**CHECKLIST**

**WELL CONSTRUCTION PERMIT**

**PUMP INSTALLATION PERMITS**

**WELL NAME or LOCATION:** Waiheka 670  
**ISLAND:** Maui

**WELL NUMBER:** 4125-01,02  
**Tax Map Key:** 2-1-08:56

**OWNER/OPERATOR:**
- Firm Name: Palauan Bay Partners
- Contact Person: Peter Nottage
- Address: 841 Bishop St #2300 Honolulu, HI 96813
- Phone: 539-9682

**LANDOWNER:**
- Firm Name: Same
- Contact Person: Address

**Date application received:** 8/10/92  
**Date acknowledged receipt/request more info:** 7/1/92

**Suspense date (90 days):**

**Date filing fee deposited:**

**Application sent to following:**
- Dept. of Hawn Home Lands
- Dept. of Health
- Office of Hawn. Affairs
- State Hist Pres Div
- Dept/Bd of Water Supply
- Sierra Club L. D. F.
- Koolauena NB #28 (Oahu)
- Dept/Pub. Wrks (Hawaii)
- Additional List (Maui):
  - Eric Hirano/Lynn
  - Waiheka Resort Company, Ltd
  - James V. Williamson

**Date agenda due:** 30 SEP 92  
**Date submittal due:** 30 SEP 92  
**Date submittal sent to applicant:**

**Date application approved or disapproved:** 14 OCT 92  
**Date applicant notified of decision:**

**REMARKS:**

**DID NOT PENETRATE**

**IN WELL LOG:**

**Ed 8-11-72**
WELL CONSTRUCTION PERMIT

for

Wailea - VMS 670 Wells
Well Nos. 4125-01,02
Wailea, Maui

TO: VMS Maui 670
34 N. Church Street, Suite 302
Wailuku, Hawaii 96793

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct and test Well Nos. 4125-01,02 for golf course irrigation within Tax Map Key: 2-1-08:56 is approved subject to the following conditions:

1. The Division of Water and Land Development (DOWALD), Geology-Hydrology Section, shall be notified at 548-7619, before any work covered by this permit commences.

2. The permit shall be for construction and testing only. A sustained rate pumping test for a minimum of four days with hourly or continuous monitoring of chloride content shall be conducted. Also, the five wells downgradient shall be monitored during the testing. No permanent pumps may be installed and no water used from the wells without the necessary pump installation permits.

3. Following drilling and testing of the wells, the applicant shall address the long-term effects of pumping the proposed wells on the existing wells in the vicinity.

4. The applicant and Wailea Resort Company, Ltd., shall conduct a study to coordinate well locations, pumping rates, pumping patterns, and quantities pumped, to minimize possible negative impacts of the proposed wells on existing wells in the area.

5. The following shall be submitted to DOWALD, P.O. Box 373, Honolulu, Hawaii 96809 within 30 days after completion of the wells:
a. Well Completion Report.

b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.

c. As-built sectional drawings of the wells.

d. Plot plan and map showing the exact locations of the wells.

e. Complete pumping test record; including time, pumping rate, drawdown, chloride content, and water quality data.

6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. The permit may be revoked if work is not started within six months of date of issuance or if work is suspended or abandoned for six months. The work shall be completed within two years of the date of issuance.

MAY 25 1989
Date of Issuance

WILLIAM W. PATY

cc: USGS
Department of Health
Drinking Water Program
Ground Water Protection Program
Maui Department of Water Supply
Roscoe Moss Co.
September 11, 1991

Peter Nottage
McCormack Properties, Ltd.
841 Davies Pacific Center
Penthouse
Honolulu, HI 96813

Dear Peter:

Thank you for sending us a copy of John Mink’s proposed scope of work, dated August 20, 1991. We are generally in support of the proposed scope, and would like to offer the following comments:

1. Our greatest concern is item number seven, dealing with mitigation of any short or long term detrimental effects on any existing uses of the aquifer. It would seem prudent to have programs in place capable of addressing those detrimental effects prior to substantial pumping upgradient. This area of the proposed scope will need to be explored and developed. Designed pumping and distribution capacity will also need to address mitigation.

2. The proposal addresses primarily the relationship between Palauea Partners (McCormack Properties, Ltd.) and Wailea. While Wailea may be the most likely to be impacted, it would probably be appropriate to include other existing users of the aquifer as well such as Seibu. Our testing and monitoring over the years does not preclude the possibility of a more lateral impact to the north or south, directly or indirectly.

3. Does item number three address data you are currently collecting? What sources of "available data" have been identified? Has compensation for obtaining existing data from others been discussed or considered?
4. We encourage you to implement Mr. Mink's proposal. We would suggest it is advisable for McCormack to establish their own independent monitoring program, rather than rely on the data being collected by Wailea's staff.

We look forward to working with your professional consultants on a long term basis and the continuation of our discussions.

Sincerely,

Clark K. Champion
Director, Property Management

CKC:ch

cc: Manabu Tagomori
    Howard Nakamura
    Roy Figueiroa
    Steve Bowles
    Bob Akinaka
Pumping from wells in the Wailea 670 land parcel approximately 6300 feet inland of the coast may ultimately affect the salinity of groundwater now being pumped by wells used to irrigate the lower Wailea golf courses. The lower Wailea wells are located along a line parallel to and about 2500 feet inland of the coast line, and approximately 3800 feet down the groundwater gradient from the Wailea 670 wells (see attached map). A total of 9 active wells are used to irrigate the lower Wailea golf courses. These wells are spaced over a distance of 14,000 feet parallel to the coast. The Wailea number and State number for each well are as follows.

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<thead>
<tr>
<th>Wailea Well No.</th>
<th>State Well No.</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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</tr>
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<td>3</td>
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<td>10</td>
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</tr>
</tbody>
</table>

The Wailea 670 wells are numbered 4225-01 (Wailea 670 no. 1) and 4225-02 (Wailea 670 no. 2).

Of the 9 lower Wailea wells, those down gradient of the Wailea 670 wells over a reach of 1 mile (1/2 mile on either side of a line drawn from the 670 wells perpendicular to the coast) are Wells 5, 2, 3 and 1. Wells 3 and 5 are at the outer limit of the reach, and Well 1 is down gradient of Well 2 and therefore affectable by pumping at that well. The well most likely to be influenced by pumping of the 670 wells is Well 2.

The Wailea wells yield brackish water adequate for irrigation, but pumping operations apparently must be carefully controlled. If the wells (or some of the wells) are pumped too long, the salinity of the pumpage rises to exceed an acceptable level. The aquifer recovers, however, before the next cycle of pumping. These observations were offered by the Wailea hydrologist, Steven Bowles.
Although pumping the Wailea 670 wells may cause a rise in the salinity of the groundwater down gradient, the rise may not be sufficiently large to be detectable in view of the relatively poor quality of the water in the lower Wailea region. Also, any effect is not likely to be detectable until 1 to 2 years after pumping of the Wailea 670 wells starts. A simple one-dimensional groundwater hydraulic model given in the Appendix elaborates on the relationship among probable groundwater heads, discharge and velocity between Wailea 670 and lower Wailea.

Proposed Monitor Program

The intent of the monitoring program is to ascertain the effect of pumping at the Wailea 670 wells on groundwater salinity in the down gradient region. More specifically, the objectives are to: 1) determine if salinity in the aquifer will be measurably affected; 2) whether salinity in the lower Wailea wells will increase; 3) whether other wells in the Wailea region will be affected; and 4) whether coastal discharges (if any are identified) are influenced. The proposed program deals exclusively with potential salinity changes caused by up gradient pumping. It does not include changes in groundwater quality that may result from golf activities.

For the program to be successful, cooperation between the Wailea Resort and Wailea 670 is essential. The active Wailea wells will be employed as the chief monitors. If other wells are available, they also may be used for monitoring, and where coastal discharges are evident they will be sampled. The program does not require drilling of wells solely devoted to monitoring.

The general scope and methods of investigation for the monitoring program are as follows.

1. Define and discuss potential problems of interference between inland and makai wells. Emphasis will be focused on wells directly down gradient of Wailea 670, but attention will also be given to wells on the periphery of the groundwater flow net.

2. Describe regional geology and hydrology.

3. Describe groundwater occurrence and behavior based on available data. Important operating information will have to be provided by Wailea Resort. Other sources are the U.S. Geological Survey and the State department of Land and Natural Resources.

4. Discuss the lower Wailea pumping operations and establish
the groundwater quality reference framework.

5. Prepare scenarios of cause and effect employing standard methods of evaluation. Discuss limitations of the methods.

6. Propose and discuss mitigation measures to be taken by users of the aquifer should down gradient wells suffer significant increases in salinity as a result of up gradient pumping.

**Design**

The wells to be monitored on a regular basis must be identified and their accessibility guaranteed. Wailea Well 2 (4126-02) is the logical choice for most attention, but Wells 3 and 5 also merit careful observation. Well 1, down gradient of Well 2, should be monitored, even though its output is influenced by Well 2. Wells 9 and 10 to the north of the 670 parcel, and 5, 6 and 7 toward the south should be monitored occasionally but not as often as the others.

Tasks needed to be accomplished for creating the salinity data base are as follows.

1. Establish the current status of groundwater quality at the lower Wailea wells, other nearby wells, and coastal discharges. Wailea Resort will have to cooperate closely and provide records of rates and time of pumpage along with chloride readings.

2. Measure salinity routinely as specific conductivity with occasional laboratory chloride analysis added for correlation purposes. At Wells 2, 3 and 5 salinities will be taken monthly; at 9, 10, 4, 6 and 7 the interval will be quarterly. Two samples will be collected in each case, one at the start of pumping, the other just before pumping ceases. Other wells and coastal discharges will be measured quarterly.

3. Salinity of the Wailea 670 wells will be measured weekly.

The program should be terminated after three years.

**Data Evaluation**

At least one year is expected to pass before changes in salinity that may be attributable to Wailea 670 pumpage are detectable. In view of the manner of operation of the lower Wailea wells (i.e., high rates of pumping over short periods), the data will have to be carefully analyzed, probably by statistical inference methods, to establish a
cause-effect relationship.

Reports

Each quarter a data report will be compiled. This report may include preliminary commentaries on the data.

In an annual report the data will be analyzed and interpreted.

After three years a final data-analyses-interpretation report with conclusions will complete the monitor program.

Final Comment

Should the monitoring program prove that groundwater in the lower Wailea area has been salinized to a level that precludes its use as irrigation water as a result of pumpage at Wailea 670, mitigation measures will have to be devised to promote aquifer recovery. In fact, however, powerful mitigation will take place once the Wailea 670 golf courses start to irrigate with treated sewage effluent. Percolate from the effluent is likely to be less saline than the ambient groundwater, and this return irrigation will recharge the aquifer to the advantage of down gradient pumpage.
TO: Palaeua Bay Partners  
841 Bishop Street, # 2300  
Honolulu, HI 96813

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to install a pump in Wailea 670 Well 1 for golf course irrigation is approved, subject to the following conditions:

1. The Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified in writing before any work covered by this permit commences.

2. The permit application and staff submittal approved by the Commission at its meeting on February 17, 1993 shall be incorporated by reference.

3. The permit shall be for installation of up to a 400 gpm capacity pump in the well.

4. The proposed use 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 pump water from the well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.
PUMP INSTALLATION PERMIT

for

Wailea 670 Well 2
Well No. 4125-02
Wailea, Maui

TO: Palaea Bay Partners
841 Bishop Street, # 2300
Honolulu, HI 96813

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to install a pump in Wailea 670 Well 2 for golf course irrigation is approved, subject to the following conditions:

1. The Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified in writing before any work covered by this permit commences.

2. The permit application and staff submittal approved by the Commission at its meeting on February 17, 1993 shall be incorporated by reference.

3. The permit shall be for installation of up to a 500 gpm capacity pump in the well.

4. The proposed use 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 pump water from the well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.
5. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage. Water usage shall be measured on a monthly basis and reported to the Commission.

6. The following shall be submitted to the Commission staff within 30 days after completion of the work:
   a. Well Completion Report.
   b. As-built sectional drawing of the installed pump.

7. The applicant shall comply with all applicable laws, rules, and ordinances.

8. The applicant shall contact Mr. Thomas Arizumi, Chief, Environmental Management Division, State Department of Health, at 586-4304, concerning "TWELVE (12) CONDITIONS APPLICABLE TO ALL NEW GOLF COURSE DEVELOPMENT" dated January 1992 (version 4). The applicant shall obtain a written statement from the Department of Health indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission.

9. This permit may be revoked if work is not started within six months of the date of issuance or if work is suspended or abandoned for six months. The work proposed in the permit application shall be completed within two years from the date of permit issuance.

The following conditions were added at the Commission meeting on February 17, 1993:

10. By this condition and permit Condition 3, the applicant is on notice that the Commission reserves the right to require a reduction in pumpage from the well should it interfere with existing wells on private lands makai of the well site, new wells on the Hawaiian Home Lands, or public lands mauka of the well site. The permitee is on specific notice that DHHL may drill wells on its own or on State lands such that the amount of water pumped from this well site may be reduced over time to protect other wells or to meet other correlative water rights.

11. Copies of quarterly and final monitoring reports shall be sent to the Commission.
12. This permit will be reviewed and possibly revised by the Commission in three years, or as wastewater effluent becomes available for use to the project site, whichever happens first.

I, Acting Chairperson
Commission on Water Resource Management

3.2.93
Date of Issuance

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.

Applicant's Signature: Peter B. Nottage Date: March 5, 1993

Printed Name: Peter B. Nottage

Firm or Title: Palauea Bay Partners

Please sign and return one copy of this permit to the Commission and retain a copy for your record.

c: USGS
Department of Health
Safe Drinking Water Branch
Ground Water Protection Program
Maui Department of Water Supply
Wailea Resort Company, Ltd.
Steve Bowles
John Mink
December 29, 1994

Mr. Ed Sakoda
Department of Land & Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Sakoda:

RE: Well Nos. 4125-01 and 4125-02

This is to confirm that we have contracted with Armitage Bros. Construction, Inc. of Maui to install the pumps at Wailea Ranch (fka Wailea 670).

We understand that installation must be completed by March 3, 1995 and will keep you apprised of our progress.

Thank you for your assistance.

Sincerely,

Palauea Bay Partners

[Signature]

Daniel K. Ide
Project Director

DKI:lh

pc: Ed Kushi
Gary Okamoto
Nelson Armitage

EXHIBIT 6
Mr. Daniel K. Ide, Project Director  
Palauea Bay Partners  
Davies Pacific Center  
841 Bishop Street, Penthouse  
Honolulu, Hawaii 96813

Dear Mr. Ide:

Well Nos. 4125-01 and 4125-02

Please be advised that the pump installation permits for these wells expired March 2, 1995.

Following successive extensions of the start date, we received your letter of December 29, 1994, confirming your contract with Armitage Bros. Construction, Inc. of Maui to install the pumps. We have not received a completion report nor as-built section drawings, and request that you submit these as soon as possible.

If you have any questions, please contact Charley Ice at 587-0251.

Sincerely,

RAE M. LOUI  
Deputy Director

Class
March 6, 1996

VIA FAX 587-0219
Three (3) Pages

Charley Ice
Commission Of Water Resource Management
DEPARTMENT OF LAND & NATURAL RESOURCES
P.O. Box 621
Honolulu, Hawaii  96813

RE:  Palauea Bay Partners Limited Partnership
Pump Installation Permit, Well No. 4125-01 & 02

Dear Mr. Ice:

Thank you for your fax dated March 1, 1996 regarding the above project. We apologize for the lack of communication regarding the status for this well permit. The project director for this Partnership, Dan Ide, left McCormack Properties, Ltd. last year. We are discovering numerous activities that languished prior and subsequent to Mr. Ide's departure.

On December 29, 1994 we contracted with ABC Trucking, Inc., dba Armitage Construction, Inc. of Maui to install the well pumps at Wailea Ranch (fka Wailea 670). In addition, on December 29, 1994 we informed your office of our intent to proceed with the installation (See Attachment). We acknowledge the March 3, 1995 expiration date for that permit and subsequently retained and instructed ABC Trucking to begin installation of those well pumps prior to that date. ABC Trucking completed the pump installation by the end of March, 1995.

Unfortunately, due to a delay in Partnership funding from our Japanese lenders we became delinquent to ABC Trucking, Inc. on our outstanding invoice for this work. Subsequently, we agreed to a mechanic's lien filed on December 1, 1995 but by January 30, 1996 we paid the contractors and received a satisfaction and release of lien.

In view of the foregoing, although we have complied with the physical requirements for this installation, we have been remiss regarding the administrative procedures outlined in the well permit. We acknowledge the well completion report and as-built sectional drawings were not submitted to your office and that we have not supplied you with quarterly monitoring reports. We have every intention of complying with your office within the next 30 to 45 days.
We are currently working with Wilson Okamoto & Associates, Inc. regarding the well completion report and hope to get this project back on track as soon as possible. Please call if I can answer any additional questions.

Thank you,
McCORMACK PROPERTIES, LTD.

Gary Faber
Vice President

Attachment

cc:    Mike McCormack
Mr. Daniel K. Ide, DKI & Associates, Inc. for WCPT/GW Land Associates
55 Merchant Street, Suite 1400
Honolulu, Hawaii 96813

Mr. Gary Faber, Vice-President
McCormack Properties, Ltd.
Davies Pacific Center
841 Bishop Street, Penthouse
Honolulu, Hawaii 96813

Dear Mssrs. Ide and Faber:

Potential Water Code Violations
Wailea 670 Irrigation Wells
Well Nos. 4125-01 and 02

It has come to our attention that the captioned wells are being proposed as irrigation sources to the Wailea 670 development now under review.

As then representative of Palauea Bay Partners, Mr. Ide was notified by our letter dated June 28, 1995 that the pump installation permits issued for these wells to Palauea Bay Partners at the McCormack Properties address had expired March 2, 1995, without our receiving any documentation of work done as required within 60 days of completing work under the permit. We requested that you submit these as soon as possible.

On behalf of McCormack Properties, Inc., Mr. Faber responded by letter dated March 6, 1996 that Mr. Ide had left the project directorship, and that while physical work had been completed on pump installation, the administrative requirements under the permit had languished. The Commission was told that McCormack Properties, Inc. would be working with Wilson, Okamoto & Associates to comply with the requirements of the permit within the next 30 to 45 days.

To date, we have received no further communications of any kind on this matter from you. Under the circumstances, this matter needs to be taken to the Commission. Potential maximum fines for violations of the Water Code are $1000 per day. We will appreciate a response at your earliest convenience.

If you have any questions, please contact Charley Ice at 587-0251.

Sincerely,

[Signature]
LINNEL T. NISHIOKA
Deputy Director

Cl: ss

C: Wilson Okamoto & Associates
    John Min, County of Maui, Department of Planning

EXHIBIT 9
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<th>Item No.</th>
<th>Description</th>
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<th>Occurring in WMA (min $250)</th>
<th>Repeat violation (min $250)</th>
<th>Gravity component</th>
<th>Mitigative component</th>
<th>TOTAL DAILY FINES</th>
<th>Start date</th>
<th>End date</th>
<th>No. of days</th>
<th>Compliance within 30 days (yes/no)</th>
<th>Total duration of violation</th>
<th>Alternate settlement for one incident</th>
<th>No. of Incidents</th>
<th>Subtotal fines</th>
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**TOTAL FINES**

$38,050

**NOTES**

- **Item No.**
  - Description - description of the violation, see submittal text for specific rules violated
- **Finding of violation (min $250)** - where there is a violation, there is a minimum daily fine of $250
- **Occurring in WMA (min $250)** - When the violation is in a designated Water Management Area, there is a minimum additional daily fine of $250
- **Repeat violation (min $250)** - When the violator has committed violations in the past, there is a minimum additional daily fine of $250
- **Gravity component** - allows for the increase of the daily fine
- **Mitigative component** - allows for the decrease of the daily fine
- **TOTAL DAILY FINES** - the sum of the values in columns C through G
- **Start date** - the date where calculation of daily fines begins (date of notice of violation, or permit approval, or permit fully signed, or violation occurred, or CWRM order)
- **End date** - the date of the end of the violation or latest CWRM meeting or completed permit application
- **No. of days** - calculated between start and end dates
- **Compliance within 30 days (yes/no)** - if the applicant complies with the Commission staff's notice of violation requirements within 30 days
- **Alternate settlement (yes / no)** - an alternate settlement in lieu of the daily fine was recommended
- **Subtotal fine for one incident** - per incident fine
- **No. of incidents** - of violation that occurred for this investigation
- **Subtotal fines** - the subtotal of fines, calculated by multiplying (per incident fine) * (no. of incidents)
I. GOALS
This penalty guideline seeks to provide a logical and consistent means to assess penalties and guide the settlement of Commission on Water Resource Management (Commission) enforcement cases. The Commission and staff should use this system to:

A. Deter violations;
B. Remove the economic benefit of violations;
C. Provide fair treatment of the regulated community; and
D. Offer the violator a chance to undertake a beneficial alternative, under proper conditions, in a partial or total replacement of a cash penalty.

II. LEGAL AUTHORITY
Hawaii Revised Statutes (HRS) § 174C-15 provides for fines of up to $1,000 for any violation of any provision of HRS § 174C. For a continuing offense, each day during which the offense is committed is a separate violation.

Administrative Rule § 13-167-10 provides for fines of up to $1,000 for any violation of any provision of Title 13, any permit condition or limitation established pursuant to Title 13, or for negligent or willful failure to comply with any final order of the Commission. For a continuing offense, each day during which the offense is committed is a separate violation.

III. APPLICABILITY
A. This guideline applies to the Commission programs, which include but are not limited to:
1. Measuring and reporting of water data;
2. Well Construction and Pump Installation Permits;
3. Stream Diversion Works Permits;
4. Stream Channel Alteration Permits;
5. Instream Use Protection Program;
6. Instream Flow Standards;
7. Water Use Permits;
8. Violations of any permit issued by the Commission;
9. Violations for failure to comply with final orders issued by the Commission; and

B. This guideline is only for use by Commission personnel. The guideline is not intended and cannot be relied upon to create rights, substantive or procedural, enforceable by any party in litigation with the Commission on Water Resource Management, Department of Land and Natural Resources or the State of Hawaii. The Commission’s staff reserves the right to act at variance with this guideline and to change it at any time without notice. The Commission’s staff expects to change this guideline as it gains experience with the guideline’s implementation.
IV. PENALTY CALCULATION METHOD

A. The Commission’s staff shall calculate an initial penalty figure for daily fines for settlement purposes based on the following:

1. Finding of violation = $250 per day/incident
2. Occurring in Water Management Area = $250 per day/incident
3. Repeat Violation = $250 per day/incident

(A repeat violation is deemed to occur when the party has previously been found to be a violator by the Commission. A repeat violation is tied to the party involved and is irrespective of the nature of the violation.)

B. Adjustments to Initial Minimum Penalty Figure in Section A: Mitigative and Gravity Factors.

Reduction or enhancement of any recommended fine will be made based on: (1) the degree of risk or actual harm to water resources, human health or the environment and (2) specific factors listed below. Where the risk or actual harm is slight, reduction of the recommended fine should be considered and where the risk or actual harm is great, enhancement of the recommended fine should be imposed.

1. Mitigation Component

Mitigative factors can be considered in the recommendation of any fine or alternative penalty. Presence of one or more mitigative factors can reduce or eliminate the fine or alternative penalty recommendation. Mitigative factors include: insignificant impact on the resource, attempt to remedy the violation without notice, good faith effort to remedy violation once noticed, and diligent and speedy effort to remedy the violation once noticed.

2. Gravity Component

Gravity factors can be considered in the recommendation of any fine or alternative penalty. Presence of one or more gravity factors can enhance the fine or alternative penalty recommendation. Gravity factors include: significant risk of or actual damage or harm to the water resources, human health or the environment, multiple or repeat violations of the code or regulations, evidence that the violator should have known about the violation, refusal to correct the violation once noticed, failure to meet deadlines as set by the Commission or its staff.

C. Calculation of the Number of Days for the Recommended Fine.

If one or more of the gravity components are met, a daily fine may accrue as follows:

1. (If no permit is issued and no prior permits have been issued, or no permit is required) The date given the violator by written notice of the violation via certified mail or personal service, including a reasonable timeframe to correct the violation, if the violation is not corrected or good faith efforts to correct the violation are not shown.

2. (If no permit is issued but prior permits have been issued) The date the violation occurred.

3. (If permit has been issued) Either:
   a. The date the violation occurred
   b. The date of permit approval
   c. The date permit issued
   d. The date of Commission meeting for conditions or deadlines imposed by the Commission not contained in a permit

4. Tolling. In calculating a recommendation for the imposition of a daily fine, the time may be tolled for upon the filing of a permit application, satisfactory progress in addressing the violation, or for good cause.

5. End. In calculating a recommendation for the imposition of a daily fine, the period of the violation ends upon: (1) satisfactory resolution of the violation, or (2) removal or remedy of the violation.

D. No staff recommendation shall not exceed the maximum amount allowable in Section 174C-15, HRS.
V. ALTERNATIVE SETTLEMENT

The following considerations will guide the Commission’s staff recommendation in deciding whether to allow a project to substitute for or be credited against a cash penalty. However, any finding of a violation by the Commission shall result in a minimum one-time $500 cash fine in addition to an alternative settlement. Failure to successfully meet the alternative will result in re-institution of the fines as calculated in IV. A. and B. above.

1. The project must be something that the violator was not required to do anyway, either because of legal or other obligation. Projects committed to, or started before a settlement is finally agreed upon may be eligible for credit, but such projects must be carefully examined to determine the extent to which they resulted from the enforcement case or were due to other factors, or prior plans or commitments. In some cases, partial credit may be appropriate.

2. The project must result in new water resources (including aquatic biota) information, provide water resources education, or benefit the water resources of the state.

3. The project may consist of corrective action to be completed within a timeframe established by the Commission. Failure to abide by the timeframe will result in re-institution of the fines as calculated in IV. A. and B. above.

VI. FUTURE APPLICATIONS

Future applications from an applicant who has not paid fines or met alternative settlements or for a project with outstanding violations may be considered incomplete until sanctions are fulfilled and/or violations are corrected.

LINNEL T. NISHIOKA
Deputy Director
Michael Rosenfeld  
WCPT/GW Land Associates, LLC  
10940 Wilshire Boulevard 1240  
Los Angeles CA 90024  

Dear Mr. Rosenfeld:

Water Code Violations  
Wailea 670 Irrigation Wells (Well Nos. 4125-01 & 02)

This letter serves as your official notice of action by the Commission on Water Resource Management at its November 14, 2001 meeting. By unanimous vote, the Commission found WCPT/GW, as successor in interest to Palauea Bay Partners, in violation of Hawaii Revised Statutes (HRS) Chapter 174C-84(a) and Hawaii Administrative Rules (HAR) Section 13-168-12(j), Permits for Well Construction and Pump Installation, for completing permitted well construction work in Well #2 and pump installation work for both wells after permits had expired; and HRS 174C-85 and HAR 13-168-13, Well Completion Report, for filing late reports for both well construction and pump installation at both wells.

The Commission assessed WCPT/GW a total fine of $38,050, payable to Hawaii Department of Land and Natural Resources by December 14, 2001. Failure to pay within the prescribed time is subject to additional penalties.

If you have any questions, please contact Charley Ice of the Water Commission staff at 587-0251.

Sincerely,

LINNEL T. NISHIOKA  
Deputy Director

Cc: ky  
Wailea 670 Associates  
Tom Nance Water Resource Engineering
Hi Charley,

This is all I have.

Mel Well #2.jpg 670.pdf Well #1.jpg

still capped and locked?
February 27, 1995

To: ARMITAGE BROTHERS CONSTRUCTION, INC.
P.O. BOX 67, PUUENE, MAUI, HAWAII 96784
C/O NELSON ARMITAGE - DON KAULIA

WAILEA NO. 670 IRRIGATION WELLS NO. 1 & 2

I, W. pleased to offer the following proposals to supply and install:

Two (2) Submersible deep well pumps.

Conditions: QTY. 1 - Deep well submersible pump with control panel

- 500 GPM @ 593' TDH 3600 RPM
- 540 feet total column pipe.

QTY. 1 - Deep well submersible pump with control panel

- 400 GPM @ 596' TDH 3600 RPM
- 540 feet total column pipe

WELL #1

Qty. 1 - SIMFLO SSL8C-5 STD-CONST. SUB. PUMP END WITH 6" DISCH.
- CAST IRON MOTOR BRACKET AND 100 HP 3600 RPM 460V 3PH 60HZ
- 8' x 8' FRANKLIN ELECTRIC SUBMERSIBLE MOTOR.

Qty. 1 - 5" X 10" FAB. STEEL SUB. DISCH. HEAD WITH 90 DEG. RADIUS DISCH. ELBOW AND 5" 150# DISCH. FLANGE.

Qty. 2 - 5" X F X F DUCTILE IRON CHECK VALVES

Qty. 27 - 5" X 20" THRD' D. & COUPLED GALVANIZED COLUMN PIPE.

Qty. 1 - SOFT START PANEL, NEMA 3R WITH M/C TYPE DISCONNECT, H-O-A-SWITCH AND START PUSHBUTTON, ESP 100 ADJ. OVERLOAD AND CONTROL POWER TRANSFORMER FOR 110V CONTROL.

WELL #2

Qty. 1 - SIMFLO SSH8C-5 STD-CONST. SUB. PUMP END WITH 6" DISCH.
- CAST IRON MOTOR BRACKET AND 100 HP 3600 RPM 460V 3PH 60HZ
- 8' x 8' FRANKLIN ELECTRIC SUBMERSIBLE MOTOR.

Qty. 1 - 5" X 10" FAB. STEEL SUB. DISCH. HEAD WITH 90 DEG. RADIUS DISCH. ELBOW AND 5" 150# DISCH. FLANGE.

Qty. 2 - 5" X F X F DUCTILE IRON CHECK VALVE

Qty. 27 - 5" X 20" THRD' D. & COUPLED GALVANIZED COLUMN PIPE.

Qty. 1 - SOFT START PANEL, NEMA 3R WITH M/C TYPE DISCONNECT, H-O-A-SWITCH AND START PUSHBUTTON, ESP 100 ADJ. OVERLOAD AND CONTROL POWER TRANSFORMER FOR 110V CONTROL.

also see reverse →
WAILEA 570 WELLS

WELL #1
INSTALLED JUNE 24, 1995
WATER LEVEL 523'
BOTTOM 558'
TOTAL PUMP SETTING 532'
PUMP & MOTOR LENGTH 10'
5 COLUMN PIPE, 25 LENGTHS OF - 21'2"
1/0 FLAT CABLE WITH GROUND

WELL #2
INSTALLED JUNE 30, 1995
WATER LEVEL 522'7"
BOTTOM 549'8"
TOTAL PUMP SETTING 532'
PUMP & MOTOR LENGTH 9'6"
5 COLUMN PIPE, 25 LENGTHS OF - 21'2"
1/0 FLAT CABLE WITH GROUND
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Well Information (m):
- Head
- Diameter
- Aquifer Thickness
- Active Length

Hydraulic Conductivity (m/d):
- THEIS
- COOPER-JACOB
- HARR 10^4
- HARR 10^6
- RECOVERY
- ZANZAR
- POLUBARIN
- THOMAS OVA
- THOMAS SON
- AVERAGE
Panel OKs Honua'ula TVR, water conditions

By CLAUDINE SAN NICOLAS, Staff Writer

WAILUKU – Acting with a bare quorum of five members, the Maui County Council Land Use Committee made it virtually impossible to operate a transient vacation rental in the proposed Honua'ula project and mandated that the developer follow county guidelines and community plans in establishing its own private water source.

Still, at the end of deliberations Monday, committee members had not voted on whether to recommend approval for the residential development planned on 670 acres south of Maui Meadows.

Formerly called Wailea 670, Honua'ula is seeking a change in zoning and a project district amendment to build as many as 1,400 residential units and develop commercial areas and a private golf course.

Land Use Committee members made it clear Monday that they did not want any of the housing units turned into transient vacation rentals. A condition prohibiting such accommodations was amended to say that no special use permits or conditional permit for vacation rentals within the Honua'ula project would be accepted by the Planning Department.

“I'm sure people will say, 'This is redundant, overkill,'” Council Member Jo Anne Johnson said after recommending the no-permit prohibition.
Johnson said she was recommending the amendment anyway to avoid the possibility that transient vacation rentals would pop up in the future, as they have in other residential areas on Maui.

County officials announced this summer that they would be enforcing a current ordinance prohibiting transient vacation rentals from operating without conditional permits beginning in January. The situation has resulted in business owners criticizing Mayor Charmaine Tavares’ administration for changing a county practice that had allowed vacation rentals to operate while county rules governing them were being changed.

“The problem is not the restriction,” Deputy Corporation Counsel Michael Hopper told Land Use Committee members Monday. He said that prohibiting vacation rental permits in Honua’ula would force any future developer or homeowner to seek a change in zoning, which often involves a lengthy and arduous county review process.

Honua’ula representative Charlie Jencks said developers have never had any intention to build housing that would turn into transient vacation rentals. He added that a change in zoning would effectively stop anyone from trying to operate a vacation rental business in Honua’ula.

On the water condition, Johnson joined Council Member Mike Victorino in requiring Honua’ula to develop its water source within county standards and statutes, and in compliance with community plans. That would prohibit the developer from transporting water from one district to another.

In addition, Honua’ula must comply with all reporting requirements on its water source development to the state Commission on Water Resource Management.

The amended water condition included deleting a previous condition that required, among many things, an expert analysis of Honua’ula’s water system and a verifiable water source.

Victorino said his intent was to simplify the water condition and to make it consistent with county statutes and with a bill passed on first reading Friday that would require future developments to show that water supply is available before they
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

FAX: Transmitting 6 pages, including this one; call 587-0251 with any reception problems.

TO: Donna Clayton
FROM: Charley Ito

Date: 28 March 06

We have not received any water quality data on these wells. The closest to that is this old report.

(Min.) June 3, 1991)

Return Fax: 587-0219
Return Post: P.O.Box 621, Honolulu 96809
who is the well management company?

(suggest for well owner right now).
Ms. Yvonne Y. Izu, Deputy Director  
Department of Land and Natural Resources  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, HI 96809

Subject: Letter Regarding Well Nos. 4125-01 & 02.

Dear Ms. Izu:

Thank you for your letter of July 6, 2004 (attached) and your inquiry as to the status of the above referenced wells.

The subject wells are tested on a monthly basis by a recognized well management company to ensure the pump mechanisms remain operable and the wellhead areas are properly maintained. The reason for keeping the wells in this state of readiness is that they will play a role in a pending entitlement action for which we are anticipating hearings to begin either this year or early next year. Our intention is to properly maintain the wells to ensure their long-term value and availability as a resource for our future project.

Ms. Izu, should you have any questions regarding this letter or the subject wells please do not hesitate to contact me at 808-250-3178.

Sincerely,

Charles Jencks
Owners Representative,  
Wailea 670 Associates

CC: Mr. Michael B. Rosenfeld  
Mr. Roy Hardy, CWRM

Attachment
July 6, 2004

Wailea 670 Associates
381 Huku Lii Place, #202
Kihei, HI 96753

Attention: Mr. Charlie Jencks

Dear Mr. Jencks:

Status of Wailea 670 Irrigation Wells
(Well Nos. 4125-01 & 02)

Our records indicate that these wells are completed but not in use. We recognize that the situation regarding water supplies for Wailea may make these wells increasingly valuable, but we also recognize the hazards of leaving wells idle and untended. If they are not to be used in the near future, they should at minimum be capped and locked. Please bring us up to date on their status.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400, extension 70251.

Sincerely,

YVONNE Y. IZU
Deputy Director
March 4, 2002

Wailea 670 Associates
381 Huku Lii Place; Suite 202
Kihei, Hawaii 96753
ATTENTION: Charlie Jencks

Dear Mr. Jencks:

Re: Receipt of check for water code violations for Wailea 670 irrigation wells
(Well Nos. 4125-01 and 02)

Pursuant to an action taken by the Commission for Water Resource Management at its November 14, 2001 meeting, a fine of $38,050.00 was levied against Palauea Bay Partners for water code violations for the above-referenced wells. This office has identified WCPT/GW Land Associates, LLC as the successor in interest in the ownership of the property and while we recognize the present ownership is not responsible for the violations, we do recognize that as the successor in interest you are responsible for paying the subject fines.

On February 27, 2002, this office received a check from WCPT/GW Land Associates, LLC, (WCPT/GW) for the full amount of the fines. This office will now advise the Land Use Commission of the payment of the fines and will recommend that the matter of water code violations for the subject wells be closed.

As we have discussed in our meetings, we understand that Palauea Bay Partners, in their efforts to develop and manage the subject wells, were the cause for the fines levied by the commission and also recognize that WCPT/GW, the present owner of the Wailea 670 Project, has done a significant amount of work in addressing the water code violations and bringing the well records up to date. We sincerely appreciate your efforts in helping us getting closure to this issue.

This office in accepting this check and closing the present water code violations on the subject wells recognizes that your firm has done an excellent job in providing the information necessary to complete the files and bring the water code records up to current standards as well as make it easier for this department to properly manage the groundwater resource in the Kamaole aquifer area in Maui County. We appreciate your efforts in this regard and look
forward to a continuation of the productive relationship we now have with the new ownership. With regard to the ongoing development of the Wailea 670 project area, it is also our understanding that the ownership will be submitting well applications in the future for domestic source. Please feel free to contact us should you have any questions concerning the Commission’s application process.

In closing, I would like to once again thank you for assisting my department in bringing this matter to close and helping us to complete the files and provide for better management of the groundwater resource in Maui County. We look forward to working with you on the Wailea 670 project. Should you have any questions with regard to this letter, please feel free to contact me at 587-0214.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

LTN:fc

c: Commissioners, Commission on Water Resource Management
   Anthony Ching, Executive Director, Land Use Commission
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The pump tests look ok even the prior one fell short. The well is a high T value. Please see me next week.

CARE to evaluate Frausen's pump test for Wailea 670 wells 1 & 2? Are we happy with the change in salinity?

Btw, no use reporting of any kind. Need to get back to Tendo ASAP if we want anything else.

Pump test to be done.
Transmitting fax record of notification prior to November 14, 2001 CWRM meeting. What was faxed to the two numbers indicated (for WCFT/Sw and Tom Nance) was the staff submittal for Item 7 on the Commission’s agenda of Nov. 14, 2001, “After-the-Fact Pump Installation Permits, Wailea 670 Wells (Well Nos 4125-01402)”, namely completing work with expired permits and non-reporting violations of those permits.

We are satisfied with pump tests submitted earlier. It will be unnecessary to redo them.

We have received no water use reports. Hereewith are the two forms for those wells.

follow-up to
30 Jan 02
Tom Nance:

pump run occasionally
to maintain, water
discharges through
51P pipe. No meter,
no WL sounder
Mr. Tony Ching, Executive Director  
Land Use Commission  
State Office Tower  
235 S. Beretania Street, 4th Floor  
Honolulu, Hawaii 96813

Dear Mr. Ching:


It has come to our attention that WCPT/GW Land Associates, LLC, successor-in-interest to the original Petitioner, Palauea Bay Partners, will be giving a presentation on its development plans for the Wailea 670 project. By this letter and its enclosures, we wish to inform the Land Use Commission that WCPT/GW Land Associates is in violation of chapter 174C, Hawaii Revised Statutes, (hereinafter referred to as “water code”).

At the November 2001 meeting of the Commission on Water Resource Management, the Commission approved the staff recommendation to find WCPT/GW in violation for work without a permit and for late filing of required reports. The Commission assessed a fine of $38,050 and ordered that the fine be paid by December 14, 2001. WCPT/GW was notified of the Commission action by letter dated November 23, 2001. To date, we have received no payment of the fine or any written explanation from WCPT/GW. We did advise that failure to pay the fine by December 14, 2001 could result in additional penalties. Such penalties could include additional fines at a maximum of $1000 per day and sealing of both wells.

Please advise whether we should send a staff person to attend the meeting to answer any questions about this matter to the Commission at its January 18, 2002 meeting, otherwise, please accept this letter and its attachments as a written testimony on the item.

Very truly yours,

LINNEL T. NISHIOKA  
Deputy Director

LTN:fc  
Attachments
NOV 23 2001

Michael Rosenfeld
WCPT/GW Land Associates, LLC
10940 Wilshire Boulevard 1240
Los Angeles CA 90024

Dear Mr. Rosenfeld:

Water Code Violations
Wailea 670 Irrigation Wells (Well Nos. 4125-01 & 02)

This letter serves as your official notice of action by the Commission on Water Resource Management at its November 14, 2001 meeting. By unanimous vote, the Commission found WCPT/GW, as successor in interest to Palauea Bay Partners, in violation of Hawaii Revised Statutes (HRS) Chapter 174C-84(a) and Hawaii Administrative Rules (HAR) Section 13-168-12(j), Permits for Well Construction and Pump Installation, for completing permitted well construction work in Well #2 and pump installation work for both wells after permits had expired; and HRS 174C-85 and HAR 13-168-13, Well Completion Report, for filing late reports for both well construction and pump installation at both wells.

The Commission assessed WCPT/GW a total fine of $38,050, payable to Hawaii Department of Land and Natural Resources by December 14, 2001. Failure to pay within the prescribed time is subject to additional penalties.

If you have any questions, please contact Charley Ice of the Water Commission staff at 587-0251.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

Cl:ky
c. Wailea 670 Associates
   Tom Nance Water Resource Engineering
STAFF SUBMITTAL

for the meeting of the

COMMISSION ON WATER RESOURCE MANAGEMENT

November 14, 2001
Wailuku, Maui

WCPT/GW Land Associates, LLC
AFTER-THE-FACT PUMP INSTALLATION PERMITS
Wailea 670 Irrigation Wells 1 & 2 (Well Nos. 4125-01 and 4125-02)
Pump Installation: 500 gpm for Irrigation Use
TMK 2-1-8:55, Wailea, Maui

APPLICANT:
WCPT/GW Land Associates, LLC
10940 Wilshire Boulevard 1240
Los Angeles CA 90024

LANDOWNER:
same

DESCRIPTION:
Location: (See Exhibit 1)
Dimensions: casing: 10 in. (both)
bottom #1: -37 feet; #2: -30 feet, msl

BACKGROUND:
The extensive list of events below is intended to highlights two points:
1) there were extensive communications up to a point, recognizing deadlines and emphasizing reporting requirements. Four separate notices were sent to the permittee concerning compliance with permit reporting requirements.
2) there has been keen public scrutiny focused on potential adverse impacts of these wells by adjacent large land owners, agencies, and community associations. There have been requests for regional water management planning, clearly and repeatedly communicated, and meetings held on the matter over nearly a year. This interest was heeded by Commission action from the outset and followed up thereafter.

March 30, 1989
GCR (Grand Champions Resort)/VMS Maui 670 applied for well construction permits for two brackish irrigation wells. There was no application for pump installation.

May 17, 1989
The Commission approved Well Construction Permits (Exhibit 2) for the subject wells (issued May 25, 1989), to VMS Maui 670 (Consultant Peter Nottage requested that any reference drop “GRC” and refer only to “VMS”). Testimony from Wailea Resort Company, Ltd. (WRC) expressed concern for the effect of

Item 7
additional large irrigation wells upon WRC's brackish irrigation wells, and asking for a regional approach to manage irrigation water resources. Permit condition #4 required the applicant and WRC to conduct a study to coordinate well locations, pumping rates, patterns, and quantities to minimize possible negative impacts of the proposed wells on existing wells.

October 20, 1989  VMS Maui 670 consultant requested in writing an extension of the construction start date.

May 18, 1990  Palaeua Bay Partners (PBP) notified staff in writing of the transfer of property interest and the well permits from VMS Maui 670 to PBP.

December 22, 1990  Maui Meadows (adjacent to the project) resident James Williamson, a professional engineer, sent a letter asking for information about a well that had been drilled at the proposed location, expressing "vehement" opposition to the proposed development and concern for fresh water supplies in the vicinity. He wrote again in May 1991 and February 1992 for more information.

January 1991  Construction completed on Well #1 (4125-01), as reported in well completion report.

January 8, 1991  Staff acknowledged a second letter from James Williamson and sent a letter to PBP noting that we had received information that the well was drilled but not tested. Permit conditions require transmittal of drilling and testing information within 30 days of well completion.

February 26, 1991  PBP met with WRC and John Mink to discuss hydrology and to approach a long-term management consensus between PBP and WRC, which has eleven nearby wells, two of which are within a mile of the PBP wells. Staff was copied a letter dated March 18, 1991.

April 16, 1991  PBP sent a letter advising staff that Well #1 (4125-01) had been drilled and tested, that a well completion report was being prepared by John Mink. The letter announced the expectation that Well #2 (4125-02) would be started soon, but that it would not likely meet the permit deadline (May 25, 1991), and an extension was requested.

May 15, 1991  An extension of the well construction permit to November 25, 1991 was approved for the second well (4125-02).

May 31, 1991  PBP sent a letter to staff announcing the first meeting of major irrigation users in the Wailea area, including Seibu Hawaii and WRC, to discuss long-term impacts and monitoring. A subsequent letter of September 11, 1991 discussed a scope of work for John Mink to develop a regional water management plan (Exhibit 3).

June 18, 1991  A Well Completion Report, Part 1 (WCR1) for 4125-01 was received (John Mink's report dated June 3, 1991). The completion date was entered as "January 1991", despite reports that the rig had already been moved by December 1990 (permit good through May; pump tests entered as March 8, 1991, WCR1 signed May 20, 1991). The late reporting was a violation of the permit requirement of transmitting well completion and pump installation reports within 30 days (Condition #5, Exhibit 2).

November 25, 1991  Pump testing for Well #2 (4125-02) was completed.

February 10, 1992  Date of a John Mink Report of drilling and testing Well #2 (4125-02) transmitted to the Commission.

March 6, 1992  A WCR1 for Well #2 (4125-02) was received, entering the well completion date as December 27, 1991 (an apparent violation of the permit, as it expired November 25, 1991). The late reporting is also a violation of the permit. Mink's report also states that "eventually treated wastewater will become the chief source for irrigation".

May 29, 1992  Maui Planning Director Brian Miskae sent a letter to Chairperson Bill Paty, noting a lack of staff response in reviewing a proposed zoning change and an EIS, and expressing concern for use of apparently potable water from Well #2 for golf course irrigation and the potential of pesticide leaching from golf course
application. The staff response dated July 2, 1992 confirmed chlorides of 157 to 182 mg/l, well location below the UIC line, and the Commission policy of applying water of equal or better quality than the underlying aquifer.

August 10, 1992
Pump Installation Permit Applications for the two wells were received from PBP.

Sept-November 1992
The Department of Hawaiian Homes, James Williamson, Tanya Every (Wailea Community Association Administrator), Gene Thompson (Kihei Community Association President), and the Maui Department of Water Supply wrote of their concern for potential impacts of irrigation pumping, the purported agreement by PBP to use reclaimed water but refusal to install requisite piping, and urging development of a comprehensive regional water management plan.

November 20, 1992
Staff sent a reminder letter to the applicant that Permit Condition #4 (a special condition) on the Well Construction Permit required conducting a coordinated study with WRC, noting that WRC acknowledged several meetings but that there was no coordinated study nor plan to minimize impacts.

December 23, 1992
A reply from PBP stated that they had agreed to a ground-water monitoring plan with WRC, which they believed complied with Condition #4, and stated the belief that a regional water management plan was the responsibility of State or County. The letter expressed a commitment to using treated effluent when available, and clarified that the two proposed pumps were intended to produce a combined total of 1 mgd.

January 14, 1993
PBP transmitted a four-page monitoring plan plus map to CWRM (Exhibit 4).

February 16, 1993
A letter from WRC, memorializing a meeting between WRC, PBP, and hydrologists John Mink and Steve Bowles, was received by staff. The meeting discussed collecting salinity and pumpage data for the affected aquifer areas of Wailea. The letter stated that with the agreement between the parties, WRC was no longer opposed to the pump installation applications of PBP, and stated the belief that treated effluent would be the ultimate relief from overpumping.

February 17, 1993
The Commission approved the pump installation permit for 400 and 500 gpm pumps in Well Nos. 4125-01 & 02, respectively (issued March 2, 1993), with special conditions that the Commission reserved the right to require reduction in pumpage if it interfered with other wells, and that monitoring results were to be sent to the Commission (none were ever received). The normal six-month start date deadline was September 2, 1993 (Exhibit 5).

August 25, 1993
The Commission received notice of commencing work on pump installation before mid-September. A subsequent letter dated November 1, 1993 requested an extension of the start date to December 15, 1993.

September 30, 1994
The last of six extensions of the start date was approved. Each successive approval noted the permit expiration date of March 2, 1995.

December 29, 1994
PBP sent notice by letter of the selection of contractor Armitage Brothers Construction and Trucking, Inc. to install pumps (type "A" license), with an acknowledgement of the expiration date (Exhibit 6).

March 2, 1995
The permit for installing pumps in the two wells expired.

June 24 & 30, 1995
The pumps were installed in 4125-01 & 02, respectively, according to the eventual filing (January 11, 2001) of the WCR2, which constitute violations of the permits.

June 28, 1995
Staff sent a letter noting that the permits had expired, requesting further information concerning the status of the project (Exhibit 7).

March 1, 1996
Staff faxed a second notice of permit expiration and a copy of the pump installation permit, with another request for information.

March 6, 1996
A letter from McCormack Properties, Ltd., for PBP, was received via fax (Exhibit 8). The permittee identified a change in project supervision and a temporary mechanic's lien in favor of the pump installer due to delayed offshore funding, resulting in a lack of administrative follow-up on permit requirements.
Staff sent a letter notifying the project developers that no further communications had been received and that the project was subject to fines for violations of permit requirements (Exhibit 9).

Daniel Ide of McCormack Properties, Ltd. and Barry Toyota for consultant Wilson, Okamoto & Associates met with staff at the Commission office. New pump test report and well completion report (WCR2) forms were provided to the permittee, amid assurances that miscommunications of the past would be remedied.

Well Completion Reports Part 2 (Pump Installation) (WCR2) were filed by Tom Nance in a letter identifying the new Wailea 670 owner as WCPT/GW Land Associates, LLC and attaching a letter from the owner authorizing Nance to sign the reports on its behalf. The cover letter from Nance notes that the pumps were not in use due to absent controller parts. The reports included summary graphs but not raw data as required for Commission staff review. A letter from staff requesting the raw data was dated February 9, 2001. No additional information has been provided to date.

WATER AVAILABILITY:

Kamaole Aquifer System of the Central Aquifer Sector
Estimated Sustainable Yield: 11 mgd
Current Aquifer System Reported Pumpage (12-MAV as of September 6, 2001): 3.841 mgd
Proposed Use: 2.0 mgd. brackish water, Irrigation

ISSUES/ANALYSIS:

There are two kinds of violations in this case: 1) work done under expired permits, and 2) late filing of well completion reports. It is important to bear in mind that none of this information was known prior to finally receiving Well Completion Reports recently. There are five potential violations in all.

Work without a Permit
HAR §13-168-12(a) states: "No well shall be constructed, altered, or repaired and no pump or pumping equipment shall be installed, replaced, or repaired without an appropriate permit from the commission."

1) While Well #1 (4125-01) was constructed within the time frame of its permit, construction of Well #2 (Well No. 4125-02) was apparently completed after its permit expired November 25, 1991. The well completion report (WCR1) candidly identifies the well construction completion date as December 27, 1991.

2) Pump installations in Wells #1 & 2 (Well Nos. 4125-01 & 02) were completed nearly four months after the permit expired. This second violation follows ample communications of the permittee's understanding of the deadline dates and requests for start date extensions.

Staff believes that doing work without a permit is a serious offense, as it may project risk to the resource we try to protect. Delay in completing work confounds any effort to monitor results from well use in the interest of reviewing new applications. The record shows that communications among neighboring landowners and the County raised such issues. Staff understands that these may have complicated the timing of completion of Well #2, which delay was only about 30 days. Staff believes that a first-time fine is appropriate under these circumstances.

Late Filing of Well Completion Reports
3) Well Completion Report Part 1 for Well #1 (4125-01) was due to have been filed within 30 days of work completion on Well #1, stated as “January 1991”. It was filed June 18, 1991, four months after the 30-day deadline passed.

4) Well Completion Report Part 1 (well construction) for Well #2 (4125-02) was due to have been filed within 30 days of work completion on Well #2, stated as December 27, 1991. It was filed on March 6, 1992, over one month after the 30-day deadline passed.
5) Well Completion Reports Part 2 (pump installation) for both Wells #1 & 2 were due within 30 days of work completion (Condition 6, Exhibit 5), stated as June 24, 1995 (Well #1) and June 30, 1995 (Well #2). They were filed January 11, 2001, five and a half years after the deadline passed. This third late filing violation of the same type came respectively 5.5 and 4.5 years after two additional letters noting permit expiration and request for information, 4.5 years following a meeting resulting in assurances that the reports would be filed, and finally, six months after yet another notice was sent identifying potential fines. The total elapsed time between the deadline for filing the first pump installation and the eventual filing was 1997 days. The total elapsed time between the notice of violation (July 31, 2000) and potential fines and the eventual submittal of the reports (January 11, 2001) was 133 days.

Penalty Calculation
Minimum Fines
Staff policy sets the minimum fine at $250 per day, and the duration may be mitigated through compliance to a one-day fine. Because there was no opportunity for mitigating compliance due to the unresponsiveness of the permittee, the minimum fine is set for the duration of the violation. Work without a permit is dated from the expiration date of the permit to the completion of work as indicated on reports eventually filed.

Gravity Component
If there were possible harm to the aquifer, non-compliance would incur a gravity component. Because these pumps have not been in use, no real harm could have occurred, and in this case no gravity component has been applied.

Reporting is required within 30 days of work completion. While staff believes these are not as significant as doing work without a valid permit, they are very important from an administrative point-of-view. Further, at the approximate time Well #1 was completed, a letter had been sent by staff reminding the permittee of the reportage requirement. Well Completion Reports Part 1 for construction of Wells #1 & #2 were both filed late.

Similarly, the unresponsiveness of the permittee on pump installation after a long period of attentiveness suggests non-compliance. If there were evidence to support non-compliance with reporting requirements, a gravity factor could be applied. To the contrary, it appears that there were legitimate reasons for non-performance on reporting.

Mitigating Component
In staff's opinion, the more cooperative, problem-solving attitude of staff during the period of record did not prepare the permittee for the gravity now visited through the penalty policy and staff's current approach of penalty warnings. The policy now results, in this situation, in heavy penalties for work without a permit. Despite the fact that late reporting would be considered a less important violation, the departure of the project director does not absolve the permittee from responsibility. Even deep mitigating reductions to reflect lost continuity could result in still heavier fines, given the long period of inattention to this requirement.

Palaula Bay Partners, part of McCormack Properties, Ltd., was the responsible party throughout most of the responsive period of communications, acquiring the ownership from Maui 670 Limited Partnership in 1990 (notification by letter May 18, 1990). The project director for Palaula Bay Partners was Daniel Ide, and Gary Faber's letter of March 6, 1996 (Exhibit 8) indicates that Mr. Ide's departure was the cause of communications breakdown in 1995, and his reappearance in on behalf of McCormack Properties in August of 2000 came just a few months prior to receipt of reportage from Tom Nance on behalf of the newly announced project owners, WCPT/GW, in January 2001. The new owners assume the responsibilities for compliance with permit conditions.

Paul Frandsen & Associates was the drilling contractor in 1991 (January for Well #1, June through November for Well #2). The reasons for the delay in completing Well #2 until after the permit expired, were never explained. It is therefore not known who, other than the well owner, is responsible for compliance with the terms of the permit.

The violations of late reporting for pump installations come following successive communications confirming the permittee's awareness of the importance of timely performance. The mitigated minimum extends from the very beginning of the violation, thirty days after completed work, over a duration of
2,111 days, which is over six and one-half years. As we are in a “catch-up” phase of enforcement, the project director cannot have anticipated the implications of potentially $1000 per day fines. Notice to this effect resulted in an end to six years of inattention. The Commission has a policy of dismissing some fines if compliance is gained within 30 days. Elapsed time from 30 days after the notice to the date of compliance is 133 days, resulting in a potential reduction of the overall fine to cover only that period.

Finally, it must be noted that these wells have not actually been used yet, and therefore are not posing a real threat to the aquifer. Further, the applicant has clearly and early committed itself to alternative sources when they are available.

The first-time violations for running late with well construction, pump installation, and completion report filing each carry a minimum $250 component. Against these are the mitigating conditions that staff recommends reduce the daily component for work without a permit $100 and late filing to $25.

Summary

The total fines for all five violations are summarized in Exhibit 10, coming to $38,050.

RECOMMENDATION:

That the Commission:

1) Find that Palauea Bay Partners, permittee for Wailea 670 Irrigation Wells (Well Nos. 4125-01 and 02) is in violation of the Water Code, HRS § 174C-84(a) Permits for Well Construction and Pump Installation, Administrative Rules §13-168-12(j), and HRS §174C-85, Administrative Rules §13-168-13 Well Completion Report, as summarized in Exhibit 10.

2) Fine Palauea Bay Partners a total of $38,050 for the violation in Recommendation 1.

Respectfully submitted,

LINNEL T. NISHIOKA
Deputy Director

Exhibit(s):  
1a, 1b. (Location Maps)  
2. (Well Construction Permit for 4125-01 & 02)  
3. (Sep 11, 1991 letter from Wailea Resort Company to Peter Nottage (McCormick Properties commenting on proposed scope of work for John Mink)  
4. (Proposed Aquifer Monitor Plan)  
5. (Pump Installation Permits for 4125-01 & 02 – identical except for gpm, see condition 3 on first pages)  
6. (Dec 29, 1994 letter from Daniel K. Ide (McCormack Properties) announcing contract award, acknowledging completion date)  
7. (Jun 28, 1995 letter to Daniel K. Ide announcing expiration of permits)  
8. (March 6, 1996 letter from Gary Faber (McCormack Properties) identifying complications in completing administrative procedures, expressing intent to comply in 30-45 days)  
9. (Jul 31, 2000 letter to Daniel Ide and Gary Faber noting appearance of wells as source for a project seeking approvals, indentifying history of permits, and announcing potential violations of Water Code and potential fines)  
10. (Penalty Calculation spreadsheet)  
11. (Penalty Policy Guideline)
WELL CONSTRUCTION PERMIT
for
Wailea - VMS 670 Wells
Well Nos. 4125-01,02
Wailea, Maui

TO: VMS Maui 670
34 N. Church Street, Suite 302
Wailuku, Hawaii 96793

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct and test Well Nos. 4125-01,02 for golf course irrigation within Tax Map Key: 2-1-08:56 is approved subject to the following conditions:

1. The Division of Water and Land Development (DOWALD), Geology-Hydrology Section, shall be notified at 548-7619, before any work covered by this permit commences.

2. The permit shall be for construction and testing only. A sustained rate pumping test for a minimum of four days with hourly or continuous monitoring of chloride content shall be conducted. Also, the five wells downgradient shall be monitored during the testing. No permanent pumps may be installed and no water used from the wells without the necessary pump installation permits.

3. Following drilling and testing of the wells, the applicant shall address the long-term effects of pumping the proposed wells on the existing wells in the vicinity.

4. The applicant and Wailea Resort Company, Ltd., shall conduct a study to coordinate well locations, pumping rates, pumping patterns, and quantities pumped, to minimize possible negative impacts of the proposed wells on existing wells in the area.

5. The following shall be submitted to DOWALD, P.O. Box 373, Honolulu, Hawaii 96809 within 30 days after completion of the wells:

EXHIBIT 2
a. Well Completion Report.

b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.

c. As-built sectional drawings of the wells.

d. Plot plan and map showing the exact locations of the wells.

e. Complete pumping test record; including time, pumping rate, drawdown, chloride content, and water quality data.

6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. The permit may be revoked if work is not started within six months of date of issuance or if work is suspended or abandoned for six months. The work shall be completed within two years of the date of issuance.

MAY 25 1989

WILLIAM W. PATY

Date of Issuance

cc: USGS
Department of Health
Drinking Water Program
Ground Water Protection Program
Maui Department of Water Supply
Roscoe Moss Co.
September 11, 1991

Dear Peter:

Thank you for sending us a copy of John Mink's proposed scope of work, dated August 20, 1991. We are generally in support of the proposed scope, and would like to offer the following comments:

1. Our greatest concern is item number seven, dealing with mitigation of any short or long term detrimental effects on any existing uses of the aquifer. It would seem prudent to have programs in place capable of addressing those detrimental effects prior to substantial pumping upgradient. This area of the proposed scope will need to be explored and developed. Designed pumping and distribution capacity will also need to address mitigation.

2. The proposal addresses primarily the relationship between Palauea Partners (McCormack Properties, Ltd.) and Wailea. While Wailea may be the most likely to be impacted, it would probably be appropriate to include other existing users of the aquifer as well such as Seibu. Our testing and monitoring over the years does not preclude the possibility of a more lateral impact to the north or south, directly or indirectly.

3. Does item number three address data you are currently collecting? What sources of "available data" have been identified? Has compensation for obtaining existing data from others been discussed or considered?
4. We encourage you to implement Mr. Mink's proposal. We would suggest it is advisable for McCormack to establish their own independent monitoring program, rather than rely on the data being collected by Wailea's staff.

We look forward to working with your professional consultants on a long term basis and the continuation of our discussions.

Sincerely,

Clark K. Champion
Director, Property Management

CKC:ch

cc: Manabu Tagomori
    Howard Nakamura
    Roy Figueiroa
    Steve Bowles
    Bob Akinaka
Pumping from wells in the Wailea 670 land parcel approximately 6300 feet inland of the coast may ultimately affect the salinity of groundwater now being pumped by wells used to irrigate the lower Wailea golf courses. The lower Wailea wells are located along a line parallel to and about 2500 feet inland of the coast line, and approximately 3800 feet down the groundwater gradient from the Wailea 670 wells (see attached map). A total of 9 active wells are used to irrigate the lower Wailea golf courses. These wells are spaced over a distance of 14,000 feet parallel to the coast. The Wailea number and State number for each well are as follows.

<table>
<thead>
<tr>
<th>Wailea Well No.</th>
<th>State Well No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4126-01</td>
</tr>
<tr>
<td>2</td>
<td>4126-02</td>
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<td>3</td>
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<td>9</td>
<td>4226-</td>
</tr>
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<td>10</td>
<td>4226-</td>
</tr>
</tbody>
</table>

The Wailea 670 wells are numbered 4225-01 (Wailea 670 no. 1) and 4225-02 (Wailea 670 no. 2).

Of the 9 lower Wailea wells, those down gradient of the Wailea 670 wells over a reach of 1 mile (1/2 mile on either side of a line drawn from the 670 wells perpendicular to the coast) are Wells 5, 2, 3 and 1. Wells 3 and 5 are at the outer limit of the reach, and Well 1 is down gradient of Well 2 and therefore affectable by pumping at that well. The well most likely to be influenced by pumping of the 670 wells is Well 2.

The Wailea wells yield brackish water adequate for irrigation, but pumping operations apparently must be carefully controlled. If the wells (or some of the wells) are pumped too long, the salinity of the pumpage rises to exceed an acceptable level. The aquifer recovers, however, before the next cycle of pumping. These observations were offered by the Wailea hydrologist, Steven Bowles.
Although pumping the Wailea 670 wells may cause a rise in the salinity of the groundwater down gradient, the rise may not be sufficiently large to be detectable in view of the relatively poor quality of the water in the lower Wailea region. Also, any effect is not likely to be detectable until 1 to 2 years after pumping of the Wailea 670 wells starts. A simple one-dimensional groundwater hydraulic model given in the Appendix elaborates on the relationship among probable groundwater heads, discharge and velocity between Wailea 670 and lower Wailea.

Proposed Monitor Program

The intent of the monitoring program is to ascertain the effect of pumping at the Wailea 670 wells on groundwater salinity in the down gradient region. More specifically, the objectives are to: 1) determine if salinity in the aquifer will be measurably affected; 2) whether salinity in the lower Wailea wells will increase; 3) whether other wells in the Wailea region will be affected; and 4) whether coastal discharges (if any are identified) are influenced. The proposed program deals exclusively with potential salinity changes caused by up gradient pumping. It does not include changes in groundwater quality that may result from golf activities.

For the program to be successful, cooperation between the Wailea Resort and Wailea 670 is essential. The active Wailea wells will be employed as the chief monitors. If other wells are available, they also may be used for monitoring, and where coastal discharges are evident they will be sampled. The program does not require drilling of wells solely devoted to monitoring.

The general scope and methods of investigation for the monitoring program are as follows.

1. Define and discuss potential problems of interference between inland and makai wells. Emphasis will be focused on wells directly down gradient of Wailea 670, but attention will also be given to wells on the periphery of the groundwater flow net.

2. Describe regional geology and hydrology.

3. Describe groundwater occurrence and behavior based on available data. Important operating information will have to be provided by Wailea Resort. Other sources are the U.S. Geological Survey and the State department of Land and Natural Resources.

4. Discuss the lower Wailea pumping operations and establish
the groundwater quality reference framework.

5. Prepare scenarios of cause and effect employing standard methods of evaluation. Discuss limitations of the methods.

6. Propose and discuss mitigation measures to be taken by users of the aquifer should down gradient wells suffer significant increases in salinity as a result of up gradient pumping.

**Design**

The wells to be monitored on a regular basis must be identified and their accessibility guaranteed. Wailea Well 2 (4126-02) is the logical choice for most attention, but Wells 3 and 5 also merit careful observation. Well 1, down gradient of Well 2, should be monitored, even though its output is influenced by Well 2. Wells 9 and 10 to the north of the 670 parcel, and 5, 6 and 7 toward the south should be monitored occasionally but not as often as the others.

Tasks needed to be accomplished for creating the salinity data base are as follows.

1. Establish the current status of groundwater quality at the lower Wailea wells, other nearby wells, and coastal discharges. Wailea Resort will have to cooperate closely and provide records of rates and time of pumpage along with chloride readings.

2. Measure salinity routinely as specific conductivity with occasional laboratory chloride analysis added for correlation purposes. At Wells 2, 3 and 5 salinities will be taken monthly; at 9, 10, 4, 6 and 7 the interval will be quarterly. Two samples will be collected in each case, one at the start of pumping, the other just before pumping ceases. Other wells and coastal discharges will be measured quarterly.

3. Salinity of the Wailea 670 wells will be measured weekly.

The program should be terminated after three years.

**Data Evaluation**

At least one year is expected to pass before changes in salinity that may be attributable to Wailea 670 pumpage are detectable. In view of the manner of operation of the lower Wailea wells (i.e., high rates of pumping over short periods), the data will have to be carefully analyzed, probably by statistical inference methods, to establish a
cause-effect relationship.

Reports

Each quarter a data report will be compiled. This report may include preliminary commentaries on the data.

In an annual report the data will be analyzed and interpreted.

After three years a final data-analyses-interpretation report with conclusions will complete the monitor program.

Final Comment

Should the monitoring program prove that groundwater in the lower Wailea area has been salinized to a level that precludes its use as irrigation water as a result of pumpage at Wailea 670, mitigation measures will have to be devised to promote aquifer recovery. In fact, however, powerful mitigation will take place once the Wailea 670 golf courses start to irrigate with treated sewage effluent. Percolate from the effluent is likely to be less saline than the ambient groundwater, and this return irrigation will recharge the aquifer to the advantage of down gradient pumpage.
TO: Palaua Bay Partners  
841 Bishop Street, # 2300  
Honolulu, HI 96813  

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to install a pump in Wailea 670 Well 1 for golf course irrigation is approved, subject to the following conditions:

1. The Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified in writing before any work covered by this permit commences.

2. The permit application and staff submittal approved by the Commission at its meeting on February 17, 1993 shall be incorporated by reference.

3. The permit shall be for installation of up to a 400 gpm capacity pump in the well.

4. The proposed use 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 pump water from the well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

EXHIBIT 5
PUMP INSTALLATION PERMIT

for

Wailea 670 Well 2
Well No. 4125-02
Wailea, Maui

TO: Palaeua Bay Partners
841 Bishop Street, # 2300
Honolulu, HI 96813

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to install a pump in Wailea 670 Well 2 for golf course irrigation is approved, subject to the following conditions:

1. The Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified in writing before any work covered by this permit commences.

2. The permit application and staff submittal approved by the Commission at its meeting on February 17, 1993 shall be incorporated by reference.

3. The permit shall be for installation of up to a 500 gpm capacity pump in the well.

4. The proposed use 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 pump water from the well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.
5. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage. Water usage shall be measured on a monthly basis and reported to the Commission.

6. The following shall be submitted to the Commission staff within 30 days after completion of the work:
   a. Well Completion Report.
   b. As-built sectional drawing of the installed pump.

7. The applicant shall comply with all applicable laws, rules, and ordinances.

8. The applicant shall contact Mr. Thomas Arizumi, Chief, Environmental Management Division, State Department of Health, at 586-4304, concerning "TWELVE (12) CONDITIONS APPLICABLE TO ALL NEW GOLF COURSE DEVELOPMENT" dated January 1992 (version 4). The applicant shall obtain a written statement from the Department of Health indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission.

9. This permit may be revoked if work is not started within six months of the date of issuance or if work is suspended or abandoned for six months. The work proposed in the permit application shall be completed within two years from the date of permit issuance.

   The following conditions were added at the Commission meeting on February 17, 1993:

10. By this condition and permit Condition 3, the applicant is on notice that the Commission reserves the right to require a reduction in pumpage from the well should it interfere with existing wells on private lands makai of the well site, new wells on the Hawaiian Home Lands, or public lands mauka of the well site. The permittee is on specific notice that DHHL may drill wells on its own or on State lands such that the amount of water pumped from this well site may be reduced over time to protect other wells or to meet other correlative water rights.

11. Copies of quarterly and final monitoring reports shall be sent to the Commission.
12. This permit will be reviewed and possibly revised by the Commission in three years, or as wastewater effluent becomes available for use to the project site, whichever happens first.

John P. Keppler
JOHN P. KEPPELER, Acting Chairperson
Commission on Water Resource Management

3.2.93
Date of Issuance

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.

Applicant's Signature: Peter B. Nottage Date: March 5, 1993

Printed Name: Peter B. Nottage

Firm or Title: Palauea Bay Partners

Please sign and return one copy of this permit to the Commission and retain a copy for your record.

c: USGS
   Department of Health
       Safe Drinking Water Branch
       Ground Water Protection Program
   Maui Department of Water Supply
   Wailea Resort Company, Ltd.
   Steve Bowles
   John Mink
December 29, 1994

Mr. Ed Sakoda  
Department of Land & Natural Resources  
P. O. Box 621  
Honolulu, Hawaii  96809

Dear Mr. Sakoda:

RE: Well Nos. 4125-01 and 4125-02

This is to confirm that we have contracted with Armitage Bros. Construction, Inc. of Maui to install the pumps at Wailea Ranch (fka Wailea 670).

We understand that installation must be completed by March 3, 1995 and will keep you apprised of our progress.

Thank you for your assistance.

Sincerely,

[Signature]

Daniel K. Ide  
Project Director

DKI:lh

pc:  Ed Kushi  
      Gary Okamoto  
      Nelson Armitage

Davies Pacific Center • 841 Bishop Street • Penthouse • Honolulu, Hawaii 96813 • 808-539-9600 • FAX 808-531-2470

EXHIBIT 6
Mr. Daniel K. Ide, Project Director  
Palauea Bay Partners  
Davies Pacific Center  
841 Bishop Street, Penthouse  
Honolulu, Hawaii 96813

Dear Mr. Ide:

Well Nos. 4125-01 and 4125-02

Please be advised that the pump installation permits for these wells expired March 2, 1995.

Following successive extensions of the start date, we received your letter of December 29, 1994, confirming your contract with Armitage Bros. Construction, Inc. of Maui to install the pumps. We have not received a completion report nor as-built section drawings, and request that you submit these as soon as possible.

If you have any questions, please contact Charley Ice at 587-0251.

Sincerely,

RAE M. LOUI  
Deputy Director

EXHIBIT 7
March 6, 1996

VIA FAX 587-0219
Three (3) Pages

Charley Ice
Commission Of Water Resource Management
DEPARTMENT OF LAND & NATURAL RESOURCES
P.O. Box 621
Honolulu, Hawaii 96813

RE: Palauea Bay Partners Limited Partnership
    Pump Installation Permit, Well No. 4125-01 & 02

Dear Mr. Ice:

Thank you for your fax dated March 1, 1996 regarding the above project. We apologize for the lack of communication regarding the status for this well permit. The project director for this Partnership, Dan Ide, left McCormack Properties, Ltd. last year. We are discovering numerous activities that languished prior and subsequent to Mr. Ide’s departure.

On December 29, 1994 we contracted with ABC Trucking, Inc., dba Armitage Construction, Inc. of Maui to install the well pumps at Wailea Ranch (fka Wailea 670). In addition, on December 29, 1994 we informed your office of our intent to proceed with the installation (See Attachment). We acknowledge the March 3, 1995 expiration date for that permit and subsequently retained and instructed ABC Trucking to begin installation of those well pumps prior to that date. ABC Trucking completed the pump installation by the end of March, 1995.

Unfortunately, due to a delay in Partnership funding from our Japanese lenders we became delinquent to ABC Trucking, Inc. on our outstanding invoice for this work. Subsequently, we agreed to a mechanic’s lien filed on December 1, 1995 but by January 30, 1996 we paid the contractors and received a satisfaction and release of lien.

In view of the foregoing, although we have complied with the physical requirements for this installation, we have been remiss regarding the administrative procedures outlined in the well permit. We acknowledge the well completion report and as-built sectional drawings were not submitted to your office and that we have not supplied you with quarterly monitoring reports. We have every intention of complying with your office within the next 30 to 45 days.
We are currently working with Wilson Okamoto & Associates, Inc. regarding the well completion report and hope to get this project back on track as soon as possible. please call if I can answer any additional questions.

Thank you,
McCORMACK PROPERTIES, LTD.

Gary Faber
Vice President

Attachment

cc: Mike McCormack
Mr. Daniel K. Ide, DKI & Associates, Inc. for WCPT/GW Land Associates
55 Merchant Street, Suite 1400
Honolulu, Hawaii 96813

Mr. Gary Faber, Vice-President
McCormack Properties, Ltd.
Davies Pacific Center
841 Bishop Street, Penthouse
Honolulu, Hawaii 96813

Dear Mssrs. Ide and Faber:

Potential Water Code Violations
Wailea 670 Irrigation Wells
Well Nos. 4125-01 and 02

It has come to our attention that the captioned wells are being proposed as irrigation sources to the Wailea 670 development now under review.

As then representative of Palauea Bay Partners, Mr. Ide was notified by our letter dated June 28, 1995 that the pump installation permits issued for these wells to Palauea Bay Partners at the McCormack Properties address had expired March 2, 1995, without our receiving any documentation of work done as required within 60 days of completing work under the permit. We requested that you submit these as soon as possible.

On behalf of McCormack Properties, Inc., Mr. Faber responded by letter dated March 6, 1996 that Mr. Ide had left the project directorship, and that while physical work had been completed on pump installation, the administrative requirements under the permit had languished. The Commission was told that McCormack Properties, Inc. would be working with Wilson, Okamoto & Associates to comply with the requirements of the permit within the next 30 to 45 days.

To date, we have received no further communications of any kind on this matter from you. Under the circumstances, this matter needs to be taken to the Commission. Potential maximum fines for violations of the Water Code are $1000 per day. We will appreciate a response at your earliest convenience.

If you have any questions, please contact Charley Ice at 587-0251.

Sincerely,

[Signature]
LINNEL T. NISHIOKA
Deputy Director

Cl:ss

c: Wilson Okamoto & Associates
    John Min, County of Maui, Department of Planning

EXHIBIT 9
### Daily Fines

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Finding of violation (min $250)</th>
<th>Occurring in VMA (min $250)</th>
<th>Repeat violation (min $250)</th>
<th>Gravity component</th>
<th>Mitigative component</th>
<th>TOTAL DAILY FINES</th>
<th>Start date</th>
<th>End date</th>
<th>No. of days</th>
<th>Compliance within 30 days (yes/no)</th>
<th>Total duration of violation</th>
<th>Alternate settlement</th>
<th>Subtotal fine for one incident</th>
<th>No. of incidents</th>
<th>Subtotal fines</th>
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**Total DAILY FINES:** $38,050

**NOTES**
- Item No: Description - description of the violation, see submittal text for specific rules violated
- Finding of violation (min. $250) - Where there is a violation, there is a minimum daily fine of $250
- Occurring in VMA (min. $250) - When the violation is in a designated Water Management Area, there is a minimum additional daily fine of $250
- Repeat violation (min. $250) - When the violator has committed violations in the past, there is a minimum additional daily fine of $250
- Gravity component - Allows for the increase of the daily fine
- Mitigative component - Allows for the decrease of the daily fine
- TOTAL DAILY FINES - The sum of the values in columns C through G
- Start date - The date where calculation of daily fines begins (date of notice of violation, or permit approval, or permit fully signed, or violation occurred, or CWRM order)
- End date - The date of the end of the violation or latest CWRM meeting or completed permit application
- No. of days - Calculated between start and end dates
- Compliance within 30 days (yes/no) - If the applicant complies with the Commission staff's notice of violation requirements within 30 days
- Total duration of violation - If there was compliance with staff notice of violation within 30 days, the duration shall be one (1) day. If there was no compliance with staff notice of violation within 30 days, the duration shall be the total days of the violation.
- Alternate settlement (yes/no) - An alternate settlement in lieu of the daily fine was recommended
- Subtotal fine for one incident - Per incident fine
- No. of incidents - Number of violation that occurred for this investigation
- Subtotal fines - The subtotal of fines, calculated by multiplying (per incident fine) * (no. of incidents)
I. GOALS
This penalty guideline seeks to provide a logical and consistent means to assess penalties and guide the settlement of Commission on Water Resource Management (Commission) enforcement cases. The Commission and staff should use this system to:
A. Deter violations;
B. Remove the economic benefit of violations;
C. Provide fair treatment of the regulated community; and
D. Offer the violator a chance to undertake a beneficial alternative, under proper conditions, in a partial or total replacement of a cash penalty.

II. LEGAL AUTHORITY
Hawaii Revised Statutes (HRS) § 174C-15 provides for fines of up to $1,000 for any violation of any provision of HRS § 174C. For a continuing offense, each day during which the offense is committed is a separate violation.

Administrative Rule § 13-167-10 provides for fines of up to $1,000 for any violation of any provision of Title 13, any permit condition or limitation established pursuant to Title 13, or for negligent or willful failure to comply with any final order of the Commission. For a continuing offense, each day during which the offense is committed is a separate violation.

III. APPLICABILITY
A. This guideline applies to the Commission programs, which include but are not limited to:
1. Measuring and reporting of water data;
2. Well Construction and Pump Installation Permits;
3. Stream Diversion Works Permits;
4. Stream Channel Alteration Permits;
5. Instream Use Protection Program;
6. Instream Flow Standards;
7. Water Use Permits;
8. Violations of any permit issued by the Commission;
9. Violations for failure to comply with final orders issued by the Commission; and

B. This guideline is only for use by Commission personnel. The guideline is not intended and cannot be relied upon to create rights, substantive or procedural, enforceable by any party in litigation with the Commission on Water Resource Management, Department of Land and Natural Resources or the State of Hawaii. The Commission’s staff reserves the right to act at variance with this guideline and to change it at any time without notice. The Commission’s staff expects to change this guideline as it gains experience with the guideline’s implementation.
IV. PENALTY CALCULATION METHOD

A. The Commission's staff shall calculate an initial penalty figure for daily fines for settlement purposes based on the following:
   1. Finding of violation = $250 per day/incident
   2. Occurring in Water Management Area = $250 per day/incident
   3. Repeat Violation = $250 per day/incident
      (A repeat violation is deemed to occur when the party has previously been found to be a violator by the Commission. A repeat violation is tied to the party involved and is irrespective of the nature of the violation.)

B. Adjustments to Initial Minimum Penalty Figure in Section A: Mitigative and Gravity Factors.
   Reduction or enhancement of any recommended fine will be made based on: (1) the degree of risk or actual harm to water resources, human health or the environment and (2) specific factors listed below. Where the risk or actual harm is slight, reduction of the recommended fine should be considered and where the risk or actual harm is great, enhancement of the recommended fine should be imposed.
   1. Mitigation Component
      Mitigative factors can be considered in the recommendation of any fine or alternative penalty. Presence of one or more mitigative factors can reduce or eliminate the fine or alternative penalty recommendation. Mitigative factors include: insignificant impact on the resource, attempt to remedy the violation without notice, good faith effort to remedy violation once noticed, and diligent and speedy effort to remedy the violation once noticed.
   2. Gravity Component
      Gravity factors can be considered in the recommendation of any fine or alternative penalty. Presence of one or more gravity factors can enhance the fine or alternative penalty recommendation. Gravity factors include: significant risk of or actual damage or harm to the water resources, human health or the environment, multiple or repeat violations of the code or regulations, evidence that the violator should have known about the violation, refusal to correct the violation once noticed, failure to meet deadlines as set by the Commission or its staff.

C. Calculation of the Number of Days for the Recommended Fine.
   If one or more of the gravity components are met, a daily fine may accrue as follows:
   1. (If no permit is issued and no prior permits have been issued, or no permit is required) The date given the violator by written notice of the violation via certified mail or personal service, including a reasonable timeframe to correct the violation, if the violation is not corrected or good faith efforts to correct the violation are not shown.
   2. (If no permit is issued but prior permits have been issued) The date the violation occurred.
   3. (If permit has been issued) Either:
      a. The date the violation occurred
      b. The date of permit approval
      c. The date permit issued
      d. The date of Commission meeting for conditions or deadlines imposed by the Commission not contained in a permit
   4. Tolling. In calculating a recommendation for the imposition of a daily fine, the time may be tolled for upon the filing of a permit application, satisfactory progress in addressing the violation, or for good cause.
   5. End. In calculating a recommendation for the imposition of a daily fine, the period of the violation ends upon: (1) satisfactory resolution of the violation, or (2) removal or remedy of the violation.

D. No staff recommendation shall not exceed the maximum amount allowable in Section 174C-15, HRS.
V. ALTERNATIVE SETTLEMENT

The following considerations will guide the Commission's staff recommendation in deciding whether to allow a project to substitute for or be credited against a cash penalty. However, any finding of a violation by the Commission shall result in a minimum one-time $500 cash fine in addition to an alternative settlement. Failure to successfully meet the alternative will result in re-institution of the fines as calculated in IV. A. and B. above.

1. The project must be something that the violator was not required to do anyway, either because of legal or other obligation. Projects committed to, or started before a settlement is finally agreed upon may be eligible for credit, but such projects must be carefully examined to determine the extent to which they resulted from the enforcement case or were due to other factors, or prior plans or commitments. In some cases, partial credit may be appropriate.

2. The project must result in new water resources (including aquatic biota) information, provide water resources education, or benefit the water resources of the state.

3. The project may consist of corrective action to be completed within a timeframe established by the Commission. Failure to abide by the timeframe will result in re-institution of the fines as calculated in IV. A. and B. above.

VI. FUTURE APPLICATIONS

Future applications from an applicant who has not paid fines or met alternative settlements or for a project with outstanding violations may be considered incomplete until sanctions are fulfilled and/or violations are corrected.

LINNEL T. NISHIOKA
Deputy Director
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: Charley

TO: BAUER, G.
    FUJII, N.
    OHYE, M.
    JINNAI, R.
    IMATA, R.
    NAKAMA, L.
    HIGA, D.

TO: HARDY, R.
    HIRANO, E.
    SAKODA, E.
    NAKANO, D.
    NISHIOKA, L.
    DANBARRA, S
    SUBIA, S.
    YODA, K.

INIT. INIT.

DATE: 16 Nov 01

SUSPENSE DATE

FOR: 1 Approval
     3 Signature
     2 Information

PLEASE:
     ____ Review & Comment
     ____ Type Draft
     ____ Type Final
     ____ File
     ____ Xerox ____ copies
     ____ Take Action:
     ____ Please See Me

14 Dec 00

Claude Jordon  879 6298
STAFF SUBMITTAL
for the meeting of the
COMMISSION ON WATER RESOURCE MANAGEMENT
November 14, 2001
Wailuku, Maui

APPLICANT:
WCPT/GW Land Associates, LLC
10940 Wilshire Boulevard 1240
Los Angeles CA 90024

LANDOWNER:
same

DESCRIPTION:
Location: (See Exhibit 1)
Dimensions: casing: 10 in. (both)
bottom #1: -37 feet; #2: -30 feet, msl

BACKGROUND:
The extensive list of events below is intended to highlights two points:
1) there were extensive communications up to a point, recognizing deadlines and emphasizing reporting
   requirements. Four separate notices were sent to the permittee concerning compliance with permit
   reporting requirements.
2) there has been keen public scrutiny focused on potential adverse impacts of these wells by adjacent
   large land owners, agencies, and community associations. There have been requests for regional
   water management planning, clearly and repeatedly communicated, and meetings held on the matter
   over nearly a year. This interest was heeded by Commission action from the outset and followed up
   thereafter.

March 30, 1989
GCR (Grand Champions Resort)/VMS Maui 670 applied for well construction
permits for two brackish irrigation wells. There was no application for pump
installation.

May 17, 1989
The Commission approved Well Construction Permits (Exhibit 2) for the subject
wells (issued May 25, 1989), to VMS Maui 670 (Consultant Peter Nottage
requested that any reference drop “GRC” and refer only to “VMS”). Testimony
from Wailea Resort Company, Ltd. (WRC) expressed concern for the effect of
additional large irrigation wells upon WRC's brackish irrigation wells, and asking for a regional approach to manage irrigation water resources. Permit condition #4 required the applicant and WRC to conduct a study to coordinate well locations, pumping rates, patterns, and quantities to minimize possible negative impacts of the proposed wells on existing wells.

October 20, 1989  
VMS Maui 670 consultant requested in writing an extension of the construction start date.

May 18, 1990  
Palauea Bay Partners (PBP) notified staff in writing of the transfer of property interest and the well permits from VMS Maui 670 to PBP.

December 22, 1990  
Maui Meadows (adjacent to the project) resident James Williamson, a professional engineer, sent a letter asking for information about a well that had been drilled at the proposed location, expressing "vehement" opposition to the proposed development and concern for fresh water supplies in the vicinity. He wrote again in May 1991 and February 1992 for more information.

January 1991  
Construction completed on Well #1 (4125-01), as reported in well completion report.

January 8, 1991  
Staff acknowledged a second letter from James Williamson and sent a letter to PBP noting that we had received information that the well was drilled but not tested. Permit conditions require transmittal of drilling and testing information within 30 days of well completion.

February 26, 1991  
PBP met with WRC and John Mink to discuss hydrology and to approach a long-term management consensus between PBP and WRC, which has eleven nearby wells, two of which are within a mile of the PBP wells. Staff was copied a letter dated March 18, 1991.

April 16, 1991  
PBP sent a letter advising staff that Well #1 (4125-01) had been drilled and tested, that a well completion report was being prepared by John Mink. The letter announced the expectation that Well #2 (4125-02) would be started soon, but that it would not likely meet the permit deadline (May 25, 1991), and an extension was requested.

May 15, 1991  
An extension of the well construction permit to November 25, 1991 was approved for the second well (4125-02).

May 31, 1991  
PBP sent a letter to staff announcing the first meeting of major irrigation users in the Wailea area, including Seibu Hawaii and WRC, to discuss long-term impacts and monitoring. A subsequent letter of September 11, 1991 discussed a scope of work for John Mink to develop a regional water management plan (Exhibit 3).

June 18, 1991  
A Well Completion Report, Part 1 (WCR1) for 4125-01 was received (John Mink's report dated June 3, 1991). The completion date was entered as "January 1991", despite reports that the rig had already been moved by December 1990 (permit good through May; pump tests entered as March 8, 1991, WCR1 signed May 20, 1991). The late reporting was a violation of the permit requirement of transmitting well completion and pump installation reports within 30 days (Condition #5, Exhibit 2).

November 25, 1991  
Pump testing for Well #2 (4125-02) was completed.

February 10, 1992  
Date of a John Mink Report of drilling and testing Well #2 (4125-02) transmitted to the Commission.

March 6, 1992  
A WCR1 for Well #2 (4125-02) was received, entering the well completion date as December 27, 1991 (an apparent violation of the permit, as it expired November 25, 1991). The late reporting is also a violation of the permit. Mink's report also states that "eventually treated wastewater will become the chief source for irrigation".

May 29, 1992  
Maui Planning Director Brian Miskae sent a letter to Chairperson Bill Paty, noting a lack of staff response in reviewing a proposed zoning change and an EIS, and expressing concern for use of apparently potable water from Well #2 for golf course irrigation and the potential of pesticide leaching from golf course
application. The staff response dated July 2, 1992 confirmed chlorides of 157 to 182 mg/l, well location below the UIC line, and the Commission policy of applying water of equal or better quality than the underlying aquifer.

August 10, 1992
Pump Installation Permit Applications for the two wells were received from PBP.

Sept-November 1992
The Department of Hawaiian Homes, James Williamson, Tanya Every (Wailea Community Association Administrator), Gene Thompson (Kihei Community Association President), and the Maui Department of Water Supply wrote of their concern for potential impacts of irrigation pumping, the purported agreement by PBP to use reclaimed water but refusal to install requisite piping, and urging development of a comprehensive regional water management plan.

November 20, 1992
Staff sent a reminder letter to the applicant that Permit Condition #4 (a special condition) on the Well Construction Permit required conducting a coordinated study with WRC, noting that WRC acknowledged several meetings but that there was no coordinated study nor plan to minimize impacts.

December 23, 1992
A reply from PBP stated that they had agreed to a ground-water monitoring plan with WRC, which they believed complied with Condition #4, and stated the belief that a regional water management plan was the responsibility of State or County. The letter expressed a commitment to using treated effluent when available, and clarified that the two proposed pumps were intended to produce a combined total of 1 mgd.

January 14, 1993
PBP transmitted a four-page monitoring plan plus map to CWRM (Exhibit 4).

February 16, 1993
A letter from WRC, memorializing a meeting between WRC, PBP, and hydrologists John Mink and Steve Bowles, was received by staff. The meeting discussed collecting salinity and pumpage data for the affected aquifer areas of Wailea. The letter stated that with the agreement between the parties, WRC was no longer opposed to the pump installation applications of PBP, and stated the belief that treated effluent would be the ultimate relief from overpumping.

February 17, 1993
The Commission approved the pump installation permit for 400 and 500 gpm pumps in Well Nos. 4125-01 & 02, respectively (issued March 2, 1993), with special conditions that the Commission reserved the right to require reduction in pumpage if it interfered with other wells, and that monitoring results were to be sent to the Commission (none were ever received). The normal six-month start date deadline was September 2, 1993 (Exhibit 5).

August 25, 1993
The Commission received notice of commencing work on pump installation before mid-September. A subsequent letter dated November 1, 1993 requested an extension of the start date to December 15, 1993.

September 30, 1994
The last of six extensions of the start date was approved. Each successive approval noted the permit expiration date of March 2, 1995.

December 29, 1994
PBP sent notice by letter of the selection of contractor Armitage Brothers Construction and Trucking, Inc. to install pumps (type "A" license), with an acknowledgement of the expiration date (Exhibit 6).

March 2, 1995
The permit for installing pumps in the two wells expired.

June 24 & 30, 1995
The pumps were installed in 4125-01 & 02, respectively, according to the eventual filing (January 11, 2001) of the WCR2, which constitute violations of the permits.

June 28, 1995
Staff sent a letter noting that the permits had expired, requesting further information concerning the status of the project (Exhibit 7).

March 1, 1996
Staff faxed a second notice of permit expiration and a copy of the pump installation permit, with another request for information.

March 6, 1996
A letter from McCormack Properties, Ltd., for PBP, was received via fax (Exhibit 8). The permittee identified a change in project supervision and a temporary mechanic's lien in favor of the pump installer due to delayed offshore funding, resulting in a lack of administrative follow-up on permit requirements.
Staff sent a letter notifying the project developers that no further communications had been received and that the project was subject to fines for violations of permit requirements (Exhibit 9).

Daniel Ide of McCormack Properties, Ltd. and Barry Toyota for consultant Wilson, Okamoto & Associates met with staff at the Commission office. New pump test report and well completion report (WCR2) forms were provided to the permittee, amid assurances that miscommunications of the past would be remedied.

Well Completion Reports Part 2 (Pump Installation) (WCR2) were filed by Tom Nance in a letter identifying the new Wailea 670 owner as WCPT/GW Land Associates, LLC and attaching a letter from the owner authorizing Nance to sign the reports on its behalf. The cover letter from Nance notes that the pumps were not in use due to absent controller parts. The reports included summary graphs but not raw data as required for Commission staff review. A letter from staff requesting the raw data was dated February 9, 2001. No additional information has been provided to date.

WATER AVAILABILITY:

Kamaole Aquifer System of the Central Aquifer Sector
Estimated Sustainable Yield: 11 mgd
Current Aquifer System Reported Pumpage (12-MAV as of September 6, 2001): 3.841 mgd
Proposed Use: 2.0 mgd. brackish water, Irrigation

ISSUES/ANALYSIS:

There are two kinds of violations in this case: 1) work done under expired permits, and 2) late filing of well completion reports. It is important to bear in mind that none of this information was known prior to finally receiving Well Completion Reports recently. There are five potential violations in all.

Work without a Permit
HAR §13-168-12(a) states: “No well shall be constructed, altered, or repaired and no pump or pumping equipment shall be installed, replaced, or repaired without an appropriate permit from the commission.”

1) While Well #1 (4125-01) was constructed within the time frame of its permit, construction of Well #2 (Well No. 4125-02) was apparently completed after its permit expired November 25, 1991. The well completion report (WCR1) candidly identifies the well construction completion date as December 27, 1991.

2) Pump installations in Wells # 1 & 2 (Well Nos. 4125-01 & 02) were completed nearly four months after the permit expired. This second violation follows ample communications of the permittee’s understanding of the deadline dates and requests for start date extensions.

Staff believes that doing work without a permit is a serious offense, as it may project risk to the resource we try to protect. Delay in completing work confounds any effort to monitor results from well use in the interest of reviewing new applications. The record shows that communications among neighboring landowners and the County raised such issues. Staff understands that these may have complicated the timing of completion of Well #2, which delay was only about 30 days. Staff believes that a first-time fine is appropriate under these circumstances.

Late Filing of Well Completion Reports

3) Well Completion Report Part 1 for Well #1 (4125-01) was due to have been filed within 30 days of work completion on Well #1, stated as “January 1991”. It was filed June 18, 1991, four months after the 30-day deadline passed.

4) Well Completion Report Part 1 (well construction) for Well #2 (4125-02) was due to have been filed within 30 days of work completion on Well #2, stated as December 27, 1991. It was filed on March 6, 1992, over one month after the 30-day deadline passed.
5) Well Completion Reports Part 2 (pump installation) for both Wells #1 & 2 were due within 30 days of work completion (Condition 6, Exhibit 5), stated as June 24, 1995 (Well #1) and June 30, 1995 (Well #2). They were filed January 11, 2001, five and a half years after the deadline passed. This third late filing violation of the same type came respectively 5.5 and 4.5 years after two additional letters noting permit expiration and request for information, 4.5 years following a meeting resulting in assurances that the reports would be filed, and finally, six months after yet another notice was sent identifying potential fines. The total elapsed time between the deadline for filing the first pump installation and the eventual filing was 1997 days. The total elapsed time between the notice of violation (July 31, 2000) and potential fines and the eventual submittal of the reports (January 11, 2001) was 133 days.

Penalty Calculation

Minimum Fines

Staff policy sets the minimum fine at $250 per day, and the duration may be mitigated through compliance to a one-day fine. Because there was no opportunity for mitigating compliance due to the unresponsiveness of the permittee, the minimum fine is set for the duration of the violation. Work without a permit is dated from the expiration date of the permit to the completion of work as indicated on reports eventually filed.

Gravity Component

If there were possible harm to the aquifer, non-compliance would incur a gravity component. Because these pumps have not been in use, no real harm could have occurred, and in this case no gravity component has been applied.

Reporting is required within 30 days of work completion. While staff believes these are not as significant as doing work without a valid permit, they are very important from an administrative point-of-view.

Further, at the approximate time Well #1 was completed, a letter had been sent by staff reminding the permittee of the reportage requirement. Well Completion Reports Part 1 for construction of Wells #1 & #2 were both filed late.

Similarly, the unresponsiveness of the permittee on pump installation after a long period of attentiveness suggests non-compliance. If there were evidence to support non-compliance with reporting requirements, a gravity factor could be applied. To the contrary, it appears that there were legitimate reasons for non-performance on reporting.

Mitigating Component

In staff’s opinion, the more cooperative, problem-solving attitude of staff during the period of record did not prepare the permittee for the gravity now visited through the penalty policy and staff’s current approach of penalty warnings. The policy now results, in this situation, in heavy penalties for work without a permit. Despite the fact that late reporting would be considered a less important violation, the departure of the project director does not absolve the permittee from responsibility. Even deep mitigating reductions to reflect lost continuity could result in still heavier fines, given the long period of inattention to this requirement.

Paluaea Bay Partners, part of McCormack Properties, Ltd., was the responsible party throughout most of the responsive period of communications, acquiring the ownership from Maui 670 Limited Partnership in 1990 (notification by letter May 18, 1990). The project director for Paluaea Bay Partners was Daniel Ide, and Gary Faber’s letter of March 6 1996 (Exhibit 8) indicates that Mr. Ide’s departure was the cause of communications breakdown in 1995, and his reappearance in on behalf of McCormack Properties in August of 2000 came just a few months prior to receipt of reportage from Tom Nance on behalf of the newly announced project owners, WCPT/GW, in January 2001. The new owners assume the responsibilities for compliance with permit conditions.

Paul Frandsen & Associates was the drilling contractor in 1991 (January for Well #1, June through November for Well #2). The reasons for the delay in completing Well #2 until after the permit expired, were never explained. It is therefore not known who, other than the well owner, is responsible for compliance with the terms of the permit.

The violations of late reporting for pump installations come following successive communications confirming the permittee’s awareness of the importance of timely performance. The mitigated minimum extends from the very beginning of the violation, thirty days after completed work, over a duration of
2,111 days, which is over six and one-half years. As we are in a "catch-up" phase of enforcement, the project director cannot have anticipated the implications of potentially $1000 per day fines. Notice to this effect resulted in an end to six years of inattention. The Commission has a policy of dismissing some fines if compliance is gained within 30 days. Elapsed time from 30 days after the notice to the date of compliance is 133 days, resulting in a potential reduction of the overall fine to cover only that period.

Finally, it must be noted that these wells have not actually been used yet, and therefore are not posing a real threat to the aquifer. Further, the applicant has clearly and early committed itself to alternative sources when they are available.

The first-time violations for running late with well construction, pump installation, and completion report filing each carry a minimum $250 component. Against these are the mitigating conditions that staff recommends reduce the daily component for work without a permit $100 and late filing to $25.

Summary
The total fines for all five violations are summarized in Exhibit 10, coming to $38,050.

RECOMMENDATION:
That the Commission:

1) Find that Palauea Bay Partners, permittee for Wailea 670 Irrigation Wells (Well Nos. 4125-01 and -02) is in violation of the Water Code, HRS § 174C-84(a) Permits for Well Construction and Pump Installation, Administrative Rules § 13-168-12(j); and HRS § 174C-85, Administrative Rules § 13-168-13 Well Completion Report, as summarized in Exhibit 10.

2) Fine Palauea Bay Partners a total of $38,050 for the violation in Recommendation 1.

Respectfully submitted,

LINNEL T. NISHIOKA
Deputy Director

Exhibit(s):
1a, 1b. (Location Maps)
2. (Well Construction Permit for 4125-01 & 02)
3. (Sep 11, 1991 letter from Wailea Resort Company to Peter Nottage (McCormick Properties commenting on proposed scope of work for John Mink)
4. (Proposed Aquifer Monitor Plan)
5. (Pump Installation Permits for 4125-01 & 02 – identical except for gpm, see condition 3 on first pages)
6. (Dec 29, 1994 letter from Daniel K. Ide (McCormack Properties) announcing contract award, acknowledging completion date)
7. (Jun 28, 1995 letter to Daniel K. Ide announcing expiration of permits)
8. (March 6, 1996 letter from Gary Faber (McCormack Properties) identifying complications in completing administrative procedures, expressing intent to comply in 30-45 days)
9. (Jul 31, 2000 letter to Daniel Ide and Gary Faber noting appearance of wells as source for a project seeking approvals, indentifying history of permits, and announcing potential violations of Water Code and potential fines)
10. (Penalty Calculation spreadsheet)
11. (Penalty Policy Guideline)
1. Minutes of the October 17, 2001 meeting
2. Old Business/Announcements
4. Waiahole-Waikane Community Association, Hakipu'u Ohana, Kaheolu

Item 3
Post-it Fax Note 7671
Date 11/9/01 # of pages - 9 -
To J. HARLAND
Co/Dept. DNR-CWMD
Phone # 874-1944
Fax # 514-1805

Item 5
Post-it Fax Note 7671
Date 11/9/01 # of pages - 8 -
To WAILANI DRILLING
Co/Dept. Malm, Inc.
Phone # 587-0251
Fax # 572-6925

Item 7
Post-it Fax Note 7671
Date 11/9/01 # of pages - 9 -
To JAMES HARLAND
Co/Dept. DNR-CWMD
Phone # 587-0251
Fax # 538-7757
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### MONTHLY GROUND WATER USE REPORT

**Wailea 670 Associates**  
381 Huku Li'I Place 202  
Kihei, Maui HI 96753

**Report Month ______ Year**

**INSTRUCTIONS:** Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu HI 96809. For assistance, please call (808) 587-0264.

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* - Flow meter, electrical consumption, weir of flume, not metered (estimated).  
- Measurement should be taken while pump is NOT running just prior to a pumping cycle; if measurement is taken while pump is running, please indicate so.

Other comments or additional information (e.g. - date and method of chloride measurement; how pumpage amounts are estimated; etc...):___

Submitted by (print) ___________________________  
Signature ___________________________  
Date ________________  
Telephone No. ________________
1. Minutes of the October 17, 2001 meeting
2. Old Business/Announcements
4. Waiahole-Waikane Community Association, Hakipu'u Ohana Kalala

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January 11, 2002

Mr. Tom Nance
WCPT/GW Land Associates, LLC
10940 Wilshire Boulevard
Los Angeles CA 90024
Kapolei, HI 96793

Dear Mr. Nance

Commission Submittal for your Well Construction/Pump Installation Permit

The Commission on Water Resource Management will be acting on your well construction/pump installation permit application for your Wailea 670 Irrigation Wells (Well Nos. 4125-01 and 4125-02) at its Department of Land and Natural Resources Board Room meeting at 9:00 am at the Department of Land and Natural Resources Board Room.

A copy of the submittal for action on your well construction / pump installation permit application is enclosed for your information and review. You may wish to attend the meeting in case the Commissioners have questions regarding your application. Otherwise, we will notify you of the Commission's decision soon thereafter.

If you have any questions, please contact Charley Ice at 587-0251.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

Ci
Attach
C: WCPT/GW Land Associates, LLC
    DKI & Associates
    Tom Nance Water Resource Engineering
    Mel's Water Works Hawaii
STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES

MONTHLY GROUND WATER DELIVERY REPORT
(INFORMATION TO BE USED BY U.S. GEOLOGICAL SURVEY)

Wailea 670 Associates
381 Huku Li'i Place 202
Kihei, Maui HI 96753

Report Month ______ Year

INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use and other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu HI 96809. For assistance, please call (808) 587-0264.

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* Use of water code:
AO: AQuaculture A: Agriculture non-irrigation use (livestock, cane wash, etc.)
C: Commercial I: Industrial-manufacturing, construction, etc.
D: Domestic H: Hydroelectric power generation - indicate KWH of power generated
ID: Irrigation - Drip F: Fuel power generation - cooling
IF: Irrigation - Furrow IS: Irrigation - Sprinkle

** For estimated values use code:
P: Power consumption
T: Total time of operation
D: Comparison with past data
X: Other means - (indicate method)

Other comments or additional information:

Submitted by (print) ____________________
Title ____________________
Signature ____________________
Date ____________________
Phone No. ____________________
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MAUI WATER BATTLE LOOMS

Water Board Member Starr says the state and county are not following water policy priorities.

Hawaiian Homesteads and resorts compete for same water.

Dave DeLeon

Native Hawaiian homesteaders are again being short-changed on water allocations, according to Maui Board of Water Supply Chairman Starr.

In a presentation released last week, Starr said that despite policy in the State Constitution, the State Water Code, and County General Plan, water for resorts and new county water line and development in South Maui resorts are claiming the island's limited water resources, at the expense of Hawaiian homesteading.

"It has been my understanding that the state's priorities for water allocation with projects built by the state Department of Hawaiian Home Lands and other developments for the Hawaiian community, and for agriculture. After meeting those needs, we are supposed to supply the existing urban and rural water customer base. Farther down the priority list comes new building. Resort development is supposed to be at the bottom of the priority list," Starr said.

Starr pointed out that major resorts have begun to tap the limited fresh water resources available in South Maui.

"It is time to decide whether the existence of these freshwater resources is sustainable for water supply with projects built by the state Department of Hawaiian Home Lands and other developments for the Hawaiian community, and for agriculture. After meeting those needs, we are supposed to supply the existing urban and rural water customer base. Farther down the priority list comes new building. Resort development is supposed to be at the bottom of the priority list," Starr said.

Starr pointed out that major resorts have begun to tap the limited fresh water resources available in South Maui.
The rumor mill suggests that Wailea 670 and the Nakua Development will be hoping to get a look on 10 mgd from the aquifer, he said. According to state water data, the Ulupalakua aquifer has an estimated sustainable yield of 11 million gallons a day. "There is enough water there for everyone," said Wailea 670 manager Charles Jencks.

Jencks said that Starr's assertion that his firm is trying to lock on all the water in Ulupalakua is attempting to develop 10 mgd is wrong. "I don't know where he is getting that," Jencks said.

Jencks said it is obvious that his project cannot depend on the county Department of Water Supply to supply the water it will require. They will have to develop their own source. But that does not preclude anyone else from developing their own wells in the same aquifer.

Ben Henderson, executive assistant to the director of the state Department of Hawaiian Home Lands (DHHL), agreed with Starr's point that his agency and its native Hawaiian clientele have a real, competing interest in the South Maui aquifer.

The Hawaiian Home Lands
Water...

from p. 3

program is based on a 1920 act of Congress that sets aside certain former royal lands for homesteading by the then-disfranchised native community. Many of the lands eventually set aside to fulfill that goal lacked water and could not be developed until a water resource was found, leaving some Hawaiian families on waiting lists for generations.

Some DHHL homesteads, such as 20,000-acre Kahilinui district on the backside of Haleakula, remain undevelopable because of the lack of water.

The Department of Hawaiian Home Lands is now attempting to develop an arid 6,000-acre homestead property between Kula and Kihei and as well as Kahilinui. Henderson said there are 2,800 native Hawaiian families on the waiting list for homesteads on Maui.

DHHL has initiated its Kula homestead development, with the creation of 360 1-acre residential lots, and 68 farm lots. The infrastructure for the project is in place and residential development is scheduled to start next spring.

Henderson said that the department is hoping to use the water in the South Maui aquifer and will assert its rights to it.

But it has not done so, so far, according to Roy Hardy, Enforcement Branch chief with the State Water Commission.

Hardy agreed with Starr that Hawaiian homesteads have priority over most other uses in the State Water Code, but for that priority to go into effect, the Hawaiian Homes Commission has to assert its claim on the water.

So far, they have not done that and Wailea 670 developers WCPT/GW Land Associates have permission for one new well in Ulupalakua and have applied for two more. While the developers hope to pull 1 mgd from the new well, exactly how much water Wailea 670 will be allowed to pull will be determined by the State Water Commission after the new well is in and there is information about the amount water that is available to be tapped, Hardy said.
05 Day of Telcom & Transmission

provided Pump Test Report Form, WCE 2 Form, WCE Form

Renewed need for documentation of work on wells (WCE 2),

21 Aug 00 w/ Betsy Tachota, positive (0)
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Mr. Daniel K. Ide, DKI & Associates, Inc. for WCPT/GW Land Associates  
55 Merchant Street, Suite 1400  
Honolulu, Hawaii 96813

Mr. Gary Faber, Vice-President McCormack Properties, Ltd.  
Davies Pacific Center  
841 Bishop Street, Penthouse  
Honolulu, Hawaii 96813

Dear Mssrs. Ide and Faber:

Potential Water Code Violations  
Wailea 670 Irrigation Wells  
Well Nos. 4125-01 and 02

It has come to our attention that the captioned wells are being proposed as irrigation sources to the Wailea 670 development now under review.

As then representative of Palauea Bay Partners, Mr. Ide was notified by our letter dated June 28, 1995 that the pump installation permits issued for these wells to Palauea Bay Partners at the McCormack Properties address had expired March 2, 1995, without our receiving any documentation of work done as required within 60 days of completing work under the permit. We requested that you submit these as soon as possible.

On behalf of McCormack Properties, Inc., Mr. Faber responded by letter dated March 6, 1996 that Mr. Ide had left the project directorship, and that while physical work had been completed on pump installation, the administrative requirements under the permit had languished. The Commission was told that McCormack Properties, Inc. would be working with Wilson, Okamoto & Associates to comply with the requirements of the permit within the next 30 to 45 days.

To date, we have received no further communications of any kind on this matter from you. Under the circumstances, this matter needs to be taken to the Commission. Potential maximum fines for violations of the Water Code are $1000 per day. We will appreciate a response at your earliest convenience.

If you have any questions, please contact Charley Ice at 587-0251.

Sincerely,

LINNEL T. NISHIOKA  
Deputy Director

Cl: ss

c: Wilson Okamoto & Associates  
John Min, County of Maui, Department of Planning
COMMISSION ON WATER RESOURCE MANAGEMENT

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G'm wait 670 dr
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Follow up. Possible big hammer fire.
Dear Mr. Nance:

"Wailea 670" Irrigation Wells (4125-01 & Ohanui-Kailua Well (5313-02)

Thank you for transmitting the Well Completion Reports for Wells and the Well Completion materials for Ohanui-Kailua. However, pump test data were not included. While we appreciate your providing graphic analysis, your permit requires submitting the pump test data itself for our analysis. We request you transmit this data at your earliest convenience.

If you have any questions, please contact Charley Ice of the Water Commission staff at 587-0251 or toll-free at 984-4644, extension 70251.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director
FROM: Charley

DATE: 28 Jan 01

TO: BAUER, G.
TO: FUJII, N.
TO: OHYE, M.
TO: JINNAI, R.
TO: IMATA, R.
TO: NAKAMA, L.
TO: HIGA, D.
TO: HARDY, R.
TO: HIRANO, E.
TO: SAKODA, E.
TO: NAKANO, D.
TO: NISHIOKA, L
TO: DANBARRA, S
TO: SUBIA, S.
TO: YODA, K.

INIT. 4
INIT. 1
INIT. 1
INIT. 3
INIT. 2
INIT. 2
INIT. 3
INIT.

FOR: Approval
FOR: Signature
FOR: Information

PLEASE:
___ Review & Comment
___ Type Draft
___ Type Final
___ File
___ Xerox ___ copies
___ Take Action:
___ Please See Me

4/28/01

Call Tom for data? ✓ Have done
 Mitch review? ✓ DONE
# COMMISSION ON WATER RESOURCE MANAGEMENT

(10/99)

| FROM: LINNEL | DATE: JAN 16 2001 | SUSPENSE DATE |

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For files
January 10, 2001

Ms. Linnel T. Nishoioka - Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Nishoika,

Well Completion Report – Part II for the
Wailea 670 Irrigation Wells, State Nos. 4125-01 and 02

By this letter, I am authorizing Tom Nance to sign the Well Completion Reports as
Permittee for the Wailea 670 irrigation wells, State Nos. 4125-01 and 02.

Sincerely,

WCPT/GW Land Associates, LLC
a Delaware Limited Liability Company
by its Managing Member: WCPT Investors, LLC
a Delaware Limited Liability Company
by Wailea Associates, LLC, its co-manager

By: Michael Rosenfeld
Its: Manager
MEMO and ROUTE SLIP

WCR 2 Check for Well No. 4125-01&02 (survey to regulation memo) 01/12/01

1. **Pump Tests Check** (special condition of PIP? Yes/No) Glenn Bauer (initial if yes)  
   
   **Step-Drawdown Test:**  
   followed WCPI Stds □  □  
   analysis attached □  □  
   proposed pump cap o.k. □  □  

   If no, describe deficiency  
   
   Have we received any test data?  
   Can we call Tony for it?  

   **Aquifer Pump Test:**  
   followed WCPI Stds □  □  
   T & S analysis attached □  □  

   **Well Interference:**  
   estimated Steady-State drawdown at 1-mile radius is ______ ft.  
   analysis attached □  □  

   **Stream Surface Water Impacted:** □  □  ← If yes, identify most probable stream

2. **Pump Installation Check** Mitch Ohye (initial)  
   
   data complete □  □  
   followed WCPI Stds □  □  
   well database updated □  □  

3. Charley/Lenore/Ryan (initial) take action based on above analysis

4. Roy (initial) check

5. Susan Subia (initial) finalize

6. Linnel (initial) signature

7. Charley/Lenore/Ryan File

---

1) Check TMK - different  
   "55" is incorrect  
   2-1-8: 56 is correct

2) [SPK] > 3/2/95 expiration  
   (Violation?) Need to go to CWRM's  
   we still need new pump  
   test data - file's are '91
Ms. Linnel T. Nishioka - Deputy Director  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  
P. O. Box 621  
Honolulu, Hawaii 96809

Dear Ms. Nishioka:

Well Completion Report - Part II for the  
Wailea 670 Irrigation Wells, State Nos. 4125-01 and 02

This letter and the attached Well Completion Reports respond to your letter of July 31, 2000 to Daniel K. Ide of DKI & Associates who represents the new owner of the Wailea 670 site. The new owner is WCPT/GW Land Associates, LLC located at 10940 Wilshire Boulevard, Suite 1240, Los Angeles, California 90024. I have signed the reports on behalf of the Owner and have attached his letter authorizing me to do so.

Based on my discussion with Charley Ice of your staff, the remaining administrative requirements are the filing of the Well Completion Report - Part II for each well. The attached reports have been completed using information provided by Mel's Water Works Hawaii, Inc. Mel's supplied the pump and motor controls to Armitage Brothers Construction, Inc., the project's contractor. Armitage is no longer in business.

The submersible well pumps were installed in June 1995 but neither has any above ground piping beyond the long radius elbow at the ground surface. Each has its own 150 KW diesel generator for power. When some missing parts to the motor control centers are replaced, it is the Owner's intention to run the wells as needed to keep the equipment in operating condition. It is anticipated that this run time may be once a month for about an hour for each well. When the use for dust control and irrigation supply is about to commence, you will be informed in writing. If you have any questions or need additional information, please feel free to call.

Sincerely,

Tom Nance

cc: Michael Rosenfeld - WCPT/GW Land Assoc.  
Mel Lima - Mel's Water Works Hawaii

Attachments
1. State Well No.: 4125-01  
   Well Name: Wailea 670 Well No. 1  
   Island: Maui

2. Address: (No Street Address)  
   Tax Map Key: 2-1-08:55


4. Date Pump Installed: June 24, 1995

5. PERMANENT PUMP INFORMATION  
   Serial No. 85175295  
   Pump Type, Make, Serial No.: SIMFL0 Model SSL8C-6  
   Rated Capacity: 500 gpm  
   Motor Type, H.P., Voltage, rpm: 100 HP, 460V, 3 Phase, 3600 RPM

6. Method of flow measurement:  
   □ Flowmeter  
   □ Propeller Meter  
   Manufacturer _____________ Make _____________ Size ________________  
   □ Weir*  □ Open Pipe*  □ Orifice*  □ Other*, explain below
   *attach schematic

7. Fill in the as-built section on the other side of this sheet.

8. Other remarks/comments:  
   Power for the pump is temporarily provided by a 150 KW diesel generator. Use of the well is currently limited to periodic short term runs to keep the equipment functional.

---

**Pump Installation Contractor (print)**
Melvin E. Lima  
C-57/C-57a/A Lic. No. C-18254

**Signature**

**Date** 1-8-2001

---

**Permittee (print)**
WCPT/GW Land Associates, LLC

**Signature**
Michael Rosenfeld, Its Manager

**Date** 1-10-01
9. AS-BUILT PUMP SECTION (Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = 522.26 ft. mean sea level

identify reference point elevation for water level measurements through chase tube

_______ ft. mean sea level

describe reference point:

Chase Tube Depth

Pump intake depth = None ft.
(referenced to bench mark)

Pump Intake Depth

Chase tube depth = 532 ft.
(referenced to bench mark)

if airline installed, bottom of airline elevation = Not Known

_______ ft. mean sea level

(Poly tubing airline installed)
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
WELL COMPLETION REPORT - PART II
1-08-01
00-92
Pump Installation

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 587-0225. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/cwrm/

1. State Well No.: 4125-02
   Well Name: Wailea 670 No. 2
   Island: Maui
2. Address: (No Street Address) Tax Map Key: 2-1-08:55
4. Date Pump Installed: June 30, 1995
5. PERMANENT PUMP INFORMATION
   Serial No. 85175A295
   Pump Type, Make, Serial No.: SIMFL0 Model SSHBC-5
   Rated Capacity: 500 gpm
   Motor Type, H.P., Voltage, rpm: 100 HP, 460V, 3 Phase, 3600 RPM
   Type of flow meter: Not Yet Installed which measures in GPM and Totalizers in Gallons
6. Method of flow measurement:
   □ Flowmeter □ Propeller □ Weir □ Open Pipe □ Orifice □ Other*, explain below
   Manufacturer Make Type Size 6"
   *attach schematic
7. Fill in the as-built section on the other side of this sheet.
8. Other remarks/comments:
   Power for the pump is temporarily provided by a 150 KW diesel generator. Use of the well is currently limited to periodic short term runs to keep the equipment functional.

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9. AS-BUILT PUMP SECTION (Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = 523.45 ft. mean sea level

identify reference point elevation for water level measurements through chase tube

ft. mean sea level

describe reference point:

Chase Tube Depth

Pump intake depth = None ft. (referenced to bench mark)

Pump Intake Depth

Chase tube depth = 532 ft. (referenced to bench mark)

if airline installed, bottom of airline elevation = Not Known

ft. mean sea level

(Poly tubing airline installed)
January 10, 2001

Ms. Linnell T. Nishioika - Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Nishoioka,

Well Completion Report – Part II for the
Wailea 670 Irrigation Wells, State Nos. 4125-01 and 02

By this letter, I am authorizing Tom Nance to sign the Well Completion Reports as
Permittee for the Wailea 670 irrigation wells, State Nos. 4125-01 and 02.

Sincerely,

WCPT/GW Land Associates, LLC
a Delaware Limited Liability Company
by its Managing Member: WCPT Investors, LLC
a Delaware Limited Liability Company
by Wailea Associates, LLC, its co-manager

By: Michael Rosenfeld
Its: Manager
## COMMISSION ON WATER RESOURCE MANAGEMENT

**FROM:** LINNEL
**DATE:** 10/6/00
**SUSPENSE DATE:**

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Linnel Nishioka, Deputy Director
Commission on Water
Resource Management
Department of Land
and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

SUBJECT: Palaeua Subdivision
TMK 2-1-23:02

Dear Ms. Nishioka:

Thank you for your November 24, 1999 letter providing comments on the subject project. On behalf of the applicant, Palaeua Investors LLC, we would like to note the following.

As of December 1, 1999, the rolling annual average groundwater withdrawals from the Iao Aquifer were 18.655 million gallons per day (MGD). These withdrawals are within the limits of the regulatory 20 MGD sustainable yield of this aquifer.

Recent discussions with the County’s Department of Water Supply (DWS), Water Resource and Planning Division have indicated that new sources will be brought on-line to supplement the water provided by the Iao Aquifer. One (1) new well, with a capacity of 1.0 MGD, is expected to be brought on-line during the first quarter of the year 2000, followed by one (1) more new well with a capacity of 1.0 MGD during the latter part of the year. In addition, two (2) new wells, with a capacity of 1.0 MGD per well, are projected for on-line production by late 2001. The source of water for these four (4) new wells is the Waihee aquifer. It should also be noted that two (2) wells in North Waihee, pumping at a combined rate of 1.5 MGD, were brought on-line by the DWS in July 1997.

In light of the foregoing, the above-referenced improvements will provide additional sources of water for the Department’s Central Maui Water System, as well as alleviate withdrawals from the Iao Aquifer.
Thank you for providing us with your comments. Please feel free to call me should you have any questions or require additional information.

Very truly yours,

Glenn Tadaki, Planner

GT:to
cc: Everett Dowling, Dowling Company, Inc.
    Ann Cua, Department of Planning
    Eva Blumenstein, Department of Water Supply
FACSIMILE TRANSMITTAL PAGE

Please deliver the following pages to:

Name: Jim Williamson
Company: Maui Meadows Homeowners Assoc.
From: Charley Ice
Date: 6 Mar 96 Time: 2:30

Message: Transmitting letter from Palamua Bay Partners concerning status of Pump Installation Permit for Wells 4125-01 & 02.
We will contact Wilson Okamoto to monitor progress. Thanks for your interest!

Total number of pages (including Transmittal Page): 3

* * * * * * *

If you do not receive all of the pages legibly, please call back: (808) 587-0251

Sending Facsimile Number: (808) 587-0219
Receiving Facsimile Number: ( ) 874 5305
March 6, 1996

VIA FAX 587-0219
Three (3) Pages

Charley Ice
Commission Of Water Resource Management
DEPARTMENT OF LAND & NATURAL RESOURCES
P.O. Box 621
Honolulu, Hawaii 96813

RE: Palauea Bay Partners Limited Partnership
Pump Installation Permit, Well No. 4125-01 & 02

Dear Mr. Ice:

Thank you for your fax dated March 1, 1996 regarding the above project. We apologize for the lack of communication regarding the status for this well permit. The project director for this Partnership, Dan Ide, left McCormack Properties, Ltd. last year. We are discovering numerous activities that languished prior and subsequent to Mr. Ide’s departure.

On December 29, 1994 we contracted with ABC Trucking, Inc., dba Armitage Construction, Inc. of Maui to install the well pumps at Wailea Ranch (fka Wailea 670). In addition, on December 29, 1994 we informed your office of our intent to proceed with the installation (See Attachment). We acknowledge the March 3, 1995 expiration date for that permit and subsequently retained and instructed ABC Trucking to begin installation of those well pumps prior to that date. ABC Trucking completed the pump installation by the end of March, 1995.

Unfortunately, due to a delay in Partnership funding from our Japanese lenders we became delinquent to ABC Trucking, Inc. on our outstanding invoice for this work. Subsequently, we agreed to a mechanic’s lien filed on December 1, 1995 but by January 30, 1996 we paid the contractors and received a satisfaction and release of lien.

In view of the foregoing, although we have complied with the physical requirements for this installation, we have been remiss regarding the administrative procedures outlined in the well permit. We acknowledge the well completion report and as-built sectional drawings were not submitted to your office and that we have not supplied you with quarterly monitoring reports. We have every intention of complying with your office within the next 30 to 45 days.
We are currently working with Wilson Okamoto & Associates, Inc. regarding the well completion report and hope to get this project back on track as soon as possible. Please call if I can answer any additional questions.

Thank you,
McCORMACK PROPERTIES, LTD.

Gary Faber
Vice President

Attachment

cc: Mike McCormack
FACSIMILE TRANSMITTAL PAGE

Please deliver the following pages to:

Name: Gary Faber
Company: Palama Bay Partners
From: Charley Ice
Date: 01 Mar 96 Time: 3:45 p

Message: transmitting copy of Pump Installation Permit (3 pp), inquiry from Jas. Williamson (Maui Mauis Homeowners). Please respond to this office concerning project status. Note permit expiration of March 2, 1995, and standard conditions #1, 5, 6, 8, 11. We have received no information on this project to date.

Total number of pages (including Transmittal Page): 5

* * * * * * *

If you do not receive all of the pages legibly, please call back: (808) 587-0251

Sending Facsimile Number: (808) 587-0219
Receiving Facsimile Number: (___) 531 2470
Mr. James V. Williamson
672 Kumulani Drive
Kihei, Hawaii 96753

Dear Mr. Williamson:

Palauea Bay Partners Wells
(Well Nos. 4125-01, 4125-02)

Thank you for your inquiry concerning the status of these two groundwater wells for irrigating the two 18-hole golf courses at Wailea.

The pump installation permits for Well Nos. 4125-01 and 4125-02 expired March 2, 1995, and we have inquired with the applicant about the status of the project. We will relay the results to you.

If you have further questions, please contact Charley Ice at 587-0251.

Sincerely,

RAE M. LOUI, P.E.
Deputy Director

Class
Mr. Daniel K. Ide, Project Director
Palauea Bay Partners
Davies Pacific Center
841 Bishop Street, Penthouse
Honolulu, Hawaii 96813

Dear Mr. Ide:

Well Nos. 4125-01 and 4125-02

Please be advised that the pump installation permits for these wells expired March 2, 1995.

Following successive extensions of the start date, we received your letter of December 29, 1994, confirming your contract with Armitage Bros. Construction, Inc. of Maui to install the pumps. We have not received a completion report nor as-built section drawings, and request that you submit these as soon as possible.

If you have any questions, please contact Charley Ice at 587-0251.

Sincerely,

RAE M. LOUI
Deputy Director
Mr. Ed Sakoda  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State Of Hawaii  
P.O.Box 621  
Honolulu, HI 96809

Dear Ed:

Subject: Pump Installation Permits - Well # 4125-01 & 4125-02

I am Vice-President of the Maui Meadows Homeowners Association. Our subdivision is located directly adjacent to the massive Wailea 670 (now Wailea Ranch) development proposed by Palaua Bay Partners. Our Association is concerned about the extent and timetable for this development.

The development will include two 18-hole golf courses planned to be irrigated (at least in part) by two groundwater wells on the property. The Commission issued pump installation permits for these two wells (4125-01 and 4125-02) on March 2, 1993. A condition of the permits is that they may be revoked if work on the pump installation is not started within six months of the date of issue. Further, the work is to be completed within two years. No work has been undertaken on either well to date.

Please advise as soon as possible as to the status of these permits. Have they expired or has an extension been granted?

We look forward to your response. Feel free to fax me at the above number.

Sincerely,

James V. Williamson, P.E.

cc: To Fax (808) 587-0219

UPDATE (JUNE 27, 1995) VIA FAX

As of June 26 there is finally action maybe related to the above subject. A well drilling derrick is installed at one of the wells. It is not known whether this is for the purpose of installing a pump. Because the derrick is so obvious, and work activity can be heard, our Homeowners Association is receiving many questions from residents as to what is going on. Your prompt response (by fax) explaining the permit situation would be appreciated.

THANKS,

James V. Williamson, P.E.
Mr. Ed Sakoda  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State Of Hawaii  
P.O.Box 621  
Honolulu, HI 96809  

Dear Ed:  

Subject: Pump Installation Permits - Well # 4125-01 & 4125-02  

I am Vice-President of the Maui Meadows Homeowners Association. Our subdivision is located directly adjacent to the massive Wailea 670 (now Wailea Ranch) development proposed by Palauea Bay Partners. Our Association is concerned about the extent and timetable for this development.  

The development will include two 18-hole golf courses planned to be irrigated (at least in part) by two groundwater wells on the property. The Commission issued pump installation permits for these two wells (4125-01 and 4125-02) on March 2, 1993. A condition of the permits is that they may be revoked if work on the pump installation is not started within six months of the date of issue. Further, the work is to be completed within two years. No work has been undertaken on either well to date.  

Please advise as soon as possible as to the status of these permits. Have they expired or has an extension been granted?  

We look forward to your response. Feel free to fax me at the above number.  

Sincerely,  

James V. Williamson, P.E.  

cc: To Fax (808) 587-0219
December 29, 1994

Mr. Ed Sakoda
Department of Land & Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Sakoda:

RE: Well Nos. 4125-01 and 4125-02

This is to confirm that we have contracted with Armitage Bros. Construction, Inc. of Maui to install the pumps at Wailea Ranch (fka Wailea 670).

We understand that installation must be completed by March 15, 1995 and will keep you apprised of our progress.

Thank you for your assistance.

Sincerely,

PALAUEA BAY PARTNERS

Daniel K. Ide
Project Director

DKI:lh

pc: Ed Kushi
Gary Okamoto
Nelson Armitage
Mr. Daniel K. Ide, Project Director
Palauae Bay Partners
Davies Pacific Center
841 Bishop Street, Penthouse
Honolulu, HI 96813

Dear Mr. Ide:

Request for Fifth Extension of Start of Construction Date for Wailea-Palauea Bay Partners Wells 1 & 2 (Well Nos. 4125-01 & 02)

We acknowledge receipt of your letter requesting a fifth extension of the start of construction date. By this letter, we are extending your start date to December 31, 1994. Please note that the wells should be completed by March 2, 1995, two years from the date the permit was issued.

Please notify the Commission on Water Resource Management, in writing, before any work covered by the permit begins, or if work cannot begin by December 31, 1994.

Sincerely,

RAE M. LOUI
Deputy Director

ES: ss
September 19, 1994

Mr. Ed Sakoda
Department of Land & Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Sakoda:

RE: Well Nos. 4125-01 and 4125-02

Please allow this letter to serve as a request for an extension of the Pump Installation Permits dated March 2, 1993. Palaeua Bay Partners requests an extension to December 31, 1994 to fulfill Condition #1 of the aforementioned Permits.

The contact persons for this work are Ed Kushi (Maui) 244-8890 or Dan Ide (Oahu) 539-9600.

Thank you for your assistance.

Sincerely,

PALAUEA BAY PARTNERS

[Signature]
Daniel K. Ide
Project Director

DKI:lh

pc: Ed Kushi
Gary Okamoto
Mr. Daniel K. Ide, Project Director  
Palauea Bay Partners  
Davies Pacific Center  
841 Bishop Street, Penthouse  
Honolulu, HI 96813

Dear Mr. Ide:

Request for Fourth Extension of Start of Construction Date for Wailea-Palauea Bay Partners  
Wells 1 & 2 (Well Nos. 4125-01 & 02)

We acknowledge receipt of your letter requesting a fourth extension of the start of construction date. By this letter we are extending your start date to September 30, 1994. Please note that the wells should be completed by March 2, 1995, two years from the date the permit was issued.

Please notify the Commission on Water Resource Management, in writing, before any work covered by the permit begins, or if work cannot begin by September 30, 1994.

Sincerely,

RAE M. LOUI  
Deputy Director
June 22, 1994

Mr. Ed Sakoda
Department of Land & Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Sakoda:

RE: Well Nos. 4125-01 and 4125-02

Please allow this letter to serve as a request for an extension of the Pump Installation Permits dated March 2, 1993. Palaeua Bay Partners requests an extension to September 30, 1994 to fulfill Condition #1 of the aforementioned Permits.

The contact persons for this work are Ed Kushi (Maui) 244-8890 or Dan Ide (Oahu) 539-9600.

Thank you for your assistance.

Sincerely,

PALAUEA BAY PARTNERS

Daniel K. Ide
Project Director

DKI:lh

pc: Ed Kushi
Gary Okamoto
Mr. Daniel K. Ide, Project Director  
Palauena Bay Partners  
Davies Pacific Center  
841 Bishop Street, Penthouse  
Honolulu, HI 96813

Dear Mr. Ide:

Request for Third Extension of Start of Construction Date for  
Wailea-Palauena Bay Partners Wells 1 & 2 (Well Nos. 4125-01 & 02)

We acknowledge receipt of your letter requesting a third extension  
of the start of construction date. By this letter we are extending your start  
date to June 30, 1994. Please note that the wells should be completed by  
March 2, 1995, two years from the date the permit was issued.

Please notify the Commission on Water Resource Management, in  
writing, before any work covered by the permit begins, or if work cannot  
begin by June 30, 1994.

Sincerely,

RAE M. LOUI  
Deputy Director

ES:ky
April 27, 1994

Mr. Ed Sakoda  
Department of Land & Natural Resources  
P. O. Box 621  
Honolulu, Hawaii  96809

Dear Mr. Sakoda:

RE: Well Nos. 4125-01 and 4125-02

Please allow this letter to serve as a request for an extension of the Pump Installation Permits dated March 2, 1993. Palaeua Bay Partners requests an extension to June 30, 1994 to fulfill Condition #1 of the aforementioned Permits.

The contact persons for this work are Ed Kushi (Maui) 244-8890 or Dan Ide (Oahu) 539-9600.

Thank you for your assistance.

Sincerely,

PALAUEA BAY PARTNERS

Daniel K. Ide  
Project Director

DKI:lh

pc: Ed Kushi  
Gary Okamoto
Mr. Daniel K. Ide, Project Director
Palaua Bay Partners
Davies Pacific Center
841 Bishop Street, Penthouse
Honolulu, HI 96813

Dear Mr. Ide:

Request for Extension of Start of Construction Date for Wailea 670 Wells 1 & 2 (Well Nos. 4125-01 & 02)

We acknowledge receipt of your letter requesting an extension of the start of construction date. By this letter we are extending your start date to April 29, 1994. Please note that the wells should be completed by March 2, 1995, two years from the date the permit was issued.

Please notify the Commission on Water Resource Management, in writing, before any work covered by the permit begins, or if work cannot begin by April 29, 1994.

Sincerely,

RAE M. LOUI
Deputy Director
January 31, 1994

Mr. Ed Sakoda
Department of Land & Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Sakoda:

RE: Well Nos. 4125-01 and 4125-02

Please allow this letter to serve as a request for an extension of the Pump Installation Permits dated March 2, 1993. Palaweia Bay Partners requests an extension to April 29, 1994 to fulfill Condition #1 of the aforementioned Permits.

The contact persons for this work are Ed Kushi (Maui) 244-8890 or Dan Ide (Oahu) 539-9600.

Thank you for your assistance.

Sincerely,

PALAUEA BAY PARTNERS

[Signature]
Daniel K. Ide
Project Director

DKI:lh

pc: Ed Kushi
Gary Okamoto
Mr. Daniel K. Ide, Project Director  
Palauoa Bay Partners  
Davies Pacific Center  
841 Bishop Street, Penthouse  
Honolulu, HI 96813  

Dear Mr. Ide:  

Request for Extension of Start of Construction Date for  
Wailea 670 Wells 1 & 2 (Well Nos. 4125-01 & 02)  

We acknowledge receipt of your letter requesting an extension of the start of construction date. By this letter we are extending your start date to February 2, 1994. Please note that the wells should be completed by March 2, 1995, two years from the date the permit was issued.  

Please notify the Commission on Water Resource Management, in writing, before any work covered by the permit begins, or if work cannot begin by February 2, 1994.  

Sincerely,  

RAE M. LOUI  
Deputy Director  

ES:ky
November 30, 1993

Mr. Ed Sakoda
Department of Land & Natural Resources
P. O. Box 621
Honolulu, Hawaii  96809

Dear Mr. Sakoda:

RE:  Well Nos. 4125-01 and 4125-02

Please allow this letter to serve as a request for an extension of the Pump Installation Permits dated March 2, 1993. Palaeu Bay Partners requests an extension to February 2, 1994 to fulfill Condition #1 of the aforementioned Permits.

The contact persons for this work are Ed Kushi (Maui) 244-8890 or Dan Ide (Oahu) 539-9600.

Thank you for your assistance.

Sincerely,

PALAUEA BAY PARTNERS

Daniel K. Ide
Project Director

DKI:lh

pc:  Ed Kushi
     Gary Okamoto
November 1, 1993

Mr. Ed Sakoda  
Department of Land & Natural Resources  
P. O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Sakoda:

RE: Well Nos. 4125-01 and 4125-02

Please allow this letter to serve as a request for an extension of the Pump Installation Permits dated March 2, 1993. Palaeau Bay Partners requests an extension to December 15, 1993 to fulfill Condition #1 of the aforementioned Permits.

The contact persons for this work are Ed Kushi (Maui) 244-8890 or Dan Ide (Oahu) 539-9600.

Thank you for your assistance.

Sincerely,

PALAUEA BAY PARTNERS

Daniel K. Ide  
Project Director

DKI:lh

pc: Ed Kushi  
Gary Okamoto
August 25, 1993

Mr. Ed Sakoda
Department of Land & Natural Resources
P. O. Box 621
Honolulu, Hawaii  96809

Dear Mr. Sakoda:

RE: Well Nos. 4125-01 and 4125-02

Pursuant to Condition #1 of the Pump Installation Permit dated March 2, 1993, please allow this letter to apprise you that Palauea Bay Partners will commence installation of pumps in our wells at Wailea Ranch (formerly Wailea 670) on or before 15 September 1993.

The contact persons for this work are Ed Kushi (Maui) 244-8890 or Dan Ide (Oahu) 539-9600.

Thank you for your assistance in this matter.

Sincerely,

PALAUEA BAY PARTNERS

Daniel K. Ide
Project Director

DKI:lh

pc: Peter Nottage
    Ed Kushi
    Gary Okamoto
PUMP INSTALLATION PERMIT

for

Wailea 670 Well 1
Well No. 4125-01
___ Wailea, Maui ___

TO: Palauea Bay Partners
841 Bishop Street, # 2300
Honolulu, HI 96813

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to install a pump in Wailea 670 Well 1 for golf course irrigation is approved, subject to the following conditions:

1. The Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified in writing before any work covered by this permit commences.

2. The permit application and staff submittal approved by the Commission at its meeting on February 17, 1993 shall be incorporated by reference.

3. The permit shall be for installation of up to a 400 gpm capacity pump in the well.

4. The proposed use 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 pump water from the well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.
5. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage. Water usage shall be measured on a monthly basis and reported to the Commission.

6. The following shall be submitted to the Commission staff within 30 days after completion of the work:
   a. Well Completion Report.
   b. As-built sectional drawing of the installed pump.

7. The applicant shall comply with all applicable laws, rules, and ordinances.

8. The applicant shall contact Mr. Thomas Arizumi, Chief, Environmental Management Division, State Department of Health, at 586-4304, concerning "TWELVE (12) CONDITIONS APPLICABLE TO ALL NEW GOLF COURSE DEVELOPMENT" dated January, 1992 (version 4). The applicant shall obtain a written statement from the Department of Health indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission.

9. This permit may be revoked if work is not started within six months of the date of issuance or if work is suspended or abandoned for six months. The work proposed in the permit application shall be completed within two years from the date of permit issuance.

   The following conditions were added at the Commission meeting on February 17, 1993:

10. By this condition and permit Condition 3, the applicant is on notice that the Commission reserves the right to require a reduction in pumpage from the well should it interfere with existing wells on private lands makai of the well site, new wells on the Hawaiian Home Lands, or public lands mauka of the well site. The permittee is on specific notice that DHHL may drill wells on its own or on State lands such that the amount of water pumped from this well site may be reduced over time to protect other wells or to meet other correlative water rights.

11. Copies of quarterly and final monitoring reports shall be sent to the Commission.
BEFORE THE MAUI PLANNING COMMISSION

COUNTY OF MAUI

STATE OF HAWAII

In The Matter Of The Application Of

Charles Jencks, on behalf of
WCPT/GW LAND ASSOCIATES LLC

To Obtain A Change in Zoning From
Agriculture and Open Space to
Kihei-Makena Project District 9
(Wailea 670) for Approximately
267.65 Acres and to Amend
Conditions of Ordinance No. 2171
and Unilateral Agreement Established
for Kihei-Makena Project District 9 for
402.35 Acres of Land in the State
Urban District for Maui Tax Map Keys
2-1-008: 56 and 71; Wailea, Kihei,
Maui, Hawaii; and Phase 1 Project
District Approval to Repeal in its
entirety Chapter 19.90, Kihei-Makena
Project District 9 (Wailea 670), Maui
County Code, 1980, as Amended with
a new Chapter 19.90A

DOCKET NO. CIZ 2000/0009
PH1 2000/0001
(Charles Jencks, on behalf of
WCPT/GW Land Associates LLC)
(CMS)

MAUI PLANNING DEPARTMENT'S REPORT
TO THE MAUI PLANNING COMMISSION
OCTOBER 23, 2001 MEETING

DEPARTMENT OF PLANNING
COUNTY OF MAUI
250 S. HIGH STREET
WAILUKU, MAUI, HI. 96793

(Change in Zoning and Project District Phase 1 Approval)
(K:\WP_DOCS\PLANNING\CIZ\00ciz9\Wailea670\2001Oct23MPCReport.wpd)
BEFORE THE MAUI PLANNING COMMISSION

COUNTY OF MAUI

STATE OF HAWAII

In The Matter Of The Application Of

Charles Jencks, on behalf of
WCPT/GW LAND ASSOCIATES LLC

To Obtain A Change in Zoning From Agriculture and Open Space to Kihei-Makena Project District 9 (Wailea 670) for Approximately 267.65 Acres and to Amend Conditions of Ordinance No. 2171 and Unilateral Agreement Established for Kihei-Makena Project District 9 for 402.35 Acres of Land in the State Urban District for Maui Tax Map Keys 2-1-008: 56 and 71; Wailea, Kihei, Maui, Hawaii; and Phase 1 Project District Approval to Repeal in its entirety Chapter 19.90, Kihei-Makena Project District 9 (Wailea 670), Maui County Code, 1980, as Amended with a new Chapter 19.90A

DOCKET NO. CIZ 2000/0009
PH1 2000/0001

(Charles Jencks, on behalf of WCPT/GW Land Associates LLC) (CMS)

BRIEF HISTORY OF THE APPLICATION

1. On October 30, 2000 the Maui Planning Commission conducted a public hearing on the applications at the Kihei Community Center in Kihei, Maui, Hawaii Minutes of the hearing were circulated to the Commission.

2. On October 30, 2000 the Maui Planning Commission voted to defer action on the applications for the following reasons:

   1. Directed the project to set up meetings with the various community groups in the Kihei-Makena Community Plan region, such as the Kihei Community Association, Wailea Community Association, Maui Meadows Homeowners Association, and Maui Meadows Neighborhood Association, to gather additional
community input regarding the development of the Project District Ordinance.

2. The applicant shall provide more specific information regarding the provisions for infrastructure improvements that will be necessary to accommodate the Wailea 670 project, including, but not limited to transportation and water.


REVISED PROJECT DESCRIPTION: (Exhibit "1", sheets 1-5)

The current master plan for the Wailea 670 community features an 18-hole private homeowner’s golf course and home oriented toward ocean views and natural open spaces. Commercial uses serving the needs of the immediate community are included within the plan. The circulation within the project district is envisioned to encourage residents to walk or ride bicycles and create a sense of community within the project.

The private golf course includes a practice area and clubhouse facility with a restaurant, pro shop, spa, indoor and outdoor recreational amenities, related community support facilities and parking. Major portions of the golf course are designed as an integral part of the community’s drainage system. The proposed course and related facilities are expected to encompass approximately 200 acres.

Single and multi family residential homes border the golf course. The community’s residential areas are for the most part less than the scale and densities currently existing in the Wailea area. Residential uses comprise approximately 370 acres or approximately 55 percent of the site. Single-family homes occupy approximately 260 acres with approximately 110 acres of multi-family homes. Although the future residential mix will be market driven, current plans call for a maximum of 1,400 planned residences of which 40 percent are single family and 60 percent are multi-family. Single family lots are envisioned to range from one-half to one acre in size. Low-density multi family are planned at densities ranging from 5 to 8 dwelling units per acre. The overall density of the community is approximately 2.1 units per acre.

In addition to the golf course, 53 acres are planned as open space, including landscaped buffers, drainage ways and steep topographic features.
The proposed commercial uses will provide convenient shopping to area residents and will be integrated in areas throughout the community. Uses may include a grocery store, retail shops, gas station, restaurants, real estate sales and management offices and other uses associated with a neighborhood level commercial facility. These uses will be located within the Village Mixed Use Subdistrict which also provides for a portion of the multi-family residential component within the project.

Relative to infrastructure improvements, the applicant proposes to develop its own private potable water system (2 MGD), two non-potable wells onsite (1.5 MGD sustainable yield) for irrigation and reuse of treated effluent from wastewater, private on-site sewage treatment facility, and private internal roadway system with pedestrian and bicycle pathways on the primary roadway system.

PROJECT REVISIONS

During the deferral period the applicant has re-evaluated its proposed project based upon the community input received during the public hearing and subsequent public meetings with various community groups and the various agency comments. According to the applicant, their goal has been to identify all the critical issues and develop a concept plan that would respond to the issues. The following summarizes the responses to the various issues:

Traffic:

Although the traffic analysis completed for Wailea 670 did an adequate job assessing the impact of the project the report did not correctly anticipate the traffic issues in Kihei nor did it properly evaluate the project’s role in addressing the traffic issues within the region. In response Parsons Brinkerhoff was hired to reevaluate the traffic issues and provided an updated report.

The report made the following regional recommendations to improve the traffic infrastructure in Kihei:

1. Demand for roadway capacity currently exceeds the ability of the roadway system to delivery capacity and additional lane capacity is needed.

2. Piilani Highway needs to be improved to four lanes.

3. South Kihei Road needs to remain two lanes, which is the current program the County of Maui has been pursuing with medium turning lanes, sidewalks and bicycle lanes. It is recommended that the segment of South Kihei Road from Lipoa Street to the future Road B (north of
Longs Shopping Center) should be widened to a four-lane roadway with median turning lane.

4. The North/South Collector Road needs to be implemented as planned.

5. The east west connectors within Kihei need to be completed so that improved access between Piilani Highway and South Kihei Road and the Collector Road can be facilitated. The connectors identified are as follows:
   a. Kaonoulu Street – improvement between Alu Like Street and South Kihei Road
   b. Waipuilani Street – improvement between South Kihei Road and, North-South Collector Road, and completion between North-South Collector Road and Piilani Highway
   c. Welakahao Street – improvement between South Kihei Road and Piilani Highway; and
   d. Auhana Street and Kanani Street – improvement between South Kihei Road and Piilani Highway.

6. Traffic signals need to be coordinated to ensure that traffic flows as efficiently as possible. In addition, it is recommended that the east-west connector streets identified above, be improved and that traffic signals be installed at their intersection with Piilani Highway when engineering studies determine that they are justified.

The report also made project area recommendations. The improvements are classified as Increment 1 (development projected to occur by the Year 2010) and Buildout (No specific time) as follows: (Exhibit B, B-1 and C)

1. Signalize Okolani Drive/Piilani Highway intersection (Increment 1);

2. Complete the four laning of Piilani Highway to Wailea Ike Drive (Increment 1);

3. Signalize Wailea Ike Drive/Piilani Highway Intersection (Increment 1);

4. Signalize Kaukahi Street/Wailea Alanui intersection (Buildout); and

5. Modify Wailea Alanui/Wailea Ike Drive intersection to add a signalized
double right-turn movement for northbound to eastbound turning traffic.

The State Department of Transportation (DOT) and the Department of Public Works and Waste Management (DPWWM) reviewed the revised Traffic Study dated May 2001. By letter dated July 18, 2001 DOT informed the Planning Department (Department) that they were working with the consultant to address issues and concerns (Exhibit "2"). By letter dated August 9, 2001 DOT informed the Department that they were in discussions with the applicant and that the developer expressed their commitment to fulfill the conditions imposed by the State Land Use Commission, including the requirement that Wailea 670 participate in its prorata share of required regional transportation improvements in South Maui. They also agreed to work collaboratively with DOT to revise the TIAR to DOT’s satisfaction (Exhibit "3"). On August 16, 2001 DOT completed its review of the TIAR and sent a letter to the traffic consultant requesting a revised report addressing concerns and further clarification requested by DOT (Exhibit "4").

Further, the DPWWM commented on the TIAR by memorandum dated July 11, 2001 (Exhibit "5").

Wailea 670 and Makena Resort have been in discussion with the Department of Transportation. As a result of the discussion, the private sector would take responsibility of designing the interim improvements while at the same time support the allocation of funds in the State and County of Maui’s capital improvement budgets for future improvements. R.M. Towill and Munekiyo & Hiraga, Inc. are pursuing the design and permitting work for the interim improvement design tasks which is intended to be completed by February of 2002. The construction time frame is estimated to be 18 months with a cost of approximately $4 million. The costs to construct the interim improvements have been allocated within the state’s budget ($3 million) and the County of Maui’s budget ($1 million). It is anticipated that construction of the interim improvements will be completed in October of 2003. However, these are interim measures to resolve the current traffic problems in the region and is not the long-term solution to traffic and future impacts from new developments in the area.

In addition to the interim improvements, the extension of Piilani Highway to the Kula area has also been included within the State’s current budget with $1 million allocated to the fiscal year 2002-2003 for the design of the extension. According to the applicant, Wailea 670 has and continues to commit to provide a pro-rata share for the actual construction of this roadway through the project area. It is important to note that this is just the first step in a long process to get the extension built and will take several years to complete pending further budgetary commitments.

It is noted that Wailea 670 was required by the Land Use Commission to “fund, design and provide its pro-rata share of the necessary local and regional roadway
improvements necessitated by the proposed development in designs and schedules accepted by the State Department of Transportation and the County of Maui." Further, the Department of Transportation in their comments during the first zoning action in 1992 and during the current requests stated that the "Developer must extend Piilani Highway through his development at his own expense." The project as designed connects to existing roadway corridors and excludes the construction of the extension. There is no firm time table for the construction of the extension.

At present there is no clear definition of the infrastructure improvements required by the State Department of Transportation which must occur at the Phase 1 Project District Approval level. Wailea 670 continues to work with DOT who has not made any commitments as to specifically what they want Wailea 670 to do for pro-rata compliance. The DOT has been requested to attend the scheduled meeting to clarify the matter for the Commission. (October 4, 2001 letter, Exhibit "E")

Relative to Piilani Highway, according to the applicant the design for the interim improvements done in cooperation with DOT is at 30% completion. Wailea 670's participation agreement with DOT for the design of these improvements states that the investment into the current highway improvement plans by Wailea 670 will be credited to the pro-rata share up to a maximum amount and that other roadway participation on a regional basis may be required to fulfill the prorata share requirement. The extent of participation is unknown.

Further, in order to seek solutions to the traffic problems of the County of Maui Mayor James "Kimo" Apana is asking developers to "voluntarily" give a $5000 per unit contribution for traffic improvements. From the voluntary contribution the County of Maui can implement needed traffic improvements. Based on the maximum units proposed for the project district (1400) the voluntary contribution would be $7 million. The developer has made a commitment to participate in the voluntary contribution. (September 21, 2001 letter, Exhibit "E")

Water:

Wailea 670 has developed a water source development plan by land use category within the project as follows:

- 7 -
### Projected Average Potable Water Use at Full Build-Out

<table>
<thead>
<tr>
<th>Land Use</th>
<th>No. of Units</th>
<th>Area (Acres)</th>
<th>Use Rate (GPD/Unit)</th>
<th>Average Use (MGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Residential</td>
<td>600</td>
<td>260</td>
<td>1750</td>
<td>1.05</td>
</tr>
<tr>
<td>Multi-Family Residential</td>
<td>800</td>
<td>110</td>
<td>1250</td>
<td>1.00</td>
</tr>
<tr>
<td>Commercial</td>
<td>100,000 sq.ft.</td>
<td>9</td>
<td>3000/acre</td>
<td>0.03</td>
</tr>
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<td>Golf Course Clubhouse</td>
<td>25,000 sq.ft.</td>
<td>6</td>
<td>3000/acre</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>385</td>
<td></td>
<td><strong>2.10</strong></td>
</tr>
</tbody>
</table>

According to the applicant there are two approaches to addressing the potable water issue for the Wailea 670 project. One is to work with the Department of Water Supply and assist them in their source development needs. Development of additional source is a long-term solution, which has a high degree of unpredictability and uncertainty associated with it. The alternative is to develop a private water system.

On February 9, 2001 Wailea 670 secured a well construction permit from the State Water Commission and requested permission to drill and test a well in the Ulupalakua region. This work will be underway shortly and is estimated to be completed by the end of this calendar year with a well tested and proven to deliver 1 million gpd of potable water. It is expected that additional wells will be required and located within the same area. It is estimated that potable water demand will be approximately 1.4 to 2.1 million gpd.

The private water system to be developed will consist of three wells developed at 1420 foot elevation on Ulupalakua Ranch land, a head tank next to the wells, a 12-inch mauka-makai transmission pipeline, and two service pressure zones, each served from 1.5 million gallon (MG) storage tanks. Design criteria of the County of Maui Department of Water Supply have been used to size all elements of the system. (Exhibit "8")

According to the applicant the locations of the wells at the 1420 foot elevation was selected based on geophysical surveys and the quality and quantity of water produced by the brackish wells that have been developed at lower elevations, including the two Wailea 670 wells onsite. Groundwater in the Wailea area, including the proposed well sites, exists as a basal lens. The lens thickens and gets fresher with distance inland. The potable wells will be located 2.8 miles in from the shoreline. Based on tests the water level in the lens at the potable well sites is expected to stand
about eight to 10 feet above sea level. Experience with basal wells on Maui and elsewhere in the state indicates that high capacity wells delivering potable quality water can be developed in a basal lens of this thickness.

Well pump capacities have tentatively been selected at 1100 gallons per minute against a total head of 1450 feet and driven by 500 horsepower motors. This will enable two wells to provide the project’s maximum supply requirements at full build-out with a third well providing standby capacity. If appropriate, pump capacities and/or the number of wells will be modified based on actual conditions encountered during drilling and pump testing.

The wells will be located within the Kamaole Aquifer System, a triangular-shaped 90-square mile area delineated by the State Commission on Water Resources Management (CWRM). The CWRM estimates that the natural recharge to this aquifer is 25 MGD and its sustainable yield is 11 MGD. Present pumpage, which is almost entirely for the Wailea and Makena golf courses, is in the range of three to four MGD. With the Wailea 670 project’s potable (2.1 MGD) and non-potable (1.5 MGD) groundwater uses added to this, the total draft would still be less than the aquifer’s sustainable yield.

The elevation of the project site ranges from 300 to 700 feet above sea level. This elevation change necessitates having two service pressure zones. The upper zone would cover the portion of the site above 560 foot elevation and would be supplied from a 1.5 MG tank directly above the site at the 800-foot elevation. The service zone below 560 feet would be fed from another 1.5 MG tank located within the site at 670-foot elevation. Water from the upper service zone would be delivered into the lower service zone’s tank.

When the water level in the upper service zone tank drops to a predetermined point, water would begin to flow from the 1.1 MG head tank next to the wells via the 12-inch mauka-makai transmission pipeline to the upper service zone tank. In turn, the drop in level in the head tank would automatically start one of the well pumps. A rate of control valve at the upper service zone would control the mauka-makai flowrate to match the flowrate of the well pump.

If the level in the upper service zone tank continues to drop to a second set point, the mauka-makai transmission rate would be doubled and a second well pump would be turned on by a further drop in level in the head tank.

It is expected that the total time to bring the system on line is approximately 28 months.

Wailea 670 proposes the development of water resources in the Ulupalakua area
which is located within the Makawao-Pukalani-Kula Community Plan (Plan) region. The Plan states in its objectives and policies on Water that we “restrict the use of any water developed within or imported to the upcountry region to consumption within the Upcountry region, with exception provided for agricultural use”. Further, the Plan states that we “prioritize the allocation of water as new resources and system improvements become available as follows: (a) for maintenance and expansion of diversified agricultural pursuits and for the Department of Hawaiian Homes projects; and then (b) for other uses including development of new housing, commercial and public/quasi-public uses” and that we “recognize and support the immediate allocation of water resources for Department of Hawaiian Home Lands projects and agriculture”. According to the Plan water resources developed in the Upcountry area are to be restricted to the region and prioritized for agricultural use and Hawaiian Homes projects. The proposed exportation of water outside the Upcountry region for nonagricultural use to Wailea 670 is in conflict with the objectives and policies of the Makawao-Pukalani-Kula Community Plan.

In response to the Makawao-Pukalani-Kula Community Plan goals, objectives and policies, Wailea 670 has revised its Water Resource Development Plan dated September 2001 (Exhibit “G”) for the project. The revised plan identifies three other alternatives for providing potable supply for the project. The first alternative is to develop four wells located at the 2800-foot elevation on Ulupalakua Ranch lands at Auwahi in the Hana Community Plan and transport the water approximately seven miles to the project site.

The wells will be improved with the following:

1. Four wells spaced 1500 feet apart at the 2800-foot elevation, and completed with 14-inch casing;
2. Each well outfitted with a 750 GPM, 800 horsepower (2-pole) submersible pump and motor with 8-inch column pipe;
3. Power to each of the first two wells initially provided by 1500 KW generators with possible conversion to Maui Electric power at a later date;
4. 13,000 linear feet of 16-inch transmission pipeline across State land in a 40-foot wide easement in favor of Ulupalakua Ranch;
5. A 0.5 MG head tank at 3150-foot elevation on Ulupalakua Ranch land, the high point of the seven-mile transmission route from the wells to the project site;
6. 21,900 feet of 12-inch pipe from the 3150 feet storage tank to a 1.5 MG distribution tank at 800 feet just above the development site;
7. Three 20,000 gallon pressure breaker tanks along the 12-inch transmission route ay 2565-1975-1, and 1385-foot elevation; and
8. The distribution system within the project itself, consisting of two service
pressure zones.

The two service pressure zones within the project, fed by storage tanks at 800 and 670 feet, would be identical to the preferred alternative. Two wells at Auwahi would be constructed initially. The third and fourth wells would be added in the future as required by the project’s build out. Automated operation of the pumps would be triggered when the water level in the 3150-foot head tank declined to a predetermined level.

Without a map identifying the aquifer system on the Ulupalakua Ranch lands it is unclear whether the source of water is also from the same Kamaole Aquifer which has a sustainable yield of 11 MGD which could provide the 2.1 MGD potable water requirement of Wailea 670 but would conflict with other Upcountry users. If it is a new aquifer, information on the capacity (sustainable yield) of the source and the effects on the aquifer should be further clarified by Mr. Tom Nance, Water Resource Engineering, consultant for Wailea 670.

The second alternative would be to desalinize water from the slightly brackish onsite wells to supply the initial residential development and golf course clubhouse. Subsequently, the system (without the desalinization plant) would be interconnected with and dedicated to the County Department of Water Supply. Existing and future development would then be supplied by the Department of Water Supply system. We note that the wells (1 mgd) were originally proposed as irrigation water for the golf course. The concurrent use of the wells for both irrigation and domestic use may present future problems. The estimated irrigation requirements for the project were 1.1 mgd for the golf course (1 mgd) and roadway landscaping (0.1 mgd). The wells were barely enough to supply the landscaping needs of the project.

The third alternative would be to connect to the Department of Water Supply system at the outset. However, the Department of Water Supply has already indicated that they are unable to guarantee the availability of water for this project as well as other projects proposed for the Central Maui System which is dependent upon additional source development. The major source of the Central Maui System is the lao Aquifer which has a regulatory sustainable yield of 20MGD. The rolling annual average groundwater withdrawals from this aquifer as of September 1, 2001 was approximately 17,540 MGD. This project alone will eventually require 2.1 MGD of potable water.

Golf Course:

Originally the Wailea 670 project proposed two 18-hole golf courses one of which would be open to public play. Conditions were established by both the Land Use Commission and the County of Maui regarding fees to be charged to Hawaii
residents.

The condition of the Land Use Commission is as follows:

"10. Petitioner shall make available adequate golf tee times at affordable rates for public play to State of Hawaii residents."

The condition of the County of Maui established through Ordinance No.2171 is as follows:

"6. That the applicant make available to Hawaii residents fifty percent of the tee times on one of the two golf courses, and charge such Hawaii residents green fees, including golf cart rental fees, in an amount not to exceed fifty percent of the green fee rates, including golf cart rental fees, charged to non-Hawaii residents."

The current proposal by Wailea 670 includes the development of a single private 18-hole golf course that will be for the exclusive use of the homeowners. No public play is proposed. Amendments to both the Land Use Commission conditions and Ordinance No 2171 is required in order to implement the current proposal for the golf course.

To compensate for the elimination of public play at the golf course Wailea 670 proposes to allow non-profit organizations as part of golf tournament fund raisers to be allowed to utilize the golf course. Wailea 670 identified sixty non-profit organizations who have benefitted from such tournaments.

Wailea 670 also identified the Maui Junior Golf program as another beneficiary for use of the golf course. The program needs play times for the youth members of the organization and increased access to professional guidance and skills development for the golfers. Most of the major existing golf organizations on Maui provide some degree of assistance for Maui Junior Golf. This assistance includes education and lessons as well as play time for the members.

However, more play time and education and skills development is needed for Maui Junior Golf, and Wailea 670 proposes that additional time be made available on a regular basis and that development of a Maui Junior Golf professional clinic for enhanced skill be developed and offered to the members of Maui Junior Golf at the proposed golf course. This would expand the current play time available to the members of Maui Junior Golf as well as provide an additional level of professional
assistance.

According to Wailea 670 the recommended alternative offered by the project will accomplish the following:

1. Provide for some public play while at the same time preserving the integrity of the private course concept critical to the success of the project.

2. Provide more benefit to the golfing community and the youth of Maui County and those receiving support from non-profit agencies than the present conditions of approval, which relate purely to provision of play and reduced fees for Hawaii residents.

According to the applicant the benefit of the proposed golf play program is directed more to the youth and the fund-raising needs of the agencies which provide a large degree of support to the residents of Maui County. The Maui County residents require both the educational and training benefits of golf and also the financial support offered by the non-profit agencies.

The proposal by Wailea 670 in lieu of public open play will require the execution of a unilateral or bi-lateral agreement identifying all the terms for non-profit play. The Department of Parks and Recreation will need to be involved in the formulation of the terms.

Parks:

Condition No. 8 of Ordinance No. 2171 requires the applicant to build a little league facility on 6.184 acres of land within the project area near the Piilani Highway and Wailea Ike Drive intersection mauka of the extension of Piilani Highway. Wailea 670 proposes to delete Condition No. 8 and to use the value of the part improvement to develop park facilities in the central Kihei area. Wailea 670 has been in discussions with the Department of Parks and Recreation as well as residents of South Maui which indicate that the funds could be used to develop playfield facilities within the Kihei regional park facility in the Piilani Village Project District.

The following summarizes the cost based on present estimates to build the park facility in Wailea 670:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site work</td>
<td>$2,197,800.00</td>
</tr>
<tr>
<td>Buildings</td>
<td>230,000.00</td>
</tr>
<tr>
<td>Landscaping</td>
<td>409,010.00</td>
</tr>
<tr>
<td>Subtotal</td>
<td>$2,836,810.00</td>
</tr>
</tbody>
</table>
Contingency at 15%  $ 425,522.00
Total Improvements       $3,262,332.00
Land Value (6.184 acres)  $223,000.00

Grand Total:              $3,470,332.00

The projected costs of the improvements could be used to provide the capital necessary to initiate design and construction of park facilities as determined by the County of Maui. Normally park facilities, land or park assessment fees are part of future subdivision approvals. In lieu of providing the little league field which was required to be completed and in operation prior to completion of the golf course the projected cost of the park facility should be collected prior to completion of the first development within Wailea 670.

Project District Ordinance:

Wailea 670 submitted a revised Project District Ordinance (Exhibit "10") for review. The Planning Department reviewed the revised ordinance and proposed minor changes (Exhibit "11"). Some of the changes proposed are as follows:

1. *Energy* – The project will include within the ordinance energy guidelines which will include concepts such as solar water heating, ceiling fans, cut off switches for large buildings and residential uses, energy efficient refrigerators, dryers and other home appliances, eaves, trellises and other architectural features on south and west exposures, light colored finishes, ventilation in all attic spaces, landscaping which will include larger shade trees, drought tolerant species, drip irrigation and walkways and bikeways within the project that will facilitate movement that does not rely on automobiles or other inefficient modes of transportation.

2. The maximum unit count for the project was and still is 1,400 units with one fundamental difference. The 1,400 unit count is now inclusive of any ohana or other units that will be developed within the project. The proposed project district ordinance has been revised to exclude ohana dwellings.

3. The commercial district has been deleted in its entirety and reallocated within the VMX Village Mixed Use District. In lieu of acreage, a maximum of 100,000 square feet of gross floor area has been allocated to the district for commercial uses and the uses have been defined and reduced where they relate more to a neighborhood level commercial need and desire. According to the applicant this reduction in permitted uses
responds to comments received by the Maui Meadows and Wailea Community. The reduction in uses relate to demand, reduction in trips and the creation of a sense of community. (September 13, 2001 letter, Exhibit "12") Further, the use of square footage rather than acreage allows greater flexibility for the developer to incorporate the commercial element of the project with the residential elements to create a sense of community rather than large shopping centers.

4. The intent of the VMX District has been clarified as a district that “create community identity and character with landmark buildings and a grouping of services within a central core that would include a mix of uses”. A total of 53 acres are identified as VMX District.

5. The single family district remains at approximately 260 acres with a gross density of two dwelling units per acre while the multi family district is approximately 110 acres with a gross density of 8 dwelling units per acre.

6. The Single Family District has been revised to eliminate ohana units, adult care homes and residential group homes and shelters. Under accessory uses and structures for “resident recreational uses and structures” the applicant proposes to eliminate review by the Planning Director. The Department feels that review by the Planning Director is important to ensure that the uses which may be proposed does not adversely impact the surrounding residential units and if appropriate mitigation measures can be incorporated.

Further the maximum height of structures has been reduced from thirty-five feet to thirty feet (current residential standard). Relative to accessory uses and structures the applicant proposes to amend the provision for antennae and antennae dishes as follows (September 13, 2001 letter, Exhibit "12"):

“Antennae and antennae dishes, provided that ground antenna shall not exceed 10 feet in height, shall be screened by walls, earth berms and/or landscaping with a minimum height of 4 feet, and that any roof or wall mounted antenna shall not exceed the height of the building.”

7. The Recreation and Open Space/Utility District has been amended under the accessory uses and structures to increase the floor area of the caretaker’s dwelling for the golf course from 1000 sq. ft. to 1500 sq.ft.
According to the applicant to attract a quality professional on-site caretaker of the golf course the dwelling needs to be large enough to allow design flexibility and adequate accommodations for the caretaker's family. Further, the caretaker's unit will be included in the overall unit count for the Project District. The applicant also requested that approval of the Planning Director be eliminated since the caretaker's unit would be subject to the general provisions of the Project District Ordinance as well as other provisions of Maui County Code and they see no reason for an additional level of review. (September 13, 2001 letter, Exhibit "12") It should be noted that an additional level of review would not be necessary since the Director's approval would be done concurrent with the Phase 3 Project District Approval.

The applicant requested elimination of the golf clubhouse as an accessory use since they envision the clubhouse facility, given its uses, as an integral part of the VMX District. The applicant is aware that a clubhouse in the Recreation and Open Space/Utility District will not be allowed through this elimination.

8. The applicant proposed amendments to the development standards of the VMX District pertaining to the uses and structures limited only to the VMX District as follows:

a. Minimum lot area: [10,000] 6,000 square feet.

b. Minimum lot width: [Seventy] Sixty feet.

c. Minimum yards:
The front, side and rear yards were eliminated and the following provision included:

No yard setbacks shall be required, except: (a) that required for off-site parking; and (b) if the lot abuts a lot in the SF District or the MF District, the side or rear yard setbacks of the abutting district shall apply.

The proposed amendments in the standards by Wailea 670 reflects standards used in the BCT Business County Town District. The Planning Department has no objections to the incorporation of a rural business standard in the Project District.
d. Maximum height: Fifty feet or four stories, except that:

(1) Elevator shafts, air conditioning equipment, vent pipes, fans, antennae and solar collectors may exceed such height limitations by not more than ten feet; and

(2) The golf clubhouse structure may have a height not to exceed fifty-five feet subject to design approval by the Planning Director.

The applicant requested the height for the clubhouse structure to be increased from fifty feet to fifty-five feet based on their design concept for the clubhouse. They are anticipating a 25,000 sq. ft. clubhouse structure with a bottom floor to ceiling height of 15 feet, with a second floor of 12 feet and a 6:12 roof pitch which translate to a building height approaching 50 feet. The additional five feet would allow flexibility in the design of the structure and make accommodations for the topography of a future site. (September 13, 2001 letter, Exhibit "12")

ARCHAEOLOGICAL RESOURCES

Aki Sinoto Consulting, archaeological consultant, prepared an Addendum Survey Report: Supplemental Inventory Survey Procedures in the Northern and Southern Portions of Lands Known as Wailea 670 Paehau, Palauea, & Keauhou, Makawao, Maui TMK 2-1-08:56 and 71 in response to the comments made by the Maui County Cultural Resources Commission (CRC) by letter dated February 7, 2001. (Exhibit "13") The Addendum Survey was circulated to the Department of Land and Natural Resources, State Historic Preservation Division (SHPD). SHPD by letter dated August 28, 2001 (Exhibit "14") commented that they have reviewed the report and have questions about the field methods that need resolution before they can conclude the survey as acceptable. Documentation on the extent of land alteration in the northern portion needs to be submitted as well as additional descriptive information for the two platforms surveyed. The follow-up archaeological work was also reviewed by the CRC at its July 2001 meeting.

HOUSING

The Department has concerns relative to whether the Wailea 670 project district will provide “a mix of single family and multi-family housing types for a range of consumer groups” as described in the Kihei-Makena Community Plan. According to the applicant a range of densities provided for in the Project District application will result in a range of housing types in both the single family and multi-family categories that will concern the Community Plan concerns. In addition, the Wailea 670 Project
will provide affordable housing within the project area if required to do so as a condition of approval. The Department is concern that although a range of housing types are proposed it does not necessarily mean a range of consumer groups will be accommodated by these housing types.

PUBLIC MEETINGS

In response to the Commission’s request for community input Wailea 670 conducted meetings with the following groups:

Board of Realtors February 16, 2001
Maui Contractors Association May 2, 2001
Maui Meadows Neighborhood Association May 10, 2001
Wailea Ekolu Board of Directors May 21, 2001
Kihei Community Association, Planning May 21, 2001
And Development Committee
Wailea Community Association May 31, 2001
Maui Tomorrow and Sierra Club June 4, 2001
Maui Meadows Homeowners Association June 19, 2001

Copies of meeting memorandums and minutes were circulated to the Commission. In addition, the applicant made written contact with individuals who gave written or oral testimony at the public hearing.

APPROVED:

JOHN E. MIN
Planning Director
ULUPALAKUA RANCH

Legend

- Residential
- Commercial
- Industrial
- Waste Water Treatment Plant
- Bikeways/Walkways

Preliminary Concept Plan
WAILEA 670

Maximum Dwelling Units: 1400
PRODUCT TYPES/ DENSITY CHARACTERISTICS
WAILEA 670
ENTRY ROAD SECTION

PRIMARY ROAD SECTION WITH PEDESTRIAN/BIKE PATH

SECONDARY ROAD SECTION WITH GRASS SHOULDER

SECONDARY ROAD SECTION WITH WALKWAY

PROTOTYPICAL ROADWAY SECTIONS
WAILEA 670
INCREMENT 1 ROADWAY IMPROVEMENTS
Legend

Legend

- Four-lane Piliani Highway
- Six-lane Piliani Highway
- Signalizes Intersection
- Traffic Signal/Intersection Reconstruction

Wailea 670

Pacific Ocean

BUILDOUT ROADWAY IMPROVEMENTS

EXHIBIT C
Dear Mr. Min:


We have received and are currently reviewing the TIAR for the subject development. We are working with the consultant to address our issues and concerns.

Please call Elton Teshima of our Statewide Transportation Planning Office at 587-1845 if there are any questions.

Very truly yours,

BRIAN K. MINAAI
Director of Transportation

c: Mr. Charles Jencks, Wailea 670
   Mr. Wayne Yoshioka, Parsons Brinckerhoff
August 9, 2001

Mr. John E. Min
Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Min:

Subject: Wailea 670 Development

On August 7, 2001, our staff met with representatives of the subject development to discuss the Revised Traffic Impact Analysis Report (TIAR) submitted for review.

The developers expressed their commitment to fulfill the conditions imposed by the State Land Use Commission, including the requirement that Wailea 670 participate in its prorata share of required regional transportation improvements in South Maui. They have also agreed to work collaboratively with us further to revise the TIAR to our satisfaction.

As such, we are satisfied that our concerns will be resolved and that the developer will continue to work with us in addressing Maui's transportation needs.

Very truly yours,

[Signature]

BRIAN K. MINAAI
Director of Transportation

c:  Mr. Dan Ide, DKI & Associates, Inc.
    Mr. Charles Jencks, Wailea 670 Associates
    Mr. Wayne Yoshioka, Parsons and Brinckerhoff Quade & Douglas, Inc.
August 16, 2001

Mr. Wayne Yoshioka
Parsons Brinckerhoff Quade & Douglas, Inc.
Pacific Tower, Suite 3000
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Yoshioka:

Subject: Wailea 670 Development Traffic Study – May 2001

We have reviewed the subject traffic study as requested. A summary of our comments and concerns is attached for your information and use. This summary includes many of the issues and concerns that were discussed at our meeting of August 7, 2001. When you submit a revised traffic study, we would appreciate receipt of a summary of your responses to our comments and concerns.

Please contact Robert Miyasaki of our Statewide Transportation Planning Office at 587-2355 should you have any questions, or if you would like to arrange another meeting to discuss and to try to resolve these comments and concerns.

Very truly yours,

BRIAN K. MINAAI
Director of Transportation

Attach.

C: Ms. Colleen Suyama, Maui County Planning Department
Mr. Dan Ide, DKI & Associates, Inc.
Mr. Charles Jencks, Wailea 670 Associates
Review Comments:

1. The report should include an evaluation of the need for the Piilani Highway extension and the impacts this extension would have on traffic circulation and the distribution of traffic on the surrounding roadway system.

2. The Summary and Conclusions section of the report must clearly identify the specific impacts, mitigation measures, and recommendations related to the “new development” (combined Wailea, Wailea 670, & Makena). General roadway improvements are discussed in Chapter VI - Recommendations, Chapter VII - Interim Traffic Improvements, and Chapter VIII - Summary and Conclusions, however, the report doesn’t clearly identify the specific “new development” (combined Wailea, Wailea 670, & Makena) related impacts and mitigation measures required. Since Chapter VIII is titled “Summary and Conclusions”, the report should clearly summarize its recommendations concerning “new development” (combined Wailea, Wailea 670, & Makena) related responsibilities.

In Chapters VI, VII, and VIII, clearly identify what conditions are being assumed in developing these recommendations. The report states that Chapter VI – Recommendations discusses “build-out” conditions for the Wailea, Makena, and Wailea 670 areas, however, it does not document whether the background traffic includes existing, existing plus normal growth, existing plus only approved projects in the area, or other condition. Baseline conditions should include existing traffic, approved projects, and normal growth in the area.

3. The report must clearly identify what is being proposed in Wailea, Makena, and Wailea 670. Identify, by development, the number and type of residential units, size and type of commercial development, etc. Trip generation rates and total trips generated by each element (before accounting for linked trips) need to be documented in the report.

4. The report states that “half of the commercial trips generated were assumed to be generated from the proposed residential”. The basis for this assumption must be documented and justified. Trip reduction is dependent on the type of retail, commercial, and/or other development actually proposed as well as its location within and layout of the proposed development. A 50% trip reduction is very optimistic and supporting information and documentation, with resource referenced, must be provided. The report also needs to explain if trip reduction was taken from both the residential and commercial traffic generating components (double counting).

5. Provide a detailed layout of the proposed developments and internal roadway systems. Page 33 states “traffic from Wailea 670 utilized only its northern entrance”. Supporting documentation of this assumption should be provided. The report states that there will be
another connection to the development but if the traffic distribution assumes it will not be used, why would you provide a second connection? Traffic distribution assumptions need to be more clearly documented and explained. The lane configuration for the proposed Wailea 670 connection also needs to be identified in the report.

This section of the report discusses specific impacts of the Wailea 670 project. As such supporting documentation and information on the Wailea 670 project must be provided for us to evaluate the validity of the report’s assumptions, analyses, recommendations, and conclusions.

6. The report needs to clearly identify the combined potential impacts of the proposed developments (Wailea, Wailea 670, and Makena) as well as identify the improvements needed to mitigate development related impacts. If the report retains transportation demand management recommendations as mitigation measures, then it must also identify who will be responsible for operating and financially supporting these recommended programs.

7. Page 5 of the report states that Maui Long-Range Land Transportation Plan (LRLTP) February 1997 and the Kihei Traffic Master Plan, October 1996 reports assumed “most of the growth between 1990 and 2005” “to occur in the Kihei area, north of Kiloohana Drive. “The Wailea-Makena areas were assumed to grow very little during this time period.” Therefore, proposed developments in Wailea and Makena would be above and beyond the growth assumed to occur in the Kihei area and the traffic impacts need to be evaluated as such.

First paragraph on page 31 states that all remaining available capacity of a four-lane Piilani Highway should be allocated to the Wailea, Makena, and Wailea 670 proposed developments. This is not a reasonable or appropriate assumption. There is significant potential for other areas within the south Maui region that could develop and add traffic to Piilani Highway and to the Piilani Highway/Lipoa Street intersection.

The report also defines Increment 1 as the amount of development that could occur within the Wailea-Makena area using available capacity of a four-lane Piilani Highway. This is not an appropriate assumption to determine the allowable level of development in Wailea, Wailea 670, and Makena. The report accounts for some future projects in Kihei/Wailea/Makena but does not correctly account for all anticipated development in the region. It is not appropriate to only account for the 11 “approved” projects in the area as generating future traffic growth and then to assume that all remaining capacity would be available for use by the Wailea, Wailea 670, and Makena developments. This assumption is contrary to information presented in the Maui Long-Range Land Transportation Plan, February 1997 and the Kihei Traffic Master Plan, October 1996.

If the intent is to identify what could be allowed to develop within Wailea, Wailea 670, and Makena without detrimentally impacting traffic operations of a four-lane Piilani Highway, then the operating conditions of a four-lane Piilani Highway at build-out as presented in the Maui LRLTP must be used as the baseline. As identified in the Maui
LRLTP report, the four-lane Piilani Highway is needed to meet future year conditions for the south Maui region based on traffic demand estimated using land use information that did not include the current proposals for Wailea, Wailea 670, and Makena. Since these three developments weren’t accounted for in the Maui LRLTP, the only excess capacity available for use by these developments would be the incremental amount above the future year build-out condition presented in the Maui LRLTP. Any additional roadway capacity needed through this corridor to accommodate what is proposed for development in Wailea, Wailea 670, and Makena (above the four-lane Piilani Highway), then needs to be clearly identified as project related impacts and mitigation measures.

8. In the August 7, 2001 meeting, the traffic engineering consultant stated that the build-out condition was based on these LRLTP reports. This report must clearly document the approach taken including identifying the build-out traffic condition presented in the LRLTP; the additional traffic generated by Wailea, Wailea 670, and Makena; and the cumulative total traffic volume and resultant traffic impacts.

9. Page 31 of the report refers to 2,920 “resort residential units (single or multi-family)” could be constructed. The type and number of units along with its associated trip generation rates must be clearly identified in the report. Trip generation rates vary greatly depending on the types of units proposed. The supporting documentation must be provided for us to evaluate and review the reasonableness of the assumptions made.

10. Page 41 states that the secondary access could be restricted to Wailea 670 traffic only but does not explain what the potential impacts would be or what the rational or justification would be. The report needs to explain where this connection will be, how it will be used, and what the potential impacts are at any connection points.

11. Page 40 of the report identifies possible roadway improvements but no recommendation is associated with them. What is intended or implied by this discussion in the Future Traffic Conditions section of the report? Are these intended to be recommendations? Please clarify.

12. Page 43 of the report states, “more north-south capacity would be needed”. Is this a recommendation to widen Piilani Highway to 6-lanes? Figure 22 seems to imply this but the report does not state this recommendation. Further, the report needs to identify the contribution Wailea, Makena, and Wailea 670 make to this need for additional north-south capacity.

In the August 7, 2001 meeting, the traffic engineer stated that the need for the six-lane Piilani Highway was a result of his modifying the recommendations presented in the Kihei Traffic Master Plan, October 1996 to reflect what he understood to be the stated desires of Kihei community. As such, the report must identify and document the specific modifications to the Kihei Traffic Master Plan that this report is recommending; where other north-south roadways on the Kihei Traffic Master Plan should be reduced which generates the need for a six-lane Piilani Highway.
13. Page 45 acknowledges that there will be growth in Kihei and that the North-South Road should be built. This is contradictory to the report's basic assumption that all reserve capacity on Piilani Highway is available for only the Wailea, Makena, and Wailea 670 developments. Page 53 also refers to future development of already approved land uses within the Maui Research and Technology Park but this growth does not appear to be reflected in the list on page 30.

14. Page 46 of the report states that traffic signals be installed along Piilani Highway at cross intersections. This statement is contradictory to the Kihei Traffic Master Plan, October 1996. Additional traffic signals along Piilani Highway will increase delay and reduce the capacity of Piilani Highway. Since this is a recommendation of the report, it needs to be analyzed and addressed accordingly.

15. Page 47 of the report identifies "Operational Improvements". Since the report recommends operational improvements, it should identify the project related responsibility to implement, support, or finance these operational improvements? The report should clearly identify what is being recommended.

16. Piilani Highway will be restriped to four-lanes within the existing pavement width. It will not be operated only during peak hour operations.

17. Page 47 of the report describes Wailea Alanui as a four-lane divided roadway. This is not consistent with the description provided under existing conditions.

18. The report states that congestion is limited to peak hours, however, Figures 4, 5, and 6 reveal significant peak hour spreading. Increasing traffic volumes at the Piilani Highway and Lipoa Street intersection are likely to be a result of the commercial developments occurring in the surrounding area as well as school generated traffic.
MEMO TO:  JOHN E. MIN  
PLANNING DIRECTOR

FROM:  DAVID GOODE  
DIRECTOR OF PUBLIC WORKS AND WASTE MANAGEMENT

SUBJECT:  WAILEA 670 TRAFFIC IMPACT ASSESSMENT

We have reviewed the traffic study done for the Wailea 670 Development by Parsons Brinckerhoff Quade & Douglas, dated May 2001. We have the following comments:

1. Page 9: On the last paragraph, the study should state that the widening of South Kihei Road, between Longs and Lipoa Street, is under planning and design as part of the Department of Public Works and Waste Management’s (DPWWM) South Kihei Road Traffic Signals Upgrade & Intersection Improvements at Lipoa Street, FAP No. STP-3100(9).

2. Page 10: Under the list of intersections, the almost completed Waipuilani Road (unsignalized) connection should be added. Also, in lists throughout the report, correct “Ke Alii Alanui” to “Alanui Ke Alii”.

3. Page 11: On the first paragraph, correct the posted speed limit for South Kihei Road of “25 mph” to “20 mph” through most business commercial areas and 30 mph on the south end.

4. Page 44: Within the second paragraph, the recommendation is to widen South Kihei Road to four lanes from Lipoa Street to the future Road B. The study also notes in the third paragraph that:
"if it is the consensus not to provide capacity above the already recommended 4 laneing of Piilani highway within that corridor and it is acceptable to conduct more through traffic within Kihei, widening of South Kihei Road or making the North-South Collector Road continuous through Kihei could be investigated. The latter two options would be significantly less effective in handling long range traffic needs, while incurring more traffic impacts to the Kihei area."

The study should note that the section of South Kihei Road, between Lipoa Street and Azeka's, is part of the South Kihei Road Traffic Signals Upgrade & Intersection Improvements at Lipoa Street, FAP No. STP-3100(9). As part of our South Kihei Road Phase IV project, DPWWM has proposed a four lane section of South Kihei Road from Long's to north of Nohokai Street. This project is currently on hold pending completion of a regional traffic study which our Department is doing.

5. Pages 47-49: Recommendations 1 through 4 should be accommodated in the proposed conditions for the project. Regarding Recommendation 3, it is recommended that the developer contribute his pro rata share of off-site traffic improvements at the Kaukahi Street/Wailea Alanui intersection.

6. Page 31: "Buildout" conditions consist of the remainder of the proposed Wailea, Makena & Wailea 670 developments which will result in traffic beyond the capacity of the interim measures. Buildout and proposed traffic improvements must be coordinated under the Maui Long Range Land Transportation Plan.

If you have any questions, please call Milton Arakawa at Ext. 7845.
October 4, 2001

Ms. Colleen Suyama
250 South High Street
Wailuku, HI 96793

Re: Wailea 670 Project District

Dear Ms. Suyama:

Thank you for your letter of September 28, 2001, and your request for clarification of the State Department of Transportation pro-rata requirements and updated Water Resource Development Plan. Pursuant to our conversation and recent communication, I have a revised Water Resource Development Plan, which I have attached to this letter as well as a response to your concerns relative to the pro-rata share requirement from the State Department of Transportation. The following summarizes:

1. We agree with you that a clear definition of the infrastructure improvements required by the State Department of Transportation (SDOT) must and will occur at the Phase I approval level. The Wailea 670 project team has been working with the SDOT in determining just what those requirements will be. As of this date, SDOT has not made any commitments as to specifically what they want us to do for pro-rata compliance.

However, for the Piilani Highway, we are now at 30% on the design for the interim improvements and this has been done in cooperation with SDOT. Our participation agreement with the SDOT for the design of these improvements states that the investment into the current highway improvement plans by Wailea 670 will be credited to the pro-rata share up to a maximum amount and that other roadway participation on a regional basis may be required to fulfill the prorata share requirement. The extent of participation is unknown, but likely candidates could be participation in other regional improvements that will be underway shortly. The design of improvements to Piilani Highway is a significant step in working with SDOT as well as ensuring mitigation of traffic impacts for the project.
Ms. Colleen Suyama  
October 4, 2001  
Page 2

As far as getting more direction from SDOT in this regard we have asked SDOT to attend the Planning Commission meeting and we will be working with SDOT until that meeting to formalize the prorata requirements.

2. Water Resource Development Plan - As I stated previously I have attached to this letter the revised Water Resource Development Plan for the project. As you can see, we have included the preferred plan that was submitted previously, and three alternative plans, which also provide for the provision of potable water for the project. The plan is self-explanatory and provides, we believe, the information necessary for discussion with the planning commission on this issue. As always, we will be prepared to discuss this revised plan in detail at the commission meeting.

Ms. Suyama, should you have any questions with regard to the above information, please feel free to contact me on my cell at 250-3178 or email me at charlie@GBImauai.com.

Sincerely,

Charles Lencks  
Owner's Representative  
Wailea 670 Associates

Attachment
September 21, 2001

Ms. Colleen Suyama
Department of Planning
County of Maui
200 S. High St.
Wailuku, Hi. 96753

Re: Response to Concerns Relative to Wailea 670 Project District Application

Dear Ms. Suyama:

Thank you for contacting me and making me aware of some of the concerns that remain within the Department of Planning relative to the above application and pending staff report. Upon receipt of your concerns, I took the time to analyze the issues and have the following response:

1. Piilani Highway Extension: The Wailea 670 Project District application has a history of entitlement that includes a change in zoning request approved by the County of Maui in 1992 for the golf courses and accessory structures presently allowed or permitted within the project district area. This approval has conditions of zoning attached to it, and I have attached to this letter the conditions that relate to roadway improvements. If you would note Condition K on Exhibit A, you will see that the roadway improvements required for the project for both the State Department of Transportation, and the County of Maui, Department of Public Works, will be identified and finalized as part of the Phase II approval of the project.

   In addition to the conditions of approval referenced above, the State Land Use Commission approved an application for Urbanization of the Project District 9 area and I have attached to this letter, as Exhibit B, the conditions of approval for that request and you will note on page 27, item 9, the conditions state “the petitioner shall fund, design and construct his pro-rata share of local and regional roadway improvements necessitated by the proposed development”.

   Finally, a letter from the State Department of Transportation that you have referenced, identified as Exhibit C, dated August 9, 2001, refers back to the State Land Use Commission conditions of approval referenced previously in this letter, and states that the project will
contribute its pro-rata share of traffic improvements as stipulated within the Decision and Order issued by the Commission.

The Wailea 670 Project has stated numerous times that it will participate on a pro-rata basis in the extension of the highway through the project district area and in fact lobbied strongly for the inclusion of design funds into the State’s budget to accomplish this extension. In this respect, we are consistent with the prior approvals and comments and remain committed to this position.

With regard to the concern relative to impact fees and the voluntary contribution mentioned by Mayor Apana, our response is in the affirmative and that is that the Wailea 670 Project is committed to providing a voluntary contribution as a part of the approval process.

2. The potable water resource for the Wailea 670 Project will be provided by either a County or private system. At this time we are developing a revised water resource development plan that will identify the options necessary to satisfy the potable water resource needs for the project and we will transmit that document to your office as soon as it is completed for your review and transmittal for the Planning Commission. We will be prepared to summarize our water source development plan as well as address the community plan issues before the Planning Commission.

3. The range of densities provided for in the Project District application will result in a range housing types in both the single family and multi-family categories that will address the Community Plan concerns. In addition, the Wailea 670 Project will provide affordable housing within the project area if required to do so as a condition of approval.

4. Relative to the Homeowner18-hole golf course concept and the need to provide a unilateral agreement for the non-profit and Maui Junior golf play, we will be pleased to provide such an agreement to specify the type and timing of play as part of the transmittal to the council. In response to significant reductions in density and elimination of one golf course, changes to the present conditions of zoning must be addressed. Applications to complete these revisions will be made when appropriate.
In summary, the above responds to your specific concerns. I would appreciate a quick review of this letter and response back to me if you have any other additional questions. I look forward to hearing from you in any case, and you can feel free to contact me at 879-5205 or on my cell at 250-3178.

Sincerely,

Charles Jencks
Owners Representative
Wailea 670 Associates

Attachments
e. Condition 6 of the Department of Health's "12 Conditions" relating to golf carts and storage of petroleum has been addressed and incorporated in the design and layout of the buildings;

f. Condition 7, 8 and 11 of the Department of Health's "12 Conditions" relating to fertilizers, biocides and pesticides and the Integrated Golf Course Management Plan has been reviewed and comments from the Departments of Agriculture and Health have been incorporated in the design and layout of the golf courses;

g. Condition 9 of the Department of Health's "12 Conditions" relating to noise from maintenance facilities have been addressed through the location and design of the maintenance activities and facilities;

h. Condition 10 of the Department of Health's "12 Conditions" and the Department of Public Works concerns and recommendations relating to solid waste disposal management activities and facilities are identified and designed;

i. Condition 12 of the Department of Health's "12 Conditions" relating to soil runoff during construction and the Department of Transportation, Public Works, Health, and Soil Conservation Service concerns relating to drainage are addressed and incorporated in the design and layout of the plans and a preliminary erosion control and drainage report is included in the application;

j. Confirmation from Maui Electric Company on applicant's proposal of relocating and/or landscaping MECO facilities and incorporated in the application and site plan; and

k. Roadway improvements to the satisfaction of the Departments of Transportation and Public Works and proposed agreements incorporated in the application and site plan and finalized as part of Phase II approval.

6. That the applicant make available to Hawaii residents fifty percent of the tee times on one of the two golf courses, and charge such Hawaii residents green fees, including golf cart rental fees, in an amount not to exceed fifty percent of the green fee rates, including golf cart rental fees, charged to non-Hawaii residents.
3. Petitioner shall cooperate with the State Department of Health and the County Department of Public Works to conform to the program goals and objectives of the Integrated Solid Waste Management Act, Chapter 342G, Hawaii Revised Statutes.

4. Petitioner shall contribute its pro-rata share to fund and construct adequate wastewater treatment, transmission and disposal facilities, as determined by the State Department of Health and the County of Maui Department of Public Works. When feasible, Petitioner shall contribute its pro-rata share and be required to connect to the County wastewater system and the Petitioner's temporary Sewage Treatment Plant shall be abandoned and dismantled.

5. Petitioner shall comply with the environmental health conditions from the State Department of Health, dated January, 1992 (Version 4), and entitled "Twelve (12) Conditions Applicable to All New Golf Course Development."

6. Petitioner shall participate in an air quality monitoring program, under such terms as may be mutually agreeable between the Petitioner and the State Department of Health.

7. Petitioner shall fund and construct adequate civil defense measures as determined by the State and County of Maui civil defense agencies.

8. Pursuant to the Agreement with the Department of Education ("DOE"), Petitioner shall contribute to the development, funding and/or construction of school facilities, by paying $850 per unit (based on 2,000 proposed units) to the DOE
August 9, 2001

Mr. John E. Min
Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Min:

Subject: Wailea 670 Development

On August 7, 2001, our staff met with representatives of the subject development to discuss the Revised Traffic Impact Analysis Report (TIAR) submitted for review.

The developers expressed their commitment to fulfill the conditions imposed by the State Land Use Commission, including the requirement that Wailea 670 participate in its prorata share of required regional transportation improvements in South Maui. They have also agreed to work collaboratively with us further to revise the TIAR to our satisfaction.

As such, we are satisfied that our concerns will be resolved and that the developer will continue to work with us in addressing Maui’s transportation needs.

Very truly yours,

[Signature]

BRIAN K. MIAI
Director of Transportation

c: Mr. Dan Ide, DKI & Associates, Inc.
Mr. Charles Jencks, Wailea 670 Associates
Mr. Wayne Yoshioka, Parsons and Brinckerhoff Quade & Douglas, Inc.
WAILEA 670 SITE

PROJECTED AVERAGE SUPPLY REQUIREMENTS

<table>
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<tr>
<th>LAND USE</th>
<th>NUMBER OF UNITS</th>
<th>AREA (ACRES)</th>
<th>USE RATE (GPD/UNIT)</th>
<th>AMOUNT (MGD)</th>
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<tbody>
<tr>
<td>SF RESIDENTIAL</td>
<td>600</td>
<td>260</td>
<td>1750</td>
<td>1.05</td>
</tr>
<tr>
<td>MF RESIDENTIAL</td>
<td>800</td>
<td>110</td>
<td>1250</td>
<td>1.00</td>
</tr>
<tr>
<td>COMMERCIAL</td>
<td>100,000 SF</td>
<td>9</td>
<td>3000/AC</td>
<td>0.03</td>
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<tr>
<td>G. C. CLUBHOUSE</td>
<td>25,000 SF</td>
<td>6</td>
<td>3000/AC</td>
<td>0.02</td>
</tr>
<tr>
<td>TOTAL RES. UNITS</td>
<td>1400</td>
<td>385</td>
<td></td>
<td>2.10</td>
</tr>
</tbody>
</table>

APPROXIMATE SOURCES OF SUPPLY

- PROVIDE MAXIMUM DAILY USE (1.5 X AVERAGE) WITH THREE (3) WELLS, ONE AS STANDBY
- WELL PUMP CAPACITIES: 1100 GPM, 1450-FOOT TOW PUMPS DRIVEN BY 500 HP MOTORS

EXHIBIT A
PROPOSED WAILEA 670 POTABLE WATER SYSTEM
Alternative Sources of Potable Supply for the Wailea 670 Project

Prepared for:
Wailea 670 Associates
381 Huku Lii Place - Suite 202
Kihei, Maui, Hawaii 96753

Prepared by:
Tom Nance Water Resource Engineering
680 Ala Moana Boulevard - Suite 406
Honolulu, Hawaii 96813

September 2001

EXHIBIT "9"
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<th>Section</th>
<th>Page</th>
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</thead>
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<td>Supply From New Wells in Auwahi in Hana District</td>
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<tr>
<td>Initial Potable Supply From Onsite Wells</td>
<td>4</td>
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<tr>
<td>Connection to the DWS System</td>
<td>5</td>
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</table>

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<th>Title</th>
<th>Page</th>
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<td>Proposed Wailea 670 Potable Water System</td>
<td>2</td>
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<tr>
<td>2</td>
<td>Supply by 2800-Foot Wells in Auwahi, Hana District</td>
<td>3</td>
</tr>
</tbody>
</table>
Introduction

Potable water supply for the Wailea 670 project at full build-out is expected to be approximately 2.10 MGD (refer to the tally below). The preferred system of wells, tanks, and transmission pipelines to provide this supply is illustrated on Figure 1. Its sources of supply would be three wells located directly upslope at 1400-foot elevation on Ulupalakua Ranch land.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>No. of Units</th>
<th>Area (Acres)</th>
<th>Use Rate (GPD/Unit)</th>
<th>Average Use (MGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Residential</td>
<td>600</td>
<td>260</td>
<td>1750</td>
<td>1.05</td>
</tr>
<tr>
<td>Multi-Family Residential</td>
<td>800</td>
<td>110</td>
<td>1250</td>
<td>1.00</td>
</tr>
<tr>
<td>Commercial</td>
<td>100,000 ft²</td>
<td>9</td>
<td>3000/Acre</td>
<td>0.03</td>
</tr>
<tr>
<td>Golf Course Clubhouse</td>
<td>25,000 ft²</td>
<td>6</td>
<td>3000/Acre</td>
<td>0.02</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>385</td>
<td>-</td>
<td>2.10</td>
</tr>
</tbody>
</table>

There are three other alternatives for providing potable supply for the project. One such alternative consists of developing wells on Ulupalakua Ranch land at Auwahi in Hana District and transporting the water approximately seven miles to the project site. Another alternative would be to desalinize water from the slightly brackish onsite wells to supply the initial residential development and golf course clubhouse. Subsequently, the system (without the desalinization plant) would be interconnected with and dedicated to the County Department of Water Supply (DWS). Existing and future development would then be supplied by the DWS system. The third alternative would be to connect to the OWS system at the outset. The paragraphs following describe each of these supply alternatives.

Supply From New Wells In Auwahi In Hana District

The well locations and offsite storage and transmission system of this alternative are depicted on Figure 2. Key elements of this system would be:

- Four wells spaced 1500 feet apart, each located at 2600-foot elevation and completed with 14-inch casing;
• Each well outfitted with a 750 GPM, 800 horsepower (2-pole) submersible pump and motor with 8-inch column pipe;

• Power to each of the first two wells initially provided by 1500 KW generators with possible conversion to Maui Electric power at a later date;

• 13,000 linear feet of 16-inch transmission pipeline across State land in a 40-foot wide easement in favor of Ulupalakua Ranch;

• A 0.5 MG head tank at 3150-foot elevation on Ulupalakua Ranch land, the high point of the seven-mile transmission route from the wells to the project site;

• 21,900 feet of 12-inch pipe from the 3150-foot storage tank to a 1.5 MG distribution tank at 800 feet just above the development site;

• Three 20,000-gallon pressure breaker tanks along the 12-inch transmission route at 2565-, 1975-, and 1385-foot elevation; and

• The distribution system within the project itself, consisting of two service pressure zones.

The two service pressure zones within the project, fed by storage tanks at 800 and 670 feet, would be identical to the preferred alternative. Two wells at Auwahi would be constructed initially. The third and fourth wells would be added in the future as required by the project's build-out. Automated operation of the pumps would be triggered when the water level in the 3150-foot head tank declined to a predetermined level.

Initial Potable Supply From Onsite Wells

For this alternative, potable supply would initially be provided by reverse osmosis treatment of water from onsite wells. At a future time, connection with the DWS system would be implemented and the project's potable supply would be provided by DWS. The reverse osmosis (RO) system would be removed at that time.

Two wells have already been developed onsite and outfitted with 525 GPM pumps. For this alternative, a third onsite well would be developed. Other key elements of the initial potable supply system would include:
Commitment of the first two onsite wells to provide feedwater for the RO plant (the unused capacity of these wells would be available for golf course irrigation);

An RO plant consisting of two parallel 200 GPM units, with a third 200 GPM unit to be added when needed;

The two service zone, onsite storage and distribution system identical to the other potable supply alternatives; and

Reuse of RO reject water for golf course and other landscape irrigation.

Using water from the onsite wells, the treated product from the RO plant will be in the range of 75 to 80 percent of the raw water supply. In other words, at the raw water inflow rate of one of the 525 GPM well pumps, approximately 400 GPM would be desalinized potable supply and 125 GPM would be RO reject water which would be pumped to the irrigation system for reuse. The 400 GPM treated water rate is equivalent to a maximum day supply of 0.576 MGD and an average day supply of 0.384 MGD.

Available brackish supply to irrigate the golf course and other landscaping would total 1175 GPM (1.69 MGD) and be comprised of the following: 525 GPM from the third onsite well; 125 GPM as RO reject water; and 525 GPM from the back-up onsite supply well for the RO system. First call on the last of these three sources would be for potable supply, but except during mechanical outages, it would always be available for irrigation use.

Connection to the DWS System

The Wailea 670 site is within the area served by DWS' Central Maui System. Primary supply for DWS' system is provided by wells in the lao Aquifer. Because of the size of the Wailea 670 project, it would be required to participate with DWS in the development of new well sources. Due to limitations of the sustainable yield of the lao Aquifer, the new well development will have to be designed to mitigate the draft on this aquifer. As such, the timing of the project's development would depend on DWS' schedule of development of these new sources.
ORDINANCE NO. __________
BILL NO. __________ (2000)

A BILL FOR AN ORDINANCE
REPEALING CHAPTER 19.90 OF THE MAUI COUNTY CODE, AND
ESTABLISHING A NEW CHAPTER 19.90A OF THE MAUI COUNTY CODE,
PERTAINING TO KIHEI-MAKENA PROJECT DISTRICT 9

BE IT ORDAINED BY THE PEOPLE OF THE COUNTY OF MAUI:

SECTION 1. CHAPTER 19.90 of the Maui County Code is hereby repealed in its entirety.

SECTION 2. Title 19 of the Maui County Code is hereby amended by adding thereto a new Chapter 19.90A to read as follows:

"Chapter 19.90A
KIHEI-MAKENA PROJECT DISTRICT 9 (WAILEA 670)

Sections:
19.90A.010 Purpose and Intent
19.90A.020 Land Use Categories, and Allowable Densities and Acreage
19.90A.030 General Standards of Development
19.90A.040 Single-Family District
19.90A.050 Multi-Family District
19.90A.060 Recreation and Open Space/Utility District
19.90A.070 Commercial District
19.90A.080 Village Mixed-Use District

EXHIBIT "10"
19.90A.010 Purpose and Intent

A. The purpose and intent of Kihei-Makena Project District 9 at Paeahu, Palauea, Keauhou, Honuaula, District of Makawao, Maui, Hawaii ("Project District 9"), is to establish permissible land uses and appropriate standards of development for residential community consisting of single-family and multi-family dwellings complemented with village [mix] mixed [and commercial] uses, all integrated with an 18-hole golf course and other recreational amenities (the "Project").

B. The objectives of Project District 9 are as follows:

1. Provide a mix of single-family and multi-family housing.

2. Emphasize community development with single-family, zero lot line, and multi-family units complemented with village [mix] mixed [and commercial] uses primarily serving the residents of the community.

3. Integrate the golf course and recreational amenities with the different uses comprising the Project.

4. Integrate bicycle/pedestrian recreation ways into the Project's parks, and include buffer zones between residential areas and the proposed Piilani Highway extension.

C. This chapter shall apply to the area designated as Project District 9 (Maui Wailea 670) in the Kihei-Makena community plan, being those certain parcels of land east of Wailea Resort, south of Maui Meadows and north of Seibu Mauka and located at Paeahu, Palauea, Keauhou, Honuaula, District of Makawao, Maui, Hawaii (the "Project Site").

19.90A.020 Land Use Categories, and Allowable Densities and Acreage

A. The land use categories for Project District 9, and the maximum allowable densities and acreages for each land use category, shall be as follows:

<table>
<thead>
<tr>
<th>Land Use Category</th>
<th>Densities/Acreages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-family residential (&quot;SF District&quot;)</td>
<td>An average for the entire single-family land use category of 2.5 units per acre or less</td>
</tr>
<tr>
<td>Multi-family residential (&quot;MF District&quot;)</td>
<td>An average for the entire multi-family land use category of 10 units per acre or less</td>
</tr>
</tbody>
</table>
### Land Use Category

| Recreation and Open Space/Utility ("Recreation and Open Space/Utility District") | 350 acres maximum |
| Neighborhood-Commercial ("Commercial District") | 9 acres maximum |
| Village-mixed use ("VMX District") | 53 acres maximum |

**B.** The number of dwelling units that may be constructed on the Project Site, exclusive of accessory dwellings, shall not exceed one thousand four hundred (1,400).

**C.** The aggregate floor area of all structures for those uses specified in section 19.90A.070 (d) (e) through (bb) of this chapter shall not exceed a total floor area of 100,000 square feet.

### 19.90A.030 General Standards of Development

Except as provided in this Chapter 19.90A, the Project Site shall be subject to all federal, state and municipal statutes, ordinances, rules, and regulations, and shall be further subject to the following standards:

**A. Environment.

1. Existing natural drainage ways shall remain as [permanent] open spaces and their hardening shall be discouraged, provided that landscaping, walkways, bikeways, roadways, fences, drainage, minor recreational and other structures, which do not either detract from the natural environment or adversely affect drainage ways and improvements, shall be permitted.

2. The drainage master plan shall incorporate the golf course and open spaces as areas for storm water retention and desilting basins.

3. Retention of the existing [rolling] topography and natural drainage ways shall be encouraged during grading of the Project Site.

**B. Energy Efficiency

1. Where applicable, the following energy efficiency guidelines are encouraged.
The Project shall not burden government agencies by requiring the provision of major infrastructure improvements or public services.

Private, non-dedicable, resort-residential roadway and pedestrian access standards that meet minimum health and safety requirements shall be reviewed during Project District Phase I.

Roadways shall incorporate landscaped bike/pedestrian ways as part of a comprehensive system of landscape roads and bike/pedestrian ways within the Project. A conceptual circulation plan, including, but not limited to design concepts and circulation patterns, shall be reviewed and approved during Project District Phase II.

Nonpotable water shall be used for golf course irrigation unless otherwise authorized by the Council of the County of Maui.

A conceptual engineering report for the Project, including, but not limited to an identification of pre- and post development impacts, on- and offsite improvements, and design and systems plans, shall be reviewed and approved during Project District Phase II.
6. A conceptual recreational plan identifying the golf course, recreational amenities, and access ways, including, but not limited to locations, integration with bike/pedestrian ways, and design concepts, shall be reviewed and approved during Project District Phase II.

[G.] **Design.**

1. Each building or structure shall be designed by a licensed architect in conformance with the intent of Project District 9.
2. Conceptual architectural and landscape architectural plans, including lighting and mechanical plans, shall be reviewed by the Maui urban design review board during Project District Phase II.
3. Conceptual design guidelines shall be reviewed by the Maui urban design review board during Project District Phase II.
4. The height of any structure within the Project Site shall be measured from the finish grade.

[D.] **Landscape Planting.**

1. Comprehensive landscaping shall be provided for all community common areas, including along streets and drainage ways, and in improved open spaces.
2. Landscaping shall be considered an integral element of the Project and shall be used for visual screening, shade, definition, and environmental control.
3. Existing native Hawaiian species shall be retained or relocated, to the extent practicable.
4. Use of native Hawaiian species shall be encouraged.
5. A minimum 50 [feet] landscape buffer area shall be provided between the southern boundary of the Maui Meadows Subdivision and Project District 9. No structures, except rear and side boundary walls, or fences shall be permitted in the buffer.
6. A minimum 20 feet wide landscape buffer area shall be provided for single-family and multi-family development adjoining the Piilani Highway extension.

[E.] **Signs.**

A comprehensive sign program, consistent with Chapter 16.12A, Maui County Code, as amended, shall be established, including, but not be limited to, type, number allowable, area, format, conceptual design, color scheme, building materials lighting, and installation of all signs for the Project. The sign program shall be reviewed by the Maui urban design review board.
Housing.

The Project shall comply with affordable housing requirements duly adopted by the County of Maui.

19.90A.040 Single-Family District.

A. Permitted Uses and Structures.

The following uses and structures shall be permitted in the Single-Family SF District:

1. Principal Uses and Structures:

   a. Any use or structure permitted under Chapter 19.08, Maui County Code;
   b. Minor utility facilities; and
   c. Zero lot line residential developments.

2. Accessory Uses and Structures. Accessory uses and structures located on the same lot and incidental and customarily found in connection with the principal uses, including, but not limited to:

   a. Accessory uses and structures permitted in Chapter 19.08, Maui County Code;
   b. Accessory dwelling consistent with the provisions of sections 19.35.020 to 19.35.100, inclusive, Maui County Code;
   c. Adult day-care homes in which residents of the home provide care for not more than six adults, provided, that such homes shall be approved by appropriate governmental agencies;
   d. Antennae and antennae dishes, provided that ground dish antennae shall not exceed ten feet in height and shall be screened by walls, earth berms, and/or landscaping with minimum height of four feet, and that any roof or wall-mounted antennae shall not be more than five feet over the height of the building;
   e. Garages, private;
   f. Greenhouses;
   g. Home occupations;
   h. Maintenance and storage structures;
   i. Off-site non-commercial parking areas for resident and guest parking as approved by the Planning Director;
On-site or off-site real estate sales offices and model home complexes, limited to the sale of units at the Project Site as approved by the Planning Director;

Park equipment, furniture and restroom facilities;

Parking lots;

Resident recreational uses and structures which perform or offer facilities and services for the owners and their tenants and social invitees, which may be located on a separate lot[...and as approved by the Planning Director].

Small scale energy systems which are incidental and subordinate to a principal use or structure;

Swimming pools; and

Other uses and structures as determined by the Planning Director as meeting the intent of this Section.

3. Special Uses.

a. Special uses and structures permitted in Chapter 19.08 Residential Districts; and

b. Adult day care homes form more than six adults;

c. Residential group homes and shelters; and

d. Uses and structures, which are similar and compatible to the principal uses or structures and which conform to the intent of this Chapter may be approved by the Maui Planning Commission.

B. Development Standards.

The following development standards shall apply to the uses and structures in the Single-Family SF District, except zero lot line residential developments shall comply with sections 19.09.060 to 19.09.090, inclusive, Maui County Code:

1. Minimum lot area: 7,500 square feet.


3. Minimum yards:

   a. Front yard: Fifteen feet;

   b. Side yard: Six feet for one-story buildings and ten feet for two-story buildings; and

   c. Rear yard: Ten feet.

4. Maximum height: Thirty-five feet and two stories, except that vent pipes, fans, chimneys, antennae and roof-top solar collectors
3. **Special Uses.**

a. Special uses and structures permitted in Chapter 19.08 Residential Districts; and

b. Adult day care homes for more than six adults;

c. Residential group homes and shelters; and

d. Uses and structures, which are similar and compatible to the principal uses or structures and which conform to the intent of this Chapter may be approved by the Maui Planning Commission.

B. **Development Standards.**

The following development standards shall apply to the uses and structures in the Single-Family SF District, except zero lot line residential developments shall comply with sections 19.09.060 to 19.09.090, inclusive, Maui County Code:

1. Minimum lot area: 7,500 square feet.


3. Minimum yards:

   a. Front yard: Fifteen feet;

   b. Side yard: Six feet for one-story buildings and ten feet for two-story buildings; and

   c. Rear yard: Ten feet.

4. Maximum height: Thirty feet and two stories, except that vent pipes, fans, chimneys, antennae and roof-top solar collectors
19.90A.050 Multi-Family District.

A. Permitted Uses and Structures.

The following uses and structures shall be permitted in the Multi-Family MF District.

1. Principal Uses and Structures.

   a. Any use or structure permitted in the Single-Family SF District;
   b. Two-family or duplex dwelling units; and
   c. Multi-family dwelling units.

2. Accessory Uses and Structures. Accessory uses and structures located on the same lot and incidental and customarily found in connection with the principal uses, including, but not limited to:

   a. Accessory uses or structures permitted in the Single-Family SF District; and
   b. Other uses and structures as determined by the Planning Director as meeting the intent of this section.

3. Special Uses.

   a. Special uses or structures permitted in the Single-Family SF District; and
   b. Uses and structures, which are similar and compatible to the principal uses or structures and which conform to the intent of this Chapter, may be approved by the Maui Planning Commission.

B. Development Standards.

The following development standards shall apply to the uses and structures in the MF District, except those uses permitted in the SF District shall follow the development standards of the SF District:

1. Minimum Lot area: 10,000 square feet.
2. Minimum Lot width: Seventy feet.
3. Minimum yards:
   a. Front yard: Fifteen feet for one-story and two-story buildings, and twenty feet for three-story and four-story buildings.
   c. Rear yard: Fifteen feet for one-story and two-story building, and twenty feet for three-story and four-story buildings.

4. Maximum height: Fifty feet and four stories, except that elevator shafts, air conditioning equipment, vent pipes, fans, antennae and solar collectors may exceed such height limitation by not more than ten feet.

5. Lot coverage: The total ground area on which the structures are located on the lot shall not exceed thirty-five percent of the total area of the lot.

6. Floor area-lot area ratio: The gross floor area of all structures on the lot shall not exceed ninety [per cent] percent of the total area of the lot.

19.90A.060 Recreation and Open Space/Utility District.

A. Permitted Uses and Structures.

The following uses and structures shall be permitted in the Recreation and Open Space/Utility District:

1. Principal Uses and Structures.

   a. Athletic courts and fields;
   b. Community and recreation centers;
   c. Drainage, utility and erosion control systems;
   d. Golf courses and golf driving ranges;
   e. Greenhouses and nurseries, limited to the propagation of plants;
   f. Historic buildings, structures and sites;
   g. Open land recreation;
   h. Parks, playgrounds, and landscaped common or open space areas.
i. Swimming pools;
j. Trails, and bike-pedestrian ways;
k. Utility facilities, major and minor; and
l. Wells and reservoirs.

2. **Accessory Uses and structures.** Accessory uses and structures located on the same lot and incidental and customarily found in connection with the principal uses, including, but not limited to:
   
a. One caretaker's dwelling unit, accessory to the golf course, with a total gross floor area of not more than 1500 square feet [and as approved by the Planning Director];
   
b. Accessory uses and facilities normally associated with golf courses, including, but not limited to cart barns, equipment, storage and maintenance facilities, instructional and practice courses and facilities, driving ranges, comfort and shelter stations, and other uses determined by the Planning Director to be accessory or compatible. Appropriate mitigative measures shall be implemented to minimize impacts from noise, lighting, and noxious odors on surrounding land uses, including, but not limited to landscape screening, noise barriers, insulation, shielded and downward projected light fixtures, and other reasonable and appropriate measures;
   
c. [One clubhouse per golf course with snack bars, restaurants with bars, locker room facilities, weight rooms, pro shops for the sale and service of equipment and materials used for or relating to golf, tennis or other recreational activities, and other accessory facilities as approved by the Planning Director;]
   
d. Comfort and shelter stations;
   
en. Greenhouses;
   
f. Maintenance and storage facilities;
   
g. Off-street parking and loading;
   
h. Park furniture and equipment; and
   
i. Other uses and structures as determined by the Planning Director as meeting the intent of this section.

3. **Special Uses.**

Uses and structures, which are similar and compatible to the principal uses or structures and which conform to the intent of
this Chapter, may be approved by the Maui Planning Commission.

B. **Development Standards.**

The following development standards shall apply to the uses and structures in the Recreation and Open Space/Utility District:

1. Minimum front, side and back yards: Twenty feet.

2. Maximum height: Thirty-five feet, except the golf clubhouse structure may have a height not to exceed fifty-five feet subject to design approval by the Planning Director.

[19.90A.070 **Commercial District.**]

**A. Permitted Uses and Structures.**

The following uses and structures shall be permitted in the Commercial District:

**4. Principal Uses and Structures:**

a: Any use or structure permitted under Chapters 19.16, Maui County Code;

b: Amusement enterprises, provided acoustical measures have been incorporated into the building to mitigate potential noise impacts;

c: Antique shops;

d: Apartments;

e: Art Galleries;

f: Arts and culture studios for artists, dancers, hawaiian culturists, musicians, photographers, theater and other artists, provided acoustical measures shall be incorporated into the buildings to mitigate potential noise impacts;

g: Auditoriums, theaters, meeting rooms, conference centers, and places of assembly, provided acoustical measures shall be incorporated into the building to mitigate potential noise impacts;

h: Automobile service stations;

i: Banks and other financial institutions;

j: Business and professional offices and agencies;

k: Clinics, medical, dental, or veterinary;

l: Educational institutions;
m: Eleemosynary organizations;

n: Equipment rental and sales yards, including, but not limited to the rental or sale of motor vehicles; motorcycles; mopeds; bicycles; and beach equipment; provided said vehicles, equipment and the like shall be stored in an enclosed area appropriately screened with fencing and landscape planting, except that motor vehicles may be stored in a parking lot landscaped and fenced in accordance with the provisions of Chapter 19.36, Maui County Code, and the exterior lighting for such lot shall be appropriately shielded from adjacent residential properties;

o: Food- and drinking-establishments, including, but not limited to bars, caterers, restaurants, cafes, coffee shops, snack bars, delicatessens, drive-ins, and refreshment stands, with or without liquor;

p: Gymnasiums, fitness, health, and wellness centers; provided acoustical measures have been incorporated into the building to mitigate potential noise impacts;

q: Hardware and garden-supply stores, provided all merchandise shall be stored either indoors or in an enclosed area appropriately screened with fencing and landscape planting;

r: Libraries and museums;

s: Miniature golf courses, provided acoustical measures shall be incorporated into the facility to mitigate potential noise impacts, as much as is practicable, and exterior lighting shall be shielded from adjacent residential areas;

t: News and magazine stands;

tu: Nurseries (flowers or plants), provided, that all incidental equipment and supplies, including fertilizers and empty cans, shall be kept within enclosed buildings;

v: Nursing and convalescent homes;

w: Parcel delivery stations, provided all parcels or packages shall be stored within an enclosed building; all delivery trucks shall be stored in an enclosed area that is appropriately screened with fencing and landscape planting; and all exterior lighting shall be appropriately shielded from adjacent residential properties;

x: Parking lots and/or buildings, provided the parking lot and/or building shall be appropriately screened in accordance with Chapter 19.36, Maui County Code, and exterior lighting shall be shielded from adjacent residential properties;
Pet-shops, not involving the treatment or boarding of animals;

Printing, lithography or publishing shops, provided all equipment and supplies shall be stored within an enclosed building, except delivery vehicles, which may be stored in an enclosed area appropriately screened with fencing and landscape planting, and if necessary, acoustical measures shall be incorporated into the building to mitigate potential noise impacts;

Private clubs or fraternal organizations;

Public facility or use;

Quasi-public facility or use;

Religious institutions;

Religious, benevolent, and philanthropic societies; including, but not limited to masonic lodges and YMCAs;

Retail establishments selling goods and commodities or providing services for compensation, including, but not limited to accessory stores, clothing stores, department stores, drug stores, jewelry stores, shoe stores, and sporting goods stores;

Sports stadiums and facilities, provided acoustical measures shall be incorporated into the buildings to mitigate potential noise impacts, as much as is practicable, and exterior lighting shall be shielded from adjacent residential areas;

Travel agencies and visitor activity services; and

Any other retail businesses or commercial enterprises which are similar in character, render sales of commodities, or perform services to the community and not detrimental to the welfare of the surrounding area; provided, however, that such uses shall be approved by the Planning Director as conforming to the intent of this section.

Accessory Uses and Structures. Accessory uses and structures located on the same lot and incidental and customarily found in connection with the principal uses, including, but are not limited to:

Small-scale energy systems which are incidental and subordinate to the principal structure or use; and

Other uses and structures as determined by the Planning Director as meeting the intent of this Section.
A. **Development Standards.**

The following development standards shall apply to the uses and structures in the Commercial District:

1. **Minimum lot area:** 6,000 square feet.
2. **Minimum lot width:** Sixty feet.
3. **Minimum yards:** No yard setbacks shall be required, except (a) that required for off-street parking; and (b) if the lot abuts a lot in the SF District or the MF District, the side or rear yard setbacks of the abutting district shall apply.
4. **Maximum Building Height:** Thirty-five feet.
5. **Maximum Floor Area Ratio:** Sixty percent.

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Village Mixed-Use District. The village mixed-use district envisions a community center comprised of a mix of residential, homeowner guest housing, commercial, and recreational and community facilities serving the needs of the Project residents and guests. The intent of the Village Mixed-Use District is to create community identity and character with landmark buildings and a grouping of services within a central core that would include a mix of uses.

A. **Permitted Uses and Structures**

The following uses and structures shall be permitted in the Village Mixed-Use VMX District:

1. **Principal Uses and Structures.**
   a. Any use or structure permitted in the Single-Family SF District, the Multi-Family MF District, or the Commercial District;
   b. Not more than twenty (20) homeowner association dwelling units at the entire Project Site, but only if (i) such units are owned by a non-profit incorporated or unincorporated association whose members are limited to the fee simple and equitable owners of the dwelling units at the Project; (ii) no fee, charge or the like in excess of the actual cost of such occupancy is imposed for the occupant's use of such dwelling units; (iii)
occupancy in such dwelling units at the Project, and their social invitees; and (iv) occupancy in such dwelling units is limited to periods less than one hundred eighty (180) consecutive days; and

[Other uses and structures as determined by the Planning Director as meeting the intent of this Section.]

Any use or structure permitted under Chapters 10, 16.

Maui County Code:

Apartment

Art Galleries

Arts and culture studies for artists, dancers, Hawaiian culture, musicians, photographers, theater, and other artists. Provided, acoustical measures shall be incorporated into the buildings to mitigate potential noise impacts.

Automobile service stations

Banks and other financial institutions

Business and professional offices and agencies

Clinics, medical, dental, veterinary

Emergency, law, organizations

Food and drinking establishments, including but not limited to bars, cafes, restaurants, cafes, coffee shops, snack bars, delicatessens, drive ins, and refreshment stands with or without liquor

Gymnasiums, fitness, health, and wellness centers

provided acoustical measures have been incorporated into the building to mitigate potential noise impacts.

Hardware and garden supply stores, provided all merchandise shall be stored, all outdoor signs for an enclosed area, appropriately screened with fencing and landscape plantings

Libraries and museums

Newstands and magazine stands

Parking lots and/or buildings provided this parking lot ant/or building shall be appropriately screen, in accordance with Chapter 41.35, Maui County Code, and exterior lighting shall be shielded from adjacent residential properties.

Pet shops, that involving the treatment or boarding of animals.

Private clubs or fraternal organizations

Public facilities or use

Quasi-public facility or use

Religious institutions
2. Accessory Uses and Structures. Accessory uses and structures located on the same lot and incidental and customarily found in connection with the principal uses, including, but are not limited to:

a. Accessory uses or structures permitted in the Single-Family SF District[;] or the Multi-Family MF District[; and] the Commercial District[; and]

b. One clubhouse per golf course, with snack bars, restaurants, with bars, locker room facilities, weight rooms, pro shops for the sale and service of equipment and materials used for or related to golf; tennis or other recreational activities, and other accessory facilities as approved by the Planning Director;

c. Other uses and structures as determined by the Planning Director as meeting the intent of this section.

3. Special Uses.

Uses and structures, which are similar and compatible to the principal uses or structures and which conform to the intent of this Chapter, may be approved by the Maui Planning Commission.

B. Development Standards.

The following development standards shall apply to the uses and structures in the Village Mixed-Use VMX District:

1. For those uses and structures permitted in the Single-Family SF District and incorporated by reference into other districts, the development standards for the Single-Family SF District shall apply.
2. For those uses and structures permitted in the Multi-Family MF District and incorporated by reference in other districts, the development standards for the Multi-Family MF District shall apply.

3. For those uses and structures permitted in the Commercial District and incorporated by reference in other districts, the development standards for the Commercial District shall apply.

4. For those uses and structures permitted in the Village Mixed-Use (VMX) District, but not in the SF District or the MF District or the Commercial District, the following development standards shall apply:

   a. Minimum lot area: [10,000] square feet.

   b. Minimum lot width: [Seventy] feet.

   c. Minimum yards:

      (1) Front yard: Fifteen feet for one-story and two-story buildings, and twenty feet for three-story and four-story buildings.

      (2) Side yard: Ten feet for one-story and two-story buildings and fifteen feet for three-story and four-story buildings.

      (3) Rear yard: Fifteen feet for one-story and two-story buildings, and twenty feet for three-story and four-story buildings.

   d. Maximum height: Fifty feet or more stories, except that elevator shafts, air conditioning equipment, vent pipes, fans, antennae and solar collectors may exceed such height limitation by not more than ten feet.

   e. Lot coverage: The total ground area on which the structures are located on the lot shall not exceed thirty-five percent of the total area of the lot.
d. Floor area-lot area ratio: The gross floor area of all structures on the lot shall not exceed ninety percent of the total area of the lot.

4. A project development plan for the village mixed uses in accordance with the land use plan approved during Project District Phase II shall be reviewed and approved by the Planning Director pursuant to section 19.510.090, Maui County Code.

SECTION 3. This ordinance shall take effect upon its approval.

APPROVED AS TO FORM AND LEGALITY:

KELLY A. CAIRNS
Deputy Corporation Counsel
County of Maui
ORDINANCE NO. __________
BILL NO. ________ (2001)

A BILL FOR AN ORDINANCE
REPEALING CHAPTER 19.90 OF THE MAUI COUNTY CODE, AND
ESTABLISHING A NEW CHAPTER 19.90A OF THE MAUI COUNTY CODE,
PERTAINING TO KIHEI-MAKENA PROJECT DISTRICT 9

BE IT ORDAINED BY THE PEOPLE OF THE COUNTY OF MAUI:

SECTION 1. CHAPTER 19.90 of the Maui County Code is hereby repealed in its
entirety.

SECTION 2. Title 19 of the Maui County Code is hereby amended by adding
thereeto a new Chapter 19.90A to read as follows:

"Chapter 19.90A
KIHEI-MAKENA PROJECT DISTRICT 9 (WAILEA 670)

Sections:

19.90A.010 Purpose and Intent
19.90A.020 Land Use Categories, and Allowable Densities and Acreage
19.90A.030 General Standards of Development
19.90A.040 Single-Family District
19.90A.050 Multi-Family District
19.90A.060 Recreation and Open Space/Utility District
19.90A.070 [Commercial District
49.90A.080] Village Mixed-Use District

EXHIBIT "11"
19.90A.010 Purpose and Intent

A. The purpose and intent of Kihei-Makena Project District 9 at Paehau, Palauea, Keauhou, Honuaula, District of Makawao, Maui, Hawaii ("Project District 9"), is to establish permissible land uses and appropriate standards of development for residential community consisting of single-family and multi-family dwellings complemented with village [mix] mixed [and commercial] uses, all integrated with an 18-hole golf course and other recreational amenities (the “Project”).

B. The objectives of Project District 9 are as follows:

1. Provide a mix of single-family and multi-family housing.

2. Emphasize community development with single-family, zero lot line, and multi-family units complemented with village [mix and commercial] mixed uses primarily serving the residents of the community.

3. Integrate the golf course and recreational amenities with the different uses comprising the Project.

4. Integrate bicycle/pedestrian recreation ways into the Project’s parks, and include buffer zones between residential areas and the proposed Piilani Highway extension.

C. This chapter shall apply to the area designated as Project District 9 (Maui Wailea 670) in the Kihei-Makena community plan, being those certain parcels of land east of Wailea Resort, south of Maui Meadows and north of Seibu Mauka and located at Paehau, Palauea, Keauhou, Honuaula, District of Makawao, Maui, Hawaii (the “Project Site”).

19.90A.020 Land Use Categories, and Allowable Densities and Acreage

A. The land use categories for Project District 9, and the maximum allowable densities and acreages for each land use category, shall be as follows:

<table>
<thead>
<tr>
<th>Land Use Category</th>
<th>Densities/Acreages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-family residential (&quot;SF District&quot;)</td>
<td>An average for the entire single-family land use category of 2.5 units per acre or less</td>
</tr>
<tr>
<td>Multi-family residential (&quot;MF District&quot;)</td>
<td>An average for the entire multi-family land use category of 10 units per acre or less</td>
</tr>
</tbody>
</table>
Land Use Category | Densities/Acreages
--- | ---
Recreation and Open Space/Utility ("Recreation and Open Space/Utility District") | 350 acres maximum

[Neighborhood-Commercial ("Commercial District")]

Village-mixed use ("VMX District") | [35] 53 acres maximum

B. The number of dwelling units that may be constructed on the Project Site, [exclusive] inclusive of accessory dwellings, shall not exceed one thousand four hundred (1,400).

C. The aggregate floor area of all structures for those uses specified in section 19.90A.070 (1) (c) through (cc) of this chapter shall not exceed a total floor area of 100,000 square feet.

19.90A.030 General Standards of Development

Except as provided in this Chapter 19.90A, the Project Site shall be subject to all federal, state and municipal statutes, ordinances, rules, and regulations, and shall be further subject to the following standards:

A. Environment.

1. Existing natural drainage ways shall remain as [permanent] open spaces and their hardening shall be discouraged, provided that landscaping, walkways, bikeways, roadways, fences, drainage, minor recreational and other structures, which do not either detract from the natural environment or adversely affect drainage ways and improvements, shall be permitted.

2. The drainage master plan shall incorporate the golf course and open spaces as areas for storm water retention and desilting basins.

3. Retention of the existing [rolling] topography and natural drainage ways shall be encouraged during grading of the Project Site.

B. Energy Efficiency

1. Where applicable, the following energy efficiency guidelines are encouraged:
The Project shall not burden government agencies by requiring the provision of major infrastructure improvements or public services.

Private, non-dedicable, resort-residential roadway and pedestrian access standards that meet [minimum] health and safety requirements shall be reviewed during Project District Phase II.

Roadways shall incorporate landscaped bike/pedestrian ways as part of a comprehensive system of landscape roads and bike/pedestrian ways within the Project. A conceptual circulation plan, including, but not limited to design concepts and circulation patterns, shall be reviewed and approved during Project District Phase II.

Nonpotable water shall be used for golf course irrigation unless otherwise authorized by the Council of the County of Maui.

A conceptual engineering report for the Project, including, but not limited to an identification of pre- and post development impacts, on- and offsite improvements, and design and systems plans, shall be reviewed and approved during Project District Phase II.
6. A conceptual recreational plan identifying the golf course, recreational amenities, and access ways, including, but not limited to locations, integration with bike/pedestrian ways, and design concepts, shall be reviewed and approved during Project District Phase II.


1. Each building or structure shall be designed by a licensed architect in conformance with the intent of Project District 9.
2. Conceptual architectural and landscape architectural plans, including lighting and mechanical plans, shall be reviewed by the Maui urban design review board during Project District Phase II.
3. Conceptual design guidelines shall be reviewed by the Maui urban design review board during Project District Phase II.
4. The height of any structure within the Project Site shall be measured from the finish grade.


1. Comprehensive landscaping shall be provided for all community common areas, including along streets and drainage ways, and in improved open spaces.
2. Landscaping shall be considered an integral element of the Project and shall be used for visual screening, shade, definition, and environmental control.
3. Existing native Hawaiian species shall be retained or relocated, to the extent practicable.
4. Use of native Hawaiian species shall be encouraged.
5. A minimum 50 feet landscape buffer area shall be provided between the southern boundary of the Maui Meadows Subdivision and Project District 9. No structures, except rear and side boundary walls or fences shall be permitted in the buffer.
6. A minimum 20 feet wide landscape buffer area shall be provided for single-family and multi-family development adjoining the Piilani Highway extension.

[E.] F. Signs.

A comprehensive sign program, consistent with Chapter 16.12A, Maui County Code, as amended, shall be established, including, but not be limited to, type, number allowable, area, format, conceptual design, color scheme, building materials lighting, and installation of all signs for the Project. The sign program shall be reviewed by the Maui urban design review board.
The Project shall comply with affordable housing requirements duly adopted by the County of Maui.

19.90A.040 Single-Family District.

A. Permitted Uses and Structures.

The following uses and structures shall be permitted in the Single-Family SF District:

1. Principal Uses and Structures:
   a. Any use or structure permitted under Chapter 19.08, Maui County Code;
   b. Minor utility facilities; and
   c. Zero lot line residential developments.

2. Accessory Uses and Structures. Accessory uses and structures located on the same lot and incidental and customarily found in connection with the principal uses, including, but not limited to:
   a. Accessory uses and structures permitted in Chapter 19.08, Maui County Code;
   b. Accessory dwelling consistent with the provisions of sections 19.35.020 to 19.35.100, inclusive, Maui County Code;
   c. Adult day care homes in which residents of the home provide care for not more than six adults, provided, that such homes shall be approved by appropriate governmental agencies;
   d. Antennae and antennae dishes, provided that ground dish antennae shall not exceed ten feet in height, and shall be screened by walls, earth berms, and/or landscaping with a minimum height of four feet, and that any roof or wall-mounted antennae shall not be more than five feet over exceed the height of the building;
   e. Garages, private;
   [f.] d. Greenhouses;
   [g.] e. Home occupations;
   [h.] f. Maintenance and storage structures;
   [i.] g. Off-site non-commercial parking areas for resident and guest parking as approved by the Planning Director;
3. **Special Uses.**

   a. Special uses and structures permitted in Chapter 19.08 Residential Districts; and

   b. Adult day care homes form more than six adults;  

   c. Residential group homes and shelters; and

   d. Uses and structures, which are similar and compatible to the principal uses or structures and which conform to the intent of this Chapter may be approved by the Maui Planning Commission.

B. **Development Standards.**

The following development standards shall apply to the uses and structures in the Single-Family SF District, except zero lot line residential developments shall comply with sections 19.09.060 to 19.09.090, inclusive, Maui County Code:

1. Minimum lot area: 7,500 square feet.


3. Minimum yards:

   a. Front yard: Fifteen feet;  

   b. Side yard: Six feet for one-story buildings and ten feet for two-story buildings; and

   c. Rear yard: Ten feet.

4. Maximum height: Thirty feet and two stories, except that vent pipes, fans, chimneys, antennae and roof-top solar collectors
may exceed such height limitation by not more than eight feet.

19.90A.050 Multi-Family District.

A. Permitted Uses and Structures.

The following uses and structures shall be permitted in the Multi-Family MF District.

1. Principal Uses and Structures.
   a. Any use or structure permitted in the Single-Family SF District;
   b. Two-family or duplex dwelling units; and
   c. Multi-family dwelling units.

2. Accessory Uses and Structures. Accessory uses and structures located on the same lot and incidental and customarily found in connection with the principal uses, including, but not limited to:
   a. Accessory uses or structures permitted in the Single-Family SF District; and
   b. Other uses and structures as determined by the Planning Director as meeting the intent of this section.

3. Special Uses.
   a. Special uses or structures permitted in the Single-Family SF District; and
   b. Uses and structures, which are similar and compatible to the principal uses or structures and which conform to the intent of this Chapter, may be approved by the Maui Planning Commission.

B. Development Standards.

The following development standards shall apply to the uses and structures in the MF District, except those uses permitted in the SF District shall follow the development standards of the SF District:

1. Minimum Lot area: 10,000 square feet.
2. Minimum Lot width: Seventy feet.
3. Minimum yards:
   a. Front yard: Fifteen feet for one-story and two-story buildings, and twenty feet for three-story and four-story buildings.
   c. Rear yard: Fifteen feet for one-story and two-story building, and twenty feet for three-story and four-story buildings.

4. Maximum height: Fifty feet and four stories, except that elevator shafts, air conditioning equipment, vent pipes, fans, antennae and solar collectors may exceed such height limitation by not more than ten feet.

5. Lot coverage: The total ground area on which the structures are located on the lot shall not exceed thirty-five percent of the total area of the lot.

6. Floor area-lot area ratio: The gross floor area of all structures on the lot shall not exceed ninety [per cent] percent of the total area of the lot.

19.90A.060 Recreation and Open Space/Utility District.

A. Permitted Uses and Structures.

The following uses and structures shall be permitted in the Recreation and Open Space/Utility District:

1. Principal Uses and Structures.
   a. Athletic courts and fields;
   b. Community and recreation centers;
   c. Drainage, utility and erosion control systems;
   d. Golf courses and golf driving ranges;
   e. Greenhouses and nurseries, limited to the propagation of plants;
   f. Historic buildings, structures and sites;
   g. Open land recreation;
   h. Parks, playgrounds, and landscaped common or open space areas.
i. Swimming pools;

j. Trails, and bike-pedestrian ways;

k. Utility facilities, major and minor; and

l. Wells and reservoirs.

2. **Accessory Uses and structures.** Accessory uses and structures located on the same lot and incidental and customarily found in connection with the principal uses, including, but not limited to:

a. One caretaker’s dwelling unit, accessory to the golf course, with a total gross floor area of not more than [4000] 1500 square feet and as approved by the Planning Director;

b. Accessory uses and facilities normally associated with golf courses, including, but not limited to cart barns, equipment, storage and maintenance facilities, instructional and practice courses and facilities, driving ranges, comfort and shelter stations, and other uses determined by the Planning Director to be accessory or compatible. Appropriate mitigative measures shall be implemented to minimize impacts from noise, lighting, and noxious odors on surrounding land uses, including, but not limited to landscape screening, noise barriers, insulation, shielded and downward projected light fixtures, and other reasonable and appropriate measures;

c. [One clubhouse per golf course with snack bars, restaurants with bars, locker room facilities, weight rooms, pro shops for the sale and service of equipment and materials used for or relating to golf, tennis or other recreational activities, and other accessory facilities as approved by the Planning Director;

d. Comfort and shelter stations;

d. Greenhouses;

e. Maintenance and storage facilities;

f. Off-street parking and loading;

g. Park furniture and equipment; and

h. Other uses and structures as determined by the Planning Director as meeting the intent of this section.

3. **Special Uses.**

Uses and structures, which are similar and compatible to the principal uses or structures and which conform to the intent of
this Chapter, may be approved by the Maui Planning Commission.

B. Development Standards.

The following development standards shall apply to the uses and structures in the Recreation and Open Space/Utility District:

1. Minimum front, side and back yards: Twenty feet.

2. Maximum height: Thirty-five feet, except the golf clubhouse structure may have a height not to exceed fifty-five feet subject to design approval by the Planning Director.

[19.90A.070 Commercial District.]

A. Permitted Uses and Structures:

The following uses and structures shall be permitted in the Commercial District:

1. Principal Uses and Structures:

a. Any use or structure permitted under Chapters 19.16, Maui County Code;

b. Amusement enterprises, provided acoustical measures have been incorporated into the building to mitigate potential noise impacts;

c. Antique shops;

d. Apartments;

e. Art Galleries;

f. Arts and culture studios for artists, dancers, hawaiian culturists, musicians, photographers, theater and other artists, provided acoustical measures shall be incorporated into the buildings to mitigate potential noise impacts;

g. Auditoriums, theaters, meeting rooms, conference centers, and places of assembly, provided acoustical measures shall be incorporated into the building to mitigate potential noise impacts;

h. Automobile service stations;

i. Banks and other financial institutions;

j. Business and professional offices and agencies;

k. Clinics, medical, dental, or veterinary;

l. Educational institutions;
m: Eleemosynary organizations;

n: Equipment rental and sales yards, including, but not limited to the rental or sale of motor vehicles, motorcycles, mopeds, bicycles, and beach equipment; provided said vehicles, equipment and the like shall be stored in an enclosed area appropriately screened with fencing and landscape planting, except that motor vehicles may be stored in a parking lot landscaped and fenced in accordance with the provisions of Chapter 19.36, Maui County Code; and the exterior lighting for such lot shall be appropriately shielded from adjacent residential properties;

o: Food and drinking establishments, including, but not limited to bars, caterers, restaurants, cafes, coffee shops, snack bars, delicatessens, drive-ins, and refreshment stands, with or without liquor;

p: Gymnasiums, fitness, health, and wellness centers; provided acoustical measures have been incorporated into the building to mitigate potential noise impacts;

q: Hardware and garden supply stores, provided all merchandise shall be stored either indoors or in an enclosed area appropriately screened with fencing and landscape planting;

r: Libraries and museums;

s: Miniature golf courses, provided acoustical measures shall be incorporated into the facility to mitigate potential noise impacts, as much as is practicable, and exterior lighting shall be shielded from adjacent residential areas;

\textbf{t:} News and magazine stands;

\textbf{u:} Nurseries (flowers or plants), provided that all incidental equipment and supplies, including fertilizers and empty cans, shall be kept within enclosed buildings;

\textbf{v:} Nursing and convalescent homes;

\textbf{w:} Parcel-delivery stations, provided all parcels or packages shall be stored within an enclosed building; all delivery trucks shall be stored in an enclosed area that is appropriately screened with fencing and landscape planting, and all exterior lighting shall be appropriately shielded from adjacent residential properties;

\textbf{x:} Parking lots and/or buildings, provided the parking lot and/or building shall be appropriately screened in accordance with Chapter 19.36, Maui County Code;
supported by the principal structure or one; and
small scale energy systems which are incident
including, but are not limited to: customarily located in connection with the principal uses;
structures located on the same lot; and incidental and
accessory uses and structures; accessory uses and

These eaves and gable/Valley areas should be shielded from
externally lit signage, and exterior lighting shall be shielded from
proactively and adequately incorporate measures so as to
mitigate potential noise impacts. As much as is
practicable, and exterior lighting shall be shielded from

The Planning Director shall determine if the site is
not determined to be the work of the surrounding area;
commodities or perform services to the community and
which are similar in character, under rules of

any other retail businesses or commercial enterprises,
travel agencies, and visitor facilities served; and

recreational facilities; retail goods stores;
sporting goods stores; dime stores; jewelry stores; shoe stores; and

Michael E. Gass

Recreational facilities; retail goods and commodity stores

Private clubs or other organizations;

buildings shall be shielded from
eco-friendly, non-profit, and philanthropist societies;

Religious institutions;

Public facilities or use;

See:

Pet shops, not involving the treatment or boarding of
residential properties;

Pets trays; not involving the treatment or boarding of

Signs;

Equipment, and supplies shall be stored with-in

Publishing, literary, or publishing shops, provided all

residences;
b. Other uses and structures as determined by the Planning Director as meeting the intent of this Section:

A. Development Standards:

The following development standards shall apply to the uses and structures in the Commercial District:

1. Minimum lot area: 6,000 square feet.

2. Minimum lot width: Sixty feet.

3. Minimum yards: No yard setbacks shall be required; except (a) that required for off-street parking; and (b) if the lot abuts a lot in the SF District or the MF District, the side or rear yard setbacks of the abutting district shall apply.

4. Maximum Building Height: Thirty-five feet.

5. Maximum Floor Area Ratio: Sixty-percent.

[19.90A.080] 19.90A.070 Village Mixed-Use District. The village mixed-use district envisions a community center comprised of a mix of residential, homeowner guest housing, commercial, and recreational and community facilities serving the needs of the Project residents and guests. The intent of the Village Mixed-Use District is to create community identity and character with landmark buildings and a grouping of services within a central core that would include a mix of uses.

A. Permitted Uses and Structures

The following uses and structures shall be permitted in the Village Mixed-Use VMX District:

1. Principal Uses and Structures.

   a. Any use or structure permitted in the Single-Family SF District[;] or the Multi-Family MF District[;—or—the Commercial District];

   b. Not more than twenty (20) homeowner association dwelling units at the entire Project Site, but only if (i) such units are owned by a non-profit incorporated or unincorporated association whose members are limited to the fee simple and equitable owners of the dwelling
units at the Project; (ii) no fee, charge or the like in excess of the actual cost of such occupancy is imposed for the occupant's use of such dwelling units; (iii) occupancy in such dwelling units at the Project, and their social invitees; and (iv) occupancy in such dwelling units is limited to periods less than one hundred eighty (180) consecutive days; and

c. [Other uses and structures as determined by the Planning Director as meeting the intent of this Section:]
   Any use or structure permitted under Chapters 19, 16, Maui County Code;

d. Apartments;

e. Art Galleries;

f. Arts and culture studios for artists, dancers, hawaiian culturists, musicians, photographers, theater and other artists, provided acoustical measures shall be incorporated into the buildings to mitigate potential noise impacts;

g. Automobile service stations;

h. Banks and other financial institutions;

i. Business and professional offices and agencies;

j. Clinics, medical, dental, or veterinary;

k. Eleemosynary organizations;

l. Food and drinking establishments, including but not limited to bars, caterers, restaurants, cafes, coffee shops, snack bars, delicatessens, drive-ins, and refreshment stands, with or without liquor;

m. Gymnasiums, fitness, health, and wellness centers, provided acoustical measures have been incorporated into the building to mitigate potential noise impacts;

n. Hardware and garden supply stores, provided all merchandise shall be stored either indoors or in an enclosed area appropriately screened with fencing and landscape planting;

o. Libraries and museums;

p. News and magazine stands;

q. Parking lots and/or buildings, provided the parking lot and/or building shall be appropriately screened in accordance with Chapter 19.36, Maui County Code, and exterior lighting shall be shielded from adjacent residential properties;

r. Pet shops, not involving the treatment or boarding of animals;

s. Private clubs or fraternal organizations;

t. Public facility or use;
2. **Accessory Uses and Structures.** Accessory uses and structures located on the same lot and incidental and customarily found in connection with the principal uses, including, but are not limited to:

   a. Accessory uses or structures permitted in the Single-Family SF District, the Multi-Family MF District, and the Commercial District;

   b. One clubhouse per golf course with snack bars, restaurants with bars, locker room facilities, weight rooms, pro shops for the sale and service of equipment and materials used for or relating to golf, tennis or other recreational activities, and other accessory facilities as approved by the Planning Director;

   c. Other uses and structures as determined by the Planning Director as meeting the intent of this Section.

3. **Special Uses.**

   Uses and structures, which are similar and compatible to the principal uses or structures and which conform to the intent of this Chapter, may be approved by the Maui Planning Commission.

B. **Development Standards.**

   The following development standards shall apply to the uses and structures in the Village Mixed-Use VMX District:

   1. For those uses and structures permitted in the Single-Family SF District and incorporated by reference into other districts, the
development standards for the Single-Family SF District shall apply.

2. For those uses and structures permitted in the Multi-Family MF District and incorporated by reference in other districts, the development standards for the Multi-Family MF District shall apply.

3. For those uses and structures permitted in the Commercial District and incorporated by reference in other districts, the development standards for the Commercial District shall apply.

4. For those uses and structures permitted in the Village Mixed-Use (VMX) District, but not in the SF District or the MF District or the Commercial District, the following development standards shall apply:

a. Minimum lot area: [10,000] 6,000 square feet.

b. Minimum lot width: [Seventy] Sixty feet.

c. Minimum yards:

   (1) Front yard: Fifteen feet for one-story and two-story buildings, and twenty feet for three-story and four-story buildings.

   (2) Side yard: Ten feet for one-story and two-story buildings and fifteen feet for three-story and four-story buildings.

   (3) Rear yard: Fifteen feet for one-story and two-story buildings, and twenty feet for three-story and four-story buildings.

No yard setbacks shall be required, except: (a) that required for off-street parking; and (b) if the lot abuts a lot in the SF District or the MF District, the side or rear yard setbacks of the abutting district shall apply.

d. Maximum height: Fifty feet or four stories, except that:

   (1) Elevator shafts, air conditioning equipment, vent pipes, fans, antennae and solar collectors may exceed such height limitation by not more than ten feet; and

   (2) The golf clubhouse structure may have a height not to exceed fifty-five feet, subject to design approval by the Planning Director.
e. Lot coverage: The total ground area on which the structures are located on the lot shall not exceed thirty-five percent of the total area of the lot.

d. Floor area-lot area ratio: The gross floor area of all structures on the lot shall not exceed ninety percent of the total area of the lot.

4. A project development plan for the village mixed uses in accordance with the land use plan approved during Project District Phase II shall be reviewed and approved by the Planning Director pursuant to section 19.510.090, Maui County Code."

SECTION 3. This ordinance shall take effect upon its approval.

APPROVED AS TO FORM
AND LEGALITY:

__________________________
BRIAN T. MOTO
Deputy Corporation Counsel
County of Maui
Re: Responses to Concerns Relative to Wailea 670 Project District Document

Dear Ms. Suyama:

I very much appreciate the time you have taken to review the proposed Project District Ordinance for the above-referenced project. Ms. Gwen Hiraga took the time to formalize your concerns and e-mailed those comments to me, to which I am now responding in detail. The following summarizes my responses to your specific concerns.

1. Section 19.90a.040 – Single Family District

   Item A.2.d. You had a concern with regard to the permissibility of antennae and antenna dishes within the project. The wording that we have included in the proposed Project District Ordinance essentially eliminates such facilities, as we feel that the provision of cable service will be adequate for the project but also eliminate potential visual conflicts that could be realized through the establishment of various types of antennae and dishes for cable television service. We have also been concerned about the establishment of antennae that could be constructed for public utility uses. In response to your comments, we reviewed the proposed code section and have the following recommendation that I believe achieves our mutual goals. The following is the wording that we are now proposing for the referenced code section:

   Antennae and antenna dishes, provided that ground dish antenna shall not exceed 10 feet in height, shall be screened by walls, earth berms and/or landscaping with a minimum height of 4 feet, and that any roof or wall mounted antenna shall not exceed the height of the building.

   As you can see, we have gone back to the original wording but eliminated any reference to antennae that could exceed the height of the building in order to protect the view planes and visual impacts that these facilities can create. We hope this wording addresses you concerns, and we also feel comfortable with this proposal.

   Item B.4. (n) J. You had a concern relative to the uses that are permitted within the residential district and why the Planning Director approval is being deleted. We reviewed your concern within the context of the types of uses or facilities that may be desired by the
resident owners on the project. The key for the uses is recreational in nature, and as such we do not feel the Planning Director needs to play a role in approving such uses or structures. The proposed uses must be permitted within the ordinance, and we do not see the need to have Planning Director approval for either the uses or structures other than that necessary for code compliance, which would include the restrictions within the ordinance, the building code, and any other codes which would apply. It is for this reason we believe that the proposed ordinance section should remain as proposed within our draft ordinance.

2. Section 19.90a.060 - Recreation and Open Space/Utility District

Item A.2.a. The caretaker’s dwelling, of which you have expressed concern in terms of its gross living area, is important to the project for a number of reasons, not the least of which is the fact that the proposed golf course is intended to be a membership course, unique to Maui, and will require a high level of professionalism and responsiveness simply because of its membership nature. The establishment of a professional on-site caretaker is necessary to ensure the course is maintained at a consistently high level of play, and it is our intent to attract the best staff for this purpose. We are anticipating the fact that the course caretaker will need a house larger than 1,000 square feet for adequate accommodations. The maximum square footage of 1,500 square feet provides for more design flexibility as well as a larger home to help attract the high quality professional staff necessary to manage such a facility. For these reasons, we would like to suggest that the caretaker’s dwelling remain at 1,500 feet, and since the dwelling is considered contained within the maximum 1,400 unit count, we do not feel there should be any problem with this size of dwelling for the caretaker.

You also mentioned some concerns with regard to the deletion of the approval of the Planning Director for this dwelling, and it is our position that the caretaker’s dwelling is subject to all of the administrative code provisions within the ordinance as well as the building code and any other appropriate section of the Maui County Code. For this reason alone, we see no reason why there should be this additional level of review and ask that the ordinance remain as drafted in this section.

Item A.2.b. You asked why we deleted the golf clubhouse use for this district, and after some discussion within the project team and reviewing our meeting notes on this issue, we have deleted this use simply because we feel that the nature of the facility, given its uses, is more directly related to the VMX district which is a more appropriate designation than the recreational open space utility district for the use area. We would therefore like to request that the golf course clubhouse facility not be included as you suggest but remain within the VMX district as proposed in the draft ordinance.
3. Section 19.90a.070

Item B.1. The VMX district has contained within its description in the draft Project District Ordinance a variety of permitted uses. Among those uses are single family and multi-family uses as well as commercial use areas. The district allows for both single family and multi-family dwellings to be built, and given the past experience with similar instances such as single family development within an apartment zone district in Maui County and the confusion relative to standards for that district, we have proposed that residential standards be mandated in lieu of multi-family standards for single family residential development in the district. The reason for this is really quite straightforward, that is we would prefer that single family development within the VMX district strictly adhere to the single family standards so we can clearly define those projects as such and not have any confusion with regard to standards for other districts or conflicts with adjacent uses. We feel that providing for specific direction for each permitted use, any future confusion or discussion regarding standards will be avoided, and make it easier both for the Planning Department and the developer. We therefore request that you leave the standards as proposed in the draft ordinance.

Item B.3.d.2. The height of the clubhouse has been discussed and as you noted in your discussion with Ms. Hiraga, we are asking for a 55-foot height limit that is in contrast to a 50-foot height limit that you mentioned as being consistent with current practice. We have taken the time to carefully evaluate the 55 foot recommendation and concluded that given the size of the clubhouse, which is projected to be approximately 25,000 square feet, and the types of uses contained within the clubhouse, we would have a bottom floor with a floor to ceiling height of approximately 15 feet, with a second floor height of approximately 12 feet, and if you assume a 6:12 roof pitch with a building that is approximately 90 feet wide, we are approaching 50 feet in total height with just those schematic standards at this time. By restricting the project to 50 feet, we will be restricting ourselves and reducing our flexibility in terms of the design of the building and its location relative to the topography, and would ask that the 55 foot height limit remain in place while at the same time assuring you that the golf course clubhouse structure will be one which is sensitively designed relative to views from the coastal area in a Mauka direction as well as from the Makai direction to the ocean for that area surrounding the clubhouse.

Ms. Suyama, I believe the above addresses your specific concerns and would appreciate your considering these responses as you evaluate and complete your review of the Project District Ordinance and the application for the Wailea 670 Project. Should you have any questions with regard to these comments, please feel free to contact me directly at 879-5205 or on my cell at 250-3178.

Sincerely,

Charles Vencks
Owner's Representative
Wailea 670 Associates
Mr. Dan Ide  
MRK & Associates, Inc.  
55 Merchant Street, Suite 1400  
Honolulu, Hawaii 96813  

Dear Mr. Ide:  

Re: Maui County Cultural Resources Commission Review of the Archaeological Inventory Survey for Wailea 670, TMK 2-1-008:56 and 71, Wailea, Kihei, Maui  

On December 7, 2000, the Maui County Cultural Resources Commission (CRC) reviewed the above referenced survey for the 190 acres southernmost portion of Wailea 670 and recommended the following:  

1. The Archaeological Inventory Survey report should indicate the length even if it is an estimated length, of Site 200 (a well-constructed ranch wall) and Site 200A (another well-constructed wall).

2. The Archaeological Inventory Survey report should be revised to include the significance evaluation and recommended mitigation for Site 200A.

3. Sites 200 and 200A are considered to be significant for Criterion A (because of their association with the ranching era) and Criterion C (as excellent examples of site type). The Archaeological Inventory Survey report recommends only "map location and archaeological data recovery" for Sites 200 and 200A. At a minimum, representative sections of these sites should be recommended for preservation in place.

4. Sites 201 and 4957 are two possible habitation complexes listed in the Archaeological Inventory Survey report as significant for Criterion A and Criterion D. The Archaeological Inventory Survey report recommends only map location and archaeological data recovery for these sites.
Preservation in place or preservation with interpretation would be a more appropriate mitigation for Sites 201 and 4957 because few of these sites remain in this portion of Maui.

5. Sites 4951 and 4949 are a'a trail segments listed as significant under Criterion C and Criterion D. The Archaeological Inventory Survey report recommends only map location and archaeological data recovery for these sites. Preservation in place or preservation with interpretation would be a more appropriate mitigation measure for Sites 4951 and 4959. These trail segments should also qualify for significance under Criterion E for their traditional cultural value (mauka/makai trails).

6. Grubbing, grading and ground-disturbing activities on the entire Wailea 670 parcel should be monitored by a qualified archaeologist.

Further, the 190 acres reviewed in the report comprise only about 28 percent of the Wailea 670 project area. It is located on the 200 and 680-foot elevations directly mauka of the important complex contained in the Palauea cultural preserve. The CRC feels that this is a situation where we should be looking at the linkage between the ahupua`a of Keauhou and the Palauea ahupua`a. The CRC feels that the study should go beyond a determination of what should or should not be preserved. It is recommended that the connection between the sites should be further addressed.

Undiscovered sites may exist on the recently surveyed 190 acre southern portion of the Wailea 670 area. Public concerns were raised about the large (20 to 50 meters) pedestrian sweep methodology utilized by the inventory survey on this parcel. Consequently, archaeological monitoring is important in case inadvertent discoveries are made during ground altering work.

Also, concern was raised about the adequacy of previous archaeological studies conducted on the northern portion of Wailea 670. Because of the large area involved, monitoring, again, is important in case inadvertent discoveries are made during ground altering activities. The Department of Land and Natural Resources, State Historic Preservation Division (SHPD) would need to determine the appropriate mitigation in the event that additional sites are identified on any portion of the Wailea 670 project.

Thank you for the opportunity to comment. If additional clarification is required, please contact Ms. Colleen Suyama, Staff Planner, of this office at 270-7735.
Mr. Dan Ide  
February 7, 2001  
Page 3  

Very truly yours,  

JAMES “KIMO” FALCONER, Chair  
Maui County Cultural Resources Commission  

JEM:CMS:tkb  
cc: Maui County Cultural Resources Commission  
John Min, Planning Director  
Clayton Yoshida, AICP, Deputy Planning Director  
Jeffrey Chang, Acting Planning Program Administrator  
Colleen Suyama, Staff Planner  
David Nakamura, Esq.  
Gwen Ohashi Hiraga, Munekiyo & Hiraga, Inc.  
Dana Naone Hall  
Don Hibbard, DLNR, SHPD  
Melissa Kirkendall, DLNR, SHPD, Maui Archaeologist  
Project File  
General File  
(S:\ALL\COLLEEN\wailea670.ltr.wpd)
August 28, 2001

Aki Sinoto
Aki Sinoto Consulting
2333 Kapiolani Blvd. No. 2704
Honolulu, Hawai'i 96826

Dear Mr. Sinoto,

SUBJECT: Review of Addendum Survey Report, Supplemental Inventory Survey Procedures in the Northern and Southern Portions of Lands Known as Wailea 670, Paeahu, Palauea, Keauhou, Makawao, Maui (TMK 2-1-08: Por 56 and 71)

Thank you for the opportunity to review the addendum report which our staff received on June 29, 2001 (Sinoto and Pantaleo 2000, Addendum Inventory Report: Supplemental Inventory Survey Procedures in the Northern and Southern Portions of Lands Known as Wailea 670, Paeahu, Palauea, Keauhou, Makawao, Maui, TMK 2-1-08: Por 56 and 71... Aki Sinoto Consulting ms.).

This addendum includes results of work in both the previously reported "southern portion" of 190 acres, and new inventory work conducted in the "northern portion" consisting of 480 acres. The additional work in the southern portion was triggered by our concerns regarding survey coverage in the densely vegetated areas. During the addendum work, one site (5109) was identified in the northern portion, and three new sites were identified in the southern 190 acre portion (5110, -5111, -5112). The sites consist of an overhang, a collapsed lava blister shelter, and two terrace platforms respectively. The terrace platforms measure 5m by 2m (varying in height between .30m and 1.2m) and 12m by 2.5m (1.3 m in height).

We still have questions about the field methods that need resolution before we can conclude that the survey has acceptably covered the project area. These questions also request documentation on the extent of land alteration in the northern portion. Please see the attachment for details.

Also, additional descriptive information seems to be needed for the two platforms in order to evaluate their function and determine their significance. Please see the attachment.
Please revise the addendum to address these concerns. We will await the revisions. As always, if you disagree with our comments or have questions, please contact Dr. Melissa Kirkendall (Maui/Lana’i SHPD 243-5169) as soon as possible to resolve these concerns.

Aloha,

Gilbert Coloma-Agaran
State Historic Preservation Officer

Attachment

MK:jen

C: John Min, Director, Department of Planning, County of Maui, FAX 270-7634
Bert Ratte, County of Maui, Land Use and Codes, FAX 270-7972
Lisa Rotunno-Hazuka, Archaeological Services Hawai‘i, FAX 244-9592
Background Section
1. General Comment. Neither the report submitted initially or the addendum report contain a map indicating the locations of previous projects in the vicinity. This would be very useful.

Methods

1. The survey still has not clearly acceptably covered the southern part of the project area. The inventory survey report stated, "The density of vegetation and the type of terrain directly influenced the intervals between transects. Generally the transects ranged between 20-50 m apart." Generally, when vegetation is dense, the distance between transects is less in order to facilitate adequate inventory survey. We recognize that in the addendum an attempt was made to ameliorate this problem. However, the addendum report does not indicate the distance between transects: it only indicates that the transects were oriented in perpendicular directions to the original transects. This still may not constitute adequate coverage. When the vegetation is extremely dense, transects may need to be spaced as closely together to assure 95-100% pedestrian coverage, in one direction. You need to clarify how far apart transects were to clarify for the reader that coverage was 100%.

2. The northern portion of the project area has not been adequately surveyed. Past studies were only reconnaissance surveys. The addendum report indicates that "ground visibility was poor" in the northern portion due to a dense cover of grass. However, if sites are likely, this is a situation that needs to be addressed in the field, using methods to overcome this problem. We realize that you are claiming that the northern area has been extensively disturbed. But documentation needs to clarify that the entire 480 acres was subjected to mechanical clearing. Please provide information regarding when and why mechanical disturbance occurred. If this evidence is not available, please provide photographic documentation of extent of disturbance. This should help to resolve this concern. If it cannot be established that the entire area was mechanically disturbed, then more survey may be needed. Transects or sweeps would facilitate coverage, and again, these should be spaced appropriate to the vegetation cover. (We recognize that initial review of aerial photos and/or an aerial survey may assist in identifying sites from the air, this method cannot be used in place of systematic sweeps or transects across the terrain.)

3. Another concern is that small archaeological features may not have been recorded. On page 9 in the initial survey report, and again on page 9 in the addendum report the authors indicate that "Only those structural remains with clearly definable attributes were selected for recording." It is important that marginal remains such as modified outcrops and alignments be recorded. If a cluster of these features are present and they are considered agricultural, then their boundary can be identified and assigned a site number and the range of dimensions of the features can be summarized. But it is important that such features be recorded. It needs to be clear that this has been done. If not, these features need to be recorded.
Inventory – Site Descriptions & Interpretations & Chronology

1. The two terraced platforms (SIHP Site -5111 and -5112) are interpreted as temporary habitations, but recommended for data recovery to aid in interpreting their function. If their function is unclear, then testing is needed now at the survey level. We do believe some testing is needed, because you describe the structures as well made and the possibility of a burial function also seems viable. Thus, either testing is needed, or you need to clarify that a burial function is unlikely. We would suggest minimal testing of each site. Data recovery may or may not be warranted depending upon the results of the archaeological inventory survey testing.

2. Page 18. We question the assessment that all four sites represent temporary habitation. Testing at Site 5109, the overhang shelter support this hypothesis for this particular site, as do the scattered surface remains and results of “trowel probes” at Site 5110. But, again testing of the two platforms seems needed to evaluate their function. Also, charcoal samples may be recovered from the two platforms during testing and could potentially provide chronological information for sites in this project area.
Maui planners pass Wailea 670 project

Development gets the green light by 5-2 vote; contracts may be next

By Susan Halas
PBN Contributor

The Maui Planning Commission approved the controversial Wailea 670 development this week by a vote of 5-2, and forwarded it to the Maui County Council for further review.

The proposed master-planned golf residential community comprising 1,400 luxury single- and multi-family homes is to be developed by WCPT/GW Land Associates LLC. The project, with costs estimated to be in the billions, would be built over 15 to 20 years.

Included in the package approved by the commission Tuesday is an upgrade in zoning, repeal of an entire section of the Maui County Code and substitution of new language specifically geared to the proposed high-end development.

The commission agreed to transfer the building trade healthy during lean times. "Public agencies. "This seems highly irregular to me," Lu said. "You're asking us to make a decision tonight, and this is the first time we are seeing or hearing any of this information."

Lu and Commissioner Susan Moikeha voted against passage.

Reach Susan Halas, a Maui-based freelance writer, at halas@maui.net.

Neighborhood island briefs

Pacific Wings scales back

Pacific Wings says it will scale back some of its Maui flights after failing to win the authority to use an empty hangar at Kahului Airport.

The carrier says the state awarded the hangar to a helicopter company that was next on the waiting list, and as a result it will have to stop flying several of its runs from Kahului to Hana.

Pacific Wings President Greg Kahlstorf wrote Ekahi Tours Inc. saying he would also have to an air-ground tour with that company.

Kahlstorf says he would run fewer flights to Hana using a twin-engine aircraft instead of more flights with a smaller single-engine plane, so that there would be about the same amount of capacity despite the reduced schedule.

Mall cancels Halloween

The specter of terrorism has halted Halloween plans at the Prince Kuhio Plaza.

General Growth Properties Inc., owner and manager of the Hilo mall and the second-largest management co. of malls in America, says it has made the same decision for all 146 shopping centers it owns or manages across the United States.
TO: Charles Jencks  
Wailea 670 Associates  
381 Huku Li‘i Place  
Suite 202  
Kihei, HI 96753

Dan Ide  
DKI & Associates  
55 Merchant Street, Suite 1400  
Honolulu, Hawaii 96813

Gwen Ohashi Hiraga  
Munekiyo & Hiraga, Inc.  
305 S. High Street, Ste 104  
Wailuku, Hawaii 96793

Brian Minaai, Director  
Dept of Transportation  
869 Punchbowl  
Honolulu, Hawaii 96813-5097

Floyd Miyazono, Director  
Dept of Parks & Recreation  
1580-C Kaahumanu Avenue  
Wailuku, Hawaii 96793

Gilbert Coloma-Agaran, Director  
Dept of Land & Natural Resources  
P.O. Box 621  
Honolulu, Hawaii 96809

Alice Lee, Director  
Dept Of Housing & Human Concerns  
200 S. High Street  
Wailuku, Hawaii 96793

Board of Realtors  
33 Lono Avenue  
Kahului, Hawaii 96732

Barney Eiting  
Kihei Community Association  
P.O. Box 662  
Kihei, Hawaii 96753

Ron Beckett  
Wailea Ekolu  
10 Wailea Ekolu Place, #1007  
Kihei, Hawaii 96753
TRANSMITTED TO YOU ARE THE FOLLOWING:

A copy of the Department’s Report to the Maui Planning Commission dated October 23, 2001 regarding the Wailea 670 project for your information.
REMARKS:
Should you have any questions, please contact me.

SIGNED

COLLEEN SUYAMA
STAFF PLANNER

Enclosures
cc: Project File
(K:\WP_DOCS\PLANNING\CIZ\00ciz9Wailea670\TransmitApplicantAgenciesOthers.wpd)
PUMP INSTALLATION PERMIT

for

Wailea 670 Well 2
Well No. 4125-02
Wailea, Maui

TO: Palauea Bay Partners
841 Bishop Street, # 2300
Honolulu, HI 96813

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to install a pump in Wailea 670 Well 2 for golf course irrigation is approved, subject to the following conditions:

1. The Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified in writing before any work covered by this permit commences.

2. The permit application and staff submittal approved by the Commission at its meeting on February 17, 1993 shall be incorporated by reference.

3. The permit shall be for installation of up to a 500 gpm capacity pump in the well.

4. The proposed use 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 pump water from the well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.
5. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage. Water usage shall be measured on a monthly basis and reported to the Commission.

6. The following shall be submitted to the Commission staff within 30 days after completion of the work:

   a. Well Completion Report.
   b. As-built sectional drawing of the installed pump.

7. The applicant shall comply with all applicable laws, rules, and ordinances.

8. The applicant shall contact Mr. Thomas Arizumi, Chief, Environmental Management Division, State Department of Health, at 586-4304, concerning "TWELVE (12) CONDITIONS APPLICABLE TO ALL NEW GOLF COURSE DEVELOPMENT" dated January 1992 (version 4). The applicant shall obtain a written statement from the Department of Health indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission.

9. This permit may be revoked if work is not started within six months of the date of issuance or if work is suspended or abandoned for six months. The work proposed in the permit application shall be completed within two years from the date of permit issuance.

The following conditions were added at the Commission meeting on February 17, 1993:

10. By this condition and permit Condition 3, the applicant is on notice that the Commission reserves the right to require a reduction in pumpage from the well should it interfere with existing wells on private lands makai of the well site, new wells on the Hawaiian Home Lands, or public lands mauka of the well site. The permittee is on specific notice that DHHL may drill wells on its own or on State lands such that the amount of water pumped from this well site may be reduced over time to protect other wells or to meet other correlative water rights.

11. Copies of quarterly and final monitoring reports shall be sent to the Commission.
12. This permit will be reviewed and possibly revised by the Commission in three years, or as wastewater effluent becomes available for use to the project site, whichever happens first.

[Signature]
JOHN P. KEPPELL, Acting Chairperson
Commission on Water Resource Management

3.2.93
Date of Issuance

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.

Applicant's Signature: Peter B. Nottage Date: March 5, 1993
Printed Name: Peter B. Nottage
Firm or Title: Palauea Bay Partners

Please sign and return one copy of this permit to the Commission and retain a copy for your record.

c: USGS
   Department of Health
       Safe Drinking Water Branch
       Ground Water Protection Program
   Maui Department of Water Supply
   Wailea Resort Company, Ltd.
   Steve Bowles
   John Mink
12. This permit will be reviewed and possibly revised by the Commission in three years, or as wastewater effluent becomes available for use to the project site, whichever happens first.

[Signature]

JOHN P. KEPPELER II, Acting Chairperson
Commission on Water Resource Management

3.2.93
Date of Issuance

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.

Applicant’s Signature: [Signature] Date: March 5, 1993

Printed Name: Peter B. Nottage

Firm or Title: Palauea Bay Partners

Please sign and return one copy of this permit to the Commission and retain a copy for your record.

c: USGS
Department of Health
Safe Drinking Water Branch
Ground Water Protection Program
Maui Department of Water Supply
Wailea Resort Company, Ltd.
Steve Bowles
John Mink
February 16, 1993

Mrs. Rae M. Loui, Deputy Director
HAWAII WATER COMMISSION
State of Hawaii
P. O. Box 621
Honolulu, HI 96809

Dear Mrs. Loui:

Re: Water Commission Hearing - Pump Application - Palauea Partners,
Wailea, Maui

As you know, Wailea Resort Company, Ltd. is vitally interested in responsible aquifer management in our area. For the past 20 years, Wailea has successfully pumped water for its Blue golf course, followed by the Orange golf course. Prior to adding the Gold golf course now under construction, we performed a controlled aquifer test to evaluate the impact of a 3 MGD pumpage on the aquifer. Subsequently, we completed our wells #9 and #10 as well as major water system reconstruction to properly manage the resource and supply the Gold golf course.

Our experience with management of the aquifer has made us very much aware of the costs and time which must be devoted to ground water use and operations.

On February 10, 1993, the ground water consultants of Wailea 670 (Palauea Partners) and Wailea Resort Company, Ltd., John Mink and Steve Bowles respectively, met to agree on the specifics of collecting salinity and pumpage data for the affected aquifer area of Wailea.

Wailea Resort Company, Ltd. presently collects salinity and pumpage on a daily basis and analyzes water quality data using a Hach model 44-600 conductivity meter and a Hack model 24444-00 analytical kit to determine total chlorides. Water flows are determined with a propeller type flow meter and a watt hour meter on the control panel of each pump. The attached data sheet represents typical information obtained. A monthly report of the maximum and minimum salinity and pumpage is reported to the Department of Land and Natural Resources Commission on Water Resource Management.

Commencing some time this summer, Wailea Resort Company, Ltd. will place a S.C.A.D.A. system in service. Each producing well will be monitored for specific conductance and pumpage on a continuous basis and the well field will be operated to meet the demand of the new course.

It is our understanding that, based on the meeting between Mr. Bowles and Dr. Mink, Palauea Partners will make specific conductance measurements using identical Hach equipment and that pumpage and quality data will be copied to Wailea Resort Company, Ltd. at least quarterly.
In addition, we assume that the Water Commission will receive like data.

We further understand that Dr. Mink and Mr. Bowles will be recommending and locating a monitor or observation well to be built by Palauea Partners at a site near our common boundary.

With the above understanding in place, Wailea Resort Company, Ltd. has no further objections to the installation of pumps in the wells on the Wailea 670 site. We believe that the pending arrival of sewage effluent will provide the best means of ultimately protecting the aquifer from over pumping.

Very truly yours,

Clyde Murashige
Vice President

cc: Dr. John Mink
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Vice President

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Wailea Resort Company, Ltd.

161 Wailea Ike Place
Wailea, Maui, Kihei, Hawaii 96753-9399
(808) 879-4461 • FAX (808) 874-6896

FAX TRANSMITTAL

Recipient: Ed Sakoda
FAX Number: 808-0219

Company: DLNR. Commission on Water Resource Management

Total Number of Pages Including Cover Sheet: 2

Originals to be mailed: Yes No Upon Request

Sender: Melanie Nakamoto

FAX Number: 875-4643
Phone Number: 879-7202

Comments:

Per Steve Bowles, transmitting pumpage for 1993 from Wailea Wells 2-12.

Date: 2/12/93 Time:

IF YOU DO NOT RECEIVE ALL PAGES, PLEASE CALL US AT (808) 879-7202.
## 1982 Water Usage - Wailea Resort Co., Ltd.

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**Mo. AVE.** 2.647 0.65 2.257 2.747 2.473 3.340 2.467 1.198 0.513 1.154 1.299 1.294 1.670

Recorded in million gallons

6 - 9 For

4.5 m3/Day - Both areas, pump, council sy.
Pumping from wells in the Wailea 670 land parcel approximately 6300 feet inland of the coast may ultimately affect the salinity of groundwater now being pumped by wells used to irrigate the lower Wailea golf courses. The lower Wailea wells are located along a line parallel to and about 2500 feet inland of the coast line, and approximately 3800 feet down the groundwater gradient from the Wailea 670 wells (see attached map). A total of 9 active wells are used to irrigate the lower Wailea golf courses. These wells are spaced over a distance of 14,000 feet parallel to the coast. The Wailea number and State number for each well are as follows.

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Although pumping the Wailea 670 wells may cause a rise in the salinity of the groundwater down gradient, the rise may not be sufficiently large to be detectable in view of the relatively poor quality of the water in the lower Wailea region. Also, any effect is not likely to be detectable until 1 to 2 years after pumping of the Wailea 670 wells starts. A simple one-dimensional groundwater hydraulic model given in the Appendix elaborates on the relationship among probable groundwater heads, discharge and velocity between Wailea 670 and lower Wailea.

Proposed Monitor Program

The intent of the monitoring program is to ascertain the effect of pumping at the Wailea 670 wells on groundwater salinity in the down gradient region. More specifically, the objectives are to: 1) determine if salinity in the aquifer will be measurably affected; 2) whether salinity in the lower Wailea wells will increase; 3) whether other wells in the Wailea region will be affected; and 4) whether coastal discharges (if any are identified) are influenced. The proposed program deals exclusively with potential salinity changes caused by up gradient pumping. It does not include changes in groundwater quality that may result from golf activities.

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2. Describe regional geology and hydrology.

3. Describe groundwater occurrence and behavior based on available data. Important operating information will have to be provided by Wailea Resort. Other sources are the U.S. Geological Survey and the State department of Land and Natural Resources.

4. Discuss the lower Wailea pumping operations and establish
the groundwater quality reference framework.

5. Prepare scenarios of cause and effect employing standard methods of evaluation. Discuss limitations of the methods.

6. Propose and discuss mitigation measures to be taken by users of the aquifer should downgradient wells suffer significant increases in salinity as a result of upgradient pumping.

**Design**

The wells to be monitored on a regular basis must be identified and their accessibility guaranteed. Wailea Well 2 (4126-02) is the logical choice for most attention, but Wells 3 and 5 also merit careful observation. Well 1, downgradient of Well 2, should be monitored, even though its output is influenced by Well 2. Wells 9 and 10 to the north of the 670 parcel, and 5, 6 and 7 toward the south should be monitored occasionally but not as often as the others.

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3. Salinity of the Wailea 670 wells will be measured weekly.

The program should be terminated after three years.

**Data Evaluation**

At least one year is expected to pass before changes in salinity that may be attributable to Wailea 670 pumpage are detectable. In view of the manner of operation of the lower Wailea wells (i.e., high rates of pumping over short periods), the data will have to be carefully analyzed, probably by statistical inference methods, to establish a
cause-effect relationship.

Reports

Each quarter a data report will be compiled. This report may include preliminary commentaries on the data.

In an annual report the data will be analyzed and interpreted.

After three years a final data-analyses-interpretation report with conclusions will complete the monitor program.

Final Comment

Should the monitoring program prove that groundwater in the lower Wailea area has been salinized to a level that precludes its use as irrigation water as a result of pumpage at Wailea 670, mitigation measures will have to be devised to promote aquifer recovery. In fact, however, powerful mitigation will take place once the Wailea 670 golf courses start to irrigate with treated sewage effluent. Percolate from the effluent is likely to be less saline than the ambient groundwater, and this return irrigation will recharge the aquifer to the advantage of down gradient pumpage.
APPENDIX

One Dimensional Model of Groundwater Flow in the Wailea Area

1. Groundwater flow: The estimated flux in the basal lens is 2 to 3 mgd per mile of coastline. Assuming an average of 2.5 mgd/mile results in a flux of 63.3 cu.ft./day/ft.

2. Hydraulic conductivity: The estimate normally used for older basalts is 1500 ft./day.

3. Head: In lower Wailea the head in the basal lens about 2500 feet inland is 1 to 2 ft.; at Wailea 670, 6300 ft. inland it is 2.5 to 3.5 ft.

The equation of groundwater flow in an unconfined basal lens in the absence of vertical recharge is:

\[ Q = 41 \cdot k \cdot h \cdot dh/dx \]

in which \( Q \) is flux per lineal foot normal to flow direction (cu.ft./day/ft.); \( k \) is hydraulic conductivity (ft./day); \( h \) is head (ft.); and 41 is the Ghyben-Herzberg constant.

Integrating this equation gives:

\[ Q(x(2) - x(1)) = 41k(h(2)^2 - h(1)^2)/2 \]

Let \( Q = 63.3 \text{ cu.ft./day/ft.}; k = 1500 \text{ ft./day}; x(2) = 6300 \text{ ft.}; x(1) = 2500 \text{ ft.}; \) and \( h(1) = 2.0 \text{ ft.}, \) then \( h(2) \) at Wailea 670 = 3.44 ft. For \( h(1) = 1 \text{ ft.}, \) \( h(2) = 2.97 \text{ ft.} \) Thus the gradient between Wailea 670 and lower Wailea is 2.0 ft./mi. if \( h(1) = 2.00 \text{ ft.}, \) and 2.74 ft./mi. if \( h(1) = 1.00 \text{ ft.} \)

Taking the average gives a gradient of 2.36 ft./mi.

The groundwater velocity equation is:

\[ v = (k/n)dh/dx \]

in which \( n \) is effective porosity. For a porosity of 10 percent the groundwater velocity is 6.75 ft./day. Thus the time required for travel of water from Wailea 670 to the line of wells directly down gradient is approximately 1.54 years.
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: 

DATE: 1/17/93 FILE IN: 

TO: INIT: 

PLEASE: REMARKS:

G. Matsumoto See Me
E. Sakoda Call
Y. Shiroma Review & Comment
E. Hirano Take Action
S. Samuels Investigate & Report
G. Bauer Draft Reply
R. Rozeboom Acknowledge Receipt
R. Hardy Type Draft

Xerox ___ copies

FOR YOUR:

M. TAGOMORI Approval
L. Nanbu Signature

__ Information

 Spike with Stan Beke on 1/22/93. They have the problem with draft resolution from NIH needs to sit down with John Hinch to discuss implementation. Thanks applicant will request data to share with you. Perhaps day tests could be run to verify John's model for velocity.
January 14, 1993

Ms. Rae M. Loui, Deputy Director  
State Department of Land and  
Natural Resources  
Commission on Water Resource Management  
P. O. Box 621  
Honolulu, Hawaii 96809

Dear Ms. Loui:

After discussing your letter of January 12, 1993 and DHHL’s letter of December 10, 1992 with our hydrologist, Dr. John F. Mink, we offer the following response.

Please be assured that Palauea Bay Partners has no intention of over-drafting the Wailea 670 wells in order to increase their brackishness. The pumps are sized (400 gpm) to extract as high a quality of water as can be practically pumped.

We have explained before, at public hearings and by written communication, that the marginal domestic quality of the water at the second well will inevitably increase in salinity as pumping at any reasonable rate goes on. At the first well, just a few hundred feet from the second, the pumped water is brackish. Please refer to the reports we have submitted to your office.

The argument that pumping the Wailea 670 wells will expand the transition zone further inland to Kula is not reasonable in view of experience throughout the Hawaiian Islands. Such a fear is unwarranted.

We submit for your review and comments Dr. Mink’s working draft of the Proposed Aquifer Monitoring Plan.

Yours truly,

Peter B. Nottage  
Senior Vice President,  
Maui Division

PBN:lh

Enclosure
Mr. Peter Nottage, Senior Vice President
McCormack Properties, Ltd.
841 Bishop Street, Penthouse
Honolulu, HI 96813

Dear Mr. Nottage:

We acknowledge receipt of your December 23, 1992 letter regarding Wailea-Palauea Bay Partners Wells 1 & 2 (Well Nos. 4125-01 & 02). We are also sending you, for your information and appropriate action, comments we recently received from the Department of Hawaiian Home Lands concerning the pump installation permit applications for the wells.

We acknowledge that you have "agreed to drafting groundwater monitoring plans at the golf course site and down gradient toward Wailea and the coast to ascertain to what extent the quality of groundwater may be affected by pumpage in the Wailea 670 parcel". We would be very interested in reviewing and providing comments on your proposed working draft. Call Ed Sakoda at 587-0225 if you have any questions.

Sincerely,

Rae M. Loui
Deputy Director

ES:ky
WAILEA, MAUI
AQUIFER MONITOR PLAN

Proposed by Palauea Bay Partners, Wailea 670

December 4, 1992

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Each quarter a data report will be compiled. This report may include preliminary commentaries on the data.

In an annual report the data will be analyzed and interpreted.

After three years a final data-analyses-interpretation report with conclusions will complete the monitor program.

**Final Comment**

Should the monitoring program prove that groundwater in the lower Wailea area has been salinized to a level that precludes its use as irrigation water as a result of pumpage at Wailea 670, mitigation measures will have to be devised to promote aquifer recovery. In fact, however, powerful mitigation will take place once the Wailea 670 golf courses start to irrigate with treated sewage effluent. Percolate from the effluent is likely to be less saline than the ambient groundwater, and this return irrigation will recharge the aquifer to the advantage of down gradient pumpage.
APPENDIX

One Dimensional Model of Groundwater Flow in the Wailea Area

1. Groundwater flow: The estimated flux in the basal lens is 2 to 3 mgd per mile of coastline. Assuming an average of 2.5 mgd/mile results in a flux of 63.3 cu.ft./day/ft.

2. Hydraulic conductivity: The estimate normally used for older basalts is 1500 ft./day.

3. Head: In lower Wailea the head in the basal lens about 2500 feet inland is 1 to 2 ft.; at Wailea 670, 6300 ft. inland it is 2.5 to 3.5 ft.

The equation of groundwater flow in an unconfined basal lens in the absence of vertical recharge is:

\[ Q = 41 \text{ khdh/dx} \]

in which \( Q \) is flux per lineal foot normal to flow direction (cu.ft./day/ft.); \( k \) is hydraulic conductivity (ft./day); \( h \) is head (ft.); and 41 is the Ghyben-Herzberg constant.

Integrating this equation gives:

\[ Q(x(2)-x(1)) = 41k\{h(2)^2 - h(1)^2\}/2 \]

Let \( Q = 63.3 \text{ cu.ft./day/ft.}; \) \( k = 1500 \text{ ft./day}; \) \( x(2) = 6300 \text{ ft.}; \) \( x(1) = 2500 \text{ ft.}; \) and \( h(1) = 2.0 \text{ ft.}, \) then \( h(2) \) at Wailea 670 = 3.44 ft. For \( h(1) = 1 \text{ ft.}, \) \( h(2) = 2.97 \text{ ft.}\) Thus the gradient between Wailea 670 and lower Wailea is 2.0 ft./mi.

If \( h(1) = 2.00 \text{ ft.}, \) and 2.74 ft./mi. if \( h(1) = 1.00 \text{ ft.}\)

Taking the average gives a gradient of 2.36 ft./mi.

The groundwater velocity equation is:

\[ v = (k/n)dh/dx \]

in which \( n \) is effective porosity. For a porosity of 10 percent the groundwater velocity is 6.75 ft./day. Thus the time required for travel of water from Wailea 670 to the line of wells directly down gradient is approximately 1.54 years.
2) Warren 670 well letter received asking for a program meeting program, the one already sent. Could you please check this.

Will send another copy.
Date: 1/14  Time: 2:19

WHILE YOU WERE OUT

M.

Phone: __________________________

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RETURNED YOUR CALL

Message: Will in kitchen now.

(007 well) being currently used. Rain for dinner.

& test with not use.

Gabe from Pete Sept 8 to 8.

Wants to call for dust control.

What should be done.

AMPAD
EFFICIENCY®

100 qpm pumps ok - need to send in test data and Chair approved.

D. E. for permanent pumps.
TO: Ed

DATE: 1/5  TIME: 9:40 am

WHILE YOU WERE OUT

Mary Lee
of
McCommick Projects

Phone: 539-9643

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RETURNED YOUR CALL

Message: Water 670

May call in "couple of weeks"

Try for 2/3/93 mtg agenda?

Meeting with David/Mark scheduled?

Operator

let me know results.
December 23, 1992

Ms. Rae M. Loui, Deputy Director
Commission on Water Resources
Management
P. O. Box 621
Honolulu, HI 96809

Dear Ms. Loui:

We are pleased to respond to your letter and the letters of the County of Maui Department of Water Supply, the Kihei Community Association, the Wailea Community Association and James Williamson, all of which refer to Palauea Bay Partners' applications to install pumps in the Wailea 670 irrigation wells 4125-01 (Well 1) and 4125-02 (Well 2).

We have addressed questions raised in the above letters at various hearings during the permitting process for the Wailea 670 project. We note, however, that two misunderstandings still persist, one of which we are responsible for. We mistakenly stated in our applications that each of the two completed wells will provide 2 mgd, whereas the correct value is 1 mgd. As stated in our submitted reports and pointed out by Mr. Williamson and Mr. Craddick, the two wells are not capable of yielding a combined total of 2 mgd for the pump sizes listed in the permit application.

The other misunderstanding is that Palauea Bay Partners is responsible for preparing a "regional water management plan." We have agreed to drafting groundwater monitoring plans at the golf course site and down gradient toward Wailea and the coast to ascertain to what extent the quality of the groundwater may be affected by pumpage in the Wailea 670 parcel. To this end we have had numerous meetings with Wailea and Makena Resorts and have proposed a working draft. A regional water management plan is properly the responsibility of either the State or the County. We understand that a Water Management Plan for Maui County has been prepared by M & E Pacific, Inc., for the Water Commission, and presumably the plan includes the Wailea region.

We believe that submission of groundwater monitoring proposals will complete the requirements of Condition 4 of the original permit for the wells granted in May, 1989. The wells have been drilled; the combined average draft of the wells will be 1 mgd, although the total installed capacity will be 1.3 mgd; the pumping pattern will take advantage of the total capacity when required during periods of stress; and pumps have been sized to minimize possible negative impacts on existing wells in the area.
It is our intention also, as stated in public hearings, to use treated effluent when available for irrigation of the golf courses to the maximum extent possible, reducing and perhaps eliminating pumpage of groundwater.

We note that the Maui County Water Department is considering seeking potable water wells in the region. This opportunity was opened to the County as a result of the success of our wells. Should the County proceed with their consideration, it should contribute to the groundwater monitoring program.

We would also like to comment that if a new regional groundwater plan is required before any further water development is permitted, the time to prepare such a plan by the State or the County will no doubt be lengthy and may cause unanticipated delays to our project.

We request that our permit to install pumps in the two Wailea 670 wells be granted at this time.

Yours truly,

Peter B. Nottage
Senior Vice President,
Maui Division

PBN:lh
December 10, 1992

The Honorable William W. Paty, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Paty:

Well Construction and Pump Installation Permits

The Department of Hawaiian Home Lands earlier had occasion to comment on the application for the Wailea 670 Irrigation Wells 1 & 2 (4125-01,02).

At that time, we felt that use of brackish water on golf courses over aquifers had some risk, a concern addressed by the Water Commission through its policy of requiring water used on golf courses to be of equal or better quality than the underlying aquifer.

We also felt that DHHL's future explorations for groundwater at higher elevations at Kula would not likely be affected by the proposed wells.

It has come to our attention that while these wells were expected to draw brackish water, in fact one of them is currently registering salinity within potability standards. Our concern is that overpumping to achieve an unpotable salinity for golf course use violates the spirit of the Water Code. If these and subsequent wells are developed in a similar way and used at a similar pumpage rate, they might distort the aquifer by drawing up the brackish transition zone across a contour higher than currently exists. While little data are available to clearly understand what threat to potable water levels this may actually pose, no data are presented to identify replenishing recharge rates. We presume that recharge rates for this sector are fairly low.
We suggest that a trigger level of salinity be adopted to prevent the mauka movement of the transition zone. Should this level be reached by any wells at this elevation in this area, their pumpage levels would be reduced, to reduce the salinity below the trigger equilibrium.

Thank you for your consideration.

Warmest aloha,

John Rowe

Hoaliku L. Drake, Chairman
Hawaiian Homes Commission

/1639L.65
November 23, 1992

Ms. Rae M. Loui, Director  
Commission on Water Resource Management  
Department of Land and Natural Resources  
P. O. Box 621  
Honolulu, Hawaii  96809

Dear Rae:

Re: WELL CONSTRUCTION AND PUMP INSTALLATION PERMIT APPLICATIONS  
WAILEA 670 Irr 1 (41-25-01), WAILEA 670 Irr 2 (41-25-02)

We have reviewed the information sent to us on the Wailea 670 wells and have the following comments to offer:

1. There appear to be some inconsistencies in the applications. The application for well 41-25-01 indicates that a 400 gpm pump will be used to withdraw 1 million gallons per day. Even running continuously, a 400 gpm pump should withdraw no more than 576,000 gpd. The application for well 41-25-02 indicates that a 500 gpm pump will withdraw 1 million gallons per day. A pump rated at 500 gpm should withdraw only 720,000 gpd. These amounts total 1,280,000 gpd. It is therefore unclear whether the applicant is seeking 1 mgd for each pump or for the two pumps combined.

Although data is provided for both wells, the "Report on Drilling and Testing Results" appears to rely on data from Well 1 only. This report states that the four-day pump test was too short to have an effect on distant wells, and stops short of any conclusive statement regarding the long-term salinity within the aquifer. The limited conclusion it reaches regarding the viability of the wells is based on an assumed withdrawal of 1 mgd. However, the Water Resource Bulletin states that the requested withdrawal is 2 mgd.

2. The water department is considering developing a well for Hawaiian Homes mauka of the area in question. We also acknowledge that there are multiple withdrawals from this aquifer and that a number of parties have expressed concern over its development. We recommend that withdrawal guidelines be established to minimize potential damage by the various users. Until such guidelines can be established, we recommend that additional withdrawal be limited.

Sincerely,

David R. Craddick  
Director

ELK:ab  
xc: Palauea Bay Partners  
xc: Hawaiian Homes

"By Water All Things Find Life"
Mr. Peter Nottage  
Palaeua Bay Partners  
841 Bishop Street #2300  
Honolulu, HI 96813

Dear Mr. Nottage:

Palaeua Bay Partners’ request to install pumps in the Wailea-Palaeua Bay Partners Wells (Well Nos. 4125-01 and 02) for golf course irrigation has raised some concerns by the Kihei Community Association, the Wailea Community Association, Mr. James V. Williamson, and Wailea Resort Company, Ltd. The letters from the Kihei and Wailea Community Associations and from Mr. Williamson are attached for your information. Mr. Clark Champion of Wailea Resort Company, Ltd. indicated in a telephone conversation with my staff that they have met several times with you over the past several years but there is no coordinated study or plan to minimize adverse impacts in the longer term.

The Commission issued the original permit for the wells in May 1989. Condition 4 reads as follows:

"The applicant and Wailea Resort Company, Ltd., shall conduct a study to coordinate well locations, pumping rates, pumping patterns, and quantities pumped, to minimize possible negative impacts of the proposed wells on existing wells in the area."

The Commission, in considering your requests to install pumps in the wells, will need to know what measures have been taken to satisfy Condition 4. Please submit any information which may be helpful to the Commission in making that determination. Call Ed Sakoda at 587-0225 if you have any questions.

Sincerely,

RAE M. LOUI  
Deputy Director
Mr. Peter Nottage  
Palauea Bay Partners  
841 Bishop Street #2300  
Honolulu, HI 96813

Dear Mr. Nottage:

Palauea Bay Partners’ request to install pumps in the Wailea-Palauea Bay Partners Wells (Well Nos. 4125-01 and 02) for golf course irrigation has raised some concerns by the Kihei Community Association, the Wailea Community Association, Mr. James V. Williamson, and Wailea Resort Company, Ltd. The letters from the Kihei and Wailea Community Associations and from Mr. Williamson are attached for your information. Mr. Clark Champion of Wailea Resort Company, Ltd. indicated in a telephone conversation with my staff that they have met several times with you over the past several years but there is no coordinated study or plan to minimize adverse impacts in the longer term.

The Commission issued the original permit for the wells in May 1989. Condition 4 reads as follows:

"The applicant and Wailea Resort Company, Ltd., shall conduct a study to coordinate well locations, pumping rates, pumping patterns, and quantities pumped, to minimize possible negative impacts of the proposed wells on existing wells in the area."

The Commission, in considering your requests to install pumps in the wells, will need to know what measures have been taken to satisfy Condition 4. Please submit any information which may be helpful to the Commission in making that determination. Call Ed Sakoda at 587-0225 if you have any questions.

Sincerely,

RAE M. LOUI  
Deputy Director

ES:ko  
Attach.
Dear Mr. Loui:

The Kihei Community Association is concerned about potential impacts on existing users of the aquifer from proposals to pump well water at Wailea 670. Water quality is a major concern of residents of the Kihei-Makena area of Maui.

Our association has closely followed "Wailea 670" through the county permitting processes and we have expressed our concerns a number of times on the impact of the project on existing infrastructure. To the best of our knowledge, the developers, Mc Cormack Properties, have not developed an acceptable regional brackish water management plan with any of the other users in the Kihei-Makena area.

It is our understanding that part of the state requirements in issuing drilling permits for Wailea 670, includes a regional water plan in place before the state grants any permits to begin sustained pumping. We are concerned about the effects of pumping an additional 2mgd from the existing aquifer.

The directors of the Kihei Community Association respectfully request delay in granting any pumping permits at Wailea 670 until a comprehensive water management plan is developed and approved by existing users and the State of Hawaii.

Very truly yours,

[Signature]

Gene Thompson, President
Ray Loui, Deputy Director
Commission on Water
Resource Management
PO Box 621
Honolulu, HI 96809

Subject: "Wailea 670" - Palauea Partners Pumping Permits

Dear Mr. Loui:

The Wailea Community Association (WCA) is a master association of property owners within the Wailea Resort. Our membership consists of over 1,000 individual owners and the owners of six major hotels. We are extremely concerned about the potential impact of the proposed pumping, upon the existing users of the aquifer. Water quality and/or other golf course irrigation problems would have a substantial impact on our property values.

WCA has been closely following "Wailea 670" through the County permit process and has given public testimony several times expressing our concern over the impact on the existing infrastructure and the lack of a regional brackish water management plan. We have requested that McCormack negotiate an acceptable plan with other users in the area and that a regional water plan be in place prior to any approvals. To the best of our knowledge McCormack has not developed an acceptable plan with other users in the Wailea/Makena area.

WCA was under the impression that part of the State's requirements in issuing drilling permits for "Wailea 670", was that Palauea Partners would be required to have a regional water plan in place before the State granted any permits to begin sustained pumping. The Wailea community is very concerned about the effect of pumping an additional 2mgd from the existing aquifer.

We respectfully request that the Water Commission consider deferral of any permits for pumping at "Wailea 670", at least until a comprehensive resource management plan is developed and approved by existing users and the State.

Very truly yours,

Tanya Every
WCA Administrator
Dear Ms. Loui

Subject: Wells 4125-01, 02: Pump Permits

Palauea Bay Partners (PBP) applied for a pump installation permit on the subject wells. The developer proposes to use the water from these wells for irrigation of two 18 hole golf courses. I live in the Maui Meadows subdivision close to these wells and have been monitoring the well drilling and testing through the Ed Sakoda's shop. I have a number of comments and concerns with the issuance of a pump permit for these wells as discussed below.

1. As neighbors to the proposed development it was our understanding that Maui County would insist that the developer would use the effluent from the Kihei Wastewater Treatment Plant (KWTP), which will soon be upgraded to a tertiary level of treatment (State Class A or B), for golf course irrigation. This would eliminate a significant amount of disposal of the sewage effluent by injection wells as now occurs, with the related potential for generation of algae blooms at the nearby beaches. In fact the Department of Health is on record as opposing further use of injection wells for disposal of effluent. PBP, however, has solicited and obtained approval from the County to irrigate with well water "until the sewage effluent is available at the project site" which is indicated by PBP to be an indefinite time in the future. In truth surplus effluent far in excess of the required 2 MGD is now available, but a delivery pipeline will have to be constructed and this could be accomplished during the same period as the golf courses are being built. The developer has refused to bear the cost of this relatively short pipeline, and has made no attempt to arrive at a cost sharing agreement with the County. Since it is obviously in the best interests of the residents and tourists of the State of Hawaii for PBP to use treated sewage effluent, no permits for pump installation should be issued for these wells at this time.
2. The PBP application states the withdrawal amount as 1 MGD per well. This is absurd since the well tests show stabilized pumping rates of 350 gpm for Well No.1, and 400 gpm for Well No. 2, or 504,000 to 576,000 GPD, about one half the 1 MGD amount. In fact in testimony before the County Council the developer stated he proposed to drill additional wells to obtain the desired irrigation quantity of 2 MGD.

3. In his report on the test results for Well No. 1, John Mink PBP's own consulting geohydrologist, states that the downhill Wailea wells will definitely become more saline even if PBP uses only 1 MGD for irrigation. Further that the sustainable yield will be exceeded, that is the supply for Wailea and Seibu resort golf courses will decrease. A copy of the appropriate pages of the report is enclosed, highlighted for your reference. This situation will be even worse if, as PBP proposes, it drills two more wells closer to the Wailea resort to augment the supply.

4. Rather than being brackish, the water from the developer's tests on Well No. 2 show a chlorine content of only 174 ppm which is below the potable limit of 250 ppm, and by County dictate cannot be used for golf course irrigation. PBP states that the salinity value for well No.2 is an "aberration" since higher pumping rates will result in increased salinity. Actually 400 gpm is already an unusually high rate: by comparison Well No. 1 is 350 gpm and the pumping rates for the Wailea Resort wells are only 200 to 300 gpm. Also, as explained above, the rate if anything should be lower to avoid impacting the golf courses below. Further, it would be unconscionable to destroy a potable well by overpumping considering the water shortage on Maui. It is interesting to note that combined salinity results for both wells is also less than 250 gpm. In my view PBP should be requested to consider the use of the well water as a potable source for its future urban (Phase 2) development.

I request that no pumping permits be issued to the developer until the above concerns are addressed. I look forward to your reply.

Very Truly Yours

James V. Williamson, P.E.

Enclosure
Wailea 670 Irrigation Well 1. Drilling and Testing Results

John F. Mink
June 3, 1991

Two wells for the project titled Wailea 670 are planned for irrigation of golf courses on the southwestern slope of Haleakala in the elevation range 350 to 700 feet above sea level (see attached map). The first well has been successfully drilled and tested at 350 gpm. After four days of continuous pumping, the chloride content of the water was 320 mg/l. The second well is now being drilled.

Between the Wailea 670 property and the coast lies the Wailea Resort and its golf courses. Several of the wells which serve the golf courses are down gradient of Wailea 670. The Wailea wells are marginal but nevertheless yield water suitable for irrigation when the pumping operation is properly managed. After the Wailea 670 wells have been on-stream for several years, a possibility exists that salinity in the lower wells will increase.

Design and Construction of Well 1

Well 1 (State no. 4125-01) was completed in January, 1991. Basic data for the well is as follows (see also the attached Driller’s Report):

2. Depth 559 ft. (-37 ft.).
3. Diameter of boring 14 in.
4. Diameter of casing 10 in.
5. Depth casing 0 - 549 ft.
6. Diameter screen 10 in.
7. Depth screen 549 - 559 ft.
8. Initial depth to water 519.5 ft, giving head of 2.8 ft. However, driller reports head of 1.43 ft.
Confidence of measurements is poor.

9. Depth cement grout 0 - 100 ft.

10. Depth rock pack 100-549 ft.

The driller log indicates that the Kula formation starts with a surficial 20 feet thick layer of soil and saprolite and grades into Honomanu basalt at a depth of about 70 feet. The log, however, is too general to be diagnostic. The aquifer in which the well ends consists of the Honomanu formation, the primary shield-building basalt underlying East Maui.

Pump Test

A brief step drawdown test in the uncased boring was made upon completion of drilling in January. Pumping rates ranged from 100 to 380 gpm, but the total pumping period was only 95 minutes. Drawdown adjusted quickly to pumping, stabilizing at 0.46 feet at a pump rate of 380 gpm. Maximum drawdown capacity was 350 mg/l. The purpose of the test was to prove that the aquifer could be pumped so that a long continuous test could be conducted.

A continuous test at a sustained rate averaging 355 gpm was run for 96 hours starting March 4 and ending March 8, 1991. The results of the test are summarized in an attached table.

At about 350 gpm the well quickly stabilized with a drawdown of 0.46 to 0.69 feet (by airline). The difference between these values is due to the coarseness of the measuring method rather than a real increase in drawdown. The drawdown is too small and achieved too quickly to permit determination of aquifer parameters by well hydraulics. The aquifer obviously is highly transmissive.

Salinity of the pumped water was measured as specific conductivity, but the final sample was titrated for chloride content. The equation converting specific conductivity to chloride content is:

\[ \text{Cl} = 0.305 \times \text{sp.con.} - 50 \]

The titrated sample had a chloride of 320 mg/l for a specific conductivity of 1200. By the equation the chloride is 316 mg/l.
The salinity of the pumped water stabilized at 1010 micromhos (258 mg/l Cl) for three days, then rose to 1200 micromhos (320 Cl). At the design pumping rate of 350 gpm the well will provide high quality irrigation water.

The wells in lower Wailea are about twice as saline at pumping rates of 200 to 300 gpm. Well 4126-02 has chloride of about 600 mg/l, 4126-03 chloride of 650 mg/l and 4126-01 of about 750 mg/l.

A four day pump test can establish characteristics of the aquifer but is too short to have an effect on distant wells. The closest lower Wailea wells are 4500 feet away, and the velocity of groundwater in the basal lens is 5 to 10 ft/day. At the height and site of the proposed Wailea 670 wells, it would take more than a year for groundwater at the new well site to arrive at the lower Wailea wells. Even then a four day pump test would not perturb the lens enough to cause measurable changes down gradient.

Long Term Effects of Wailea 670 Wells on Lower Wailea Wells

The flux in the basal lens probably falls between 2 and 3 mgd per mile of coast. This estimate is based on an approximation of the groundwater gradient employing heads for the Wailea 670 and lower Wailea wells along with an assumed value of hydraulic conductivity. Not all of the flux is available as sustainable yield, but more than half can be withdrawn for irrigation.

The future demand for lower Wailea is projected as 3 to 3.5 mgd, while for Wailea 670 the projected demand for two golf courses is 2.5 mgd. Total demand for the two areas will average 4.5 mgd along an equivalent shore line reach of three miles toward which a natural flux of 6 to 9 mgd moves. For these values of flux and demand, it seems that saline contamination will not be a problem. For these values of flux and demand, the increase may not be great enough to eliminate the wells as sources of useable irrigation water. In fact, the lower Wailea wells are likely to experience quality deterioration more from the addition of new wells and increase in pumpage within the area than from the Wailea 670 wells.
Date 10/8/92  Time 11:55

WHILE YOU WERE OUT

M  Dan Hise
of  Palawan Partners

Phone  539-9600

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Message

They also got the left front trailer off the house.

Operator
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DATE 10/5 TIME 130

WHILE YOU WERE OUT
M. Clyde Newton Jr.
of Wailea Resort
Phone 531-1500

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Message: 

Dracked code
Well
Working on letter - will FAX asap.
Ms. Rae Loui, Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Loui:

SUBJECT: PUMP INSTALLATION PERMIT APPLICATION
WAILEA 670 IRRIGATION WELL NOS. 1 AND 2
STATE WELL NOS. 4125-01 AND -02
WAILEA, MAUI

Thank you for the opportunity to review and comment on the subject document. We have examined the application and have the following comments to offer:

1. The application indicates that the proposed wells will be used for golf course irrigation. Thus, Hawaii Administrative Rules, Title 11, Chapter 20, Rules Relating to Potable Water Systems, will not be applicable. However, in the event that the proposed use of the well were to change, the Safe Drinking Water Branch must be notified.

2. If the irrigation system is supplemented with potable water, adequate measures must be taken to eliminate cross-connections and backflow conditions. The potable and nonpotable water systems should be clearly labeled and physically separated by an air gap or an approved backflow preventer to avoid contaminating the potable water supply. In addition, all nonpotable spigots and irrigated areas should be clearly labeled with warning signs to prevent the inadvertent consumption of nonpotable water.
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<td>Signature</td>
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</tr>
<tr>
<td>G. MATSUMOTO</td>
<td>Information</td>
<td></td>
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</tr>
<tr>
<td>Y. SHIROMA</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Letter coming.
Mr. Clark K. Champion  
Director, Property Management  
Wailea Resort Company, Ltd.  
161 Wailea Ike Place  
Kihei, HI 96753-9599

Dear Mr. Champion:

Pump Installation Permit Applications

Transmitted for your information are copies of the pump installation permit applications for the Wailea 670 wells (WellNos. 4125-01, 02).

Should you have questions, please contact the Commission on Water Resource Management staff at 587-0225.

Sincerely,

RAE M. LOUI  
Deputy Director

NF:ky  
Enc.
Mr. James V. Williamson
Consulting Engineer
672 Kumulani Drive
Kihei, HI 96753

Dear Mr. Williamson:

Pump Installation Permit Applications

Transmitted for your information are copies of the pump installation permit applications for the Wailea 670 wells (Well Nos. 4125-01, 02).

Should you have questions, please contact the Commission on Water Resource Management staff at 587-0225.

Sincerely,

RAE M. LOUI
Deputy Director

NF:ky
Enc.
Mr. Peter Nottage  
Palauea Bay Partners  
841 Bishop Street, #2300  
Honolulu, Hawaii 96813  

Dear Mr. Nottage:  

We have received your applications for permits to install a pump in two wells (Well Nos. 4125-01, 02) at Wailea, Maui, (TMK 2-1-08:56). We are reviewing the application for completeness. However, our rules require a filing fee of $25 per application. Please make a check payable to the Department of Land and Natural Resources and send it to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809.  

Should you have questions, please call the Commission on Water Resource Management staff at 587-0225.  

Sincerely,  

RAE M. LOUI  
Deputy Director  

NF:ky
The Honorable William W. Paty, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Paty:

Well Construction and Pump Installation Permits

Thank you for the opportunity to comment on the following applications:

Keopu-HFDC (3957-03)
Papaaloa-Savio (5713-01)
Kapalua 1 (5938-02)
Wailea 670 Irr 1 & 2 (4125-01,02)

These projects are not expected to affect Hawaiian home lands; we have no direct comment.

We can point out that the information supplied for the Keopu well is internally inconsistent; it states the well is intended to tap a high level groundwater source, but the specifications clearly indicate the well taps basal groundwater.

We again call attention to the use of groundwater, even brackish water, for golf course irrigation, as at Wailea. This may have no adverse short-term impacts, but may eventually be shown to be inadvisable, and thereafter restricted. We note that the applicant fully expects to make the transition to treated sewage effluent in the future.

Warmest aloha,

Hoaliku L. Drake, Chairman
Hawaiian Homes Commission
PAY TO THE ORDER OF

Department of Land and Natural Resources
Commission on Water Resource Management
P.O. Box 621
Honolulu, HI 96809

FIFTY AND 00/100

DATE 09/17/92
AMOUNT $50.00

CHECK VOID AFTER 90 DAYS

Michael E. Ford

Reference No.: 00002248
Check Date - 09/17/92

PALAUEA BAY PARTNERS

Stub 1 of 1

REFERENCE NO. DESCRIPTION AMOUNT
90492 09/04 Filing Fees for Pump Install 50.00
MEMORANDUM

TO: Rae M. Loui, Deputy Director
Commission on Water Resource Management

FROM: Don Hibbard, Administrator
State Historic Preservation Division

SUBJECT: Pump Installation Permit for Well No. 412541 Wailea
670 Paehau (Wailea), Makawao, Maui
TMK: 2-1-08: 56

We believe that the proposed installation of a pump at this well will have "no effect" on significant historic sites. This parcel was previously surveyed for a proposed development and no historic sites were identified (Kennedy 1988. Archaeological Survey Results the Proposed Makena 700 Development).

Please call Annie Griffin at extension 7-0013 if you have any questions about these comments.

AG:aal
Mr. Peter Nottage
Palauea Bay Partners
841 Bishop Street, #2300
Honolulu, Hawaii 96813

Dear Mr. Nottage:

We have received your applications for permits to install a pump in two wells (Well Nos. 4125-01, 02) at Wailea, Maui, (TMK 2-1-08:56). We are reviewing the application for completeness. However, our rules require a filing fee of $25 per application. Please make a check payable to the Department of Land and Natural Resources and send it to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809.

Should you have questions, please call the Commission on Water Resource Management staff at 587-0225.

Sincerely,

RAE M. LOUI
Deputy Director

NF:ky
Mr. Dave Craddick, Director  
Department of Water Supply  
County of Maui  
200 South High Street  
Wailuku, Maui, Hawaii 96793

Dear Mr. Craddick:

Well Construction and Pump Installation Permit Applications

Transmitted for your review and comment are copies of the following permit applications:

<table>
<thead>
<tr>
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Please review the applications pursuant to your area of concern and submit your comments to us, orally or in writing, ten (10) working days from date of this letter.

Should you have any questions, please contact the Commission on Water Resource Management at 587-0225.

Sincerely,

RAE M. LOUI
Deputy Director

NF:ky
Enc.
Mr. Clayton H. W. Hee  
Chairman & Trustee At Large  
Office of Hawaiian Affairs  
711 Kapiolani Blvd., Suite 500  
Honolulu, Hawaii  96813-5249

Attn: Ms. Linda Delaney, Land & Natural Resources Division

Dear Mr. Hee:

Well Construction and Pump Installation Permit Applications

Transmitted for your review and comment are copies of the following permit applications:

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Please review the applications pursuant to your area of concern and submit your comments to us, orally or in writing, ten (10) working days from date of this letter.

Should you have any questions, please contact Rae M. Loui, Deputy Director at 587-0214.

Very truly yours,

WILLIAM W. PATY

Enc.
Honorable Hoaliku L. Drake  
Director  
Department of Hawaiian Home Lands  
State of Hawaii  
P.O. Box 1879  
Honolulu, Hawaii 96805

Dear Mrs. Drake:

Well Construction and Pump Installation Permit Applications

Transmitted for your review and comment are copies of the following permit applications:

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Please review the applications pursuant to your area of concern and submit your comments to us, orally or in writing, ten (10) working days from date of this letter.

Should you have any questions, please contact Rae M. Loui, Deputy Director at 587-0214.

Very truly yours,

William W. Paty

Enc.
Mr. Thomas Arizumi, Chief  
Environmental Management Division  
State Department of Health  
Five Waterfront Plaza  
500 Ala Moana Blvd., Suite 250  
Honolulu, Hawaii 96813  

Attn: Mr. William Wong  

Dear Mr. Arizumi:  

Well Construction and Pump Installation Permit Applications  

Transmitted for your review and comment are copies of the following permit applications:  

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Please review the applications pursuant to your area of concern and submit your comments to us, orally or in writing, ten (10) working days from date of this letter.  

Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0225.

Sincerely,  

RAE M. LOUI  
Deputy Director  

NF:ky  
Enc.
MEMORANDUM

TO: Don Hibbard, Director
   Historic Preservation Program

FROM: Rae M. Loui, Deputy Director
      Commission on Water Resource Management

SUBJECT: Well Construction and Pump Installation Permit Applications

Transmitted for your review and comment are copies of the following permit applications:

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Please review the applications pursuant to your area of concern and submit your comments to us, orally or in writing, ten (10) working days from date of this memo.

Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0225.

Enc.
Ms. Marjorie Ziegler
Sierra Club Legal Defense Fund, Inc.
212 Merchant Street, Room 202
Honolulu, Hawaii 96813

Dear Ms. Ziegler:

Well Construction and Pump Installation Permit Applications

Transmitted for your information are copies of recent well permit applications:

<table>
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</table>

Should you have questions, please contact the Commission on Water Resource Management staff at 587-0225.

Sincerely,

RAE M. LOUI
Deputy Director

NF:ky
Enc.
APPLICATION FOR PERMIT

[Form details]

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER
   Firm/Name: Palua Bay Partners
   Contact Person: Peter Nottage
   Address: 861 Bishop Street #2300
   Honolulu, HI 96813

   (b) LANDOWNER
   Firm/Name: Palua Bay Partners
   Contact Person: Peter Nottage
   Address: 861 Bishop Street #2300
   Honolulu, HI 96813

   (c) CONTRACTOR
   Firm/Name: To Be Named Later
   Address: ________ 
   Ph: ____________ 
   Signature: __________ 
   Date: ________ 
   Contractor's C-57 License No.

2. WELL LOCATION/NAME: 4125-01 Wailea 670
   Island: Maui
   Address: Wailea, Maui, Hawaii 96753
   Tax Map Key: 2-1-08:56

3. (a) PROPOSED WORK: 
   - Drill New Well
   - Modify Existing Well
   - Install New Pump
   - Deepen
   - * Abandon/Seal
   * Be sure to complete and submit well abandonment report upon completion of work.

4. PROPOSED PUMP INFORMATION:
   - Rated Pump Capacity: 400 gallons per minute
   - Pump Type:
     - Deep Well Turbine
     - Submersible
     - Centrifugal
     - Rotary
     - Rotary-Displacement
     - Rotary-Gear
     - Impulse
   - Motor:
     - Diesel
     - Electric, rated horsepower of

5. PROPOSED USE:
   - Municipal (including hotels, stores, etc.)
   - Residential
   - Irrigation (prop)
   - Golf Course
   - State Land Use District: Urban, Agriculture, Rural, Conservation
   - County Zoning (describe)
   - Other (explain)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: 1,000,000 gallons per day

7. PENDING ACTIONS:
   - CDUA
   - SMA
   - EIS
   - EA
   - NONE
   - Other (explain)

8. REMARKS, EXPLANATIONS:
   Pumpage will be decreased when sewage effluent becomes available

[Signature and Date]

[State of Hawaii]
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

[Instructions]

NOTE: Signing below indicates that the applicant understands all. The permit requested is granted by the Commission on Water Resource Management. The proposed work is to be completed within two (2) years of the approved date. In addition, the contractor shall submit to the Commission a well completion report, well abandonment report, or both, within 30 days after the completion date of the permitted work. The applicant also understands that water level data shall be submitted to the Commission. The applicant further understands that approval of the proposed permit shall not constitute a determination of cumulative water rights and that no guarantee of well capacity or future use is to the permitted pump capacity.

[Receipe Information]

[For Official Use Only]

Date Received __________ 
Date Accepted __________ 
Field Checked By __________ 
Date __________ 

Longitude: __________ 
Latitude: __________ 

Aquifer System Name: KAMAOLE 415-01
State Well No. 6/24/92 WCR For

9. PROPOSED WELL SECTION

Elevation at top of casing __ ft., msl.

Ground Elevation: 522.26 ft., msl*

Cement Grout: 100 ft.

Rock Packing: 449 ft.

Hole Diameter: 14 in.

Total Depth: 559 ft.

Solid Casing:
- Material: Steel
- Length: 549 ft.
- Diameter: 10 in.
- Wall thickness: .321 in.

Casing: [ ] Perforated [ ] Screen
- Material: Steel
- Length: (not specified)
- Diameter: 10 in.
- Wall thickness: .321 in.
- Openings: (not specified) sq. in./L.F.

Open Hole:
- Length: (not specified)
- Diameter: (not specified) in.

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment report.
APPLICATION FOR PERMIT

Date: 08 AUG 10

All: 30

[Option selected: X Pump Installation]

Instructions: Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. Application must be accompanied by a non-refundable fee of $150 and a payoff statement upon receipt. The Commission may not accept incomplete applications. For assistance, please call the Application Branch at 587-6226.

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER
      Firm/Name: Palaua Bay Partners
      Contact Person: Peter Nottage
      Address: 841 Bishop Street #2300
      Honolulu, HI 96813
   (b) LANDOWNER
      Firm/Name: Palaua Bay Partners
      Contact Person: Peter Nottage
      Address: 841 Bishop Street #2300
      Honolulu, HI 96813
   (c) CONTRACTOR
      Firm/Name: To Be Named Later
      Street: Address

2. WELL LOCATION/NAME: 4125-02 Wailea 670
   Address: Wailea, Maui, Hawaii 96753
   Island: Maui
   Tax Map Key: 2-1-08:56
   (Attach a USGS map, scale 1"=2000', and a property tax map showing well location referenced to established property boundaries.)

3. (a) PROPOSED WORK:
   - Drill New Well
   - * Alter Location
   - Modify Existing Well
   - Redrill
   - Install New Pump
   - Replace Pump
   * Be sure to complete and submit well abandonment report upon completion of work.

   (b) WELL TYPE:
   - Dug
   - Bored
   - Driven
   - Drilled
   - Radial
   Is this well a part of a battery of wells? 
      Yes
      No
   (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION:
   Rated Pump Capacity: 500 gallons per minute
   Pump Type:
   - Deep Well Turbine
   - Submersible
   - Centrifugal
   - Rotary
   - Rotary-Displacement
   - Reciprocating
   - Rotary-Gear
   - Impulse
   Motor:
   - Diesel
   - Gas
   - Electric, rated horsepower of

5. PROPOSED USE:
   - Municipal (including hotels, stores, etc.)
   - Industrial
   - Military
   - Residential (including noncommercial water sys.)
   - Agriculture
   - Urban
   - Rural
   - Conservation
   - Other (explain)
   State Land Use District:
   County Zoning (describe):
   (If more space is needed, continue below under remarks, explanations.)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: 1,000,000 gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
      - Flow-meter
      - Open-pipe
      - Orifice Plate
      - Weir

7. PENDING ACTIONS:
   - CDUA
   - SMA
   - EIS
   - EA
   - NONE
   - Other (explain)

8. REMARKS, EXPLANATIONS:
   Pumage will be decreased when sewage effluent becomes available.

__________________________________________________________
Well Owner
Signature Date: 8/5/92

__________________________________________________________
Landowner
Signature Date: 8/5/92

__________________________________________________________
Contractor
Signature Date: 8/5/92

For Official Use Only:
Date Received
Date Accepted
Field Checked By
Date

Longitude
Latitude
Aquifer System Name: KAMAOLE
State Well No.: 4125-02

6/24/92 WCR FBR
Remarks, Explanations (cont’d): Permit application submitted for two nearly identical wells, about 300 feet apart. Reports submitted to Water Commission 2/10/92 for Well #4125-02 and 6/3/91 for Well #4125-01.

9. PROPOSED WELL SECTION

Elevation at top of casing: __ ft., msl.

Ground Elevation: 519.18 ft., msl*

Cement Grout: 300 ft.

Rock Packing: 350 ft.

Hole Diameter: 17 in.

Total Depth: 550 ft.

Solid Casing:
- Material: Steel
- Length: 529 ft.
- Diameter: 10 in.
- Wall thickness: .321 in.

Casing: □ Perforated □ Screen
- Material: Steel
- Length: 20 ft.
- Diameter: 10 in.
- Wall thickness: .321 in.
- Openings: __ sq. in./L.F.

Open Hole:
- Length: 0 ft.
- Diameter: _ in.

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.
Wailea 670 Change in Zoning and Project District
Phase I Development Approval Applications,
TMK: 2-1-8: 56 and 71 (ID #91/PH1-001 and #91/CIZ-005)

We have reviewed Volumes I and II relating to the above application and offer the following comments:

1. The specific conductivity of well 2 (Well No. 4125-02) obtained during the pumping test indicates that the water is of potable quality (157 to 182 mg/l chlorides). However, the quality of the water (320 mg/l) at well 1 (Well No. 4125-01), located about 300 ft. away, indicates that the aquifer would not likely remain potable with increased pumping in the area.

2. As indicated in Volume I, Appendix B, page 6, the wells are located below the Department of Health’s Underground Injection Control (UIC) line which runs along the 600-foot contour. Potable sources of water should be developed above the UIC line.

3. The Commission uses the following principle as a guideline: Water applied for golf course irrigation should be of equal or better quality than the water in the aquifer beneath the golf course. This principle is used on a case-by-case basis in making decisions related to water use on golf courses as well as any other use of water that may affect an aquifer adversely. Assuming that the chloride levels from both wells equalize over time, using that water over the aquifer would be in accordance with the guideline.

If you have any questions, please call Rae M. Loui, Deputy Director, at 587-0214.

Very truly yours,

WILLIAM W. PATY
Re: Wailea 670

Eric: Please discuss with Ed. I just talked to him a few minutes after I talked to you.

Thanks.
May 29, 1992

Mr. William Paty, Director
Office of the Chairperson
Department of Land and Natural Resources
1151 Punchbowl Street, Room 130
Honolulu, Hawaii 96813

Dear Mr. Paty:

Re: Wailea 670 Change in Zoning and Project District Phase I
Development Approval Applications, TMK: 2-1-8: 56 and 71
(ID #91/PHl-001 and #91/CIZ-005)

On April 13, 1992, we transmitted two (2) copies each of Volumes I and II relating to the above application requesting review and comment by May 14, 1992. To date we have not received any response from your department. We also note that your department did not respond to the Environmental Impact Statement completed in 1988.

The applicants are proposing two 18-hole golf courses. The County’s Department of Water Supply stated that the groundwater protection branch should comment on the documents. In addition, the director of the Department of Water Supply has indicated that Well #2, located on the property may be potable.

We are also concerned about leaching and monitoring of pesticides. In addition, we are concerned about cumulative impact of all of the golf course developments in the area with well permits using the same source.

We have enclosed more copies of Volumes I and II and would appreciate a response as soon as possible. The public hearing before the Planning Commission is scheduled for June 15, 1992.

Thank you for your assistance. Should you have any questions, please call me or Ms. Julie Higa of my staff at 243-7735.

Very truly yours,

[Signature]
Brian Miskae
Director of Planning

Encl.
cc: C. Suyama, J. Higa, T. Witten, File
A: DLNR470
TRANSMITTAL:

TO: State Agencies:
- DOH Maui
- DOH Enl
- DOT Hwys
- DOT Harbors
- DOT Airports
- DLNR/Hist Presv Office
- DLNR (2 Copies)
- Dept of Agriculture
- DOE/Off of Bus Serv (Res)
- DOE/Facilities Branch (CPA) Federal
- Hawaiian Home Lands
- DBEDT
- Dept Of Human Serv
- Office of Hawn Affrs
- Dept of Labor
- DABS (Survey Division)
- OSP

County Agencies:
- LUCA (3 Copies)
- Water
- Parks And Recreation
- Human Concerns-Housing Division
- Fire Dept
- Police Dept
- Corporation Counsel
- Army Corps of Engineers
- Soil Conservation Service
- Maui Electric Company
- Kihei Community Assn (2 Copies)

SUBJECT: I.D. No. 92/P1-001
TIME: 2-1-08:56 & 57
Project Names: Wailea 670
Applicant: David Nakamura

TRANSMITTED TO YOU ARE THE FOLLOWING:

- Application (Vol. 1 & 2)
- Project Plans
- Environmental Assessment
- Shoreline Map
- Drainage Report
- Draft Ordinance(s)
- Unilateral Agreement(s)
- Traffic Report
- Archaeological Report
- Infrastructure Report
- Soils Report
- Previous-Agency Comments
- Housing Agreements

THESE ARE TRANSMITTED AS CHECKED BELOW:

- For Your Comment/Recommendation
- For Your Information
- For Your Approval/Signature
- For Appropriate Attention
- As Requested

Please Submit Your Comments/Recommendations By May 14, 1992

Remarks:

If additional clarification is required please contact Julie Higa of my office at 243-7735.

For BRIAN MISKAE,
Planning Director
MAUI PLANNING DEPARTMENT

Planner

cc: Colleen Suyama
Charles Jencks, DFW
Julie Higa

FILE
WELL COMPLETION REPORT

STATE WELL NO. 4125-01, ISLAND: MAUI

LOCATION: Wailea, Maui

WELL NAME: Irrigation Well

WELL OWNER: Maui 670 Ltd., Partnership & Palauan Bay Partners

DRILLING OR PUMP INSTALLATION CONTRACTOR: Paul Frandsen & Associates

DRILLER: Miles Frandsen

DATE OF WELL COMPLETION: 1/91

DATE OF PUMP INSTALLATION

GROUNDS ELEVATION (m.a.s.l.) 522.26 ft.

TOTAL DEPTH OF WELL BELOW GROUND 539 ft.

HOLE SIZE:

- 16 in. diameter from 0 ft. to 539 ft. below ground
- 16 in. diameter from 0 ft. to 539 ft. below ground
- 16 in. diameter from 0 ft. to 539 ft. below ground

CASING INSTALLED:

- 10 in. I.D. x 32 ft. wall solid section to 539 ft. below ground
- 10 in. I.D. x 32 ft. wall perforated section to 539 ft. below ground

Type of perforation: (A.C.F.)

ANNUAL:

- Grouted from 0 ft. to 100 ft. below ground
- Gravel packed from 100 ft. to 539 ft. below ground

PERMANENT PUMP INSTALLATION:

- Pump type, make, serial no.
- Motor type, H.P., voltage, r.p.m.
- Depth of pump intake setting ft. below ground
- Which elevation is ft. below ground

PROPOSED USE: Irrigation

INITIAL WATER LEVEL 519.5 ft. below ground. Date and time of measurement:

INITIAL CHLORIDE ppm. Date and time of sampling:

PUMPING TESTS: Reference point (R.P.) used:

DRILLER'S LOG:

DEPTH FT. 
0 to 20
20 to 30
30 to 50
50 to 70
70 to 90
90 to 120
120 to 150
150 to 210
210 to 240
240 to 280
280 to 320
320 to 385
385 to 400
400 to 410
410 to 418
418 to 430
430 to 439
439 to 475
475 to 543
548 to 582

DESCRIPTION & REMARKS

ROCK DESCRIPTION & REMARKS

WATER LEVEL FT.
0 to 20
20 to 30
30 to 50
50 to 70
70 to 90
90 to 120
120 to 150
150 to 210
210 to 240
240 to 280
280 to 320
320 to 385
385 to 400
400 to 410
410 to 418
418 to 430
430 to 439
439 to 475
475 to 543
548 to 582

REMARKS:

INITIATED BY (PRINT) Rhonda Bear

TITLE Office Mgr.

DATE 5/20/91

482-490 red black broken

520-530 red black broken

530-543 red black broken (520.5 hit)

543-548 red black broken (water)
**INSTRUCTIONS:** Please print or type and submit completed report within 30 days of well completion to the Division of Water & Land Development, P.O. Box 373, Honolulu, HI 96808. An as-built drawing of the well and chemical analysis, if available, should also be submitted. If necessary, phone 548-1443, Hydrology, Geology Section for assistance.

| A. STATE WELL NO. | 4125-01-02 | WELL NAME | Irrigation Well #2 | ISLAND | Maui |
| B. LOCATION | Wailea, Maui | TAX MAP KEY | 2-1-08-56 |
| C. WELL OWNER | Mall DRILLER E. J. O. | Partn. of P. H. Cunningham & Partners |
| D. DRILLING OR PUMP INSTALLATION CONTRACTOR | Paul Frank & Associates |
| E. TYPE OF RIG | Rotary |
| F. DATE OF WELL COMPLETION | 12-29-91 | DATE OF PUMP INSTALLATION |
| G. GROUND ELEVATION (ft) | 519.18 ft. |
| H. TOTAL DEPTH OF WELL BELOW GROUND | 5.49 ft. |
| I. HOLE SIZE | 17 in. dia. from 6 ft. to 550 ft. below ground | Length of drilling platform (m) ft. |
| J. CASING INSTALLED | 1/8 in. I.D. x 3/8 in. wall solid section to 522 ft. below ground |
| K. ANULUS | Gravel packed from 200 ft. to 550 ft. below ground |
| L. PERMANENT PUMP INSTALLATION | Pump type, make, serial No. | Capacity (gpm) |
| | Motor type, H.P., voltage, r.p.m. |

**PROPOSED USE:**

| N. INITIAL WATER LEVEL | 519.6 ft. below ground. | Date and time of measurement | 12-25-91 12:30 noon |
| O. INITIAL CHLORIDE | ppm. | Date and time of sampling | 12-25-91 12:30 noon |

**PUMPING TESTS:** Reference point (R.P.) used: pipe which elevation is 519 ft. |

| Date | 12-25-91 |
| Start water level | 519.6 ft. below R. P. |
| End water level | 519.6 ft. below R. P. |
| Depth of well | 550 ft. below R. P. |
| Elapsed Time (hours) | Rate (gpm) | Drawdown (ft.) | Cl. (ppm) | Temp. (°F) |
| 1:00 | 100 | 0 | 0 | 70 |
| 3:00 | 80 | 20 | 1-5 |
| 4:00 | 70 | 40 | 0 | 70 |
| 5:00 | 60 | 60 | 0 | 70 |
| 6:00 | 50 | 80 | 0 | 70 |
| 7:00 | 40 | 100 | 0 | 70 |

**DRILLER’S LOG:**

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level (ft)</th>
<th>Depth (ft)</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 70</td>
<td>Brown, Clay, sandy clay</td>
<td>593.9 to 519.6</td>
<td>200 to 300</td>
<td>Blue, sandy, silt</td>
<td>Red, gray, silt</td>
</tr>
<tr>
<td>100 to 130</td>
<td>Blue, clay, hard</td>
<td>Blue, clay, hard</td>
<td>373.5 to 320</td>
<td>Blue, clay, hard</td>
<td>Red, clay, silt</td>
</tr>
<tr>
<td>130 to 150</td>
<td>Red, clay, sandy clay</td>
<td>320 to 273</td>
<td>Red, gray, silt</td>
<td>Red, clay, silt</td>
<td>Red, clay, silt</td>
</tr>
<tr>
<td>150 to 170</td>
<td>Black, clay, sandy clay</td>
<td>273 to 226</td>
<td>Red, clay, silt</td>
<td>Red, gray, silt</td>
<td>Red, clay, silt</td>
</tr>
<tr>
<td>170 to 200</td>
<td>Black, clay, hard</td>
<td>226 to 192</td>
<td>Red, clay, silt</td>
<td>Red, gray, silt</td>
<td>Red, clay, silt</td>
</tr>
<tr>
<td>200 to 250</td>
<td>Blue, clay, hard</td>
<td>192 to 157</td>
<td>Red, clay, silt</td>
<td>Red, gray, silt</td>
<td>Red, clay, silt</td>
</tr>
<tr>
<td>250 to 300</td>
<td>Blue, clay, hard</td>
<td>157 to 122</td>
<td>Red, clay, silt</td>
<td>Red, gray, silt</td>
<td>Red, clay, silt</td>
</tr>
<tr>
<td>300 to 350</td>
<td>Blue, clay, hard</td>
<td>122 to 87</td>
<td>Red, clay, silt</td>
<td>Red, gray, silt</td>
<td>Red, clay, silt</td>
</tr>
</tbody>
</table>

**REMARKS:**

Submitted by (print)  Rickey Frank & Associates  Title  Driller  Date  1-5-92  

Signature  Rickey Frank
**ALL COMPLETION REPORT**

**INSTRUCTIONS:** Please print or type and submit completed report within 30 days of well completion to the Division of Water & Land Development, P.O. Box 372, Honolulu, HI 96804. An as-built drawing of the well and chemical analysis, if available, should also be submitted. If necessary, phone 548-7642, Hydrology, Geology Section for assistance.

<table>
<thead>
<tr>
<th>A. STATE WELL NO.</th>
<th>4125-01-02</th>
<th>WELL NAME</th>
<th>Irrigation Well No. 1, Island Maui</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. LOCATION</td>
<td>Wailea, Maui</td>
<td>TAX MAP KEY</td>
<td>2-1-09-18.06</td>
</tr>
<tr>
<td>C. WELL OWNER</td>
<td>Maui Water Partnership/ Puna Bay Partners</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. DRILLING OR PUMP INSTALLATION CONTRACTOR</td>
<td>Paul Engdahl &amp; Associates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. TYPE OF RIQ.</td>
<td>Rotary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. DATE OF WELL COMPLETION</td>
<td>12-27-91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. DATE OF PUMP INSTALLATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. GROUND ELEVATION (m)</td>
<td>5(\frac{19}{12}) ft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. TOTAL DEPTH OF WELL BELOW GROUND</td>
<td>549 ft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. HOLE SIZE:</td>
<td>17 inch dia. from 8 ft. to 550 ft. below ground</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17 inch dia. from 8 ft. to 550 ft. below ground</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17 inch dia. from 8 ft. to 550 ft. below ground</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K. CASING INSTALLED:</td>
<td>10 in. I.D. x 32(\frac{1}{3}) in. wall solid section to 529 ft. below ground</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>32(\frac{1}{3}) in. wall perforated section to 550 ft. below ground</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L. ANNULOG:</td>
<td>Grouted from 2 ft. to 300 ft. below ground</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gravel packed from 300 ft. to 550 ft. below ground</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M. PERMANENT PUMP INSTALLATION:</td>
<td>Capacity 1000 gpm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Depth of pump intake setting 17 ft. below which elevation is 549 ft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Depth of bottom of airlift 17 ft. below which elevation is 549 ft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N. PROPOSED USE</td>
<td>Irrigation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O. INITIAL WATER LEVEL</td>
<td>518 ft. below ground.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P. PUMPING TESTS: Reference point (R.P.) used:</td>
<td>Pipe which elevation is 518 ft.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Start water level | 518 ft. below R. P. |
| End water level   | 518 ft. below R. P. |
| Depth of well     | 518 ft. below R. P. |

| Date | 11-25-91 |
| Start water level | 518 ft. below R. P. |
| End water level   | 518 ft. below R. P. |
| Depth of well     | 518 ft. below R. P. |

<table>
<thead>
<tr>
<th>Elapsed Time (hours)</th>
<th>Rate Drawn (gpm)</th>
<th>Cl. (ppm)</th>
<th>Temp. °F</th>
<th>Elapsed Time (hours)</th>
<th>Rate Drawn (gpm)</th>
<th>Cl. (ppm)</th>
<th>Temp. °F</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00 to 12:00</td>
<td>100</td>
<td>100</td>
<td>55</td>
<td>11:00 to 12:00</td>
<td>100</td>
<td>100</td>
<td>55</td>
</tr>
<tr>
<td>12:00 to 13:00</td>
<td>200</td>
<td>200</td>
<td>55</td>
<td>12:00 to 13:00</td>
<td>200</td>
<td>200</td>
<td>55</td>
</tr>
<tr>
<td>13:00 to 14:00</td>
<td>300</td>
<td>300</td>
<td>55</td>
<td>13:00 to 14:00</td>
<td>300</td>
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<td>55</td>
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<tr>
<td>14:00 to 15:00</td>
<td>400</td>
<td>400</td>
<td>55</td>
<td>14:00 to 15:00</td>
<td>400</td>
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<td>55</td>
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<tr>
<td>15:00 to 16:00</td>
<td>400</td>
<td>400</td>
<td>55</td>
<td>15:00 to 16:00</td>
<td>400</td>
<td>400</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## WELL COMPLETION REPORT

### INSTRUCTIONS:
Please print or type and submit completed report within 30 days of well completion to the Division of Water & Land Development, P.O. Box 373, Honolulu, HI 96809. An as-built drawing of the well and chemical analysis, if available, should also be submitted. If necessary, phone 548-1549, Hydrology, Geology Section for assistance.

### A. STATE WELL NO. 4195-01-02 | WELL NAME Irrigation Well #2, ISLAND Maui

### B. LOCATION
- **Maui, HI**
- **TAX MAP KEY 2-1-0856**

### C. WELL OWNER
- **Mau 670 Ltd. Partners of Baldwin Bay Partners**

### D. DRILLING OR PUMP INSTALLATION CONTRACTOR
- **Paul Frandson & Associates**
- **DRILLER John Carroll**

### F. DATE OF WELL COMPLETION 12-27-91 | DATE OF PUMP INSTALLATION

### G. GROUND ELEVATION (m.s.l.) 519.18 ft.
- **Top of Drilling Platform (m.s.l.) 510 ft.**
- **Height of drilling platform above ground surface 9.18 ft.**
- **Bench mark and method used to determine ground elevation 522.18 ft.**

### H. TOTAL DEPTH OF WELL BELOW GROUND 549 ft.

### I. HOLE SIZE
- **17 inch dia. from 0 ft. to 550 ft. below ground**
- **17 inch dia. from 550 ft. to 550 ft. below ground**
- **17 inch dia. from 550 ft. to 550 ft. below ground**

### J. CASING INSTALLED
- **10 in. I.D. x 321 ft. solid section to 529 ft. below ground**
- **10 in. I.D. x 321 ft. perforated section to 550 ft. below ground**

### K. ANNUlus:
- **Grouted from 0 ft. to 200 ft. below ground**
- **Gravel packed from 200 ft. to 550 ft. below ground**

### L. PERMANENT PUMP INSTALLATION:
- **Pump type, make, serial No.**
- **Motor type, H.P., voltage, r.p.m.**
- **Depth of pump intake setting**
- **Depth of bottom of airlift**

### M. PROPOSED USE
- **Irrigation**

### N. INITIAL WATER LEVEL 519.6 ft. below ground. | Date and time of measurement 11-25-91 2:00 p.m.

### O. INITIAL CHLORIDE ppm.

### P. PUMPING TESTS:
- **Reference point (R.P.) used: pipe which elevation is 519 ft.**
- **Date 11-25-91**
- **Start water level**
- **End water level**
- **Depth of well**

<table>
<thead>
<tr>
<th>Elapsed Time (hours)</th>
<th>Rate (gpm)</th>
<th>Drawn Down (ft.)</th>
<th>Temp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00 to 12:00</td>
<td>100</td>
<td>100</td>
<td>72</td>
</tr>
<tr>
<td>12:00 to 13:00</td>
<td>100</td>
<td>100</td>
<td>72</td>
</tr>
<tr>
<td>13:00 to 14:00</td>
<td>100</td>
<td>100</td>
<td>72</td>
</tr>
<tr>
<td>14:00 to 15:00</td>
<td>100</td>
<td>100</td>
<td>72</td>
</tr>
</tbody>
</table>

### Q. DRILLER'S LOG:

<table>
<thead>
<tr>
<th>Depth (ft.)</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level (ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 10</td>
<td>Brown, Clay/Kiln Lava</td>
<td>519 to 527</td>
</tr>
<tr>
<td>10 to 20</td>
<td>O.H. &amp; Brown Lava, Med</td>
<td>519 to 527</td>
</tr>
<tr>
<td>20 to 30</td>
<td>Blue, Lava, Hard</td>
<td>519 to 527</td>
</tr>
<tr>
<td>30 to 40</td>
<td>Black, Red, Lava, Hard</td>
<td>519 to 527</td>
</tr>
<tr>
<td>40 to 50</td>
<td>Red &amp; Black, Lava, Med</td>
<td>519 to 527</td>
</tr>
<tr>
<td>50 to 60</td>
<td>Black, Lava, Med</td>
<td>519 to 527</td>
</tr>
<tr>
<td>60 to 70</td>
<td>Black, Lava, Med</td>
<td>519 to 527</td>
</tr>
<tr>
<td>70 to 80</td>
<td>Blue, Lava, Hard</td>
<td>519 to 527</td>
</tr>
<tr>
<td>80 to 90</td>
<td>Blue, Lava, Med</td>
<td>519 to 527</td>
</tr>
<tr>
<td>90 to 100</td>
<td>Brown to Black, Lava, Med</td>
<td>519 to 527</td>
</tr>
<tr>
<td>100 to 200</td>
<td>Black, Lava, Med</td>
<td>519 to 527</td>
</tr>
<tr>
<td>200 to 300</td>
<td>Blue, Lava, Med</td>
<td>519 to 527</td>
</tr>
<tr>
<td>300 to 400</td>
<td>Black, Lava, Med</td>
<td>519 to 527</td>
</tr>
<tr>
<td>400 to 500</td>
<td>Blue, Lava, Med</td>
<td>519 to 527</td>
</tr>
</tbody>
</table>
# DRILLER'S LOG:

<table>
<thead>
<tr>
<th>Depth, ft.</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 to 10.0</td>
<td>Brown Clay breccia lave</td>
<td></td>
</tr>
<tr>
<td>10.0 to 20.0</td>
<td>Blk. &amp; Bred. lave, Med.</td>
<td></td>
</tr>
<tr>
<td>20.0 to 40.0</td>
<td>Blue lave, hard</td>
<td></td>
</tr>
<tr>
<td>40.0 to 60.0</td>
<td>Blk + Red lave, Med.</td>
<td></td>
</tr>
<tr>
<td>60.0 to 80.0</td>
<td>Red + Black, cinders, soft</td>
<td></td>
</tr>
<tr>
<td>80.0 to 100.0</td>
<td>Black + Red lave, Med.</td>
<td></td>
</tr>
<tr>
<td>100.0 to 125.0</td>
<td>Black + Blue lave, Med.</td>
<td></td>
</tr>
<tr>
<td>125.0 to 218.0</td>
<td>Blue lave, hard</td>
<td></td>
</tr>
<tr>
<td>218.0 to 260.0</td>
<td>Blue + Blk lave, Med.</td>
<td></td>
</tr>
<tr>
<td>260.0 to 290.0</td>
<td>Blue lave, hard</td>
<td></td>
</tr>
<tr>
<td>290.0 to 345.0</td>
<td>Blk + Bred lave, Med.</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:**

<table>
<thead>
<tr>
<th>Depth, ft.</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>225.0 to 307.0</td>
<td>Blue lave, hard</td>
<td></td>
</tr>
<tr>
<td>307.0 to 313.0</td>
<td>Red cinders, soft</td>
<td></td>
</tr>
<tr>
<td>313.0 to 319.0</td>
<td>Blue lave, hard</td>
<td></td>
</tr>
<tr>
<td>319.0 to 335.0</td>
<td>Blk. &amp; Bred. lave, Med.</td>
<td></td>
</tr>
<tr>
<td>335.0 to 373.0</td>
<td>Blue lave, hard</td>
<td></td>
</tr>
<tr>
<td>373.0 to 375.0</td>
<td>Red cinders, soft</td>
<td></td>
</tr>
<tr>
<td>375.0 to 436.0</td>
<td>Blue lave, hard</td>
<td></td>
</tr>
<tr>
<td>436.0 to 462.0</td>
<td>Red cinders, soft</td>
<td></td>
</tr>
<tr>
<td>462.0 to 480.0</td>
<td>Blue lave, hard</td>
<td></td>
</tr>
<tr>
<td>480.0 to 536.0</td>
<td>Blk. &amp; Bred. lave, Med.</td>
<td></td>
</tr>
<tr>
<td>536.0 to 570.0</td>
<td>Blk. &amp; Bred. lave, Med.</td>
<td></td>
</tr>
</tbody>
</table>

**Submitted by (print):**

Bickey Franksen

**Signature:**

Bickey Franksen

**Title:** Driller

**Date:** 1-8-92
## WELL COMPLETION REPORT

### INSTRUCTIONS:
Please print or type and submit completed report within 30 days of well completion to the Division of Water & Land Development, P.O. Box 373, Honolulu, HI 96809. An as-built drawing of the well and chemical analysis, if available, should also be submitted. If necessary, phone 548-5143, Hydrology, Geology Section for assistance.

### A. STATE WELL NO. 4125-01-02  
WELL NAME: Irrigation Well #2  
LOCATION: Wailea Maui  
TAX MAP KEY: 2-1-08-56

### B. WELL OWNER:  
Maui 675 Ltd. Partnersho  
Members: Ray Partners

### C. DRILLING OR PUMP INSTALLATION CONTRACTOR:  
Paul Frandsen & Associates  
DRILLER: John Carroll

### D. RECOMMENDATION OF LAND AND NATURAL RESOURCES MANAGEMENT:

<table>
<thead>
<tr>
<th>Description</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### E. INITIAL USE:

- Irrigation
- Pump
- solar
- Hot water
- Other

### F. TOTAL DEPTH OF WELL BELOW GROUND:
529 ft

### G. HOLE SIZE:

<table>
<thead>
<tr>
<th>Diameter (inches)</th>
<th>Depth (feet)</th>
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</thead>
<tbody>
<tr>
<td>19</td>
<td>529</td>
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</tbody>
</table>

### H. INITIAL WATER LEVEL:

#### Initial Chloride

<table>
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<tr>
<th>Depth (ft)</th>
<th>Chloride (mg/L)</th>
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<tr>
<td>0</td>
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### I. GROUND ELEVATION:

- Top of Drilling Platform (m.a.s.l.): 519 ft
- Height of drilling platform above ground surface: 519 ft
- Bench mark and method used to determine ground elevation: 519 ft

### J. CASING INSTALLED:

- Type: 10 in. I.D. x 3/4 in. wall solid section to 529 ft below ground
- Type: 10 in. I.D. x 3/4 in. well perforated section to 529 ft below ground

### K. ANNUAL:

- Grouted from 0 ft to 300 ft below ground
- Gravel packed from 300 ft to 529 ft below ground

### L. PERMANENT PUMP INSTALLATION:

- Pump type, make, serial No., type:
- Motor type, H.P., voltage, r.p.m., size:
- Depth of pump intake setting:
- Depth of bottom of discharge:
- which elevation is:

### M. PROPOSED USE:

- Irrigation
- Pump
- solar
- Hot water
- Other

### N. INITIAL WATER LEVEL:

- Date and time of measurement: 11-25-91 12:00 noon
- Date and time of sampling: 11-25-91 12:00 noon

### O. PUMPING TESTS:

<table>
<thead>
<tr>
<th>Date</th>
<th>Start water level (ft. below R. P.)</th>
<th>End water level (ft. below R. P.)</th>
<th>Depth of well (ft. below R. P.)</th>
<th>Rate of Drawdown (ft. per day)</th>
<th>Rate of Drawdown (ft. per day)</th>
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<td>11-09 4:00</td>
<td>11-09 10:00</td>
<td>11-09 10:00</td>
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<td>11-09 10:00</td>
<td>11-09 10:00</td>
<td>11-09 10:00</td>
<td>11-09 10:00</td>
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<td>11-09 10:00</td>
<td>11-09 10:00</td>
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<td>11-09 10:00</td>
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### O. FLOW testers:

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<th>Date</th>
<th>Start water level (ft. below R. P.)</th>
<th>End water level (ft. below R. P.)</th>
<th>Depth of well (ft. below R. P.)</th>
<th>Rate of Drawdown (ft. per day)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1/25/91</td>
<td>11-09 4:00</td>
<td>11-09 10:00</td>
<td>11-09 10:00</td>
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<td>11-09 10:00</td>
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<td>11-09 10:00</td>
<td>11-09 10:00</td>
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<td>11-09 10:00</td>
<td>11-09 10:00</td>
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### O. DRILLER'S LOG:

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level (ft)</th>
<th>Depth (ft)</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level (ft)</th>
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</thead>
<tbody>
<tr>
<td>0</td>
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<tr>
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<td>307</td>
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<tr>
<td>20</td>
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<td>Blue Lava, Hard</td>
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<tr>
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<td></td>
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</table>

### O. REMARKS:

- remarks:

### Submitted by (print):

Rickey Frandsen  
Tittle: Driller

Signature: Rickey Frandsen  
Date: 1-8-92
The first irrigation well (4125-01) in the upper Wailea property (Palauea Partners) was completed a year ago and a final report on drilling and testing was submitted on June 3, 1991. Two wells are planned for golf course irrigation, but eventually treated wastewater will become the chief source for irrigation.

The June 3 report discussed the potential interference with and deleterious effects on the down gradient Wailea Resort wells that might ensue some years after the upper wells are put on stream. This memorandum is limited to the performance of the second well during the pump test. The well lies about 300 feet from the first well at about the same elevation and was drilled through similar geological formations.

Well 4125-02 is as successful and as potentially productive as well 4125-01. At a steady pumping rate of 420 gpm the drawdown hovered around 1.6 feet and specific conductivity settled at 735 mmhos/cm, somewhat less than what was encountered at the first well. At higher pump rates the salinity would rise appreciably.
The well was pumped continuously for 96 hours. Static water level is given by the driller as 3.7 feet. The expected head should be between 2.5 and 3.5 feet. A better measurement will have to be taken at some time.

A brief summary of essential test data follows. The Driller Well Completion Report along with copies of the driller's stratigraphic log and pump test results are included as an appendix. An accompanying map shows the location of the wells.

**Well Construction Information**

1. Ground elevation = 519.18 ft.
   
   Measuring Point elevation = 523.45 ft. (top of pipe)
2. Static water level = 519.6 ft. Head = 3.7 ft. (per driller)
3. Total depth drilling = 550 ft.
4. Diameter boring = 17 in.
5. Diameter casing = 10 in.
7. Diameter screen = 10 in.
8. Length screen = 20 ft.
9. Depth grout = 0 to 200 ft.
10. Rock pack = 200 to 550 ft.
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7. Length casing = 529 ft.
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9. Length screen = 20 ft.
10. Depth grout = 0 to 200 ft.
11. Rock pack = 200 to 550 ft.
February 24, 1992

Mr. Ed Sakoda  
Division of Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  
1151 Punchbowl  
Honolulu, HI 96813

Dear Ed,

Subject: Pump Test Results for Well No. 4125-02

This is a follow up on my letter of December 22, 1990, a subsequent telecon with you on April 21, 1991, and my May 1991 letter confirming our conversation on the testing of irrigation wells by McCormack Properties in Kihei. The above listed well is the second, and last, test well.

As you may recall I live in Maui Meadows (Kihei) adjacent to the Ulapalakua Ranch on which these wells were drilled. The Tax Map Key is 2-1-18-11. McCormack Properties, a Limited Partnership, is drilling the wells for the purpose of proving up a brackish water supply for a major golf course and luxury resort development.

So far one well has been drilled and tested and I received the test results, thank you. The second well was completed in November 1991. In my letter to your office of December 22, 1990, I requested a copy of the drilling and testing information as soon as it is received by you, including the driller's log and the field notes on the pump tests as well as the hydrologist's report. Deputy Director Tagomori in his response of January 8, 1991, indicated that I would receive the information when it was filed.

Please provide me with the requested information for the subject well as soon as possible.

Very truly yours

James V. Williamson  
P.E. 5370
# Pump Test data Summary

**Well 2  State no. 4125-02**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Hrs.</th>
<th>Rate (gpm)</th>
<th>DrDn (ft)</th>
<th>Sp. Con. (mmho/cm)</th>
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</thead>
<tbody>
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<td>11/25/91</td>
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<td>0</td>
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<td>700</td>
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<td>735</td>
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<tr>
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</table>

Note: All of above data provided by driller.
APPENDIX
Pump Test data Summary

Well 2  State no. 4125-02

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Hrs.</th>
<th>Rate</th>
<th>DrDn</th>
<th>Sp.Con.</th>
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<td>1</td>
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</tr>
</tbody>
</table>

Note: All of above data provided by driller.
APPENDIX
WAILEA 670
Well #2
Well Drilling Log

Elevation:
Top of pipe..........................+523.45 ft.
Cement pad..........................+519.18 ft.
Static water level....................+3.70 ft.
Total depth of hole...................550 ft.

Contractor:
Paul Frandsen & Associates
848 7th. ave.
Honolulu, HI. 96816
Ph. 737-3371

Formation Log:
0-10....................................Brown clay & broken Black lava.
10-30...................................Black & brown lava, Med. hard.
30-42..................................Blue lava, very hard.
42-60..................................Black & red lava, med. hard.
60-70..................................Red & black cinders, soft.
70-100.................................Black & red lava, med. hard.
100-125..............................Blue lava, hard.
125-207...............................Black & red lava, med. hard.
207-218...............................Blue lava, hard.
218-235...............................Black & brown lava, med. hard.
235-245...............................Black & red cinders, soft.
245-260...............................Black & brown lava, med. hard.
260-280...............................Blue lava, hard.
280-295...............................Black & brown lava, med. hard.
295-307...............................Blue lava, hard.
307-312...............................Red cinders, soft.
312-319...............................Blue lava, hard.
319-355...............................Black & brown lava, med. hard.
355-373...............................Blue lava, hard.
373-395...............................Red cinders, soft.
395-401...............................Blue lava, hard.
401-417...............................Red cinders, soft.
417-436...............................Blue lava, hard.
436-442...............................Red cinders, soft.
442-460...............................Blue lava, hard.
460-518...............................Black & brown lava, med. hard.
518-526...............................Blue lava, hard.
526-536................................Red & Black Cinders, soft.
536-550...............................Black & brown lava, med. hard.
Wailea 670 Well #2 Test pump inst. data

E.Lv. +519.18

Ground Level

519.6

530'528'7

Static Water level ±

Bottom of air line

Pump inlet

Bottom of hole
WAILEA 670
Well #2
Well Drilling Log

**Elevation:**
- Top of pipe: 523.45 ft.
- Cement pad: 519.18 ft.
- Static water level: 3.70 ft.
- Total depth of hole: 550 ft.

**Contractor:**
Paul Frandsen & Associates
848 7th. ave.
Honolulu, HI. 96816
Ph. 737-3371

**Formation Log:**

<table>
<thead>
<tr>
<th>Depth</th>
<th>Formation Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>Brown clay &amp; broken Black lava.</td>
</tr>
<tr>
<td>10-30</td>
<td>Black &amp; brown lava, Med. hard.</td>
</tr>
<tr>
<td>30-42</td>
<td>Blue lava, very hard.</td>
</tr>
<tr>
<td>42-60</td>
<td>Black &amp; red lava, med. hard.</td>
</tr>
<tr>
<td>60-70</td>
<td>Red &amp; black cinders, soft.</td>
</tr>
<tr>
<td>70-100</td>
<td>Black &amp; red lava, med. hard.</td>
</tr>
<tr>
<td>100-125</td>
<td>Blue lava, hard.</td>
</tr>
<tr>
<td>125-207</td>
<td>Black &amp; red lava, med. hard</td>
</tr>
<tr>
<td>207-218</td>
<td>Blue lava, hard.</td>
</tr>
<tr>
<td>218-235</td>
<td>Black &amp; brown lava, med. hard.</td>
</tr>
<tr>
<td>235-245</td>
<td>Black &amp; red cinders, soft.</td>
</tr>
<tr>
<td>245-260</td>
<td>Black &amp; brown lava, med. hard.</td>
</tr>
<tr>
<td>260-280</td>
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<tr>
<td>280-295</td>
<td>Black &amp; brown lava, med. hard.</td>
</tr>
<tr>
<td>295-307</td>
<td>Blue lava, hard.</td>
</tr>
<tr>
<td>307-312</td>
<td>Red cinders, soft.</td>
</tr>
<tr>
<td>312-355</td>
<td>Blue lava, hard.</td>
</tr>
<tr>
<td>355-373</td>
<td>Black &amp; brown lava, med. hard.</td>
</tr>
<tr>
<td>373-380</td>
<td>Red cinders, soft.</td>
</tr>
<tr>
<td>380-401</td>
<td>Blue lava, hard.</td>
</tr>
<tr>
<td>401-417</td>
<td>Red cinders, soft.</td>
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<td>417-436</td>
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<td>Red cinders, soft.</td>
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<tr>
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<td>Blue lava, hard.</td>
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<td>460-518</td>
<td>Black &amp; brown lava, med. hard.</td>
</tr>
<tr>
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<tr>
<td>526-536</td>
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<tr>
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<td>Black &amp; brown lava, med. hard.</td>
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</table>
Wailea 670 Well #2 Test pump inst. data

Elv. +519.18

Ground Level

550'

530' 528.7'

Static Water level ±

Bottom of air line
Pump inlet

Bottom of hole
Mr. Vince G. Bagoyo, Jr., Chair
Planning and Economic Development Committee
County Council, County of Maui
200 S. High Street
Wailuku, HI 96793

Dear Mr. Bagoyo:

We are responding to your letter of November 12, 1991, requesting information on State statutes or regulations regarding hours of drilling for water with reference to property at Tax Map Key: 2-1-08: 56 & 71.

There are two wells on TMK: 2-1-08: 56. The first well (Well No. 4125-01) was completed in January 1991 and the second well (Well No. 4125-02) is under construction.

The State Water Code and its administrative rules do not have any provisions concerning hours for drilling for water. For information about noise complaints from drilling as well as other construction-related activities, please call the Department of Health's Environmental Health Services Division, Noise and Radiation Branch, at 548-3075, on Oahu.

Please call me or Ed Sakoda at 587-0225 if you have any questions.

Sincerely,

MANABU TAGOMORI
Deputy Director

ES:fc
September 11, 1991

Peter Nottage
McCormack Properties, Ltd.
841 Davies Pacific Center
Penthouse
Honolulu, HI 96813

Dear Peter:

Thank you for sending us a copy of John Mink’s proposed scope of work, dated August 20, 1991. We are generally in support of the proposed scope, and would like to offer the following comments:

1. Our greatest concern is item number seven, dealing with mitigation of any short or long term detrimental effects on any existing uses of the aquifer. It would seem prudent to have programs in place capable of addressing those detrimental effects prior to substantial pumping upgradient. This area of the proposed scope will need to be explored and developed. Designed pumping and distribution capacity will also need to address mitigation.

2. The proposal addresses primarily the relationship between Palauea Partners (McCormack Properties, Ltd.) and Wailea. While Wailea may be the most likely to be impacted, it would probably be appropriate to include other existing users of the aquifer as well such as Seibu. Our testing and monitoring over the years does not preclude the possibility of a more lateral impact to the north or south, directly or indirectly.

3. Does item number three address data you are currently collecting? What sources of "available data" have been identified? Has compensation for obtaining existing data from others been discussed or considered?
4. We encourage you to implement Mr. Mink's proposal. We would suggest it is advisable for McCormack to establish their own independent monitoring program, rather than rely on the data being collected by Wailea's staff.

We look forward to working with your professional consultants on a long term basis and the continuation of our discussions.

Sincerely,

Clark K. Champion
Director, Property Management

CKC:ch

cc: Manabu Tagomori
    Howard Nakamura
    Roy Figueiroa
    Steve Bowles
    Bob Akinaka
Mr. Peter B. Nottage  
McCormack Properties, Ltd.  
Davies Pacific Center  
841 Bishop Street, Penthouse  
Honolulu, HI 96813

Dear Mr. Nottage:

Wailea-Palauea Partners Well (Well No. 4125-02)

This is to confirm that our meeting has been changed from August 8th to August 15th at 9:30 a.m. at Clark Champion's office at Wailea Resorts in Wailea.

I look forward to meeting with you on this matter.

Sincerely,

MANABU TAGOMORI  
Deputy Director

ES:bm
Mr. James V. Williamson  
Consulting Engineer  
672 Kumulani Drive  
Kihei, Hawaii 96753  

Dear Mr. Williamson:

Pump Test Results for Well No. 4125-01

Enclosed for your information are pump test results for the Wailea-Palauea Bay Partners Well No. 4125-01 as specified under Condition No. 5 of their Well Drilling Permit. We are aware that the second well is presently being drilled and will send you the pump test results as soon as they are made available.

Also enclosed are copies of the Well Completion Report and cross-section for Well No. 4527-08 (Kihei-Pillani Irrigation Well) identified by you as belonging to the "Baldwin Pacific" development.

If you have any questions please contact Ed Sakoda at 548-7643.

Sincerely,

[Signature]

MANABU TAGOMORI  
Deputy Director  

ES:bm  
Enc.
June 17, 1991

State of Hawaii Dept. of
Land and Natural Resources
Commission of Water Resource Management
P. O. Box 621
Honolulu, Hawaii 96809
Attn: Mr. Manabu Tagomori

Gentlemen:

RE: Wailea-Palauea Partners Well No. 4125-01

We submit herewith the Well Completion Report prepared by John F. Mink in accordance with Condition #5 of our Well Construction Permit.

For your information, Well #2 is under construction and no further delays are anticipated.

Respectfully submitted,

Peter B. Nottage

Davies Pacific Center • 841 Bishop Street • Penthouse • Honolulu, Hawaii 96813 • 808-539-9600 • FAX 808-531-2470
Wailea 670 Irrigation Well 1.
Drilling and Testing Results

John F. Mink
June 3, 1991

Two wells for the project titled Wailea 670 are planned for irrigation of golf courses on the southwestern slope of Haleakala in the elevation range 350 to 700 feet above sea level (see attached map). The first well has been successfully drilled and tested at 350 gpm. After four days of continuous pumping, the chloride content of the water was 320 mg/l. The second well is now being drilled.

Between the Wailea 670 property and the coast lies the Wailea Resort and its golf courses. Several of the wells which serve the golf courses are down gradient of Wailea 670. The Wailea wells are marginal but nevertheless yield water suitable for irrigation when the pumping operation is properly managed. After the Wailea 670 wells have been on-stream for several years, a possibility exists that salinity in the lower wells will increase.

Design and Construction of Well 1

Well 1 (State no. 4125-01) was completed in January, 1991. Basic data for the well is as follows (see also the attached Driller's Report):

2. Depth 559 ft. (-37 ft.).
3. Diameter of boring 14 in.
4. Diameter of casing 10 in.
5. Depth casing 0 - 549 ft.
6. Diameter screen 10 in.
7. Depth screen 549 - 559 ft.
8. Initial depth to water 519.5 ft, giving head of 2.8 ft. However, driller reports head of 1.43 ft.
Confidence of measurements is poor.

9. Depth cement grout 0 - 100 ft.

10. Depth rock pack 100-549 ft.

The driller log indicates that the Kula formation starts with a surficial 20 feet thick layer of soil and saprolite and grades into Honomanu basalt at a depth of about 70 feet. The log, however, is too general to be diagnostic. The aquifer in which the well ends consists of the Honomanu formation, the primary shield-building basalt underlying East Maui.

Pump Test

A brief step drawdown test in the uncased boring was made upon completion of drilling in January. Pumping rates ranged from 100 to 380 gpm, but the total pumping period was only 95 minutes. Drawdown adjusted quickly to pumping, stabilizing at 0.46 feet at a pump rate of 380 gpm. Maximum chloride content was 250 mg/l. The purpose of the test was to prove that the aquifer could be pumped so that a long continuous test could be conducted.

A continuous test at a sustained rate averaging 355 gpm was run for 96 hours starting March 4 and ending March 8, 1991. The results of the test are summarized in an attached table.

At about 350 gpm the well quickly stabilized with a drawdown of 0.46 to 0.69 feet (by airline). The difference between these values is due to the coarseness of the measuring method rather than a real increase in drawdown. The drawdown is too small and achieved too quickly to permit determination of aquifer parameters by well hydraulics. The aquifer obviously is highly transmissive.

Salinity of the pumped water was measured as specific conductivity, but the final sample was titrated for chloride content. The equation converting specific conductivity to chloride content is:

\[ Cl = 0.305 \times \text{sp.con.} - 50 \]

The titrated sample had a chloride of 320 mg/l for a specific conductivity of 1200. By the equation the chloride is 316
The salinity of the pumped water stabilized at 1010 micromhos (258 mg/l Cl) for three days, then rose to 1200 micromhos (320 Cl). At the design pumping rate of 350 gpm the well will provide high quality irrigation water.

The wells in lower Wailea are about twice as saline at pumping rates of 200 to 300 gpm. Well 4126-02 has chloride of about 600 mg/l, 4126-03 chloride of 650 mg/l and 4126-01 of about 750 mg/l.

A four day pump test can establish characteristics of the aquifer but is too short to have an effect on distant wells. The closest lower Wailea wells are 4500 feet away, and the velocity of groundwater in the basal lens is 5 to 10 ft/day. At the higher end of the velocity range it would take more than a year for groundwater at the new well site to arrive at the lower Wailea wells. Even then a four day pump test would not perturb the lens enough to cause measureable changes down gradient.

**Long Term Effects of Wailea 670 Wells on Lower Wailea Wells**

The flux in the basal lens probably falls between 2 and 3 mgd per mile of coast. This estimate is based on an approximation of the groundwater gradient employing heads for the Wailea 670 and lower Wailea wells along with an assumed value of hydraulic conductivity. Not all of the flux is available as sustainable yield, but more than half can be withdrawn for irrigation.

The future demand for lower Wailea is projected as 3 to 3.5 mgd, while for Wailea 670 the projected demand for two golf courses is 1 mgd. Total demand for the two areas will average 4.5 mgd along an equivalent shore line reach of three miles toward which a natural flux of 6 to 9 mgd moves. The demand as a fraction of flux probably corresponds to or somewhat exceeds sustainable yield. For these values of flux and demand, the lower Wailea wells are apt to suffer an increase in salinity over the long run, but the increase may not be great enough to eliminate the wells as sources of useable irrigation water. In fact, the lower Wailea wells are likely to experience quality deterioration more from the addition of new wells and increase in pumpage within the area than from the Wailea 670 wells.
In the future treated wastewater is expected to irrigate the Wailea 670 golf courses. When the conversion is made, groundwater pumpage will be reduced to the difference between irrigation demand and wastewater availability. Also, some of the applied irrigation will circulate to the aquifer, reducing the net draft. The net draft at Wailea 670 may drop to less than 0.5 mgd, at which rate the effects on the lower Wailea wells would be quite small and perhaps undetectable.

Conclusions

The drilling and testing of the first Wailea 670 well (4125-01) was successful. The aquifer was proven to be highly transmissive and to yield irrigation quality water. Salinity should stabilize at less than 400 mg/l chloride when the well is pumped continuously at 350 gpm.

The down gradient wells in lower Wailea were not affected by the pumping test in the short time allowed for monitoring. In the long run, after lower Wailea increases its average draft to 3 to 3.5 mgd and the wailea 670 wells are on stream at 1 mgd, an increase in salinity at the lower wells may be experienced. However, the higher salinity is not likely to exceed the level acceptable for irrigation.

The use of wastewater by Wailea 670 for irrigation will have a salutory effect on the quality of groundwater in the aquifer through reducing net draft and contributing low salinity recharge by way of return irrigation.
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<th>SpCon (mmho)</th>
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<td>1200</td>
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</table>
**WELL COMPLETION REPORT**

**STATE WELL NO.**: 4125-01-02  
**WELL NAME**: Irrigation Well  
**ISLAND**: Maui  
**LOCATION**: Maui, HI  
**TAX MAP KEY**: 2-1-08:56  
**WELL OWNER**: Maui 670 Ltd., Partnership & Palauea Bay Partners  
**DRILLING OR PUMP INSTALLATION CONTRACTOR**: Paul Frandson & Associates  
**TYPE OF RIG**: Rotary  
**DATE OF WELL COMPLETION**: 1/91  
**DATE OF PUMP INSTALLATION**:  

**GROUND ELEVATION (m.t.)**: 522.25 ft.  
**Top of Drilling Platform (Tdp)**:  
**Height of drilling platform above ground surface**: ft.  
**Bench mark and method used to determine ground elevation**: ft. (Certified Surveyor)  
**TOTAL DEPTH OF WELL BELOW GROUND**: 599 ft.  
**HOLE SIZE**: 14 in. dia. from 0 ft. to 530 ft. below ground  
**Casing Installed**:  
- **10 in. I.D. x 421 in. wall sold section to 560 ft. below ground**  
- **10 in. I.D. x 321 in. wall perforated section to 559 ft. below ground**  
**Type of perforation**:  

**ANNUAL**:
- **Grouted from 0 ft. to 100 ft. below ground**  
- **Gravel packed from 100 ft. to 400 ft. below ground**  

**PERMANENT PUMP INSTALLATION**:
- **Pump type, make, serial No.** Capacity ppm:  
- **Motor type, H.P., voltage, r.p.m.**  
- **Depth of pump intake setting**: ft. below which elevation is ft.  
- **Depth of bottom of sump**: ft. below which elevation is ft.  

**PROPOSED USE**: Irrigation  

**INITIAL WATER LEVEL**: 319.5 ft. below ground.  
**Date and time of measurement**:  
**INITIAL CHLORIDE**: ppm.  
**Date and time of sampling**:  

**PUMPING TESTS**: Reference point (R.P.) used: which elevation is ft.  
**Date**: March 8, 1991  
**Start water level**: ft. below R. P.  
**End water level**: ft. below R. P.  
**Depth of well**: ft. below R. P.  
**Elapsed Time (hours)**
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<th>Rate Draw Down (ft.) (ppm)</th>
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**DRILLER'S LOG**:

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<th>Depth, ft.</th>
<th>Rock Description &amp; Remarks</th>
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**REMARKS**:  

Submitted by: Rhonda Beak  
Title: Office Mgr.  
Date: 3/20/91  
Signature: Rhonda Beak
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WAILEA 670
Drilling and Testing of Second Well (4125-02)

John F. Mink
February 10, 1992

The first irrigation well (4125-01) in the upper Wailea property (Palauea Partners) was completed a year ago and a final report on drilling and testing was submitted on June 3, 1991. Two wells are planned for golf course irrigation, but eventually treated wastewater will become the chief source for irrigation.

The June 3 report discussed the potential interference with and deleterious effects on the down gradient Wailea Resort wells that might ensue some years after the upper wells are put on stream. This memorandum is limited to the performance of the second well during the pump test. The well lies about 300 feet from the first well at about the same elevation and was drilled through similar geological formations.

Well 4125-02 is as successful and as potentially productive as well 4125-01. At a steady pumping rate of 420 gpm the drawdown hovered around 1.6 feet and specific conductivity settled at 735 mmhos/cm, somewhat less than what was encountered at the first well. At higher pump rates the salinity would rise appreciably.
The well was pumped continuously for 96 hours. Static water level is given by the driller as 3.7 feet. The expected head should be between 2.5 and 3.5 feet. A better measurement will have to be taken at some time.

A brief summary of essential test data follows. The Driller Well Completion Report along with copies of the driller's stratigraphic log and pump test results are included as an appendix. An accompanying map shows the location of the wells.

Well Construction Information

1. Ground elevation = 519.18 ft.
   Measuring Point elevation = 523.45 ft. (top of pipe)
2. Static water level = 519.6 ft. Head = 3.7 ft. (per driller)
3. Total depth drilling = 550 ft.
4. Diameter boring = 17 in.
5. Diameter casing = 10 in.
7. Diameter screen = 10 in.
8. Length screen = 20 ft.
9. Depth grout = 0 to 200 ft.
10. Rock pack = 200 to 550 ft.
Pump Test data Summary

Well 2  State no. 4125-02

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<th>Time</th>
<th>Hrs.</th>
<th>Rate</th>
<th>DrDn</th>
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Note: All of above data provided by driller.
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
Division of Water Resource Management

WELL COMPLETION REPORT

INSTRUCTIONS: Please print or type and submit completed report within 30 days of well completion to the
Division of Water & Land Development, P.O. Box 373, Honolulu, HI 96809. An as-built drawing of the well and
chemical analyses, if available, should also be submitted. If necessary, phone 548-1543, Hydrology, Geology
Section for assistance.

A. STATE WELL NO. 4425-01-02
   WELL NAME Irrigation Well #2
   ISLAND Maui

B. LOCATION Wailea, Maui
   TAX MAP KEY 2-1-28.54

C. WELL OWNER Maui Irrigation Co. LTD.
   Partners: Putna, Bay, Partners

D. DRILLING OR PUMP INSTALLATION CONTRACTOR
   Paul Gandson & Associates
   DRILLER John Carroll

E. TYPE OF RIG

F. DATE OF WELL COMPLETION 12-27-91
   DATE OF PUMP INSTALLATION

G. GROUND ELEVATION (masl) 519.18 ft.
   Top of Drilling Platform (masl) __ ft.
   Height of drilling platform above ground surface __ ft.
   Bench mark used to determine ground elevation __ ft.

H. TOTAL DEPTH OF WELL BELOW GROUND 549 ft.

I. HOLE SIZE: __ in. I.D. dia. from __ ft. to __ ft. below ground
   __ in. I.D. dia. from __ ft. to __ ft. below ground
   __ in. I.D. dia. from __ ft. to __ ft. below ground

J. CASING INSTALLED:
   __ in. I.D. x __ ft. solid to __ ft. below ground
   __ in. I.D. x __ ft. perforated to __ ft. below ground
   Type of perforation __

K. ANNULUS:
   Grouted from __ ft. to __ ft. below ground
   Gravel packed from __ ft. to __ ft. below ground

L. PERMANENT PUMP INSTALLATION:
   Pump type, make, serial No. __
   Motor type, H.P., voltage, r.p.m. __
   Depth of pump intake setting __ ft. below __
   Depth of bottom of siphon __ ft. below __
   Which elevation is __ ft.
   Which elevation is __ ft.

M. PROPOSED USE __
   Date and time of measurement __

N. INITIAL WATER LEVEL __ ft. below ground.
   Date and time of sampling __

O. INITIAL CHLORIDE ppm __
   Date and time of sampling __

P. PUMPING TESTS: Reference point (R.P.) used: __
   Date __
   Start water level __ ft. below R.P.
   End water level __ ft. below R.P.
   Depth of well __ ft. below R.P.
   Depth of water __ ft. below R.P.
   Elapsed Time (hours) __
   Rate Drawn down (ft.) __
   Temp. __
   Chloride (ppm) __
   Depth (ft.) __
   Temp. __
   Rate Drawn down (ft.) __
   Temp. __
   Chloride (ppm) __

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Wailea 670 Well #2 Test pump inst. data

Elv. t519.18

Ground Level

530' 528.7

519.6

Static Water level

Bottom of air line

Pump Inlet

Bottom of hole
WAILEA 670
Well #2
Well Drilling Log

Elevation:
Top of pipe .................................. -523.45 ft.
Cement pad .................................. -519.18 ft.
Static water level .......................... -3.70 ft.
Total depth of hole ......................... 550 ft.

Contractor:
Paul Frandsen & Associates
848 7th. ave.
Honolulu, HI. 96816
Ph. 737-3371

Formation Log:
0-10.............................................. Brown clay & broken Black lava.
10-30.............................................. Black & brown lava, Med. hard.
30-42.............................................. Blue lava, very hard.
42-60.............................................. Black & red lava, med. hard.
60-70.............................................. Red & black cinders, soft.
70-100.......................................... Black & red lava, med. hard.
100-125........................................... Blue lava, hard.
125-207........................................... Black & red lava, med. hard.
207-218........................................... Blue lava, hard.
218-235........................................... Black & brown lava, med. hard.
235-245........................................... Black & red cinders, soft.
245-260........................................... Black & brown lava, med. hard.
260-280........................................... Blue lava, hard.
280-295........................................... Black & brown lava, med. hard.
295-307........................................... Blue lava, hard.
307-312........................................... Red cinders, soft.
312-319........................................... Blue lava, hard.
319-355........................................... Black & brown lava, med. hard.
355-373........................................... Blue lava, hard.
373-395........................................... Red cinders, soft.
395-401........................................... Blue lava, hard.
401-417........................................... Red cinders, soft.
417-436........................................... Blue lava, hard.
436-442........................................... Red cinders, soft.
442-460........................................... Blue lava, hard.
460-518........................................... Black & brown lava, med. hard.
518-526........................................... Blue lava, hard.
526-536........................................... Red & Black Cinders, soft.
536-550........................................... Black & brown lava, med. hard.
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**WAILEA 670 - WELL #2 PUMP TEST RESULTS**

End long term Pump Test

Recovery
Mr. James V. Williamson  
Consulting Engineer  
672 Kumulani Drive  
Kihei, Maui, HI 96753  

Dear Mr. Williamson:

Pump Test Results for Well No. 4125-02

Attached for your information and use is a copy of Mr. John Mink's report for the drilling and test pumping of the second Palauena Bay Partners Well (4125-02).

If you have any questions, please contact George Matsumoto at 587-0216.

Sincerely,

RAE M. LOUI  
Deputy Director

GB:ky  
Encl.
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Formerly called Wailea-Palaua 1
Wailea 670 Irrigation Well 1.
Drilling and Testing Results

John F. Mink
June 3, 1991

Two wells for the project titled Wailea 670 are planned for irrigation of golf courses on the southwestern slope of Haleakala in the elevation range 350 to 700 feet above sea level (see attached map). The first well has been successfully drilled and tested at 350 gpm. After four days of continuous pumping, the chloride content of the water was 320 mg/l. The second well is now being drilled.

Between the Wailea 670 property and the coast lies the Wailea Resort and its golf courses. Several of the wells which serve the golf courses are down gradient of Wailea 670. The Wailea wells are marginal but nevertheless yield water suitable for irrigation when the pumping operation is properly managed. After the Wailea 670 wells have been on-stream for several years, a possibility exists that salinity in the lower wells will increase.

Design and Construction of Well 1

Well 1 (State no. 4125-01) was completed in January, 1991. Basic data for the well is as follows (see also the attached Driller’s Report):


2. Depth 559 ft. (-37 ft.).

3. Diameter of boring 14 in.

4. Diameter of casing 10 in.

5. Depth casing 0 - 549 ft.

6. Diameter screen 10 in.

7. Depth screen 549 - 559 ft.

8. Initial depth to water 519.5 ft, giving head of 2.8 ft. However, driller reports head of 1.43 ft.
Confidence of measurements is poor.

9. Depth cement grout 0 - 100 ft.

10. Depth rock pack 100-549 ft.

The driller log indicates that the Kula formation starts with a surficial 20 feet thick layer of soil and saprolite and grades into Honomanu basalt at a depth of about 70 feet. The log, however, is too general to be diagnostic. The aquifer in which the well ends consists of the Honomanu formation, the primary shield-building basalt underlying East Maui.

Pump Test

A brief step drawdown test in the uncased boring was made upon completion of drilling in January. Pumping rates ranged from 100 to 380 gpm, but the total pumping period was only 95 minutes. Drawdown adjusted quickly to pumping, stabilizing at 0.46 feet at a pump rate of 380 gpm. Maximum chloride content was 250 mg/l. The purpose of the test was to prove that the aquifer could be pumped so that a long continuous test could be conducted.

A continuous test at a sustained rate averaging 355 gpm was run for 96 hours starting March 4 and ending March 8, 1991. The results of the test are summarized in an attached table.

At about 350 gpm the well quickly stabilized with a drawdown of 0.46 to 0.69 feet (by airline). The difference between these values is due to the coarseness of the measuring method rather than a real increase in drawdown. The drawdown is too small and achieved too quickly to permit determination of aquifer parameters by well hydraulics. The aquifer obviously is highly transmissive.

Salinity of the pumped water was measured as specific conductivity, but the final sample was titrated for chloride content. The equation converting specific conductivity to chloride content is:

\[ \text{Cl} = 0.305 \times \text{sp. con.} - 50 \]

The titrated sample had a chloride of 320 mg/l for a specific conductivity of 1200. By the equation the chloride is 316
mg/l.

The salinity of the pumped water stabilized at 1010 micromhos (258 mg/l Cl) for three days, then rose to 1200 micromhos (320 Cl). At the design pumping rate of 350 gpm the well will provide high quality irrigation water.

The wells in lower Wailea are about twice as saline at pumping rates of 200 to 300 gpm. Well 4126-02 has chloride of about 600 mg/l, 4126-03 chloride of 650 mg/l and 4126-01 of about 750 mg/l.

A four day pump test can establish characteristics of the aquifer but is too short to have an effect on distant wells. The closest lower Wailea wells are 4500 feet away, and the velocity of groundwater in the basal lens is 5 to 10 ft/day. At the higher end of the velocity range it would take more than a year for groundwater at the new well site to arrive at the lower Wailea wells. Even then a four day pump test would not perturb the lens enough to cause measureable changes down gradient.

**Long Term Effects of Wailea 670 Wells on Lower Wailea Wells**

The flux in the basal lens probably falls between 2 and 3 mgd per mile of coast. This estimate is based on an approximation of the groundwater gradient employing heads for the Wailea 670 and lower Wailea wells along with an assumed value of hydraulic conductivity. Not all of the flux is available as sustainable yield, but more than half can be withdrawn for irrigation.

The future demand for lower Wailea is projected as 3 to 3.5 mgd, while for Wailea 670 the projected demand for two golf courses is 1 mgd. Total demand for the two areas will average 4.5 mgd along an equivalent shore line reach of three miles toward which a natural flux of 6 to 9 mgd moves. The demand as a fraction of flux probably corresponds to or somewhat exceeds sustainable yield. For these values of flux and demand, the lower Wailea wells are apt to suffer an increase in salinity over the long run, but the increase may not be great enough to eliminate the wells as sources of useable irrigation water. In fact, the lower Wailea wells are likely to experience quality deterioration more from the addition of new wells and increase in pumpage within the area than from the Wailea 670 wells.
In the future treated wastewater is expected to irrigate the Wailea 670 golf courses. When the conversion is made, groundwater pumpage will be reduced to the difference between irrigation demand and wastewater availability. Also, some of the applied irrigation will circulate to the aquifer, reducing the net draft. The net draft at Wailea 670 may drop to less than 0.5 mgd, at which rate the effects on the lower Wailea wells would be quite small and perhaps undetectable.

Conclusions

The drilling and testing of the first Wailea 670 well (4125-01) was successful. The aquifer was proven to be highly transmissive and to yield irrigation quality water. Salinity should stabilize at less than 400 mg/l chloride when the well is pumped continuously at 350 gpm.

The down gradient wells in lower Wailea were not affected by the pumping test in the short time allowed for monitoring. In the long run, after lower Wailea increases its average draft to 3 to 3.5 mgd and the Wailea 670 wells are on stream at 1 mgd, an increase in salinity at the lower wells may be experienced. However, the higher salinity is not likely to exceed the level acceptable for irrigation.

The use of wastewater by Wailea 670 for irrigation will have a salutory effect on the quality of groundwater in the aquifer through reducing net draft and contributing low salinity recharge by way of return irrigation.
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APPENDIX
WELL COMPLETION REPORT

INSTRUCTIONS: Please print or type and submit completed report within 30 days of well completion to the Division of Water & Land Conservation, P.O. Box 312, Honolulu, HI 96810. An as-built drawing of the well and chemical analysis, if available, should also be submitted. If necessary, phone 548-7145, Hydrology, Geology Section for assistance.

A. STATE WELL NO. 4175-01.07 WELL NAME Irrigation Well ISLAND Maui

B. LOCATION Waialea, Maui TAX MAP KEY 2-1-08:56

C. WELL OWNER Maui 670 Ltd. Partnership & Palaua Bay Partners

D. DRILLING OR PUMP INSTALLATION CONTRACTOR Paul Frandsen & Associates

E. TYPE OF RIG Rotary DRILLER Miles Frandsen

F. DATE OF WELL COMPLETION 1/91 DATE OF PUMP INSTALLATION

G. GROUND ELEVATION (m.a.s.l.) 532.26 ft. Height of drilling platform above ground surface 110 ft. Bench mark and method used to determine ground elevation n. Certified Surveyor

H. TOTAL DEPTH OF WELL BELOW GROUND 559 ft.

I. HOLE SIZE: 14 inch dia. from 0 ft. to 539 ft. below ground 12 inch dia. from 539 ft. to 559 ft. below ground

J. CASING INSTALLED: 10 in. I.D. x 32 in. wall solid section to 540 ft. below ground 10 in. I.D. x 32 in. well perforated section to 559 ft. below ground

K. ANNULUS: Grouted from 0 ft. to 100 ft. below ground Gravel packed from 100 ft. to 459 ft. below ground

L. PERMANENT PUMP INSTALLATION: Capacity pump

M. PROPOSED USE Irrigation

N. INITIAL WATER LEVEL 319 ft. below ground. Date and time of measurement

O. INITIAL CHLORIDE ppm Date and time of sampling

P. PUMPING TESTS: Reference point (R.P.) used: which elevation is ft.

DRILLER'S LOG:

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<th>Water Level, ft.</th>
<th>Depth, ft.</th>
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REMARKS: manslaughter by (print) Rhonda Bear

Date: 5/20/91

Title Office Mgr.

nature Rhonda Bear

482-490 red black broken
490-520 red black broken
520-530 red black broken (520.5 hit)
530-543 red black broken water
543-548 black lava

482-490 red black broken
490-520 red black broken
520-530 red black broken (520.5 hit)
530-543 red black broken water
543-548 black lava
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**End of 4th day:**

**Notes:**
- **72 hours:** Police came out at 4:58 to answer complaints from neighbors.
- **3-8-91:**
DIVISION OF WATER RESOURCE MANAGEMENT

FROM: [Signature]  DATE: 6/8  FILE IN: 6-4125-01

TO: INITIAL: PLEASE: REMARKS:

- G. AKITA ✔️  See Me
- L. Nanbu  Take Action By
- E. Sakoda  Route to Your Branch
- G. Matsumoto  Review & Comment
- E. Lau  Draft Reply
- L. Chang  Acknowledge Receipt
- Y. Shiroma  Xerox copies
-  File
-  Mail
- [Signature]

FOR YOUR:

- Approval
- Signature
- Information

M. TAGOMORI
S. Kokubun

4528-08
4426-03
4426-08?

See me - do we have phone? If not, get it.
Mr. Ed Sakoda
Division of Water Resource Management
Department of Land and Natural Resources
State of Hawaii
1151 Punchbowl
Honolulu, HI 96813

Dear Ed,

Subject: Irrigation Well Test Results

This is a follow up on my letter of December 22, 1990, a subsequent telecon with you on April 21, and my letter confirming our conversation sent in May, on the above subject.

I live in Maui Meadows (Kihei) adjacent to the Ulapalakua Ranch. The Tax Map Key is 2-1-18-11. Maui 670, a Limited Partnership, is drilling test wells adjacent to my property for the purpose of proving up a brackish water supply for a major golf course and luxury resort development.

So far one well has been drilled and tested (several months ago). Another well is now being drilled in the same vicinity. In my letter to your office of December 22, 1991, I requested a copy of the drilling and testing information as soon as it is received by you, including the driller's log and the field notes on the pump tests as well as the hydrologist's report. Deputy Director Tagomori in his response of January 8, 1991, indicated that I would receive the information when it was filed.

In our telecon of April 21, 1991, you indicated that you would send me the information for the first Wailea 670 well. In addition I requested similar information on the well recently drilled by Baldwin Pacific development makai of Piilani highway adjacent to the Kihei elementary school, and also the well drilled by the Silversword golf course makau of Piilani Highway close to Lipoa Street. To date I have received no reply to my requests.

Please provide me with the requested information as soon as possible.

Very truly yours

James V. Williamson
P.E. 5370
Wailea 670 Irrigation Well 1. Drilling and Testing Results

John F. Mink
June 3, 1991

Two wells for the project titled Wailea 670 are planned for irrigation of golf courses on the southwestern slope of Haleakala in the elevation range 350 to 700 feet above sea level (see attached map). The first well has been successfully drilled and tested at 350 gpm. After four days of continuous pumping, the chloride content of the water was 320 mg/l. The second well is now being drilled.

Between the Wailea 670 property and the coast lies the Wailea Resort and its golf courses. Several of the wells which serve the golf courses are down gradient of Wailea 670. The Wailea wells are marginal but nevertheless yield water suitable for irrigation when the pumping operation is properly managed. After the Wailea 670 wells have been on-stream for several years, a possibility exists that salinity in the lower wells will increase.

Design and Construction of Well 1

Well 1 (State no. 4125-01) was completed in January, 1991. Basic data for the well is as follows (see also the attached Driller's Report):

2. Depth 559 ft. (-37 ft.).
3. Diameter of boring 14 in.
4. Diameter of casing 10 in.
5. Depth casing 0 - 549 ft.
6. Diameter screen 10 in.
7. Depth screen 549 - 559 ft.
8. Initial depth to water 519.5 ft, giving head of 2.8 ft. However, driller reports head of 1.43 ft.
Confidence of measurements is poor.

9. Depth cement grout 0 - 100 ft.

10. Depth rock pack 100-549 ft.

The driller log indicates that the Kula formation starts with a surficial 20 feet thick layer of soil and saprolite and grades into Honomanu basalt at a depth of about 70 feet. The log, however, is too general to be diagnostic. The aquifer in which the well ends consists of the Honomanu formation, the primary shield-building basalt underlying East Maui.

**Pump Test**

A brief step drawdown test in the uncased boring was made upon completion of drilling in January. Pumping rates ranged from 100 to 380 gpm, but the total pumping period was only 95 minutes. Drawdown adjusted quickly to pumping, stabilizing at 0.46 feet at a pump rate of 380 gpm. Maximum chloride content was 250 mg/l. The purpose of the test was to prove that the aquifer could be pumped so that a long continuous test could be conducted.

A continuous test at a sustained rate averaging 355 gpm was run for 96 hours starting March 4 and ending March 8, 1991. The results of the test are summarized in an attached table.

At about 350 gpm the well quickly stabilized with a drawdown of 0.46 to 0.69 feet (by airline). The difference between these values is due to the coarseness of the measuring method rather than a real increase in drawdown. The drawdown is too small and achieved too quickly to permit determination of aquifer parameters by well hydraulics. The aquifer obviously is highly transmissive.

Salinity of the pumped water was measured as specific conductivity, but the final sample was titrated for chloride content. The equation converting specific conductivity to chloride content is:

\[ Cl = 0.305 \times \text{sp.con.} - 50 \]

The titrated sample had a chloride of 320 mg/l for a specific conductivity of 1200. By the equation the chloride is 316
mg/l.

The salinity of the pumped water stabilized at 1010 micromhos (258 mg/l Cl) for three days, then rose to 1200 micromhos (320 Cl). At the design pumping rate of 350 gpm the well will provide high quality irrigation water.

The wells in lower Wailea are about twice as saline at pumping rates of 200 to 300 gpm. Well 4126-02 has chloride of about 600 mg/l, 4126-03 chloride of 650 mg/l and 4126-01 of about 750 mg/l.

A four day pump test can establish characteristics of the aquifer but is too short to have an effect on distant wells. The closest lower Wailea wells are 4500 feet away, and the velocity of groundwater in the basal lens is 5 to 10 ft/day. At the higher end of the velocity range it would take more than a year for groundwater at the new well site to arrive at the lower Wailea wells. Even then a four day pump test would not perturb the lens enough to cause measureable changes down gradient.

**Long Term Effects of Wailea 670 Wells on Lower Wailea Wells**

The flux in the basal lens probably falls between 2 and 3 mgd per mile of coast. This estimate is based on an approximation of the groundwater gradient employing heads for the Wailea 670 and lower Wailea wells along with an assumed value of hydraulic conductivity. Not all of the flux is available as sustainable yield, but more than half can be withdrawn for irrigation.

The future demand for lower Wailea is projected as 3 to 3.5 mgd, while for Wailea 670 the projected demand for two golf courses is 1 mgd. Total demand for the two areas will average 4.5 mgd along an equivalent shore line reach of three miles toward which a natural flux of 6 to 9 mgd moves. The demand as a fraction of flux probably corresponds to or somewhat exceeds sustainable yield. For these values of flux and demand, the lower Wailea wells are apt to suffer an increase in salinity over the long run, but the increase may not be great enough to eliminate the wells as sources of useable irrigation water. In fact, the lower Wailea wells are likely to experience quality deterioration more from the addition of new wells and increase in pumpage within the area than from the Wailea 670 wells.
In the future treated wastewater is expected to irrigate the Wailea 670 golf courses. When the conversion is made, groundwater pumpage will be reduced to the difference between irrigation demand and wastewater availability. Also, some of the applied irrigation will circulate to the aquifer, reducing the net draft. The net draft at Wailea 670 may drop to less than 0.5 mgd, at which rate the effects on the lower Wailea wells would be quite small and perhaps undetectable.

Conclusions

The drilling and testing of the first Wailea 670 well (4125-01) was successful. The aquifer was proven to be highly transmissive and to yield irrigation quality water. Salinity should stabilize at less than 400 mg/l chloride when the well is pumped continuously at 350 gpm.

The down gradient wells in lower Wailea were not affected by the pumping test in the short time allowed for monitoring. In the long run, after lower Wailea increases its average draft to 3 to 3.5 mgd and the wailea 670 wells are on stream at 1 mgd, an increase in salinity at the lower wells may be experienced. However, the higher salinity is not likely to exceed the level acceptable for irrigation.

The use of wastewater by Wailea 670 for irrigation will have a salutary effect on the quality of groundwater in the aquifer through reducing net draft and contributing low salinity recharge by way of return irrigation.
### Wailea 670 Well 1 Pump Test Mar 4 - 8, 1991

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SURVEY BRANCH
Division of Water Resource Management

FROM: Ed

TO: INITIAL: 

PLEASE: 

- See Me
- Call
- Review & Comment
- Take Action
- Investigate & Report
- Draft Reply
- Acknowledge Receipt
- Type Draft
- Type Final cc:
- Xerox _ copies

FOR YOUR: 

- Approval
- Signature
- Information

REMKS: Peter Nottage's secretary called. Meeting has been rescheduled for August 15, 9:30 am, at Clark Champions office in Wailea. Need letter to confirm? Yes? No.

DATE: 7-8-91 FILE IN: 6-4125-02

E. SAKODA
F. Ching
W. Rozeboom
P. Haraguchi
G. Bauer
N. Fujii
A. Okamura
B. Micua
G. AKITA
L. Nanbu
G. MATSUMOTO
E. LAU
L. CHANG
Y. SHIROMA
M. TAGOMORI
S. Kokubun

Rev. 4/91
DIVISION OF WATER RESOURCE MANAGEMENT

FROM: _________________________ DATE: 6/1/1971 FILE IN: _________________________

TO: _________________________ INITIAL: _________________________ PLEASE: _________________________

G. AKITA
L. Nanbu
E. Sakoda
G. Matsumoto
E. Lan
L. Chang
Y. Shiroma

See Me
Take Action By
Route to Your Branch
Review & Comment
Draft Reply
Acknowledgment Receipt
Xerox copies
File
Mail

REMARKS:

Call to
Meet

M. Tagomori
S. Kokubun

Approval
Signature
Information

Pls draft

Although

I called to say

that to go ahead

with my on 8th

(I cannot make it) that someone

will represent me. I'm

changing my mind — reschedule meeting

for Aug 13 or 15 @ 9:30 @ Wailea. I would

like to be present, w5.
May 31, 1991

Mr. Manabu Tagomori  
State of Hawaii Dept. of  
    Land and Natural Resources  
Commission of Water Resource  
Management  
P. O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Tagomori:

RE: Wailea-Palauea Partners Well No. 4125-02

We are in receipt of your letter of May 29, 1991 wherein you advised us that our application for a six-month extension of our completion date for Well #2 was approved at the May 25, 1991 meeting. Thank you.

As requested by the Commission in our original approval, we are about to undertake discussions with the other major users of the aquifer (Wailea Resorts and Seibu Hawaii) to address the long-term monitoring of the various impacts. Our discussions will also focus on long-term alternatives, such as the use of effluent, reservoirs, injection systems, etc.

We would appreciate your attendance at our first meeting. This meeting is scheduled for August 8th at 9:30 a.m. at Clark Champion's office at Wailea Resorts in Wailea, Maui. Please advise as soon as possible if this date is convenient. John Mink and I will be flying up from Honolulu that morning and will coordinate the transportation.

Yours truly,

[Signature]

Peter B. Nottage

cc: John Mink  
    Clark Champion, Wailea Resorts  
    Roy Figueiroa, Seibu Hawaii
EXTENSION OF WELL CONSTRUCTION/PUMP INSTALLATION PERMIT

for

Wailea-Palaeua Partners Well #2
Well No. 4125-02
Wailea, Maui

TO: Palaeua Bay Partners
McCormack Properties, Ltd.
Davies Pacific Center
841 Bishop Street, Penthouse
Honolulu, HI 96813

The Commission on Water Resource Management, at its meeting of May 25, 1991, approved a six-month extension of the completion date for Well #2 to November 25, 1991, subject to all other conditions of the original permit and the following additional conditions:

1. The proposed well construction and pump installation 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 shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

2. The grouted annulus of the well shall be from 0 to 300 ft. instead of from 0 to 100 ft. as proposed. The grouted annular space shall be at least 3 inches all around the casing.

3. The permit shall be for construction, testing, and installation of a 350 gpm capacity, or less, pump in the well, as determined by the pumping test results. The applicant shall submit to DWRM the test results and proposed permanent pump information, based on the test, for approval by the Chairperson. No permanent pump may be installed and no water used from the well without the Chairperson's approval.
4. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage on a monthly basis.

5. The work proposed in the permit application shall be completed by November 25, 1991.

MAY 29 1991
Date of Issuance

cc: USGS
    Department of Health
    Safe Drinking Water Branch
    Ground Water Protection Program
    Maui Department of Water Supply

WILLIAM W. PATY, Chairperson
Commission on Water Resource Management
**STATE WELL NO. 4125-01.95**

**WELL NAME** Irrigation Well 1

**ISLAND** Maui

**LOCATION** Waiana, Maui

**TAX MAP KEY** 2-1-08:56

**WELL OWNER** Maui 670 Ltd. Partnership & Palaua Bay Partners

**DRILLING ON PUMP INSTALLATION CONTRACTOR** Paul Frandsen & Associates

**TYPE OF RIG** Rotary

**DRILLER** Miles Frandsen

**DATE OF WELL COMPLETION** 1/91

**DATE OF PUMP INSTALLATION**

**GROUND ELEVATION (msl)** 522.25 ft.

**Total Depth of Well below ground** 539 ft.

**HOLE SIZES**

- 16 inch dia. from 0 ft. to 530 ft. below ground
- 16 inch dia. from 530 ft. to 539 ft. below ground
- 16 inch dia. from 539 ft. to 550 ft. below ground

**CASING INSTALLED:**

- 10 in. I.D. x 321 in. well solid section to 530 ft. below ground
- 10 in. I.D. x 321 in. well perforated section to 550 ft. below ground

**ANNUAL:**

- Grotuded from 0 ft. to 100 ft. below ground
- Gravel packed from 100 ft. to 530 ft. below ground

**PERMANENT PUMP INSTALLATION:**

- Pump type, make, serial No.
- Motor type, H.P., voltage, R.P.M.
- Depth of pump intake setting
- Depth of bottom of siren line

**PROPOSED USE** Irrigation

**INITIAL WATER LEVEL** 519.5 ft. below ground.

**INITIAL CHLORIDE** ppm.

**PUMPING TESTS:**

- Reference point (R.P.) used:
- Which elevation is

**DRILLER'S LOG:**

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<th>Water Level</th>
<th>Depth, ft.</th>
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**REMARKS:**

- Submitted by (print) Rhonda Bear
- Title Office Mgr.
- Date 5/20/91

- 482-490 red black broken
- 490-520 red black broken
- 520-530 red black broken (520.5 hit)
- 530-543 red black broken (water)
- 543-548 black lava

**COMMISSION ON WATER RESOURCE MANAGEMENT**

**DEPARTMENT OF LAND AND NATURAL RESOURCES**

**DIVISION OF WATER RESOURCE MANAGEMENT**

**INSTRUCTIONS:** Please print or type and submit completed report within 30 days of well completion to the Department of Land and Natural Resources, Division of Water Resource Management, P.O. Box 313, Honolulu, HI 96808. An as-built drawing of the well and chemical analysis, if available, should also be submitted. If necessary, phone 548-1843, Hydrology, Geology section for assistance.
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**Māui 670 Irrigation Well - Sustained Pumping Test**

**March 4, 1991**

*End of 1st day 24h*

*End of 2nd day 48h*

*3-6-91*
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<td>✓</td>
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<td>176.30</td>
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3-7-91

Police came out at 9:58 to answer complaints from neighbors...

3-8-91

End of 4th day...

$Q = 356.76$
Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Wailuku, Maui

Gentlemen:

Palaea Bay Partners
Request for an Extension of a Well Construction Permit
Wailea-Palaea Partners Well #2, Wailea, Maui

Applicant: Palauea Bay Partners
McCormack Properties, Ltd.
Davies Pacific Center
841 Bishop Street, Penthouse
Honolulu, HI 96813

Landowner: Same

Action Requested: Extension of six months to complete Well #2 (Well No. 4125-02).

Well location: The proposed well will be located at Wailea at Tax Map Key: 2-1-08:56
(see attached map).

Well Description:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground elevation</td>
<td>520 ft.</td>
</tr>
<tr>
<td>Casing diameter</td>
<td>10 inches</td>
</tr>
<tr>
<td>Solid casing depth</td>
<td>520 ft.</td>
</tr>
<tr>
<td>Screen casing depth</td>
<td>530 ft.</td>
</tr>
<tr>
<td>Open hole</td>
<td>20 ft.</td>
</tr>
<tr>
<td>Total depth</td>
<td>550 ft.</td>
</tr>
<tr>
<td>Grouted annulus</td>
<td>0 to 100 ft.</td>
</tr>
<tr>
<td>Proposed pump capacity</td>
<td>350 gpm</td>
</tr>
</tbody>
</table>

BACKGROUND: The Commission on Water Resource Management approved the issuance of well construction permits for the wells then known as Wailea-VMS 670 Wells 1 & 2 at its meeting of May 17, 1989. Following is a chronology of events concerning the project:

<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 25, 1989</td>
<td>Permits issued to VMS Maui 670</td>
</tr>
<tr>
<td>October 20, 1989</td>
<td>Letter from the applicant requesting a six-month extension for the commencement of construction because they were &quot;still in the process of deciding on the final configuration of the golf course and hopes to have the final layout completed shortly&quot;.</td>
</tr>
</tbody>
</table>
October 31, 1989  Letter to the applicant extending the date for commencement of construction an additional six months or until May 25, 1990.

May 16, 1990  Letter from the applicant stating that construction was to commence on or before May 25, 1990.

May 18, 1990  Letter from an attorney representing Palauea Bay Partners, a Hawaii limited partnership, informing the Commission that it had "acquired all of the real and other property owned by Maui 670 Limited Partnership, including its rights under the above-referenced well construction permit".

April 16, 1991  Letter from McCormack Properties, Ltd. informing the Commission that: the first well was drilled and tested; a well completion report is being prepared; a long-term monitoring program is being set up to determine impacts on down-gradient wells; the second well will be started soon; it is doubtful that it will be completed by May 25, 1991; a six-month extension is requested to complete the second well.

RECOMMENDATION:

That the Commission approve a six-month extension of the completion date for Well #2 to November 25, 1991, subject to all other conditions of the original permit and the following additional conditions:

1. The Division of Water Resource Management (DWRM) shall be notified before work commences.

2. 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 and pump water from a well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

3. The grouted annulus of the well shall be from 0 to 300 ft. instead of from 0 to 100 ft. as proposed. The grouted annular space shall be at least 3 inches all around the casing.

4. The permit shall be for construction, testing, and installation of a 350 gpm capacity, or less, pump in the well, as determined by the pumping test.
Chairperson and Members
Commission on Water Resource Management

results. The applicant shall submit to DWRM the test results and proposed permanent pump information, based on the test, for approval by the Chairperson. No permanent pump may be installed and no water used from the well without the Chairperson’s approval.

5. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage on a monthly basis.

6. The work proposed in the permit application shall be completed by November 25, 1991.

Respectfully submitted,

[Signature]
KAZUO G. AKITA
Manager-Chief Engineer

[Signature]
WILLIAM W. PATY, Chairperson
WHILE YOU WERE OUT

TO  Ed

DATE  4/3

TIME  3:31 pm

M. Jim Williams

Phone  741-6167

<table>
<thead>
<tr>
<th>TELEPHONED</th>
<th>PLEASE CALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALLED TO SEE YOU</td>
<td>WILL CALL AGAIN</td>
</tr>
<tr>
<td>WANTS TO SEE YOU</td>
<td>URGENT</td>
</tr>
</tbody>
</table>

RETURNED YOUR CALL

FAX: 874-5305

Message

Operator
TO ________________________________

DATE ___________________ TIME ________

WHILE YOU WERE OUT

M ________________________________
of ________________________________

Phone ________________________________

<table>
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<tr>
<th>TELEPHONED</th>
<th>PLEASE CALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALLED TO SEE YOU</td>
<td>WILL CALL AGAIN</td>
</tr>
<tr>
<td>WANTS TO SEE YOU</td>
<td>URGENT</td>
</tr>
</tbody>
</table>

RETURNED YOUR CALL

Message________________________________

______________________________
Operator
Sakada

Kihei Makena area

Exist. 1991 Use

8.38 MGD → Iao Aquifer

Additional Projection to 2010

5.41 — probably

Total 2010

13.79 MGD over

S.Y. 11 MGD

but most is from Iao Aquifer therefore less than S.Y.
Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Wailuku, Maui

Gentlemen:

Palauea Bay Partners
Request for an Extension of a Well Construction Permit
Wailea-Palauea Partners Well #2, Wailea, Maui

Applicant: Palauea Bay Partners
McCormack Properties, Ltd.
Davies Pacific Center
841 Bishop Street, Penthouse
Honolulu, HI 96813

Landowner: Same

Action Requested: Extension of six months to complete Well #2 (Well No. 4125-02).

Well location: The proposed well will be located at Wailea at Tax Map Key: 2-1-08:56 (see attached map).

Well Description:

Ground elevation: 520 ft.
Casing diameter: 10 inches
Solid casing depth: 520 ft.
Screen casing depth: 530 ft.
Open hole: 20 ft.
Total depth: 550 ft.
Grouted annulus: 0 to 100 ft.
Proposed pump capacity: 350 gpm

BACKGROUND: The Commission on Water Resource Management approved the issuance of well construction permits for the wells then known as Wailea-VMS 670 Wells 1 & 2 at its meeting of May 17, 1989. Following is a chronology of events concerning the project:

DATE ACTION
May 25, 1989 Permits issued to VMS Maui 670
October 20, 1989 Letter from the applicant requesting a six-month extension for the commencement of construction because they were "still in the process of deciding on the final configuration of the golf course and hopes to have the final layout completed shortly".

ITEM 5
October 31, 1989  Letter to the applicant extending the date for commencement of construction an additional six months or until May 25, 1990.

May 16, 1990  Letter from the applicant stating that construction was to commence on or before May 25, 1990.

May 18, 1990  Letter from an attorney representing Palauca Bay Partners, a Hawaii limited partnership, informing the Commission that it had "acquired all of the real and other property owned by Maui 670 Limited Partnership, including its rights under the above-referenced well construction permit".

April 16, 1991  Letter from McCormack Properties, Ltd. informing the Commission that: the first well was drilled and tested; a well completion report is being prepared; a long-term monitoring program is being set up to determine impacts on down-gradient wells; the second well will be started soon; it is doubtful that it will be completed by May 25, 1991; a six-month extension is requested to complete the second well.

RECOMMENDATION:

That the Commission approve a six-month extension of the completion date for Well #2 to November 25, 1991, subject to all other conditions of the original permit and the following additional conditions:

1. The Division of Water Resource Management (DWRM) shall be notified before work commences.

2. 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 and pump water from a well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

3. The grouted annulus of the well shall be from 0 to 300 ft. instead of from 0 to 100 ft. as proposed. The grouted annular space shall be at least 3 inches all around the casing.

4. The permit shall be for construction, testing, and installation of a 350 gpm capacity, or less, pump in the well, as determined by the pumping test
Chairperson and Members  

results. The applicant shall submit to DWRM the test results and proposed permanent pump information, based on the test, for approval by the Chairperson. No permanent pump may be installed and no water used from the well without the Chairperson’s approval.

5. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage on a monthly basis.

6. The work proposed in the permit application shall be completed by November 25, 1991.

Respectfully submitted,

KAZUO G. AKITA  
Manager-Chief Engineer

WILLIAM W. PATY, Chairperson
December 22, 1990

Mr. Ed Sakoda
Division of Water Resource Management
Department of Land and Natural Resources
State of Hawaii
1151 Punchbowl
Honolulu, HI 96813

Dear Ed,

Subject: Irrigation Well Test Results

I live in Maui Meadows (Kihei) adjacent to the Ulapalakua Ranch. The Tax Map Key is 2-1-18-11. Maui 670, a Limited Partnership, is drilling test wells adjacent to my property for the purpose of proving up a brackish water supply for a major golf course and luxury resort development.

So far one well has apparently been drilled and tested. However, another well is planned in the same vicinity. In my letter to your office of December 22, 1991, I requested a copy of the drilling and testing information as soon as it is received by you, including the driller's log and the field notes on the pump tests as well as the hydrologist's report. Deputy Director Tagomori in his response of January 8, 1991, indicated that I would receive the information when it was filed.

This will confirm our telecon of April 21, 1991, during which you indicated that you would send me the information for the Wailea 670 well. I also requested similar information on the well recently drilled by Baldwin Pacific development makai of Piilani highway adjacent to the Kihei elementary school, and also the well drilled by the Silversword golf course makau of Pillani Highway close to Lipoa Street.

I look forward to your response.

Very truly yours

James V. Williamson
P.E. 5370
Dear Applicant:

The Commission on Water Resource Management will be acting on your permit application(s) at its meeting on May 15, 1991, at 9:00 a.m., at the Wailuku Community Center, Wailuku, Maui.

The agenda and submittal(s) concerning your application(s) are enclosed for your information.

You or your representative are invited to attend the meeting.

Sincerely,

[Signature]

MANABU TAGOMORI
Deputy Director

ES:fc

Encl.
April 16, 1991

State of Hawaii
Department of Land and Natural Resources
Commission on Water Resource Management
P. O. Box 621
Honolulu, Hawaii 96809

Gentlemen:

RE: Wells #4125-01, 02
Wailea, Maui

This is to advise you that well #4125-01 has been drilled, tested and presently is having the casing installed. The Well Completion Report and other required data are being prepared by John Mink and will be forwarded shortly.

We have been in close contact with Wailea Resort Company and are currently setting up a procedure for the long-term monitoring of the impacts on the down-gradient wells.

We will start drilling well #02 shortly. It is doubtful that we will finish by May 25, 1991. To assure that our permit remains in good standing, however, we hereby request an extension of six (6) months for completion of well #02, in the event unforeseen problems occur.

Respectfully,

Peter B. Nottage

cc: John Mink
DIVISION OF WATER RESOURCE MANAGEMENT

FROM: [Signature]
DATE: [Date]
FILE IN: ________ 

TO: INITIAL: PLEASE: REMARKS:

G. AKITA  See Me
L. Nanbu  Take Action By
E. Sakoda  Route to Your Branch
G. Matsumoto  Review & Comment
E. Lau  Draft Reply
L. Chang  Acknowledge Receipt
Y. Shiroma  Xerox ___ copies

FOR YOUR: Approval

— Y. Shiroma  File
— Mail

M. TAGOMORI  Check
S. Kokubun  Blair

__ Check: Draft Reply
__ Check: Acknowledge Receipt
__ Check: Xerox ___ copies
__ Check: File
__ Check: Mail
__ Check: Blair

___ Check: Map
___ Check: Map

Map is prepared
[Signature]
April 12, 1991

Peter Nottage  
McCormack Properties, Ltd.  
Davies Pacific Center - Penthouse  
841 Bishop Street  
Honolulu, HI 96813  

Re: Brackish Water Wells

Dear Peter:

Thank you for the recognition of Wailea's concerns acknowledged in your letter of March 27, 1991 on Mike McCormack's behalf. It would seem that the recent testing of McCormack's first well reinforce the need for long range integrated planning, testing and utilization of the aquifer.

In January of 1991, Wailea Resort Company expanded and intensified its well monitoring program as a result of our concerns. This was done in recognition of our continuing reliance on the brackish groundwater to sustain our golf courses and surrounding lands. This increased testing has revealed some existing stresses in our pumping patterns. Some of our salinities have been higher than we would have anticipated.

Your brief pumping test in April was conducted in what seems to be an atypical period in our readings. We are not aware of any additional sampling you may have done during your pumping tests, nor what you might have expected; however we would be interested in any findings you may have made.

As soon as you and John Mink have developed an overall proposal for source development, testing, and operations, we would welcome the opportunity to review your expectations for possible impact. We would also be interested to review Dr. Mink's report on the first well.
Please advise us as soon as you are ready to propose your suggested guidelines.

Sincerely,

HOWARD K. NAKAMURA
President and
Chief Executive Officer

cc: Steve Bowles
    Manabu Tagomori
    Roy Figueiroa
    Mike McCormack
    Clark Champion
FROM: JON OF WATER RESOURCE MANAGEMENT

DATE: 3-17

TO: G. AKITA, L. Nanbu, E. Sakoda, G. Matsumoto, E. Lau, L. Chang, Y. Shiroma

PLEASE:

See Me
Take Action By
Route to Your Branch
Review & Comment
Draft Reply
Acknowledge Receipt
Xerox copies
File
Mail

FOR YOUR:

Approval
Signature
Information

REMARKS:

[Handwritten notes]
March 18, 1991

Mr. Mike McCormack
McCormack Properties, Ltd.
Davies Pacific Center - Penthouse
841 Bishop Street
Honolulu, HI 96813

Subject: Brackish Water Source Development - Wailea 670 Parcel

Dear Mike:

Thank you for facilitating the meeting on February 26, 1991, among Wailea's representatives, Peter Nottage and John Mink. I understand that Wailea's long-term concerns for protection of the existing aquifer were again expressed. Most of the assets, operations and property values within Wailea are based directly or indirectly on the continuing careful management and utilization of the underlying aquifer.

Mr. Mink's statement that it might require six months to one year for any ground water flowing under your new well site to reach the coordinated Wailea well field, helped to ease our short-term testing concerns to a degree. It also emphasized the strong need for long range planning and assurances of protection.

We understand that your current plans propose one mauka golf course, utilizing approximately 1 MGD from the aquifer within a 4-5 year time frame. Wailea, through extensive long term planning and testing, has demonstrated the ability to draw 3+ MGD for a sustained period of time, along 3 miles of the coastline. Our current utilization slightly exceeds 2 MGD; however now that our third course is under construction, the utilization can be expected to increase proportionately. We expect our usage to approach 3.5 MGD or higher during various phases of our golf course construction over the next 2-3 years as water is used for dust control, grow-in periods, sod farm irrigation and irrigation of the existing golf courses.
Assuming your tests of the first upgradient well go as planned and with no negative impact on our existing well field, we understand a second well will be drilled. The two wells are apparently expected to deliver 1 MGD for your first golf course. At that point in time we expect to be utilizing somewhat in excess of 3 MGD on a permanent basis.

We respectfully suggest that longer term planning be initiated very soon to develop a sustained testing program of the aquifer prior to initiating actual development on any mauka golf courses. This might demonstrate the ability to draw your anticipated water requirement, without negative impact. Based on Mr. Mink's comments, it would seem that it could require as long as a year to determine the degree, if any, of a sustained upgradient draw of this quantity.

We recognize the impact of this type of a sustained testing program on project budgets and schedules, but feel it is imperative for the protection of existing water resources. In recognition of the possibly severe consequences of "salting up" the down gradient aquifer, we must also strongly urge you to consider any other possible alternatives for protecting existing utilization, as well as for alternate water sources for your projected uses.

It would seem to be appropriate to begin an extended series of discussions and planning sessions among the ground water users in the area and their consultants. We would welcome the opportunity to work together with you in long term planning efforts for the protection of the resource and its users, both present and future.

Please feel free to contact me at your convenience.

Sincerely,

Howard K. Nakamura
President and Chief Operating Officer

cc: Clark Champion
    Roy Figueroa
    Manabu Tagomori
    Steve Bowles
    Bob Akinaka
Mr. James V. Williamson
Consulting Engineer
672 Kumulani Dr.
Kihei, Hawaii 96753

Dear Mr. Williamson:

Well Nos. 4125-01, 02

Thank you for your letter expressing your concerns regarding the drilling and testing of Well Nos. 4125-01, 02. The construction of these wells and conditions for monitoring test pumping is covered by a well construction permit issued to VMS Maui 670 on May 25, 1989.

Under Condition 5 of the permit, the applicant must submit the following information to the Division of Water Resource Management (DWRM) within 30 days of completion of both wells:

1) Well Completion Report
2) Elevation (referenced to mean sea level) survey by Hawaii-licensed surveyor.
3) As-built sectional drawings of the wells.
4) Plot plan and map showing the exact locations of the wells.
5) Complete pumping test record, including time, pumping rate, drawdown, chloride content, and water quality data.

Other conditions in the permit covering the pump testing phase call for hourly monitoring of chloride in the pumping well, and regular monitoring of the five wells which are downgradient. When these documents are filed they become public record. We will pass on this information to you.
At the present time, Well No. 4125-01 is drilled but not tested. The applicant is aware that the conditions set forth in the permit must be adhered to during the pump testing phase.

An estimate for the safe yield of the wells can be obtained from the pump test data submitted. Other aquifer parameters such as transmissivity, are, as you point out, better obtained if there is an observational well to monitor during pump testing. However, due to the lateral variability of lava flows, a number for transmissivity only reflects the conditions between the pumping well and the observation well.

If you have any questions, please call Ed Sakoda at 548-7643.

Sincerely,

[Signature]

MANABU TAGOMORI
Deputy Director

GB: mh
Mr. Michael T. McCormack  
Managing Partner  
Palauea Bay Partners  
23rd Floor  
Davies Pacific Center  
841 Bishop Street  
Honolulu, Hawaii 96813

Dear Mr. McCormack:

Drilling and Testing
Well Nos. 4125-01, 02  
Wailea, Maui

We have been informed that Well No. 4125-01 is drilled but not tested.

We remind you of Conditions 2 through 5 in the Well Construction Permit issued on May 25, 1990. We also wish to emphasize the timely manner for submittal of data as outlined in Condition 5.

If you have any questions, please contact Ed Sakoda at 548-7643.

Sincerely,

MANABU TAGOMORI  
Deputy Director

cc: Mr. John Mink  
Mr. James V. Williamson
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<th>TO:</th>
<th>INITIAL:</th>
<th>PLEASE:</th>
<th>REMARKS:</th>
</tr>
</thead>
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<td>E</td>
<td>See Me</td>
<td>1) Confirmed that John is coming</td>
</tr>
<tr>
<td>F. Ching</td>
<td>F</td>
<td>Call</td>
<td></td>
</tr>
<tr>
<td>W. Rozeboom</td>
<td></td>
<td>Review &amp; Comment</td>
<td></td>
</tr>
<tr>
<td>P. Haraguchi</td>
<td></td>
<td>Take Action</td>
<td></td>
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<tr>
<td>G. Bauer</td>
<td>G</td>
<td>Investigate &amp; Report</td>
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<tr>
<td>N. Fujii</td>
<td>N</td>
<td>Draft Reply</td>
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<tr>
<td>A. Okamura</td>
<td>A</td>
<td>Acknowledge Receipt</td>
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<td>M. Holt</td>
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<td>Type Draft</td>
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<tr>
<td>B. Micua</td>
<td>B</td>
<td>Type Final</td>
<td>i) We told me that the well</td>
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<td>cc: ____</td>
<td>is drilled to -84', 55' deeper than specified. Water was in drill.</td>
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<td>FOR YOUR:</td>
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<td>G. Akita</td>
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<td>Approval</td>
<td>3) They will test pump test</td>
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<td>M. Tagomori</td>
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<td>Information</td>
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<td>S. Kokubun</td>
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<td>letters requested.</td>
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<td>___</td>
<td>L. Nanbu</td>
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<td>M. TAGOMORI</td>
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<td>___</td>
<td>S. Kokubun</td>
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<td>___ See Me</td>
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<td>___ Call</td>
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<td>___ Review &amp; Comment</td>
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<td>___ Take Action</td>
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<td>___ Investigate &amp; Report</td>
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<td>___ Type Draft</td>
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<td>___ File</td>
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<td>___ Mail</td>
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<tr>
<th>REMARKS</th>
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<tbody>
<tr>
<td>1. Is John Minds consultant? See permit application.</td>
</tr>
<tr>
<td>2. Letter to applicant (Palenue Bay, Parker) reminding them of permit condition 2-5, and concerns of Mr. Williamson. CC to Williamson (and Minds?).</td>
</tr>
<tr>
<td>3. Letter to Mr. Williamson - thanking for concerns - we have reminded applicant of their permit condition and will pass on info, etc.</td>
</tr>
</tbody>
</table>
Mr. Dan Lum
Chief Geologist
Division of Water Resources Management
Department of Land and Natural Resources
State of Hawaii
1151 Punchbowl
Honolulu, HI 96813

Dear Mr. Lum,

Subject: Irrigation Well Test Results

I live in Maui Meadows (Kihei) adjacent to the Ulapalakua Ranch. The Tax Map Key is 2-1-18-11. Maui 670, a Limited Partnership, is drilling test wells adjacent to my property for the purpose of proving up a brackish water supply for a major golf course and luxury resort development. My neighbours and I are vehemently opposed to this development. Maui 670 is located at:
1001 Bishop St.
Pauahi Tower, Suite 1570
Honolulu, HI 96813

So far one well has apparently been drilled and tested and the rig removed. However, another well is planned in the same vicinity. Please send me a copy of the drilling and testing information as soon as it is received by your office. This should include the driller's log and the field notes on the pump tests as well as the hydrologist's report.

Incidentally my experience with the results of single-hole pump tests (i.e. without observation wells) is that they are extremely unreliable. And particularly when one is dealing with a very thin "fresh" water zone (about two feet thick), a very tricky situation indeed. I do not understand why the management of the Wailea and Seibu links located below and served by the same aquifer are not strongly opposed to even consideration by Maui 670 of using this same source.

I would be interested to know what specifications DLNR requires for such pump tests. Also the analysis procedure you use to estimate the sustainable yield. For example do you apply Thiem and Theis equations, Darcy's law, Jacob Straight Line Method, the Hantush-Jacob formula, or other methods.

I look forward to your response.

Very truly yours,

James V. Williamson
P.E. 5370
DIVISION OF WATER RESOURCE MANAGEMENT

FROM: __________________________ DATE: 5-3-85 FILE IN: 4125-01,02

TO: INITIAL: __________________________ PLEASE: ____________ REMARKS: __________________________

- ( ) M. TAGOMORI ( ) See Me
- ( ) G. Matsumoto ( ) Take Action By
- ( ) G. Akita ( ) Route to Your Branch
- ( ) L. Chang ( ) Review & Comment
- ( ) Y. Shiroma ( ) Draft Reply
- ( ) E. Sakoda ( ) Acknowledge Receipt
- ( ) D. Nakano ( ) Xerox copies
- ( ) W. Rozeboom ( ) File
- ( ) S. Samuels ( ) Mail
- ( ) E. Hirano ( ) For Information
- ( ) T. Kam ( ) S. Kokubun
- ( ) A. Monden ( ) L. Nanbu
- ( ) H. Young ( ) F. Ching
- ( ) D. Lee ( ) L. Choo
- ( ) G. Miyashiro ____________

Diese Seite wurde nicht ausgewiesen.

Owner changed - Ed 5-31-90
Owner = Palomar Bay Partners

M7947 - please change Index/Format
May 18, 1990

Mr. William W. Paty
Chairman
State of Hawaii
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Re: Well Construction Permit for
Wailea/VMS 670 Wells
Wells No. 4125-01, 02, Wailea Maui

Gentlemen:

I represent Palauea Bay Partners, a Hawaii limited partnership. A copy of the Certificate of Limited Partnership is enclosed indicating relevant information relating to the Partnership.

The purpose of this letter is to inform you that Palauea Bay Partners has acquired all of the real and other property owned by Maui 670 Limited Partnership, including its rights under the above-referenced well construction permit. Palauea Bay's rights are subject to the conditions set forth in the permit which Palauea Bay Partners has agreed to assume. Should such be necessary, we are seeking your consent to the transfer of the permit. Should you need any further information, please let me know and it will be promptly furnished.

Very truly yours,

JEFFREY S. GRAD

Enc.

cc: Michael T. McCormack
In the Matter of the Limited Partnership

of

PALAUEA BAY PARTNERS

CERTIFICATE OF LIMITED PARTNERSHIP

The undersigned, being desirous of forming a limited partnership, hereby certify, in accordance with the provisions of Chapter 425, Part II, Hawaii Revised Statutes, as follows:

I. The name of the limited partnership shall be __Palaeua Bay Partners__

II. The character of the business of the partnership shall be to develop real estate project consisting of single family and multi family residential and other improvement in the Makena/Wailea area of the County of Maui, State of Hawaii.

III. The principal place of business of the partnership shall be 1580 Makaloa Street, Suite 500,

Honolulu, Hawaii 96814

IV. The names and residences of the partners are as follows:

GENERAL PARTNERS

Beam 670 Maui Developers

ADDRESS

1580 Makaloa Street, Suite 500
Honolulu, Hawaii 96814
V. The term for which the partnership is to exist is from the date of filing of this certificate in the Department of Commerce and Consumer Affairs and shall continue until dissolved or terminated.

VI. The amount of cash contributed by each of the limited partners is as follows:

<table>
<thead>
<tr>
<th>LIMITED PARTNERS</th>
<th>CASH CONTRIBUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daiichi Real Estate Co., Ltd.</td>
<td>$1.00</td>
</tr>
<tr>
<td>Okusig Investment Partners</td>
<td>$1.00</td>
</tr>
</tbody>
</table>

No other property has been contributed by the limited partners.

VII. No additional contributions have been agreed to be made by the limited partners.

VIII. The time when the contributions of the limited partners are to be returned shall be at the dissolution or termination of the partnership.

IX. The share of the profits which the limited partners shall receive shall be the pro-rata share based on the amounts of their contribution as such amounts bear to the total amount contributed herein by both the general and limited partners.
X. A limited partner shall have the right to substitute an assignee as a contributor in his place with the consent of a general partner.

XI. On the death, retirement or insanity of a general partner, the remaining general partner or general partners, if there then be any, shall have the right to continue the business.

XII. There is no right of a limited partner to demand and receive property other than cash in return for his contribution.

We certify, under the penalties set forth in Section 425-51 of the Hawaii Revised Statutes, that we have read the above statement and that the same is true and correct.

IN WITNESS WHEREOF, the undersigned have caused this Certificate to be executed this ___ day of ___ 1990.

BEAM 670 MAUI DEVELOPERS
By Bradley 670 Maui, Ltd.
By

Richard Bradley
Its President
May 16, 1990

DOWALD
P.O. Box 373
Honolulu, Hawaii 96809

Re: Wells No. 4125-01, 02

This will confirm our notifying the Geology-Hydrology section of our intention to start Well Construction on or before May 25, 1990. Confirmation was by phone with Faith.

Peter B. Nottage
Consultant
TO Ed
DATE 5/16/90 TIME 2:27 p

WHILE YOU WERE OUT
Peter Nottage
of VMS Maui 810
Phone 533-3596

<table>
<thead>
<tr>
<th>TELEPHONED</th>
<th>PLEASE CALL</th>
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<td>CALLED TO SEE YOU</td>
<td>WILL CALL AGAIN</td>
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</table>

RETURNED YOUR CALL

Message: Well No. 4125-01 & 02
Start drilling approx. 5/25/90
October 31, 1989

VMS Maui 670
34 N. Church St., Ste. 302
Wailuku, Hawaii 96793

Gentlemen:

We acknowledge receipt of a request, dated October 20, 1989, by your consultant, Warren S. Unemori Engineering, Inc., requesting a six-month extension of the date to start work on the Wailea-VMS Maui 670 Wells (Well Nos. 4125-01,02).

By this letter, we are approving your request for a six-month extension to start work. All the remaining conditions of the permit issued on May 25, 1989, remain in effect. Please contact DOWALD's Geology-Hydrology Section at 548-7619 before any work covered by the permit begins or if work cannot be started by May 25, 1990.

Sincerely,

MANABU TAGOMORI
Deputy Director

ES:ko
cc: Warren S. Unemori Engineering, Inc.
Mr. Manabu Tagamori, Deputy Director  
Department of Land and Natural Resources  
State of Hawaii  
1151 Punchbowl Street  
Honolulu, Hawaii 96813

Dear Mr. Tagamori,

Subject: Wailea - VMS 670 Wells  
Well Nos. 4125-01, 02  
Wailea, Maui

This is in reference to a "well construction permit" that was issued our client, VMS Maui 670, on May 25, 1989. One of the conditions of the permit was that work be started within six months from date of issuance of the permit.

VMS is still in the process of deciding on the final configuration of the golf course and hopes to have the final layout completed shortly. The exact location of the wells, to begin the drilling operation, will be determined at that time. Therefore, on behalf of VMS, we respectfully request a six months extension of the current permit which will expire on November 25th unless amended.

Very truly yours,

[Signature]

Warren S. Unemori

cc: Peter Nottage  
    Jim Murray

\sfowp\87172004.doc
Mr. Manabu Tagamori, Deputy Director  
Department of Land and Natural Resources  
State of Hawaii  
1151 Punchbowl Street  
Honolulu, Hawaii 96813

Dear Mr. Tagamori,

Subject: Wailea - VMS 670 Wells  
Well Nos. 4125-01, 02  
Wailea, Maui

This is in reference to a "well construction permit" that was issued our client, VMS Maui 670, on May 25, 1989. One of the conditions of the permit was that work be started within six months from date of issuance of the permit.

VMS is still in the process of deciding on the final configuration of the golf course and hopes to have the final layout completed shortly. The exact location of the wells, to begin the drilling operation, will be determined at that time. Therefore, on behalf of VMS, we respectfully request a six months extension of the current permit which will expire on November 25th unless amended.

Very truly yours,

Warren S. Unemori

cc: Peter Nottage  
Jim Murray

\sfowp\87172004.doc
May 30, 1989

The Honorable William W. Paty, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Paty:

SUBJECT: WELL CONSTRUCTION PERMIT APPLICATION
WAILEA-GCR/VMS WELLS
STATE WELL NOS. 4125-01 AND 02
WAILEA, MAUI

Thank you for the opportunity to review and comment on the subject application.

Since the proposed wells are intended to be limited to golf course irrigation, the Department's Administrative Rules, Title 11, Chapter 20, "Potable Water Systems," are not applicable. However, in the event that the proposed use were to change, please inform the Drinking Water Program.

If you should have any questions, please contact the Drinking Water Program at 548-2235.

Very truly yours,

JOHN C. LEWIN, M.D.
Director of Health
WELL CONSTRUCTION PERMIT

for

Wailea - VMS 670 Wells
Well Nos. 4125-01,02
Wailea, Maui

TO: VMS Maui 670
34 N. Church Street, Suite 302
Wailuku, Hawaii 96793

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct and test Well Nos. 4125-01,02 for golf course irrigation within Tax Map Key: 2-1-08:56 is approved subject to the following conditions:

1. The Division of Water and Land Development (DOWALD), Geology-Hydrology Section, shall be notified at 548-7619, before any work covered by this permit commences.

2. The permit shall be for construction and testing only. A sustained rate pumping test for a minimum of four days with hourly or continuous monitoring of chloride content shall be conducted. Also, the five wells downgradient shall be monitored during the testing. No permanent pumps may be installed and no water used from the wells without the necessary pump installation permits.

3. Following drilling and testing of the wells, the applicant shall address the long-term effects of pumping the proposed wells on the existing wells in the vicinity.

4. The applicant and Wailea Resort Company, Ltd., shall conduct a study to coordinate well locations, pumping rates, pumping patterns, and quantities pumped, to minimize possible negative impacts of the proposed wells on existing wells in the area.

5. The following shall be submitted to DOWALD, P.O. Box 373, Honolulu, Hawaii 96809 within 30 days after completion of the wells:
a. Well Completion Report.

b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.

c. As-built sectional drawings of the wells.

d. Plot plan and map showing the exact locations of the wells.

e. Complete pumping test record; including time, pumping rate, drawdown, chloride content, and water quality data.

6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. The permit may be revoked if work is not started within six months of date of issuance or if work is suspended or abandoned for six months. The work shall be completed within two years of the date of issuance.

MAY 25 1989

Date of Issuance

cc: USGS
    Department of Health
    Drinking Water Program
    Ground Water Protection Program
    Maui Department of Water Supply
    Roscoe Moss Co.
AGENDA
FOR THE MEETING OF THE
COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: May 17, 1989
TIME: 2:00 P.M.
PLACE: KALANIMOKU BUILDING
BOARD ROOM, ROOM 132
1151 PUNCHBOWL STREET
HONOLULU, HAWAII

1. Resubmittal: Adjustment to Permitted Water Uses, Pearl Harbor Water Management Area, Oahu
2. Petition to Designate the Island of Lanai as a Water Management Area, Lanai
3. Registration of Existing Wells and Stream Diversion Works and Declaration of Water Use
4. Honolulu Board of Water Supply, Application for a Well Construction Permit, Maakua Well, Hauula, Oahu
5. Ewa Plain Water Development Corp., Application for Well Construction Permit, Honouliuli Well 6, Honouliuli, Oahu
6. Gentry Development Company, Application for Well Construction Permits, Ewa-Gentry Exploratory Caprock Wells, Ewa, Oahu
8. GCR/VMS Maui 670, Application for Well Construction Permits, Wailea-GCR/VMS Wells, Wailea, Maui
9. David W. Curtis, Application for Well Construction Permit, Kamalo-Curtis Well, Kamalo, Molokai
10. Dennis O'Shea, Application for Well Construction Permit, Kealia-O'Shea Well, Kealia, South Kona, Hawaii
12. James Lawhead, Application for Pump Installation Permit, Moloa-Lawhead Well, Moloa, Kauai
May 17, 1989

Chairperson and Members  
Commission on Water Resource Management  
State of Hawaii  
Honolulu, Hawaii

Gentlemen:

GCR/VMS Maui 670  
Application for Well Construction Permits  
Wailea-GCR/VMS Wells, Wailea, Maui

Applicant: GCR (Grand Champions Resort)/VMS Maui 670  
34 N. Church St., Ste. 302  
Wailuku, Hawaii 96793

Action Requested: Permission to construct and test two 10-inch diameter, 550 ft. deep wells (well nos. 4125-01,02) for golf course irrigation.

Well Location: The proposed well sites are near Wailea, Maui, at Tax Map Key: 2-1-08:56 (see attached map).

Proposed Use of Well: To construct and test for a source of water for golf course irrigation. A 350 gpm pump is proposed for each well.

<table>
<thead>
<tr>
<th>Well Description</th>
<th>Both Wells</th>
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<tbody>
<tr>
<td>Ground elevation:</td>
<td>520 ± ft.</td>
</tr>
<tr>
<td>Casing diameter:</td>
<td>10-inch I.D.</td>
</tr>
<tr>
<td>Solid casing depth:</td>
<td>520 ± ft. (0 ft., msl)</td>
</tr>
<tr>
<td>Screen casing depth:</td>
<td>530 ft. (-10 ft., msl)</td>
</tr>
<tr>
<td>Open hole:</td>
<td>20 ft.</td>
</tr>
<tr>
<td>Open hole diameter:</td>
<td>6 inches</td>
</tr>
<tr>
<td>Total depth:</td>
<td>550 ft. (-30 ft., msl)</td>
</tr>
<tr>
<td>Grouted annulus:</td>
<td>0-100 ft.</td>
</tr>
</tbody>
</table>

Agency Review: The application has been sent to the State Department of Health and the Maui Department of Water Supply for review. There have been no objections to the application.

Analysis: The wells are expected to encounter a thin (3 ± ft.) brackish...
basal lens. The wells are approximately one mile upgradient of A&B Well 2 (4126-02), A&B Well 3 (4126-03), and Well 4126-01. Long-term effects of pumping the proposed wells on the existing wells cannot be determined at this time and should be addressed prior to issuance of the pump installation permits.

RECOMMENDATION:

That the Commission approve the issuance of well construction permits for construction and testing of Wailea-GCR/VMS Wells, subject to the following conditions:

(1) The Division of Water and Land Development (DOWALD) shall be notified before work commences.

(2) The permit shall be for construction and testing only. A sustained rate pumping test for a minimum of four days with hourly or continuous monitoring of chloride content shall be conducted. Also, the three wells downgradient shall be monitored. No permanent pump may be installed and no water used from the wells without the necessary pump installation permits.

(3) Following drilling and testing of the wells, the applicant shall address the long-term effects of pumping the proposed wells on the existing wells in the vicinity.

(4) The following shall be submitted to DOWALD within 30 days after completion of the wells:

   a. Well Completion Report forms.
   b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawings of the wells.
   d. Plot plan and map showing the exact locations of the wells.
   e. Complete pumping test record; including time, pumping rate, drawdown, chloride content, and water quality data.

(5) The applicant shall comply with all applicable laws, rules, and ordinances.

(6) The permit may be revoked if work is not started within six months of date of issuance or if work is suspended or abandoned for six months. The work shall be completed within two years of the date of issuance.
Chairperson and Members
Commission on Water Resource Management

Respectfully submitted,

MANABU TAGOMORI
Deputy Director

Attach.

APPROVAL FOR SUBMITTAL:

WILLIAM W. PATY, Chairperson

May 17, 1989
TO: Doris/Ed

DATE: 5/19/69  TIME: 4:00

WHILE YOU WERE OUT

M

Phone ________________________________

TELEPHONED  PLEASE CALL
CALLED TO SEE YOU  WILL CALL AGAIN
WANTS TO SEE YOU  URGENT

RETURNED YOUR CALL

Message: Peter called.

Other name should be addressed "U.S. Navy 670"
M. TAGOMORI
D. Lum
G. Matsumoto
G. Akita
L. Chang
Y. Shiroma
E. Sakoda
D. Nakano
W. Rozeboom
P. Haraguchi
S. Samuels
R. Chung
T. Kam
A. Monden
H. Young
R. Suzuki
N. Kaneshiro
T. Nakama

D. Lum
G. Matsumoto
G. Akita
L. Chang
Y. Shiroma
E. Sakoda
D. Nakano
W. Rozeboom
P. Haraguchi
S. Samuels
R. Chung
T. Kam
A. Monden
H. Young
R. Suzuki
N. Kaneshiro
T. Nakama

Please:
See Me
Take Action By
Route to Your Branch
Review & Comment
Draft Reply
Acknowledgment Receipt
Xerox copies
File
Mail
For Information

Remarks:
Attached
Joined by [redacted]
Ref: [redacted]
#8
Wailea Resort Company, Ltd.
161 Wailea Ike Place
Wailea, Maui, Kihei, Hawaii 96753-9599
(808) 879-4461 FAX 808-874-6295

FAX TRANSMITTAL LETTER

PLEASE DELIVER THE FOLLOWING PAGES TO:
NAME: Department of Land & Natural Resources DATE: 5/15/89
FIRM: ATTENTION: SHARON TIME: 11:45 AM
FROM: ________________________________
FAX NO.: (808) 874-6295

TOTAL NUMBER OF PAGES INCLUDING THIS COVER SHEET: ______

THESE ARE TRANSMITTED AS CHECKED BELOW:
____ For Approval ______ For Your Use
____ As Requested ______ For Review and Comment
____ For Your Information

COMMENTS/REMARKS: Attached is the letter as discussed with Meredith Ching.

IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL US AT
(808) 879-4461 OR (808) 524-8525/531-1520
May 15, 1989

Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P. O. Box 373
Honolulu, HI 96809

Chairman Paty and Members of the Commission:

RE: GCR/VMS 670, Application for Well Construction Permits,
Wailea - GCR/VMS Wells, Wailea, Maui

It is our understanding that application has been made to
your commission for the subject well construction permits by
GCR/VMS Maui 670 for two 10-inch deep wells for golf course
irrigation purposes.

Please be advised that the Wailea Resort Company, Ltd.
currently owns and operates a carefully managed system of
brackish water wells on its land immediately makai (west) of
the subject parcel(s). Wailea has been utilizing this
resource for over 15 years to provide more than two million
gallons per day of irrigation water for use on its two golf
courses, and other properties within the Wailea Resort.
Additionally, Wailea is currently in the process of drilling
two additional wells which are intended to provide the system
flexibility needed to utilize the resource more effectively
and to safely provide the water needed to irrigate an
additional golf course.

Wailea's development and management of this brackish ground-
water began in 1969 with an initial hydrogeologic study
followed by the construction of the first wells. Studies
were periodically undertaken in the years that followed to
analyze our use practices and to ensure that the integrity of
the aquifer is being maintained. In 1986, Wailea developed a
Brackish Water Source Protection and Development program to
guide the future use of the underlying aquifer. Thus, great
time and attention have been devoted by Wailea over the years
to understanding this resource.

We urge that careful management is necessary to protect the
sensitive brackish water resource underlying the Wailea-
Makena area. We are concerned that the proposed wells, which
Commission on Water Resource Management
May 15, 1989
Page 2

are up-gradient from Wailea's established system of wells, may impact the quality and quantity of water we pump. Coordination of well locations, pumping rates, pumping patterns, and quantities pumped can possibly serve to ameliorate the potentially negative impact of these mauka wells on existing wells in the area.

It is our opinion that there should be a long-term irrigation program developed amongst the users of irrigation water in the Wailea-Makena area. This program should consider the utilization of all available resources--i.e., sewage effluent as well as the brackish water aquifer. We submit that additional development of the aquifer should proceed cautiously, in recognition of and coordination with existing wells, so as to protect the long-term integrity of the resource.

Thank you for your consideration. Please feel free to contact the undersigned, or Ms. Meredith Ching, should you desire further information.

Very truly yours,

Howard K. Nakamura
Acting General Manager

HKN:sh
May 15, 1989

Gentlemen:

The Commission on Water Resource Management will be acting upon your application for well construction permits for Wailea-GCR/VNS Wells (4125-01,02) at its meeting on May 17, 1989, at 2:00 p.m., in the Board Room 132, 1151 Punchbowl Street, Honolulu. Your application will be included on the agenda as Item 8 (attached).

You, or your representative, are invited to attend the meeting.

Sincerely,

MANABU TAGOCHI
Deputy Director

ES:ko
Encl.
MAY 11, 1989

Honorable John C. Lewin, M.D.
Director of Health
Department of Health
1250 Punchbowl Street
Honolulu, Hawaii 96813

Attention: Mr. Thomas Arizumi, Drinking Water Program

Dear Dr. Lewin:

Well Construction Permit Applications

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168-12(c), we are sending you a copy of the following permit applications:

Kealia-O'Shea Well (2354-01).
Wailea-GCR/VMS Wells (4125-01,02).

Please submit your comments to us, orally or in writing, within three weeks from the date of this letter.

If you have any questions, please contact Manabu Tagomori at 548-7533.

Very truly yours,

WILLIAM W. PATY

Enc.
May 8, 1989

Honorable Vince Bagoyo, Director
Department of Water Supply
County of Maui
200 S. High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Bagoyo:

Well Construction Permit Applications

We are sending you a copy of the following permit applications for your review and comments:

Kamalo - Curtis Well (0352-10).
Wailea-GCR/VMS Wells (4125-01,02).

Please submit your comments to us, orally or in writing, within three weeks from the date of this letter.

If you have any questions, please contact Dan Lum at 548-7643.

Sincerely,

[Signature]

TANABU TAGOHORI
Deputy Director

ES:br
WE ARE SENDING YOU ☑ Attached ☐ Under separate cover via the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐

<table>
<thead>
<tr>
<th>COPIES</th>
<th>DATE</th>
<th>NO.</th>
<th>DESCRIPTION</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Check No. 10366 - Filing Fee for 2 irrigation wells</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(State Well Nos. 4125-01,02)</td>
</tr>
</tbody>
</table>

ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit ___ copies for approval

☐ For your use ☐ Approved as noted ☐ Submit ___ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return ___ corrected prints

☐ For review and comment ☐ FOR BIDS DUE 19 ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS

__________________________________________________________________________

COPY TO____________________________________

SIGNED:  

If enclosures are not as noted, kindly notify us at once.  
Warren S. Unemori
PAY _______________________________________________________
DOLLARS $50.00

TO 
THE ORDER OF

Department of Land & Natural Resources

WELL CONSTRUCTION PERMIT FEES (WELLS 4/25-01, 02)

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW.
IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

DELUXE FORM WVC-2 V-2

<table>
<thead>
<tr>
<th>DATE</th>
<th>DESCRIPTION</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/12/89</td>
<td>Filing Fee - Maui Wailea 670 Project</td>
<td>$50.00</td>
</tr>
<tr>
<td></td>
<td>Irrigation Wells</td>
<td></td>
</tr>
</tbody>
</table>
April 6, 1989

GCR/VMS Maui 670
34 N. Church Street, Suite 302
Wailuku, Hawaii 96793

Gentlemen:

This is to acknowledge receipt of your application to drill two golf course irrigation wells at Wailea, Maui (State Well Nos. 4125-01,02). Under the administrative rules of the State Water Code, a $25.00 filing fee must accompany each well construction permit application. Enclosed, for your information and use, is a copy of the rules and the forms we currently use.

Please send a $50.00 filing fee, $25.00 for each well, payable to the Department of Land and Natural Resources, to the Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96809. We will continue to process your application upon receipt of the filing fee.

If you have any questions, please contact Dan Lum at 548-7619.

Sincerely,

[Signature]

MAMABU TACOMO
Deputy Director

ES;ko
Encl.
cc: Warren S. Unemori,
    Engineering, Inc. w/encl.
DIVISION OF WATER RESOURCE MANAGEMENT

FROM: __________________________ DATE: 3-31 __________ FILE IN: 4125-01,02

TO: INITIAL: __________________________ PLEASE: __________________________ REMARKS: __________________________

- M. TAGOMORI __________ See Me __________
- D. Lum __________ Take Action By __________
- G. Matsumoto __________ Route to Your Branch __________
- G. Akita __________ Review & Comment __________
- L. Chang __________ Draft Reply __________
- Y. Shiroma __________ Acknowledge Receipt __________
- E. Sakoda __________ Xerox ____ copies __________
- D. Nakano __________ File __________
- W. Rozeboom __________ Mail __________
- P. Haraguchi __________ For Information __________
- S. Samuels __________ S. Kokubun __________
- R. Chung __________ D. Hamada __________
- T. Kam __________ L. Nanbu __________
- A. Monden __________ F. Ching __________
- H. Young __________ (131) 242-4403 __________
- R. Suzuki __________ Which wall (was) drilled first? __________
- N. Kaneshiro __________ O con/vms = ? __________
- T. Nakama __________

GRAND CHAMPIONS RESORT/VMS
APPLICATION FOR (check one)

☐ WELL DRILLING PERMIT  ☐ WELL MODIFICATION PERMIT

Instructions: Send completed application and attachments to Department of Land and Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809.

Reference: Regulation 9, Dept. of Land & Natural Resources.

State of Hawaii

DEPARTMENT OF LAND AND NATURAL RESOURCES

Is the well located in a Designated Ground Water Control Area?  Yes ☒ No

If "yes", application must be accompanied by a Water Use and/or Water Supply Permit and a non-refundable filing fee of $100 payable to the Department of Land & Natural Resources. However, if application is for minor modification of well, filing fee may be waived. If "no", no filing fee is required. Filing fee is waived for federal, state, and county government agencies.

1. WELL LOCATION: Island Maui Tax Map Key 2-1-08:56. Attach a plot plan showing well location referenced to established property boundaries.

2. WATER USER GCR/VMS Maui 670

   Address 34 N. Church St., Suite 302, Wailuku, Hawaii

   Telephone 244-8890

3. PROPOSED DRILLING COMPANY: Roscoe Moss Company

4. PROPOSED WORK: ☐ Drill new well ☐ Deepen ☐ Redrill ☐ Alter ☐ Seal

☐ Abandon ☐ Install new pump ☐ Replace pump ☐ Modify pump

Fill in the diagram and briefly describe the proposed work (use back of form if necessary):

Applicant proposes to drill two wells at approximate elevation of 520 feet above MSL. Water will be used to irrigate the golf course applicant is planning to construct on the site. John Mink is applicant's Hydro-Geological consultant.

5. PROPOSED USE: ☐ Municipal ☐ Military ☐ Agriculture ☐ Industrial

☐ Domestic ☐ Disposal ☐ Other (specify) ☐ Golf Course Irrigation

6. PROPOSED AMOUNT OF WITHDRAWAL: Check most appropriate box and fill in amount.

☐ Daily 1.0 MG gallons ☐ Monthly gallons ☐ Yearly gallons

7. PROPOSED PUMP OR FLOW CAPACITY: (Two Wells) Each well 350 gallons per minute

Signature: GCR/VMS Maui 670

Date: 3/31/89

For Official Use:

State Well No. 4126-01-02

DLNR Permit No. __________________________

DLNR Application No. ________________________

Signature: GCR/VMS Maui 670

Landowner of Well Site

Date: 3/31/89
March 28, 1989

Department of Land & Natural Resources
State of Hawaii
P.O. Box 373
Honolulu, Hawaii 96809

Gentlemen:

Transmitted herewith for your approval is an application for a well drilling permit by our client GCR/VMS Maui 670. They are proposing to drill two (2) irrigation wells in their property TMK 2-1-08:56 located at Wailea, Maui. Water will be used to irrigate a golf course that they are planning to build on the site.

We believe all the pertinent information required have been provided. However, should you need more information or have any questions concerning the project please call us.

Thank you for your cooperation.

Sincerely,

[Signature]

Warren S. Unemori

2933L
WAILEA—GCR/VMS WELLS (4125—01,02)