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*Thursday, September 22, 2011*
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**COMMISSION ON WATER RESOURCE MANAGEMENT**

**ROUTE SLIP FOR PERMIT ISSUANCE 3/9/11**

**FROM:** RYAN

**DATE:** 1/26/12

**TO:**
- CHONG, R.
- DANBARA, S.
- FUJII, N.
- HARDY, R.
- HOAGBIN, S.
- ICE, C.
- IMATA, R.

**TO:**
- KIMURA, J.
- OHYE, L.
- TAM, B.
- UYENO, D.
- YODA, K.
- YOSHINAGA, M.

**FOR:**
- Approval
- Signature
- Information

**PLEASE:**
- See Me
- Review & Comment
- Take Action
- Type Draft
- Type Final
- File
- Xerox copies

**WELL NUMBER:** 3787-16

**WELL NAME:** Brawner

**application type** BOTH

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**proposed well section out issues?**

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**COMMENTS:**

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**NOTES:**

**DRILLER**

Derrick Moreira
Derrick's Drilling and Pump Service
28002 P.O. Box 2187
Keeau HI 96749

**phone**

**fax**

**cell**

**TMK**

**PUMP CAPACITY**

**WELL OWNER**

**LAND OWNER**

**COMMENT DEADLINE** 1/0/00

**90-DAY DEADLINE** 3/30/00

---

Susan,

Pls scan after signed so I can e-mail

That's Pumps Aug

Sue
Mr. Derrick Moreira  
Derrick's Well Drilling and Pump Service  
P.O. Box 2187  
Keeau, HI 96749

Dear Mr. Moreira:

Pump Installation Permit  
Brawner Well (Well No. 3787-16), Hawaiian Paradise Park, Island of Hawaii

Enclosed are two (2) originals of your approved Pump Installation Permit for the captioned well(s) that authorize permanent pump installation work for your well(s). As part of the Chairperson's approval, the following special conditions were added and are part of your permit under Permit Condition 14:

Special Conditions

1. If the elevation benchmark needs to be altered, the permittee, well operator, and/or well owner shall ensure that the benchmark is transferred (or the well resurveyed) and documentation of the new benchmark shall be submitted to the Commission within sixty (60) days after the pump is installed.

2. Attached for your information are copies of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities. Also, please contact the Noise Radiation and Indoor Air Quality Branch at [contact information] to check compliance with construction noise permit requirements for this project.

The permittee is responsible for all conditions of the permit. This includes ensuring the submission of a completed Well Completion Report Part II form within sixty (60) days after the pump installation work is completed. Be advised that you may be subject to fines of up to $5,000 per day for any violations of your permit conditions starting from the permit approval date.

Please sign both permit originals and return one copy to the Commission office for our files.

IMPORTANT - Pump installation shall not commence until a fully signed permit is returned to the Commission.

If you have any questions, please call Ryan Imata of the Commission staff at [contact information] or toll-free at [contact information] (Hawaii), extension 70255.

Sincerely,

WILLIAM J. AILA, JR.  
Chairperson

Enclosure

c: Jim Brawner (with applicable comments – DOH SDWB, WWB, CWB)
PUMP INSTALLATION PERMIT
Brawner Well, Well No. 3787-16

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 Brawner Well (Well No. 3787-16) at TMK (3) 1-5-060:051, 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 15 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 sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dnr/cwrm/info_permits.htm 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: January 26, 2012
Expiration Date: January 26, 2014

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 and Pump Service

Please sign both copies of this permit, return one copy to the Commission office, and retain the other for your records.
Attachments
Mr. Derrick Moreira  
Derrick's Well Drilling and Pump Service  
P.O. Box 2187  
Keeau, HI 96749  

Dear Mr. Moreira:

Well Construction Permit  
Brawner Well (Well No. 3787-16), Hawaiian Paradise Park, Island of Hawaii  

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) that authorize well construction activities but excludes installation work for a permanent pump. As part of the Chairperson's approval, the following special conditions were added and are part of your permit under Permit Condition 17:

**Special Conditions**

1. Attached for your information are copies of the Department of Health’s (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities. Also, please contact the Noise Radiation and Indoor Air Quality Branch at [Contact Information] to check compliance with construction noise permit requirements for this project.

Please refer to the Permit Processes Worksheet (transmitted with your acknowledgement letter) for further information regarding the process of drilling a well and installing a pump.

No withdrawal of water shall be made other than for testing purposes until a certificate of pump installation completion has been issued by the Commission.

Please sign both permit originals and return one copy to the Commission office for our files. For copies of the aquifer pump test worksheet, please call staff or visit [Website URL].

**IMPORTANT** - Drilling work shall not commence until a fully signed permit is returned to the Commission. The permit shall be prominently displayed or made available at the construction site during construction. Be advised that you may be subject to fines of up to $5,000 per day for any violations of your permit conditions starting from the permit approval date.

If you have any questions, please call Ryan Imata of the Commission staff at [Contact Information] or toll-free at [Contact Information] (Hawaii), [Contact Information] (Kauai), 984-2400 (Maui), or [Contact Information] (Lanai & Molokai), extension 70255.

Sincerely,

WILLIAM J. AILA, JR.  
Chairperson  

Enclosures  
c: Jim Brawner (with applicable comments – DOH SDWB, WWB, CWB)
WELL CONSTRUCTION PERMIT

Brawner Well, Well No. 3787-16

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 Brawner Well (Well No. 3787-16) at TMK (3) 1-5-060:051, 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 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 HWCPIS (the latest pump test worksheet can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrm/resources_permits.htm). 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 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 sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dlnr/cwrm/resources_permits.htm 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 HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

12. Any variances from the HWCPIS 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(1), 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(t), HAR.

17. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: January 26, 2012
Expiration Date: January 26, 2014

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 and Pump Service

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

Attachment
## Well Check Program
4/1/04 - Revised for update to Well Standards (February 2004)

### Data Input

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### Results

#### Well Depth
- Theoretical Thickness of Aquifer: 123
- 1/4 Aquifer Thickness: 30.75
- **Depth of Well below Sea Level**: -10 okay

#### Well Casing
- Minimum Wall Thickness Material: pvc plastic
- Minimum Thickness per standards: no requirement
- **Wall Thickness Provided**: 0.28 no standard
- Minimum Length of Solid Casing: 31.5
- **Length of solid casing Provided**: 38 okay
- **Casing Material**: Schedule 40 in compliance
- **(for pvc only - check for 200' limit)** okay

#### Annular Space
- **Depth of Grouting**: 24.5
- **Depth of Grouting provided**: 35 okay
- Minimum Annular Space required: 2
- **Thickness of Annular Space**: 3 okay
Ms. Bobby Jean Leithead Todd  
Planning Director  
Planning Department  
County of Hawaii  
101 Aupuni Street, Suite 3  
Hilo, HI 96720

Dear Ms. Todd:

Special Management Area Use Permit Requirements for  
Well Construction/Pump Installation Permit Application  
Brawner Well (Well No. 3787-16)

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 with regard to the SMA permitting requirements specific to your division. Please respond by returning this cover memo form by January 16, 2012. If we do not receive comments or a request for additional review time by this date, we will assume 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 Ryan Imata of the Commission staff at ____________

Sincerely,

WILLIAM J. AILA, JR.  
Chairperson

RESPONSE:

[ ] This well project [ ] requires [ ] does not require a SMA. If a SMA is required it [ ] has [ ] has not been approved and [ ] is [ ] is not currently active.

[ ] Other relevant rules/regulations, information, or recommendations are attached.

[ ] No objections

[ ] Other comments:

Contact Person: Esther Imamura  
Phone: (808) 961-8139

Signed:  
Date: 1/5/12
TO: Honorable Loretta J. Fuddy, A.C.S.W., M.P.H., Director
Attention: Acting Chief, Wastewater Branch
Joanna L. Seto, Chief, Safe Drinking Water Branch
Alec Wong, Chief, Clean Water Branch
Dr. Keith Kawaoka, Office of Hazard Evaluation and Emergency Response

FROM: William J. Aila, Jr., Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Brawner Well (Well No. 3787-16) TMK (3) 1-5-060:051
Well address: Hawaiian Paradise Park

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 January 16, 2012. 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 Ryan Imata of the Commission staff at [BLANK]

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 owner should test for bacteriological and chemical presence before initiating such use and routinely monitor the water quality thereafter. However, if future plans 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 apertures 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 [a] 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

- No comments/objections

Contact Person: [NAME] Phone: 568-4253
Signed: [SIGNATURE] Date: 1/5/12
Safe Drinking Water Branch Engineering Section

See attached private water wells information sheet.

Underground Injection Control (UIC)

In general, a shallow well, or a well that recharges quickly from local rainfall, should not be used as a drinking water source because such a well increases the risk of having unsatisfactory groundwater quality that when consumed may compromise health. Factors that directly influence a well's groundwater quality include wastewater disposal systems (cesspools, septic systems, drainage wells), lawn/garden/crop-growing activities, and even the proximity to the ocean where salt water intrusion may occur.

Well water quality should be initially and periodically tested for its acceptable and intended use, especially if for human consumption. Water quality should not be presumed acceptable and unchanging. Land-based activities around the well and within the well's recharge area may, over time, have an unacceptable effect on the well's water quality. Well construction materials and related equipment could also affect water quality.

Questions about UIC may be directed to Chauncey Hew at [红acted]
**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/safewater/privatewells/faq.html](http://www.epa.gov/safewater/privatewells/faq.html)

**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/safewater/privatewells/whatyoucando.html](http://www.epa.gov/safewater/privatewells/whatyoucando.html) for more helpful 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 also be found at the DOH website [www.hawaii.gov/health/environmental/water/sdwb/conmaps/pdf/conmaps05.pdf](http://www.hawaii.gov/health/environmental/water/sdwb/conmaps/pdf/conmaps05.pdf)

**LABORATORIES**

Local commercial laboratories can be found in the yellow pages of the telephone book under “Laboratories, Analytical.” 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. Just be sure to ask the lab to use EPA approved methods for drinking water analysis. A list of labs certified or approved by the Department of Health can be found at [www.hawaii.gov/health/environmental/water/sdwb/sdwb/pdf/Testing%20Labs.pdf](http://www.hawaii.gov/health/environmental/water/sdwb/sdwb/pdf/Testing%20Labs.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](http://www.epa.gov/safewater/mcl.html)) and State ([www.hawaii.gov/health/environmental/water/sdwb/sdwb/pdf/State%20MCL.pdf](http://www.hawaii.gov/health/environmental/water/sdwb/sdwb/pdf/State%20MCL.pdf)) drinking water standards. Where your test results are greater than the State or Federal maximum contaminant levels, your well water should be considered as **unsafe** for consumption.
December 15, 2011

TO: Honorable Loretta J. Fuddy, A.C.S.W., M.P.H., Director
Department of Health
Attention: Acting Chief, Wastewater Branch
Joanna L. Seto, Chief, Safe Drinking Water Branch
Alec Wong, Chief, Clean Water Branch
Dr. Keith Kawaoka, Office of Hazard Evaluation and Emergency Response

FROM: William J. Aila, Jr., Chairperson
Commission on Water Resource Management

SUBJECT: Brawner Well (Well No. 3787-16) TMK (3) 1-5-060:051
Well address: Hawaiian Paradise Park

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 January 16, 2012. 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 Ryan Imata of the Commission staff at [redacted]

Rkt:
Attachment(s)

RESPONSE:

[1] 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.

[2] This well does not qualify as a source serving a public water system (serve less than 25 people or 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.

[3] 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 epigons with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.

[4] It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.

[5] For the applicant’s information, a source of possible wastewater contamination [redacted] is not located near the proposed well site (information attached).


[7] Other relevant DOH rules/regulations, information, or recommendations are attached

One-Stop database screen

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.

[8] No comments/objections

Contact Person: Eng. in Hilo

Signed: [redacted] Date: 12/21/2011 1D 853
Site Plan for Septic System

For James C. Brawner

TMIK (5) 1-5-080:051

Christopher Garland, P.E.
Registered Professional Civil Engineer
Computer-Aided Drafting and Design
P.O. Box 2168, Valparaiso, IN 46385
800-755-8857

Copyright and design are property of Christopher Garland, P.E. and may not be reproduced without permission.

Scale: 1" = 30'
Date: 4/20/11
DWG NAME:
Page 1 of 1
Subject: National Pollutant Discharge Elimination System Regulations for the Well Construction/Pump Installation Permit Application(s) for the Subject Well(s)

The Department of Health, Clean Water Branch (CWB) has the following comments for the subject well:

1. For Well-Drilling Activities

Any discharge to State waters of treated process wastewater effluent associated with well drilling activities is regulated by Hawaii Administrative Rules (HAR), Title 11, Chapter 55, Appendix I, effective October 22, 2007, and compiled June 15, 2009. Treated process wastewater effluent covered by this general permit includes well drilling slurries, lubricating fluids wastewater, and well purge wastewater. This general permit does not cover well pump testing. The applicable Notice of Intent (NOI) Forms and filing fee shall be submitted at least 30 calendar days before the start of discharge to the:

Department of Health
Clean Water Branch
919 Ala Moana Boulevard, Room 301
Honolulu, Hawaii 96814-4920

The CWB-NOI Forms are available online at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html. Inquiries may be directed to the CWB at [phone number] or by fax [fax number].

2. 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 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, best management practices shall be implemented to prevent the discharge from collecting sediments and other pollutants prior to entering the storm drain.

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

By HAR, Title 11, Chapter 55, Appendix C, effective October 22, 2007, and compiled June 15, 2009, an NPDES permit or Notice of General Permit Coverage 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. An NOI (see Comment No. 1, above) shall be submitted 30 calendar days before the start of construction activities.
COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR NEW APPLICATIONS

FROM: RYAN
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TO:
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TO: INIT. FUJII, N.
TO: NAKAMA, L.
TO: UYENO, D.
TO: YODA, K.
TO: YOSHINAGA, M.
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3 Approval
3 Signature
3 Information

PLEASE:
1 See Me
1 Review & Comment
1 Take Action
1 Type Draft acknow letter
2 Type Final, label file folder, update People.db
4 File & Input Issue Date
Xerox
copies

WELL NUMBER 3787 - 16
WELL NAME  Brawner
WUP Number na

WELL CONSTRUCTION PUMP INSTALLATION WUP
WUP Transfer DEC-ADM97-A1 Modification

ATTACHMENTS FOR APPLICATION PROCESSING - Both applicant & staff generated
1 TRANSL. LETTER
2 PERMIT PROCESS TABLE
3 CWRM MAPS  making 1-mile radius and penciling in on hanging maps
4 APPL. FORM (11 COPIES)
5 USGS MAPS (11 COPIES)
6 TAX MAPS (11 COPIES)
7 PARCEL OWNER VERIF.
8 CONTRACTOR VERIF.
9 ALL INFO FILLED IN
10 BACKGROUND CHECK
11 $25 FEE DEPOSIT SLIP
12 DHP/CDUP/SMA pre-screen
13 EA 343 5(a) triggers?

FOLDER:
MADE NEW FILE FOLDER, ATTACHED
FILE FOLDER ALREADY MADE, IN FILE CABINET

INCOMPLETE ACTION DATES:
DATE ACTION

19°37'0.5"
154°57'1.5"

"in SMA, not in CO"
(SMA map printout http://gis.hicentral.com/website/parcelzoning/viewer.htm. or INGRID’S SMA/CD MAP)
(LUC map printout http://luc.state.hi.us/luc_maps.htm., or INGRID’S SMA/CD MAP)

YES - trigger identified is:
(if triggered, exemption analysis memo and/or OEQC Environmental Notice Documents must be attached
before accepting)
December 15, 2011

Mr. Derrick Moreira
Derrick’s Well Drilling and Pump Service
P.O. Box 2187
Keeau, HI 96749

Dear Mr. Moreira:

Well Construction/Pump Installation Permit Application for
Well No. 3787-16, Hawaiian Paradise Park, Island of Hawaii

On December 9, 2011, the Commission acknowledged your completed Well Construction/Pump Installation permit application and filing fee for the Brawner Well (Well No. 3787-16). Your application will be processed within ninety (90) days from this date.

The attached table describes the process, responsible parties, and deadline requirements for drilling or modifying a well and installing, modifying, or replacing a pump.

By this acceptance letter, we are also notifying the well operator/landowner that no water may be pumped other than for testing until a certificate of well construction/pump installation completion letter is issued to the well operator and landowner.

The permitted pump capacity described on the pump installation permit may be reduced if the pump test does not support the capacity. No certificate of pump installation will be issued until the Commission determines that the pump capacity will not have adverse effects on the aquifer, other nearby wells, or streams. Thus, you may need to remove the pump and install a smaller pump if the Commission decides a smaller pump is required to protect water resources before you can withdraw water for purposes other than testing.

If you have any questions about your permit application, please contact Ryan Imata of the Commission staff at [redacted] or toll-free at [redacted] (Hawaii), [redacted] (Kauai), [redacted] (Maui), or [redacted] (Lanai & Molokai) extension 70255.

Sincerely,

WILLIAM M. TAM
Deputy Director

RI:ss
Attachment
c: Jim Brawner
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

December 15, 2011

TO: Honorable Loretta J. Fuddy, A.C.S.W., M.P.H., Director
Department of Health
Attention: Acting Chief, Wastewater Branch
Joanna L. Seto, Chief, Safe Drinking Water Branch
Alec Wong, Chief, Clean Water Branch
Dr. Keith Kawaoka, Office of Hazard Evaluation and Emergency Response

FROM: William J. Aila, Jr., Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Brawner Well (Well No. 3787-16) TMK (3) 1-5-060:051
Well address: Hawaiian Paradise Park

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 January 16, 2012. 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 Ryan Imata of the Commission staff at [___] [___]

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 II, 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 [___] 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.

[ ] No comments/objections

Contact Person: [___] Phone: [___]

Signed: [___] Date: [___]
December 15, 2011

TO: Russell Tsuji, Administrator
Land Division

FROM: William M. Tam, Deputy Director
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Brawner Well (Well No. 3787-16) TMK (3) 1-5-060:051

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 with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by January 16, 2012. If we do not receive comments or a request for additional review time by this date, we will assume 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 Ryan Imata of the Commission staff at

attachment

RESPONSE:
[ ] A water lease/permit is required of this applicant and an application for such will be requested by our division.

[ ] A water lease/permit is not required of this applicant.

[ ] A water lease/permit has been obtained by the applicant through lease no. _____________________.

[ ] Other relevant Land Division rules/regulations, information, or recommendations are attached.

[ ] No objections

[ ] Other comments:

Contact Person: ___________________________ Phone: ______________

Signed: ___________________________ Date: ______________
TO:     Dr. Puaalaokalani Aiu, Administrator  
        Historic Preservation  
        Attn: Theresa Donham  
FROM:  William M. Tam, Deputy Director  
        Commission on Water Resource Management  
SUBJECT:  Well Construction/Pump Installation Permit Application  
        Brawner Well (Well No. 3787-16) TMK: (3) 1-5-060:051

December 15, 2011

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 with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by January 16, 2012. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application or request additional review time, please contact Ryan Imata of the Commission staff at [ ] If you require additional information regarding specific information that can be provided by the applicant, please contact the applicant directly at the contact information provided on the application form.

RI:ss
Attachment(s)

RESPONSE:

[ ] This is a [ ] public (county or state) project [ ] private project and [ ] will [ ] may disturb historic sites.

[ ] We concur that the work described under this permit will not disturb historic sites.

[ ] We do not concur that the work described under this permit will not disturb historic sites. We require the following for our concurrence:

Contact Person: ____________________________ Phone: ____________________________

Signed: ____________________________ Date: ____________________________
December 15, 2011

Ms. Bobby Jean Leithead Todd
Planning Director
Planning Department
County of Hawaii
101 Aupuni Street, Suite 3
Hilo, HI 96720

Dear Ms. Todd:

Special Management Area Use Permit Requirements for
Well Construction/Pump Installation Permit Application
Brawner Well (Well No. 3787-16)

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 with regard to the SMA permitting requirements specific to your division. Please respond by returning this cover memo form by January 16, 2012. If we do not receive comments or a request for additional review time by this date, we will assume 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 Ryan Imata of the Commission staff at [redacted].

Sincerely,

WILLIAM J. AILA, JR.
Chairperson

RESPONSE:

[ ] This well project [ ] requires [ ] does not require a SMA. If a SMA is required it [ ] has [ ] has not been approved and [ ] is [ ] is not currently active.

[ ] Other relevant rules/regulations, information, or recommendations are attached.

[ ] No objections

[ ] Other comments:

Contact Person: __________________________ Phone: _______

Signed: __________________________ Date: __________
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This information has been supplied by third parties and has not been independently verified by Hawaii Information Service and is, therefore, not guaranteed. Copyright ©12/13/2011
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<td>P O BOX 2187 KEAAU HI 96749</td>
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Click here to enter search criteria for prior complaints history ->

For prior complaints and disciplinary history, contact licensing and business information center at [contact information]

License information on this site reflects information in the Professional and Vocational Licensing Division as of December 13, 2011; however, applications and forms are subject to standard processing time, and the information here does not reflect pending changes which are being reviewed. The site is updated daily, Monday through Friday.
Department of Land & Natural Resources

Application Fee for Brawner Well

Bank of Hawaii #9474  Brawner Well

9/13/2011  4228
25.00

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**TOTAL** $ 50.00

**REMARKS:**
- LINE (1) Brawner Well
- LINE (2) Lee’s Well
- LINE (3)
- LINE (4)
- LINE (5)
- LINE (6)
- LINE (7)
- LINE (8)
- LINE (9)
- LINE (10)
**WELL LOCATION INFORMATION**

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<th>4. TNK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brawner Well</td>
<td>Hawaii</td>
<td>Brawner Well</td>
<td>Hawaii</td>
<td></td>
</tr>
</tbody>
</table>

The following must be attached before the application is accepted as complete:

- Portion of 7.5-Minutes USGS topographic map (scale 1:24,000) with well location labeled and include the name of the quadrangle.
- Property tax map, showing well location referenced to established property boundaries.
- Photograph of the proposed well site.
- A schematic diagram showing the well site, access road and proposed well infrastructure.
- For dug wells, attach a grading plan with cross section profiles showing existing and finish grades.

**PROPOSED WELL CONSTRUCTION**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>G) Construct New Well</td>
<td>Drilled</td>
<td>G) Install New Pump</td>
<td>15</td>
<td>Flowmeter</td>
</tr>
<tr>
<td>G) Modify Existing Well</td>
<td>Dog</td>
<td>G) Replace Pump</td>
<td></td>
<td>Other (explain)</td>
</tr>
<tr>
<td>G) Abandon/Seal Well</td>
<td>Shaft</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G) Tunnel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PROPOSED PUMP INSTALLATION**

<table>
<thead>
<tr>
<th>9. Is this well part of a battery of wells?</th>
<th>14. Proposed Surveyor name and license number (a surveyor is required for all Well Construction Permits and may be required for some Pump Installation Permits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>NA</td>
</tr>
</tbody>
</table>

**PROPOSED USE**

- 15. Municipal (water systems serving greater than 25 individuals or 15 service connections)
- 16. Domestic (Number of units to be served:)
- 17. Industrial (describe)
- 18. Irrigation (describe crops and no. of acres)
- 19. Military (describe)
- 20. Other (describe)

**OTHER LEGAL REQUIREMENTS**

If required, items 21. and 22. must be obtained before the Commission can legally issue a permit:

- 21. Conservation District Use Permit (CDUP) (a) Well is in a Conservation District: [ ] Required, CDUP # [ ] date approved (b) Not Required, (attach documentation from CDU) (c) I have not consulted with CDU about whether or not a CDUP is required.
- 22. Special Management Area Permit (SMA) (a) Required, SMA # [ ] date approved (b) Not Required (attach documentation from applicable County agency) (c) I have not consulted with county about whether or not an SMA Permit is required.
- 23. State Historic Preservation Division (SHPD) (a) I have consulted with the SHPD regarding potential impacts of well construction activities on historic sites.
- 24. Chapter 343 (a) I have not consulted with the SHPD regarding potential impacts of well construction activities on historic sites.

Additional remarks, explanations, etc. (attach additional sheet if more space is needed)

**STATE OF HAWAI’I**

**DEPARTMENT OF LAND AND NATURAL RESOURCES**

**COMMISSION ON WATER RESOURCE MANAGEMENT**

**APPLICATION FOR A WELL CONSTRUCTION / PUMP INSTALLATION PERMIT**

**For Official Use Only:**

2011 SEP 20 PM: 12:54

[Signature]

**ADDRESS**

P.O. Box 2187, Keaau, Hawaii 96749

**PHONE**

982-7627

**FAX**

982-7698

**E-MAIL**

moreira_ds@yahoo.com

**APPLICATION FOR**

A WELL CONSTRUCTION [ ] PUMP INSTALLATION [ ]

**FOR**

Well Operator's Name/Company

[ ] Well Construction Permit [ ] Install/Replace Pump Permit

**FOR**

Well Operator's Contact

[ ] New Well [ ] Abandon/Seal Well

**ADDRESS**

Well Operator's Mailing Address

13-4966 Moku Street

Pahoa, Hawaii 96778

**PHONE**

333-5220

**FAX**

333-5220

**E-MAIL**

Well Operator's E-mail

[ ] New Well [ ] Abandon/Seal Well

**ADDRESS**

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13-4966 Moku Street

Pahoa, Hawaii 96778

**PHONE**

333-5220

**FAX**

333-5220

**E-MAIL**

Well Operator's E-mail

**For assistance, call the Regulation Branch at 1-808-586-8200. For further information and updates to this application form, visit http://www.hawaii.gov/dlnr/cwrm.**
**PROPOSED WELL SECTION** *(Please attach schematic if different from diagram provided below)*

<table>
<thead>
<tr>
<th>Component</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hole Diameter:</td>
<td>12 in.</td>
</tr>
<tr>
<td>Elevation at top of casing</td>
<td>39 ft., msl*</td>
</tr>
<tr>
<td>Ground Elevation</td>
<td>38 ft., msl*</td>
</tr>
<tr>
<td>Minimum of 2' Radius &amp; 4&quot; Thick Concrete Pad</td>
<td>to contain benchmark surveyed to nearest 0.01 ft.</td>
</tr>
<tr>
<td>Grouting method:</td>
<td>- Positive displacement</td>
</tr>
<tr>
<td>- Other</td>
<td></td>
</tr>
<tr>
<td>Annular space between hole and casing</td>
<td>(1.5&quot; for positive displacement, 3&quot; for other methods): 3 in.</td>
</tr>
<tr>
<td>Rock or Gravel Packing:</td>
<td></td>
</tr>
<tr>
<td>Total Depth</td>
<td>46 ft.</td>
</tr>
<tr>
<td>Total Length</td>
<td>38 ft.</td>
</tr>
<tr>
<td>Nominal Diameter</td>
<td>6 in.</td>
</tr>
<tr>
<td>Wall Thickness</td>
<td>280 in.</td>
</tr>
<tr>
<td>Bottom Elevation</td>
<td>0 ft., msl*</td>
</tr>
<tr>
<td>Open Casing:</td>
<td>- Perforated</td>
</tr>
<tr>
<td>- Screen</td>
<td></td>
</tr>
<tr>
<td>Nominal Diameter</td>
<td>10 in.</td>
</tr>
<tr>
<td>Wall Thickness</td>
<td>280 in.</td>
</tr>
<tr>
<td>Bottom Elevation</td>
<td>-10 ft., msl*</td>
</tr>
<tr>
<td>Open Hole:</td>
<td>Length: NA ft.</td>
</tr>
<tr>
<td>Diameter:</td>
<td>in.</td>
</tr>
<tr>
<td>Bottom Elevation</td>
<td>ft., msl*</td>
</tr>
</tbody>
</table>

*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,

\[
\text{Bottom Elevation of Well Limit} = \left(\frac{\text{Ground Elevation}}{4} - \frac{\text{Water Level Elev.}}{2}\right)
\]

**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 D5224): (check one):
  - Schedule 40
  - Schedule 80
  - Schedule 120
- **Thermoset Plastic:** (check one)
  - Filament Wound Resin Pipe conforming to ASTM D2998
  - Centrifugally Cast Resin 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
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  - Schedule 80
  - Schedule 120
- **Thermoset Plastic:** (check one)
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  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing conforming to ASTM D3296
  - FEP Fluorocarbon Tubing conforming to ASTM D3296

**HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS**

To ensure that your as-built is in compliance with applicable standards.

**Grouting method:**
- Positive displacement
- Other

**Annular space between hole and casing:** (1.5" for positive displacement, 3" for other methods): 3 in.

**Rock or Gravel Packing:**
- Crushed Basalt
- Rounded Gravel

**Total Depth:** 46 ft.

**Material:**
- Casing Material:
  - Schedule 40
  - Grade B
  - ASTM D2998
  - ASTM D3517
- Rock or Gravel Packing:
  - Crushed Basalt
  - Rounded Gravel

**Estimated Water Level Elevation:** 3 ft., msl*

**Minimum of 2' Radius & 4" Thick Concrete Pad** (to containbenchmark surveyed to nearest 0.01 ft.)

**Solid Casing:** (≥ 90% x (Ground Elev.-Water Level Elev))
- Total Length: 38 ft.
- Nominal Diameter: 6 in.
- Wall Thickness: 280 in.
- Bottom Elevation: 0 ft., msl*

**Open Casing:**
- Total Length: 10 ft.
- Nominal Diameter: 6 in.
- Wall Thickness: 280 in.
- Bottom Elevation: -10 ft., msl*

**note:** Neither bentonite nor mud should be used in saturated zone during drilling

**Open Hole:**
- Length: NA ft.
- Diameter: in.
- Bottom Elevation: ft., msl*

* 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.

Example: Estimated + 2 ft. Water Level Elev. → Bottom Elevation of Well Limit = (Water Elev. - 4 x Water Level Elev.)

\[
\text{Example: Estimated + 2 ft. Water Level Elev.} = \left(\frac{\text{Ground Elevation}}{4} - \frac{\text{Water Level Elev.}}{2}\right)
\]

\[
\text{Example: Estimated + 2 ft. Water Level Elev.} = \left(\frac{38}{4} - \frac{18.5}{2}\right)
\]
# Application for a Well Construction / Pump Installation Permit

## WELL LOCATION INFORMATION

1. **STATE WELL NO.** (if already assigned): 
2. **WELL NAME**
   - Brawner Well
3. **ISLAND**
   - Hawaii
4. **YMK**
   - 1
5. **zone**
   - 5
6. **sec**
   - 060
7. **pit**
   - 051

The following must be attached before this application is accepted as complete:
- Portion of 7.5-Minute Series USGS topographic map (scale 1:24,000) with well location labeled and include the name of the quadrangle
- Property tax map, showing well location referenced to established property boundaries
- Photograph of the proposed well site
- A schematic diagram showing the well site, access road and proposed well infrastructure
- For new wells, attach a grading plan with cross section profiles showing existing and finish grades

## PROPOSED WELL CONSTRUCTION

<table>
<thead>
<tr>
<th>Proposed Work</th>
<th>Construction Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Construct New Well</td>
<td>Drilled</td>
</tr>
<tr>
<td>8. Construction Type</td>
<td>Dig</td>
</tr>
<tr>
<td>10. Proposed Work</td>
<td>Replace Pump</td>
</tr>
</tbody>
</table>

## PROPOSED PUMP INSTALLATION

<table>
<thead>
<tr>
<th>Proposed Pump</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Proposed Pump Capacity, gpm (gallons per minute)</td>
</tr>
<tr>
<td>13. Method of flow measurement</td>
</tr>
</tbody>
</table>

## PROPOSED USE

- 15. Municipal (water systems serving greater than 25 individuals or 15 service connections)
- 16. Domestic Number of units to be served: 1
- 17. Industrial (describe)
- 18. Irrigation (describe crop and no. of acres)
- 19. Military (describe)
- 20. Other (describe)

## OTHER LEGAL REQUIREMENTS

If required, Items 21. and 22. must be obtained before the Commission can legally issue a permit:

- 21. Conservation District Use Permit (CDUP)
  - Well is in Conservation District
  - Required, CDUP 
  - Date of approval
  - Not Required (attach documentation from OCCL)
  - I have not checked with OCCL about whether or not a CDUP is required.

- 22. Special Management Area Permit (SMA P)
  - Required, SMA 
  - Date approved
  - Not Required (attach documentation from applicable County agency)
  - I have not checked with the county about whether or not an SMA Permit is required.

- 23. State Historic Preservation Division (SHPD) of the Department of Land and Natural Resources
  - I have consulted with the SHPD regarding potential impacts of well construction activities on historic sites.
  - I have not consulted with the SHPD regarding potential impacts of well construction activities on historic sites.

## Chapter 343

- An Environmental Assessment was completed, and
- An Environmental Statement was required and has been accepted (attach letter of acceptance). Publication date in The Environmental Notice:

## Water Use Permit No. (if applicable): NA

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 and abandonment report within 60 days after the completion date of the permitted work; 3) in the event that the application is not completed correctly, any permit may be suspended until the item is brought to compliance, and any work done while the permit is in suspension may result in fines of up to $5000/day.

## Signature

**Print Name**: Derrick Moreira
**Date**: 2011-08-10

**Licensee business name**: C-57 License No.
**Certificate number**: C-57C-57A License No.

**Business address**: P.O. Box 2187 Keaau, Hawaii 96749
**Phone**: 982-7698
**Fax**: 982-7698
**E-mail**: moreira_ds@yahoo.com

**Signature**: Derrick Moreira
**Print Date**: 9/9/11

**Address**: P.O. Box 2187 Keaau, Hawaii 96749
**Phone**: 982-7698
**Fax**: 982-7698
**E-mail**: moreira_ds@yahoo.com

**WCP Application Form**: 08/31/2010
PROPOSED WELL SECTION

(Please attach schematic if different from diagram provided below)

- 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 basalt Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or, Bottom Elevation of Well Limit = \( \frac{41 \times \text{Water Level Elev}}{4} \).

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

### Solid Casing Material:

- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
- Stainless Steel: (check one): □ ASTM A409 (production wells) □ ASTM A519 (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 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
- Stainless Steel: (check one): □ ASTM A409 (production wells) □ ASTM A519 (monitor wells)
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