-CWB comments for one or more of these documents, please utilize the DOH-CWB Standard Comments below regarding your project's responsibilities to maintain water quality and any necessary permitting. DOH-CWB Standard Comments are also available on the DOH-CWB website located at: <http://health.hawaii.gov/cwb/>.

Exhibit 4 Agency Comments

DOH-CWB Standard Comments

The following information is for agencies and/or project owners who are seeking comments regarding environmental compliance for their projects with the Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program.

1. Any project and its potential impacts to State waters must meet the following criteria:
 - a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.
 - b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.
 - c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).
2. You may be required to obtain National Pollutant Discharge Elimination System (NPDES) permit coverage for point source water pollutant discharges into State surface waters (HAR, Chapter 11-55). Point source means any discernible, confined, and discrete conveyance from which pollutants are or may be discharged.

For NPDES general permit coverage, a Notice of Intent (NOI) form must be submitted at least 30 calendar days before the commencement of the discharge. An application for a NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. To request NPDES permit coverage, you must submit the applicable form ("CWB Individual NPDES Form" or "CWB NOI Form") through the e-Permitting Portal and the hard copy certification statement with the respective filing fee (\$1,000 for an individual NPDES permit or \$500 for a Notice of General Permit Coverage). Please open the e-Permitting Portal website located at: <https://eha-cloud.doh.hawaii.gov/epermit/>. You will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool and locate the appropriate form. Follow the instructions to complete and submit the form.

Some of the activities requiring NPDES permit coverage include, but, are not limited to:

a. Discharges of Storm Water

- i. For Construction Activities Disturbing One (1) or More Acres of Total Land Area.

By HAR Chapter 11-55, an NPDES permit is required before the start of the construction activities that result in the disturbance of one (1) or more acres of total land area, including clearing, grading, and excavation. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale.

- ii. For Industrial Activities for facilities with primary Standard Industrial Classification (SIC) Codes regulated in the Code of Federal Regulations (CFR) at 40 CFR 122.26(b)(14)(i) through (ix) and (xi). If a facility has more than one SIC code, the activity that generates the greatest revenue is the primary SIC code. If revenue information is unavailable, use the SIC code for the activity with the most employees. If employee information is also unavailable, use the SIC code for the activity with the greatest production.

- iii. From a small Municipal Separate Storm Sewer System (along with certain non-storm water discharges).

- b. Discharges to State surface waters from construction activity hydrotesting or dewatering
- c. Discharges to State surface waters from cooling water applications
- d. Discharges to State surface waters from the application of pesticides (including insecticides, herbicides, fungicides, rodenticides, and various other substances to control pest) to State waters
- e. Well-Drilling Activities

Any discharge to State surface waters of treated process wastewater effluent associated with well drilling activities is regulated by HAR Chapter 11-55. Discharges of treated process wastewater effluent (including well drilling slurries,

lubricating fluids wastewater, and well purge wastewater) to State surface waters requires NPDES permit coverage.

NPDES permit coverage is not required for well pump testing. For well pump testing, the discharger shall take all measures necessary to prevent the discharge of pollutants from entering State waters. Such measures shall include, if necessary, containment of initial discharge until the discharge is essentially free of pollutants. If the discharge is entering a stream or river bed, best management practices (BMPs) shall be implemented to prevent the discharge from disturbing the clarity of the receiving water. If the discharge is entering a storm drain, the discharger must obtain written permission from the owner of the storm drain prior to discharge. Furthermore, BMPs shall be implemented to prevent the discharge from collecting sediments and other pollutants prior to entering the storm drain.

3. A Section 401 Water Quality Certification (WQC) is required if your project/activity:
 - a. Requires a federal permit, license, certificate, approval, registration, or statutory exemption; and
 - b. May result in a discharge into State waters. The term “discharge” is defined in Clean Water Act, Subsections 502(16), 502(12), and 502(6).

Examples of “discharge” include, but are not limited to, allowing the following pollutants to enter State waters from the surface or in-water: solid waste, rock/sand/dirt, heat, sewage, construction debris, any underwater work, chemicals, fugitive dust/spray paint, agricultural wastes, biological materials, industrial wastes, concrete/sealant/epoxy, and washing/cleaning effluent.

Determine if your project/activity requires a federal permit, license, certificate, approval, registration, or statutory exemption by contacting the appropriate federal agencies (e.g. Department of the Army (DA), U.S. Army Corps of Engineers (COE), Pacific Ocean Division Honolulu District Office (POH) Tel: (808) 835-4303; U.S. Environmental Protection Agency, Region 9 Tel: (415) 947-8021; Federal Energy Regulatory Commission Tel: (866) 208-3372; U.S. Coast Guard Office of Bridge Programs Tel: (202) 372-1511). If your project involves work in, over, or under waters of the United States, it is highly recommended that you contact the Army Corp of Engineers, Regulatory Branch regarding their permitting requirements.

To request a Section 401 WQC, you must complete and submit the Section 401 WQC application. This application is available on the e-Permitting Portal website located at: <https://eha-cloud.doh.hawaii.gov/epermit/>.

Please see HAR, Chapter 11-54 for the State's Water Quality Standards and for more information on the Section 401 WQC. HAR, Chapter 11-54 is available on the CWB website at: <http://health.hawaii.gov/cwb/>.

4. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of \$25,000 per day per violation and up to two (2) years in jail.
5. It is the State's position that all projects must reduce, reuse, and recycle to protect, restore, and sustain water quality and beneficial uses of State waters. Project planning should:
 - a. Treat storm water as a resource to be protected by integrating it into project planning and permitting. Storm water has long been recognized as a source of irrigation that will not deplete potable water resources. What is often overlooked is that storm water recharges ground water supplies and feeds streams and estuaries; to ensure that these water cycles are not disrupted, storm water cannot be relegated as a waste product of impervious surfaces. Any project planning must recognize storm water as an asset that sustains and protects natural ecosystems and traditional beneficial uses of State waters, like community beautification, beach going, swimming, and fishing. The approaches necessary to do so, including low impact development methods or ecological bio-engineering of drainage ways must be identified in the planning stages to allow designers opportunity to include those approaches up front, prior to seeking zoning, construction, or building permits.
 - b. Clearly articulate the State's position on water quality and the beneficial uses of State waters. The plan should include statements regarding the implementation of methods to conserve natural resources (e.g. minimizing potable water for irrigation, gray water re-use options, energy conservation through smart design) and improve water quality.
 - c. Consider storm water Best Management Practice (BMP) approaches that minimize the use of potable water for irrigation through storm water storage and reuse, percolate storm water to recharge groundwater to revitalize natural hydrology, and treat storm water which is to be discharged.

- d. Consider the use of green building practices, such as pervious pavement and landscaping with native vegetation, to improve water quality by reducing excessive runoff and the need for excessive fertilization, respectively.
- e. Identify opportunities for retrofitting or bio-engineering existing storm water infrastructure to restore ecological function while maintaining, or even enhancing, hydraulic capacity. Consideration should be given to areas prone to flooding, or where the infrastructure is aged and will need to be rehabilitated.

Private Water Wells

WARNING! As the owner of a privately-owned well, you should **NOT** assume that water from your well is safe for consumption. It is your responsibility to make sure that your well water is safe to drink. The only way to do this is to have your well regularly tested for bacteriological and chemical contaminants.

There are no regulations controlling water quality in private wells serving individual residences as there are for public water systems (public or privately-owned utilities supplying water to 25 or more people or 15 service connections). In other words, there are no enforceable limits for contaminants and no requirements for regular testing. Private wells are often found in rural areas, where many activities such as onsite wastewater disposal can contaminate the ground water.

U.S. Environmental Protection Agency (EPA) Recommendations

The EPA recommends that private well owners test their well water each year for such contaminants as Total Coliform bacteria, Nitrates, as well as any other contaminants that may be of concern in your area. More frequent testing may be appropriate if you suspect a problem. EPA also suggests that you consider testing for pesticides, organic chemicals, and heavy metals before using it for the first time. Please refer to the EPA website on Private Drinking Water Wells at <http://www.epa.gov/privatewells>.

Other Contaminants

Water testing can be very expensive. It is important that you spend time to identify what other potential contaminants may be of concern. Please refer to the EPA website on Private Drinking Water Wells at <http://www.epa.gov/privatewells/key-steps-protect-your-well> for more information. Be aware of what and how you use and dispose of household and garden chemicals. Also determine the location of nearby septic tanks or cesspools, and agricultural or industrial activities in the area. General information on known chemical contamination of ground water in Hawaii can be found at the DOH website <http://health.hawaii.gov/sdwb/groundwater-contamination-viewer>.

Laboratories

Whenever possible, utilize a laboratory that is certified or approved for the specific drinking water tests and carefully follow their instructions for collecting, storing, and transporting the samples. Be sure to ask the lab to use EPA approved methods for drinking water analysis. A Directory of Drinking Water Laboratories Certified or Approved by the Hawaii Department of Health, State Laboratories Division can be found at <http://health.hawaii.gov/sdwb/files/2018/01/Labs2017Dec.pdf>. As lab certification status changes constantly, confirm their status when you contact the lab. Please note that the list is limited to currently regulated contaminants in public water systems.

Results


Once the lab provides you with the test results, you will be in a better position to determine if your well water is safe to drink or what contaminant you need to treat for. Generally, you should compare the results with Federal (www.epa.gov/safewater/mcl.html) and State (<http://health.hawaii.gov/sdwb/files/2014/07/MCL-Fct-2014-07-10.pdf>) Maximum Contaminant Level (MCL) drinking water standards. Where your test results are greater than the Federal or State maximum contaminant levels, your well water should be considered as **unsafe** for consumption.



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'
DEPARTMENT OF LAND AND NATURAL RESOURCES | KA 'OIHANA KUMUWAIWAI 'ĀINA
COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO
P.O. BOX 621
HONOLULU, HAWAII 96809

Aug 20, 2024

TO: Mr. Kenneth Fink, M.D., Director
Department of Health
Attention: Mr. Jonathan Nagato, Acting Chief, Wastewater Branch

FROM: Dean D. Uyeno, Acting Deputy Director for
Dawn N.S. Chang, Chairperson
Commission on Water Resource Management 

SUBJECT: Well Construction/Pump Installation Permit Application
Da Well (Well No. 8-4205-001) TMK: (3) 2-3-036:018
Well address: Ponahawai Street **Using 505 Ponahawai St, Hilo, 96720**

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. **Please respond by returning this cover memo form by September 23, 2024.** If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Queenie Komori of the Commission staff at (808) 636-8503.

QK:ss
Attachment(s)

RESPONSE:

- This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 days per year or has 15 or more service connections) and **must** receive Director of Health approval **prior** to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-20-29.
- This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 days per year or 15 service connections) and if the well water is used for drinking, the private owner **should** test for bacteriological and chemical presence before initiating such use and routinely monitor the water quality thereafter. However, if future planned use from this source increases to meet the public water system definition then Director of Health approval is required **prior** to implementation.
- If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and backflow connections by physically separating potable and non-potable systems by an air gap or an approved backflow preventer, and by clearly labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.
- It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.
- For the applicant's information, a source of possible wastewater contamination **is** **is not** located near the proposed well site (information attached).
- An NPDES permit is required.
- Other relevant DOH rules/regulations, information, or recommendations are attached.
- In the event that the location of the well changes but is still within the parcel described on this application, our division considers the comments to still be applicable, and we do not need to review the new location.
- An injection well permit is required for the disposal of the effluent from this well.

No comments/objections **NO IWS on file at this time.** **808-586-4294 on Oahu**
Contact Person: Mark Tomomitsu, PD Supervisor Phone: _____
Signed: Mark Tomomitsu Date: 8/22/2024

WWB LUD 6817

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

RYAN K. P. KANAKA'OLE
FIRST DEPUTY

DEAN D. UYENO
ACTING DEPUTY DIRECTOR - WATER

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

STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

September 9, 2024

IN REPLY REFER TO:
Project No. 2024PR01033
Doc. No. 2409NM01

MEMORANDUM

TO: Dean Uyeno, P.E., Acting Deputy Director
State Commission on Water Resource Management
P.O. Box 621, Honolulu, Hawai'i 96809
c/o Queenie Komori, queenie.k.komori@hawaii.gov

FROM: Nicole Mello, Hawai'i Island Historic Preservation Archaeologist IV

SUBJECT: Chapter 6E-42 Historic Preservation Review
Well Construction/Pump Installation Permit Application, Da Well (Well No. 8-4205-001)
Ponahawai Ahupua'a, Hilo District, Island of Hawai'i
TMK: (3) 2-3-036:018

RESPONSE:

[] This is a [] public (county or state) project [X] private project and [] will [] may affect historic properties.

[X] SHPD's determination is **no historic properties affected** for the work described under this permit
(no historic properties have been identified within or near the proposed project area)

Pursuant to HAR §13-284-7(e), when the SHPD agrees that the action will not affect any significant historic properties, this is the SHPD's written concurrence and historic preservation review ends. The historic preservation review process is ended. The permit issuance process may proceed.

Please attach to permit: In the unlikely event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the State Historic Preservation Division, at (808) 933-7651.

Please contact Nicole A. Mello, Hawai'i Island Archaeologist IV, at Nicole.Mello@hawaii.gov for any questions or concerns regarding this letter.

Signed:

Jessica L. Puff
Architecture Branch Chief
Acting Administrator, State Historic Preservation Division

cc. Justin Clayton and Kristin Frost-Albrecht, justin@hawaiifoodbasket.org
Derrick Moreira, derrickswelldrilling07@gmail.com

From: [Chenet, Robert F](#)
To: [Komori, Queenie K](#)
Subject: RE: update FW: 8-4205-001 Da wcpia stream review
Date: Monday, October 28, 2024 10:32:05 AM
Attachments: [image001.png](#)
[image002.png](#)

Aloha Queenie,

Based on the facts that:

- The Well is 141 feet MSL and cased to 6.0 feet MSL
- The closest Stream, the Alenaio Stream is ~ 0.1 mile at > 100 feet MSL and the Wailuku River and Waiakea Stream are much further away.
- Pump capacity is 45 gpm

I see no impact from this Well on the Alenaio Stream, Wailuku River and Waiakea Stream.

Mahalo,
Bob

Robert (Bob) Chenet
Geologist, Survey Branch
State of Hawaii
Commission of Water Resources Management
1151 Punchbowl Street, Room 227
Honolulu, Hawaii 96813
robert.f.chenet@hawaii.gov
Office: (808) 587-0243
Fax (808) 587-0219

From: Komori, Queenie K <queenie.k.komori@hawaii.gov>
Sent: Tuesday, October 15, 2024 11:40 AM
To: Chenet, Robert F <Robert.F.Chenet@hawaii.gov>
Subject: update FW: 8-4205-001 Da wcpia stream review

Hi Bob,

We are processing the attached Well/Pump Installation application located on Hawaii (TMK: 323036018). Attached are 1) WCPIA and 3) TMK/stream map
Previously, you provide review for Wailuku and Waiakea stream – no impact but no review on the 'Alenaio Stream.

- Please take a look at **'Alenaio Stream, Wailuku river and Waiakea Stream**. See map attached and below.
- Attached is the well/pump application.
- Ground elevation is 140' (well). The proposed pump capacity is 45 gpm which is not required to do any pump test.



Mahalo,
Queenie Komori, P.E.
Dept. of Land & Natural Resources
Commission on Water Resource Management
1151 Punchbowl Street, Room 227

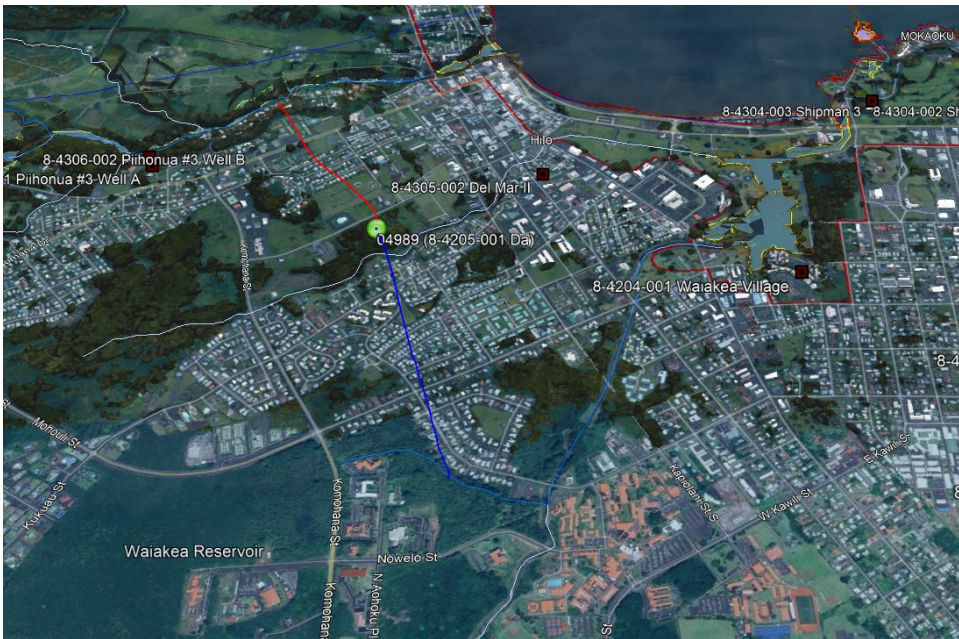
Honolulu, HI 96813
Cell (808) 636-8503

From: Komori, Queenie K
Sent: Tuesday, June 4, 2024 2:26 PM
To: Chenet, Robert F <Robert.F.Chenet@hawaii.gov>
Subject: 8-4205-001 Da wcpia stream review

We are processing the attached Well/Pump Installation application located on Hawaii (TMK: 323036018). Attached are 1) WCPIA and 3) TMK/stream map

Please provide review and comment of any well impact.

- The proposed well is located near Wailuku river (0.68 miles) and Waiakea Stream (about 0.82 mile). See map attached and below.
- Attached is the well/pump application.
- Ground elevation is 140' (well). The proposed pump capacity is 45 gpm which is not required to do any pump test.



Mahalo,
Queenie

WELL CONSTRUCTION PERMIT

Da Well, Well No. 8-4205-001

Note: This permit shall be prominently displayed at the construction site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Da Well (Well No. 8-4205-001) at TMK (3) 2-3-036:018, Island of Hawaii, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIIS - February 2004) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules (HAR).
2. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.
3. The well construction permit shall be for construction and testing of the well only. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the HWCPIIS (the latest pump test worksheet can be obtained by contacting Commission staff or at <http://files.hawaii.gov/dlnr/cwrm/forms/APTR.pdf>). The permittee shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson. No withdrawal of water shall be made for purposes other than testing without a Certificate of Pump Installation Completion. The permitted pump capacity described on the pump installation permit **may be reduced** in the event that the pump test does not support the capacity.
4. In basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson. If it can be shown that the well does not tap basal ground water then this condition may be waived after consultation with and acceptance by Commission staff. However, in no instance can the well be drilled deeper than one-half (1/2) of the theoretical thickness without Commission approval.
5. The permittee shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.
6. In the event that historically significant remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and immediately contact the Department of Land and Natural Resources' State Historic Preservation Division. Work may recommence only after written concurrence by the State Historic Preservation Division.
7. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of correlative water rights.
8. The Well Completion Report Part I shall be submitted to the Chairperson within thirty (30) days after completion of work (please contact staff or visit <http://files.hawaii.gov/dlnr/cwrm/forms/WCR1.pdf> for current form).
9. The permittee shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.
10. The well construction permit application and, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.
11. If the HWCPIIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.
12. Any variances from the HWCPIIS shall be approved by the Chairperson prior to invoking the variance.
13. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.
14. If the well is not to be used it must be properly capped. If the well is to be abandoned during the course of the project then the permittee must apply for a well abandonment permit in accordance with §13-168-12(f), HAR, prior to any well sealing or plugging work.
15. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.
16. This permit shall apply to the location shown on the application only. If the well is to be relocated, the permittee shall apply for a new well construction/pump installation permit in accordance with §13-168-12(f), HAR.
17. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval:

Dawn N.S. Chang, Chairperson

Expiration Date: **Two (2) years from approval date**

Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to \$5,000 per day starting from the permit date of approval.

Driller's Signature: _____ C-57 License #: C-28001 Date: _____

Printed Name: Derrick Moreira Firm or Title: Derrick's Well Drilling & Pump Services, LLC

Please sign both copies of this permit, return one copy to the Commission office, and retain the other for your records.

Attachment

PUMP INSTALLATION PERMIT
Da Well, Well No. 8-4205-001

Note: This permit shall be prominently displayed at the site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Da Well (Well No. 8-4205-001) at TMK (3) 2-3-036:018, Island of Hawaii, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules (HAR).
2. No withdrawal of water shall be made other than for testing until a Certificate of Pump Installation Completion has been issued by the Commission.
3. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.
4. The pump installation permit shall be for installation of a 45 gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.
5. A water-level measurement access shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels.
6. The permittee shall install an approved meter or other appropriate means for measuring and reporting withdrawals and appropriate devices or means for measuring chlorides and temperature at the well head.
7. Well Completion Report Part II shall be submitted to the Chairperson within thirty (30) days after completion of work (please contact staff or visit <http://files.hawaii.gov/dlnr/cwrm/forms/WCR2.pdf> for current form).
8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.
9. The pump installation permit application and, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.
10. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.
11. Any variances from the HWCPIS shall be approved by the Chairperson **prior** to invoking the variance.
12. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.
13. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.
14. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval:

Dawn N.S. Chang, Chairperson

Expiration Date: **Two (2) years from approval date**

Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to \$5,000 per day starting from the permit date of approval.

Installer's Signature: _____ C-57, C-57a, or A License #: C-28001 Date: _____

Printed Name: Derrick Moreira Firm or Title: Derrick's Well Drilling & Pump Services, LLC

Please sign both copies of this permit, return one copy to the Commission office, and retain the other for your records.

Attachments