Is this same as water shortage Plan?

Water conservation plan. Shortage plan waive for this permit.
March 16, 2009

Mr. Ken C. Kawahara, Deputy Director
State of Hawaii
Department of Land and Natural Resources
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Kawahara:

Re: Water Use Permits, Puuloa Ground-Water Management Area, Oahu
WUP No. 855 for Well No. 1901-08 (new permit)
WUP No. 857 for Well No. 2001-12 (supersedes WUP No. 793)
WUP No. 858 for Well No. 1901-05 (supersedes WUP No. 794)
WUP No. 859 for Well Nos. 1900-24 and 2000-06 (new permit)

As required by the Conservation Conditions Ewa Caprock Water Use Permits attached to your February 12, 2009 letter, enclosed please find the Water Conservation Program and Plan for irrigation of landscaped areas in Ewa by Gentry. The plan was prepared by our landscape architects, Brownlie and Lee, for the Ewa by Gentry development.

Please call me at 599-8229 if you require additional information.

Very truly yours,

GENTRY HOMES, LTD.

Michael J. Brant, P. E.
Vice President – Engineering

 Attachment

cc: T. Nance, TNWRE
EWA BY GENTRY EWA CAPROCK WATER CONSERVATION PROGRAMS AND PLANS

Ewa by Gentry shall minimize demand for non-potable water by:

1. Utilizing low maintenance water efficient plants which are brackish water, drought, wind and pest tolerant. Planting shall have minimal susceptibility to insect and disease to minimize usage of insecticides and fungicides. Groundcover species shall densely cover the ground to minimize weed establishment and germination and thus minimize the application of herbicides.

2. Planting trees, shrubs and groundcovers which have proven themselves in the growing environment at Ewa by Gentry including:

<table>
<thead>
<tr>
<th>Native</th>
<th>Non Native</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trees</strong></td>
<td><strong>Trees</strong></td>
</tr>
<tr>
<td>Alahee</td>
<td>Autograph</td>
</tr>
<tr>
<td>Coconut</td>
<td>Beach Heliotrope</td>
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<tr>
<td>Dwarf Hau</td>
<td>Bridal Veil Plumeria</td>
</tr>
<tr>
<td>Hala</td>
<td>California Pepper</td>
</tr>
<tr>
<td>Kou</td>
<td>Geiger Tree</td>
</tr>
<tr>
<td>Lonomea</td>
<td>Hong Kong Orchid</td>
</tr>
<tr>
<td>Loulu</td>
<td>Italian Cypress</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Native</th>
<th>Non Native</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shrubs</strong></td>
<td><strong>Palm</strong></td>
</tr>
<tr>
<td>Aali'i</td>
<td>Areca Palm</td>
</tr>
<tr>
<td>Ahu'awa</td>
<td>Bottle Palm</td>
</tr>
<tr>
<td>Akoko</td>
<td>Coconut</td>
</tr>
<tr>
<td>Hawaiian Cotton, Ma'o</td>
<td>Dwarf Date</td>
</tr>
<tr>
<td>Hibiscus</td>
<td>Giant Cycad</td>
</tr>
<tr>
<td>Hinahina</td>
<td>Manila Palm</td>
</tr>
<tr>
<td>Kului</td>
<td>Neodypsis</td>
</tr>
<tr>
<td>Mountain Naupaka</td>
<td>Royal Palm</td>
</tr>
<tr>
<td>Naio</td>
<td>Washingtonia Palm</td>
</tr>
<tr>
<td>Nanu</td>
<td>Woodyetia</td>
</tr>
<tr>
<td>Naupaka</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Native</th>
<th>Non Native</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Groundcovers</strong></td>
<td><strong>Shrubs</strong></td>
</tr>
<tr>
<td>Ae'ne</td>
<td>Agave</td>
</tr>
<tr>
<td>Akulikuli</td>
<td>Bird-of-Paradise</td>
</tr>
<tr>
<td>Carex</td>
<td>Caricature Plant</td>
</tr>
<tr>
<td>Hinahina</td>
<td>Copperleaf</td>
</tr>
<tr>
<td>Hunakai</td>
<td>Croton Mame</td>
</tr>
<tr>
<td>Naio Papa</td>
<td>Dwarf Spider Lily</td>
</tr>
<tr>
<td>Nanea</td>
<td>Eldorado</td>
</tr>
<tr>
<td>Ohai (Sesbania molokaiensis)</td>
<td>Galphimia</td>
</tr>
<tr>
<td>Pa'u o Hi'ilaka</td>
<td>Green Eranthemum</td>
</tr>
<tr>
<td>Native Plumbago, ilie'e</td>
<td>Lilinoi Ti</td>
</tr>
<tr>
<td>Pohinahina</td>
<td>Natal Plum</td>
</tr>
<tr>
<td>Ulei</td>
<td>Purple Eranthemum</td>
</tr>
<tr>
<td>Vitex rotundifolia</td>
<td>Sago</td>
</tr>
<tr>
<td></td>
<td>Spider Lily</td>
</tr>
<tr>
<td></td>
<td>Yucca</td>
</tr>
</tbody>
</table>
3. Utilizing plant material which develops a minimum of undesired or excessive growth or foliage which must be frequently trimmed.

4. Installing and maintaining organic mulch in groundcover areas where feasible and beneficial to plant growth to reduce evaporation and for weed and erosion control. Mulch shall be spread to a thickness of 2-inches in wide beds below hedge planting to minimize weed establishment and eliminate the need for groundcover and related water and maintenance. Mulch shall not be installed to excessive depths which will inhibit plant growth or present an environment which creates insect or slug problems.

5. Maintaining landscaping with minimal application of pesticides and fertilizer. Fertilizer shall not be applied on established planting more frequently than on a quarterly basis. Fertilizer shall not be applied if it will result in excessive plant growth or where current plant condition is excellent.

6. Improving land management plans to conserve water, this includes at least annual laboratory soil analysis to determine current soil fertility levels and necessary nutrient supplements. Rainfall and run-off shall be captured thru site and landscape grading to create sump areas and minimize the use of berms.

Ewa by Gentry shall improve efficiency in use of non-potable water and reduce losses and waste of non-potable water by:

1. Utilizing efficiently designed landscaping and irrigation systems.
2. Monitoring irrigation requirements and controlling usage by checking the condition of all landscaping on at least a weekly basis and adjusting irrigation duration and frequency accordingly.
3. Managing irrigation scheduling to minimize water demand by monitoring the weather on both a daily and seasonal basis and adjusting irrigation schedules and operating times and duration of irrigation cycles accordingly. Turning off irrigation controllers when raining.
4. Eliminating water wastage by checking irrigation system and promptly repairing leaks and breaks in irrigation pipes. Irrigation system shall be checked at least monthly to ensure that the radius and arc of each irrigation head is correct and that each head is not overthrowing pavement or spraying onto structures. Leaks and malfunctioning irrigation equipment reported by residents to the Homeowners Association or the landscape maintenance contractor shall be repaired no later than the following day, excluding Sunday.
5. Maintaining and improving irrigation system as necessary. Consult with Landscape Architect who designed the existing irrigation system prior to making modifications to the irrigation system which will change existing flow rates or equipment application rates or area of coverage.
March 2, 2009

Mr. Wayne M. Hashiro, P.E., Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, HI 96843

Dear Mr. Hashiro:

Ewa by Gentry, Irrigation Source Contingency Plan
Water Use Permit Nos. 855, 857, 858, and 859

Enclosed for your information is a copy of the irrigation water supply contingency plan submitted by Gentry Homes, Ltd. Gentry Homes submitted this plan in accordance with Special Condition 4 of the captioned water use permits, which states:

4. The permittee shall submit a contingency plan for water use in the event the chloride concentration in the permitted well(s) exceeds the 1,000 mg/l sustainable capacity limit established for Ewa caprock aquifer sources, in which case the permittee shall seek an alternative source of supply. The contingency plan shall be submitted to the Commission within 30 days of the issuance of this permit.

The Commission included Special Condition 4, as a condition of permit approval on January 22, 2009, in response to a comment received from the Board of Water Supply on Gentry Homes’ applications for these permits.

If you have any questions, please contact Denise Mills of the Commission staff at 587-0251.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

DEM:ss
Enclosure

c: Mike Brant, Gentry Homes
Copy to BWS

- still waiting for WVP 856 plan.
February 20, 2009

Mr. Ken C. Kawahara, Deputy Director
State of Hawaii
Department of Land and Natural Resources
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Kawahara:

Subject: Water Use Permits, Puuloa Ground-Water Management Area, Oahu

WUP No. 855 for Well No. 1901-08 (new permit)
WUP No. 857 for Well No. 2001-12 (supersedes WUP No. 793)
WUP No. 858 for Well No. 1901-05 (supersedes WUP No. 794)
WUP No. 859 for Well Nos. 1900-24 and 2000-06 (new permit)

In response to your February 12, 2009 letter, Special Condition 4, should the chloride concentration in any of the permitted wells exceed the 1,000 mg/l limit, the following action will be taken:

1. The amount of water drawn from the non-performing well (well exceeding chloride limit) will be reduced. The irrigation system of the nearby area will be adjusted to allow nearby wells to supplement shortfall in system with reduced amount of water drawn.

2. If adjustment of water use fails or is not feasible, Gentry will apply for a variance to exceed the specified chloride limit.

3. If a variance is not granted, a new well(s) will be developed to provide additional sources of water for use in the irrigation system.

If you require additional information, please feel free to call me at 599-8229.

Very truly yours,

GENTRY HOMES, LTD.

Michael J. Brant, P.E.
Vice President – Engineering

/sacm

cc: T. Nance, TNWRE
<table>
<thead>
<tr>
<th>TO</th>
<th>INIT.</th>
<th>TO</th>
<th>INIT.</th>
<th>FOR</th>
<th>PLEASE</th>
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<tr>
<td>CHENG, C.</td>
<td></td>
<td>KUNIMURA, I.</td>
<td></td>
<td>Approval</td>
<td>See Me</td>
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<tr>
<td>CHING, F.</td>
<td></td>
<td>MILLS, D.</td>
<td>4</td>
<td>Signature</td>
<td>Review &amp; Comment</td>
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<tr>
<td>CHONG, R.</td>
<td></td>
<td>OHYE, L.</td>
<td></td>
<td>Information</td>
<td>Take Action</td>
</tr>
<tr>
<td>DANBARA, S.</td>
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<td>OHYE, M.</td>
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<td>Type Draft</td>
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<tr>
<td>ENGLAND, D.</td>
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<td>OSHIRO, K.</td>
<td></td>
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<tr>
<td>FUJII, N.</td>
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<td>SAKODA, E.</td>
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<td>HARDY, R.</td>
<td>1</td>
<td>SWANSON, S.</td>
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<td></td>
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<tr>
<td>HOAGBIN, S.</td>
<td>2</td>
<td>TORRES, R.</td>
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<tr>
<td>ICE, C.</td>
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<td>UYENO, D.</td>
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<td>IMATA, R.</td>
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<td>YODA, K.</td>
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<tr>
<td>KAWAHARA, K.</td>
<td>3</td>
<td>YOSHINAGA, M.</td>
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<tr>
<td>KIMURA, J.</td>
<td></td>
<td></td>
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</tbody>
</table>

- Corrections to Gentry permits - yellow highlight & strike out as per. (Track changes caused the whole merge file to show as changed.)
- O.K.
**Sender: Complete This Section**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

   Mr. Mike Brant  
   . Gentry Homes, Ltd.  
   Honolulu, HI

   WUP Nos. 855, 857 - 859

2. Article Number  
   (Transfer from service label)  
   7006 2150 0003 3953 9463

**Complete This Section on Delivery**

<table>
<thead>
<tr>
<th>A. Signature</th>
<th>B. Received by (Printed Name)</th>
<th>C. Date of Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Shelly Morris</td>
<td></td>
<td>3/17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D. Is delivery address different from item 1?</th>
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</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Service Type</th>
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</thead>
<tbody>
<tr>
<td>Certified Mail</td>
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<td>Registered</td>
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<tr>
<td>Return Receipt for Merchandise</td>
</tr>
<tr>
<td>Insured Mail</td>
</tr>
<tr>
<td>C.O.D.</td>
</tr>
</tbody>
</table>

4. Restricted Delivery? (Extra Fee)  
   Yes

PS Form 3811, February 2004  
Domestic Return Receipt  
102595-02-M-1540
COMMISSION ON WATER RESOURCE MANAGEMENT
P. O. Box 621
Honolulu, Hawaii 96809

Attn: Denise
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postage</td>
<td>$1.85</td>
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<tr>
<td>Certified Fee</td>
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<tr>
<td>Return Receipt Fee (Endorsement Required)</td>
<td>$2.25</td>
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<tr>
<td>Restricted Delivery Fee (Endorsement Required)</td>
<td></td>
</tr>
<tr>
<td>Total Postage &amp; Fees</td>
<td>$6.41</td>
</tr>
</tbody>
</table>
Certified Mail Provides:
- mailing receipt
- a unique identifier for your mailpiece
- a record of delivery kept by the Postal Service for two years

Important Reminders:
Certified Mail may ONLY be combined with First-Class Mail® or Priority Mail®.
Certified Mail is not available for any class of international mail.

NO INSURANCE COVERAGE IS PROVIDED with Certified Mail. For valuables, please consider Insured or Registered Mail.

- For an additional fee, a Return Receipt may be requested to provide proof of delivery. To obtain Return Receipt service, please complete and attach a Return Receipt (PS Form 3811) to the article and add applicable postage to cover the fee. Endorse mailpiece "Return Receipt Requested". To receive a fee waiver for a duplicate return receipt, a USPS® postmark on your Certified Mail receipt is required.

- For an additional fee, delivery may be restricted to the addressee or the addressee’s authorized agent. Advise the clerk or mark the mailpiece with the endorsement “Restricted Delivery”.

- If a postmark on the Certified Mail receipt is desired, please present the article at the post office for postmarking. If a postmark on the Certified Mail receipt is not needed, detach and affix label with postage and mail.

IMPORTANT: Save this receipt and present it when making an inquiry

PS Form 3800, August 2006 (Reverse) PSN 7530-02-000-9047
February 12, 2009

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Mike Brant
Gentry Homes, Ltd.
P.O. Box 295
Honolulu, HI 96809

Dear Mr. Brant:

Water Use Permits Approved
WUP No. 855 for Well No. 1901-08 (new permit)
WUP No. 857 for Well No. 2001-12 (supersedes WUP No. 793)
WUP No. 858 for Well No. 1901-05 (supersedes WUP No. 794)
WUP No. 859 for Well Nos. 1900-24 and 2000-06 (new permit)

Puuloa Ground-Water Management Area, Oahu

This letter transmits your water use permits for the following Gentry Homes irrigation wells: Gentry Area 45 (Well No. 1901-08); Gentry Area 13 (Well No. 1901-05); Keaunui Area 30 (Well No. 2001-12); and Gentry Area 35 #1 and #2 (Well Nos. 1900-24 and 2000-06, respectively). This transmittal corrects the permits that we issued to you on January 27, 2009, notably, that you are not required to submit a water shortage plan for the four wells subject to these permits. Your permits, which were approved by the Commission on Water Resource Management on January 22, 2009, authorize the following quantities of water use on a 12-month moving average basis.

<table>
<thead>
<tr>
<th>Well Number and Name</th>
<th>1901-08</th>
<th>2001-12</th>
<th>1901-05</th>
<th>2000-06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gentry Area 45</td>
<td>0.066</td>
<td>0.225</td>
<td>0.037</td>
<td></td>
</tr>
<tr>
<td>Keaunui Area 30</td>
<td>0.066</td>
<td>0.225</td>
<td>0.037</td>
<td>0.255</td>
</tr>
<tr>
<td>Gentry Area 13</td>
<td>0.066</td>
<td>0.225</td>
<td>0.037</td>
<td>0.255</td>
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<tr>
<td>Gentry Area 31, #1</td>
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<td>0.225</td>
<td>0.037</td>
<td>0.255</td>
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<tr>
<td>Gentry Area 35, #2</td>
<td>0.066</td>
<td>0.225</td>
<td>0.037</td>
<td>0.255</td>
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<tr>
<td>Battery w/1900-24</td>
<td></td>
<td></td>
<td></td>
<td>0.255</td>
</tr>
</tbody>
</table>

As part of the Commission's approval, the following special conditions were added to each of the enclosed permits under Standard Permit Condition 19:

Special Conditions

1. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke the permit after a hearing.

2. This permit is approved under the assumption that reclaimed wastewater will become available for reuse as an alternative supply source.
3. Pumping shall cease immediately if chloride measurements show that the brackish water drawn by
the well(s) exceeds 1,000 mg/l of chloride, unless a variance from the chloride limit has been granted.
The authority to approve variance requests is delegated to the Chairperson.

4. The permittee shall submit a contingency plan for water use in the event the chloride concentration
in the permitted well(s) exceeds the 1,000 mg/l sustainable capacity limit established for Ewa caprock
aquifer sources, in which case the permittee shall seek an alternative source of supply. The
contingency plan shall be submitted to the Commission within 30 days of the issuance of this permit.

5. In the event that the tax map key(s) at the location(s) of the water use is (are) changed, the permittee
shall notify the Commission in writing of the tax map key change(s) within thirty (30) days after the
permittee receives notice of the tax map key change(s).

6. Standard Condition 16 is waived for brackish water wells.

7. The permittee shall comply with the conservation conditions for Ewa caprock water use permits,
attached to this permit.

Enclosed with this approval letter are the following:

1. Water Use Permit No. 855
2. Water Use Permit No. 857
3. Water Use Permit No. 858
4. Water Use Permit No. 859
5. Conservation Conditions - Ewa Caprock Water Use Permits
6. Your monthly water use report form (for five irrigation supply wells)

The special conditions listed above and the Ewa Caprock water use permit conservation conditions should
be kept with each of the subject permits. Please be sure to read all the conditions of your approved
permits.

We draw your attention to two specific conditions of each permit that require your response. First,
Standard Condition 10 requires you to keep a record of your monthly total pumpage, water level in the
well, chloride concentration, and water temperature measurements. This information must be submitted
to the Commission on a monthly basis using the enclosed water use report form. You may make copies
of the enclosed report form or download blank forms, as needed, from our website at

Second, Special Condition 4 requires you to submit a contingency plan for water use in the event that
chloride concentrations in the wells covered by these permits exceeds the 1,000 mg/l chloride limit
established for Ewa caprock irrigation water supply sources. Your contingency plan must be submitted
within thirty (30) days of the issuance date of this permit.

If you have any questions, please call Denise Mills of the Commission staff at 587-0251.

Sincerely,

LAURA H. THEILEN
Chairperson

Attachments:  WUP Nos. 855, 857, 858, and 859
Conservation Conditions - Ewa Caprock Water Use Permits
Water Use Report Form
# GROUND-WATER USE PERMIT
## WUP NO. 855

### PERMITTEE

<table>
<thead>
<tr>
<th>Permittee/Water User</th>
<th>Landowner of Source</th>
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<tbody>
<tr>
<td>Gentry Homes, Ltd.</td>
<td>Gentry Homes, Ltd.</td>
</tr>
<tr>
<td>P.O. Box 295, Honolulu, HI 96809</td>
<td>P.O. Box 295, Honolulu, HI 96809</td>
</tr>
</tbody>
</table>

### PERMITTED SOURCE INFORMATION

<table>
<thead>
<tr>
<th>Island</th>
<th>Oahu</th>
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<tbody>
<tr>
<td>Water Management Area</td>
<td>Ewa Caprock</td>
</tr>
<tr>
<td>Aquifer Sector</td>
<td>Ewa Caprock</td>
</tr>
<tr>
<td>Aquifer System</td>
<td>Puuloa</td>
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<tr>
<td>System Sustainable Yield</td>
<td>N/A (1,000 mg/l chloride concentration limit for irrigation uses)</td>
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<tr>
<td>Well Name</td>
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<tr>
<td>State Well Nos.</td>
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### PERMITTED USE INFORMATION

<table>
<thead>
<tr>
<th>Reasonable beneficial use</th>
<th>Irrigation</th>
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</thead>
<tbody>
<tr>
<td>Withdrawal (12 month moving ave.)</td>
<td>0.066 mgd</td>
</tr>
<tr>
<td>Location of water use</td>
<td></td>
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<tr>
<td>TMK(s)</td>
<td>9-1-069-005, por (10.62 acres)</td>
</tr>
<tr>
<td>State land use classification</td>
<td>Urban</td>
</tr>
<tr>
<td>County zoning classification</td>
<td>R-5 and A-1</td>
</tr>
</tbody>
</table>

Pursuant to Hawaii's State Constitution, Article XI, Section 7, Hawaii Revised Statutes, Chapter 174C; Hawaii Administrative Rules, Chapters 13-167 through 13-171; and Hawaii decisional law and custom, the permittee is hereby authorized to use ground water from the sources and in the amount and from and upon the locations described above; subject however, to the requirements of law including but not limited to the following conditions:
1. The water described in this water use permit may only be taken from the location described and used for the reasonable beneficial use described at the location described above. Reasonable beneficial uses means "the use of water in such a quantity as is necessary for economic and efficient utilization which is both reasonable and consistent with State and County land use plans and the public interest." (HRS § 174C-3)

2. The right to use ground water is a shared use right.

3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
   a. Can be accommodated with the available water source;
   b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
   c. Will not interfere with any existing legal use of water;
   d. Is consistent with the public interest;
   e. Is consistent with State and County general plans and land use designations;
   f. Is consistent with County land use plans and policies; and
   g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).

4. The ground-water use here must not interfere with surface or other ground-water rights or reservations.

5. The ground-water use here must not interfere with interim or permanent instream flow standards. If it does, then:
   a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
   b. The interim or permanent instream flow standard, as applicable, must be amended.

6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

7. The water use permit application and submittal, as amended, approved by the Commission at its January 22, 2009, meeting are incorporated into this permit by reference.

8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.

9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
   a. Protect the water sources (quantity or quality);
   b. Meet other legal obligations including other correlative rights;
   c. Insure adequate conservation measures;
   d. Require efficiency of water uses;
   e. Reserve water for future uses, provided that all legal existing uses of water as of June, 1987 shall be protected;
   f. Meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
   g. Carry out such other necessary and proper exercise of the State's and the Commission's police powers under law as may be required.

Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.
10. Approved flowmeters must be installed to measure monthly ground-water withdrawals, and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a monthly basis (see attached form).

11. This permit shall be subject to the Commission’s periodic review of the Puuloa Aquifer System’s sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the Puuloa Aquifer System, or relevant modified aquifer(s), is reduced.

12. A permit may be transferred, in whole or in part, from the permittee to another, if:
   a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of the use, remain the same; and
   b. The Commission is informed of the transfer within ninety days.

Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer, which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

13. The use(s) authorized by law and by this permit do not constitute ownership rights.

14. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances that will affect the permittee’s water use.

15. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservation, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period of forfeiture.

16. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee’s water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the Puuloa Ground-Water Management Area.

17. The water use permit shall be subject to the Commission’s establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.

18. The permittee understands that any willful violation of any of the above conditions or any provisions of HRS § 174C or HAR § 13-171 may result in the suspension or revocation of this permit.

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

Attachments: Conservation Conditions – Ewa Caprock Water Use Permits
**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
   - Mr. Mike Brant
   - Gentry Homes, Ltd.
   - P.O. Box 295
   - Honolulu, HI 96809

2. Article Number
   (Transfer from service label)
   - 7006 2150 0003 3953 9432

**COMPLETE THIS SECTION ON DELIVERY**

<table>
<thead>
<tr>
<th>A. Signature</th>
<th>X</th>
<th>B. Received by (Printed Name)</th>
<th>Geo Luy</th>
<th>C. Date of Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>D. Is delivery address different from item 1?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
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<tr>
<td>If YES, enter delivery address below</td>
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<td></td>
</tr>
</tbody>
</table>

3. Service Type
   - Certified Mail
   - Registered
   - Insured Mail
   - Express Mail
   - Return Receipt for Merchandise
   - C.O.D.
   - Restricted Delivery? (Extra Fee) | Yes | No |

PS Form 3811, February 2004
Domestic Return Receipt

102595-02-M-154i
Certified Mail Provides:

- A mailing receipt
- A unique identifier for your mailpiece
- A record of delivery kept by the Postal Service for two years

Important Reminders:

- Certified Mail may ONLY be combined with First-Class Mail® or Priority Mail®,
- Certified Mail is not available for any class of international mail.
- NO INSURANCE COVERAGE IS PROVIDED with Certified Mail. For valuables, please consider Insured or Registered Mail.
- For an additional fee, a Return Receipt may be requested to provide proof of delivery. To obtain Return Receipt service, please complete and attach a Return Receipt (PS Form 3811) to the article and add applicable postage to cover the fee. Endorse mailpiece "Return Receipt Requested". To receive a fee waiver for a duplicate return receipt, a USPS® postmark on your Certified Mail receipt is required.
- For an additional fee, delivery may be restricted to the addressee or addressee's authorized agent. Advise the clerk or mark the mailpiece with the endorsement "Restricted Delivery".
- If a postmark on the Certified Mail receipt is desired, please present the article at the post office for postmarking. If a postmark on the Certified Mail receipt is not needed, detach and affix label with postage and mail.

IMPORTANT: Save this receipt and present it when making an inquiry.

S Form 3800, August 2006 (Reverse) PSN 7530-02-000-9047
U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

Postage $1.68
Certified Fee $2.76
Return Receipt Fee (Endorsement Required) $0.32
Restricted Delivery Fee (Endorsement Required) $0.00
Total Postage & Fees $4.86

Mr. Mike Brant
Gentry Homes, Ltd.
Honolulu, HI
Mr. Mike Brant  
Gentry Homes, Ltd.  
P.O. Box 295  
Honolulu, HI 96809

Dear Mr. Brant:

Water Use Permits Approved
WUP No. 855 for Well No. 1901-08 (new permit)  
WUP No. 857 for Well No. 2001-12 (supersedes WUP No. 793)  
WUP No. 858 for Well No. 1901-05 (supersedes WUP No. 794)  
WUP No. 859 for Well Nos. 1900-24 and 2000-06 (new permit)  

Puuloa Ground-Water Management Area, Oahu

This letter transmits your water use permits for the following Gentry Homes irrigation wells:  
Gentry Area 45 (Well No. 1901-08); Gentry Area 13 (Well No. 1901-05); Keaunui Area 30 (Well No. 2001-12); and Gentry Area 35 #1 and #2 (Well Nos. 1900-24 and 2000-06, respectively). Your permits, which were approved by the Commission on Water Resource Management on January 22, 2009, authorize the following quantities of water use on a 12-month moving average basis:

<table>
<thead>
<tr>
<th>Well Number and Name</th>
<th>1901-08</th>
<th>2001-12</th>
<th>1901-05</th>
<th>1900-24</th>
<th>2000-06</th>
</tr>
</thead>
<tbody>
<tr>
<td>WUP No.</td>
<td>855</td>
<td>857</td>
<td>858</td>
<td>859</td>
<td>859</td>
</tr>
<tr>
<td>Quantity permitted (mgd)</td>
<td>0.066</td>
<td>0.225</td>
<td>0.037</td>
<td>0.255</td>
<td>Battery w/1900-24</td>
</tr>
<tr>
<td>Permitted use area (acres)</td>
<td>10.62</td>
<td>36.09</td>
<td>5.94</td>
<td>41.00</td>
<td>-</td>
</tr>
<tr>
<td>Pump capacity (gpm)</td>
<td>100</td>
<td>430</td>
<td>355</td>
<td>150</td>
<td>-</td>
</tr>
</tbody>
</table>

As part of the Commission's approval, the following special conditions were added to each of the enclosed permits under Standard Permit Condition 19:
Special Conditions

1. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke the permit after a hearing.

2. This permit is approved under the assumption that reclaimed wastewater will become available for reuse as an alternative supply source.

3. Pumping shall cease immediately if chloride measurements show that the brackish water drawn by the well(s) exceeds 1,000 mg/l of chloride, unless a variance from the chloride limit has been granted. The authority to approve variance requests is delegated to the Chairperson.

4. The permittee shall submit a contingency plan for water use in the event the chloride concentration in the permitted well(s) exceeds the 1,000 mg/l sustainable capacity limit established for Ewa caprock aquifer sources, in which case the permittee shall seek an alternative source of supply. The contingency plan shall be submitted to the Commission within 30 days of the issuance of this permit.

5. In the event that the tax map key(s) at the location(s) of the water use is (are) changed, the permittee shall notify the Commission in writing of the tax map key change(s) within thirty (30) days after the permittee receives notice of the tax map key change(s).

6. The permittee shall comply with the conservation conditions for Ewa caprock water use permits, attached to this permit.

Enclosed with this approval letter are the following:

1. Water Use Permit No. 855
2. Water Use Permit No. 857
3. Water Use Permit No. 858
4. Water Use Permit No. 859
5. Conservation Conditions – Ewa Caprock Water Use Permits
6. Your monthly water use report form (for five irrigation supply wells)

The special conditions listed above and the Ewa Caprock water use permit conservation conditions should be kept with each of the subject permits. Please be sure to read all the conditions of your approved permits.

We draw your attention to three specific conditions of each permit that require your response. First, Standard Condition 10 requires you to keep a record of your monthly total pumpage, water level in the well, chloride concentration, and water temperature measurements. This information must be submitted to the Commission on a monthly basis using the enclosed water use report form. You may make copies of the enclosed report form or download blank forms, as needed, from our website at http://www.hawaii.gov/dlnr/cwrm/resources_permits.htm.

Second, you are required to submit a water shortage plan to the Commission within thirty (30) days of the issuance date of these permits (see Standard Condition 16). Your water shortage plan should state what you are willing to do if the Commission declares a water shortage situation in the Ewa Caprock Ground-Water Management Area, and can be as concise as a one-page letter. In a water shortage situation, the Commission may require temporary reductions in pumpage from some or all sources. The Commission is required by law to formulate a plan to implement
such area-wide reductions, which should accommodate, include, and be consistent with your plan. Therefore, we need your water shortage plan to assist us in formulating the Commission's overall Water Shortage Plan.

Third, Special Condition 4 requires you to submit a contingency plan for water use in the event that chloride concentrations in the wells covered by these permits exceeds the 1,000 mg/l chloride limit established for Ewa caprock irrigation water supply sources. Your contingency plan must be submitted within thirty (30) days of the issuance date of this permit. This plan may be combined with your water shortage plan, although the contingency plan is expected to cover longer-range supply needs than would normally be covered by a water shortage plan.

If you have any questions, please call Denise Mills of the Commission staff at 587-0251.

Sincerely,

Laura H. Thielen
Chairperson

Attachments:  WUP Nos. 855, 857, 858, and 859
              Conservation Conditions – Ewa Caprock Water Use Permits
              Water Use Report Form
# GROUND-WATER USE PERMIT

**WUP NO. 855**

## PERMITTEE

<table>
<thead>
<tr>
<th>Permittee/Water User</th>
<th>Landowner of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gentry Homes, Ltd.</td>
<td>Gentry Homes, Ltd.</td>
</tr>
<tr>
<td>Address</td>
<td>Address</td>
</tr>
<tr>
<td>P.O. Box 295</td>
<td>P.O. Box 295</td>
</tr>
<tr>
<td>Honolulu, HI 96809</td>
<td>Honolulu, HI 96809</td>
</tr>
</tbody>
</table>

## PERMITTED SOURCE INFORMATION

<table>
<thead>
<tr>
<th>Island</th>
<th>Oahu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Management Area</td>
<td>Ewa Caprock</td>
</tr>
<tr>
<td>Aquifer Sector</td>
<td>Ewa Caprock</td>
</tr>
<tr>
<td>Aquifer System</td>
<td>Puuloa</td>
</tr>
<tr>
<td>System Sustainable Yield</td>
<td>N/A (1,000 mg/l chloride concentration limit for irrigation uses)</td>
</tr>
<tr>
<td>Well Name</td>
<td>Gentry Area 45</td>
</tr>
<tr>
<td>State Well Nos.</td>
<td>1901-08</td>
</tr>
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</table>

## PERMITTED USE INFORMATION

<table>
<thead>
<tr>
<th>Reasonable beneficial use</th>
<th>Irrigation</th>
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</thead>
<tbody>
<tr>
<td>Withdrawal (12 month moving ave.)</td>
<td>0.066 mgd</td>
</tr>
<tr>
<td>Location of water use</td>
<td></td>
</tr>
<tr>
<td>TMK(s)</td>
<td>9-1-069:005, por (10.62 acres)</td>
</tr>
<tr>
<td>State land use classification</td>
<td>Urban</td>
</tr>
<tr>
<td>County zoning classification</td>
<td>R-5 and A-1</td>
</tr>
</tbody>
</table>

Pursuant to Hawaii's State Constitution, Article XI, Section 7, Hawaii Revised Statutes, Chapter 174C; Hawaii Administrative Rules, Chapters 13-167 through 13-171; and Hawaii decisional law and custom, the permittee is hereby authorized to use ground water from the sources and in the amount and from and upon the locations described above; subject however, to the requirements of law including but not limited to the following conditions:
1. The water described in this water use permit may only be taken from the location described and used for the reasonable beneficial use described at the location described above. Reasonable beneficial uses means "the use of water in such a quantity as is necessary for economic and efficient utilization which is both reasonable and consistent with State and County land use plans and the public interest." (HRS § 174C-3)

2. The right to use ground water is a shared use right.

3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
   a. Can be accommodated with the available water source;
   b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
   c. Will not interfere with any existing legal use of water;
   d. Is consistent with the public interest;
   e. Is consistent with State and County general plans and land use designations;
   f. Is consistent with County land use plans and policies; and
   g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).

4. The ground-water use here must not interfere with surface or other ground-water rights or reservations.

5. The ground-water use here must not interfere with interim or permanent instream flow standards. If it does, then:
   a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
   b. The interim or permanent instream flow standard, as applicable, must be amended.

6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

7. The water use permit application and submittal, as amended, approved by the Commission at its January 22, 2009, meeting are incorporated into this permit by reference.

8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.

9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
   a. Protect the water sources (quantity or quality); 
   b. Meet other legal obligations including other correlative rights;
   c. Insure adequate conservation measures;
   d. Require efficiency of water uses;
   e. Reserve water for future uses, provided that all legal existing uses of water as of June, 1987 shall be protected;
   f. Meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
   g. Carry out such other necessary and proper exercise of the State's and the Commission's police powers under law as may be required.

Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.
10. Approved flowmeters must be installed to measure monthly ground-water withdrawals, and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a monthly basis (see attached form).

11. This permit shall be subject to the Commission's periodic review of the Puuloa Aquifer System's sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the Puuloa Aquifer System, or relevant modified aquifer(s), is reduced.

12. A permit may be transferred, in whole or in part, from the permittee to another, if:
   a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of the use, remain the same; and
   b. The Commission is informed of the transfer within ninety days.

Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer, which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

13. The use(s) authorized by law and by this permit do not constitute ownership rights.

14. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances that will affect the permittee's water use.

15. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservation, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period of forfeiture.

16. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee's water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the Puuloa Ground-Water Management Area.

17. The water use permit shall be subject to the Commission's establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.

18. The permittee understands that any willful violation of any of the above conditions or any provisions of HRS § 174C or HAR § 13-171 may result in the suspension or revocation of this permit.

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

LAURA H. THIELEN, Chairperson
Commission on Water Resource Management

Attachments: Conservation Conditions – Ewa Caprock Water Use Permits
AGENDA FOR THE MEETING OF THE COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: January 22, 2009
TIME: 9:00 a.m.
PLACE: Kalanimoku Building, Conference Room 132
1151 Punchbowl Street
Honolulu, Hawaii 96813

A. APPROVAL OF MINUTES
1. December 17, 2008

B. ANNOUNCEMENTS

C. GROUND WATER REGULATION
1. Gentry Homes, Ltd. and Ewa by Gentry Community Association, APPLICATIONS FOR WATER USE PERMITS: WUP No. 855, Future Irrigation Use, 66,085 gpd (Well No. 1901-08); WUP No. 856, Modify Existing Irrigation Use to 194,768 gpd (Well No. 2001-05); WUP No. 857, Modify Existing Irrigation Use to 224,615 gpd (Well No. 2001-12); WUP No. 858, Modify Existing Irrigation Use to 36,975 gpd (Well No. 1901-05); WUP No. 859, Future Irrigation Use, 255,108 gpd (Well Nos. 1900-24 and 2000-06); Puuloa Ground Water Management Area, Oahu

2. Oasis Water Systems, Inc., REQUEST TO EXCEED MAXIMUM PERMITTED WELL DEPTH: Lanikai Condominium Irrigation Well, “Welly 1” (Well No. 0319-01), TMK (4) 4-3-002:003, Wailua, Kauai

D. NON-ACTION ITEMS
1. Report to the Twenty-Fifth Legislature, 2009 Regular Session: 20-Year Review of Water Use Permits

E. NEXT COMMISSION MEETINGS (TENTATIVE)
1. February 18, 2009
2. March 18, 2009

The Commission on Water Resource Management’s monthly meeting agenda and staff submittals are now available on our website at http://www.hawaii.gov/dlnr/cwrm. Materials related to items on this agenda are available for review at our office at 1151 Punchbowl Street, Room 227, and also will be available at the meeting. Any person may testify or present information on any meeting agenda item, unless the item involves a proceeding in an existing contested case. In addition, if you have a legal interest that may be adversely affected by the proposed action, you may have a right to an administrative contested case hearing. You must make the request for such a hearing either orally or in writing at the public hearing or meeting for which this notice is given. Hawaii Administrative Rules (H.A.R.) Section 13-167-52(a).

If you request a contested case hearing, you will have the opportunity to present to the Commission oral or written evidence or testimony or both to establish your standing. You may present your testimony or evidence on standing at the meeting or public hearing described above or, alternatively, at a hearing set by the Commission at a later date. If you request a contested case hearing either orally or in writing, you must also complete and file (or mail and postmark) a written petition for a contested case with the Commission within ten days after the date of the public hearing or meeting noticed here. Petition forms are available from the Commission. H.A.R. Section 13-167-52(a).

If you do not make such a request or fail to file a timely written petition with the Commission, the consequence is that you will be precluded from later obtaining a contested case hearing and seeking judicial review of any adverse decision. H.A.R. Chapter 13-167.

Disabled individuals planning to attend the public hearing or meeting are asked to contact the Commission at the above address or phone (Kauai) 274-3141 ext. 70214, (Maui) 984-2400 ext. 70214, (Hawaii) 974-0000 ext. 70214, (Molokai or Lanai) 1-800-GOV-NHII ext. 70214 or 587-0214 at least three days in advance of the public hearing or meeting to indicate if they have special needs which require accommodation.
Barry said BWS's concern is really having to deal with the Community Associations in the future once Gentry hands management over to them and if and when the wells start consistently going over 1000 mg/l.

The gentry non-potable systems have been designed to use the caprock wells and currently the WW reuse has some other issues to overcome as follows:

1. The WW reuse can only deliver about 50 psi if they were to hook up and various booster pumps would be necessary to bring the gentry irrigation systems up to the 70 psi they require. Seems kinda high to me but that's what Gentry's irrigation systems need.
2. Although nearby, the hook up would have to occur on Fort Weaver Rd and is a bit far away from the demand areas (part of the booster pump need).
3. Honouliuli can only deliver 10 mgd of WW reuse and the short of it is that BWS has other users projected to use what little remains in the reuse system. BWS could probably handle 100,000 gpd or so but not much more.

Barry offered to be at the CWRM mtg to help answer other WW reuse questions should they arise.

--- Forwarded by Roy Hardy/DLNRIStateHiUS on 01/07/2009 02:27 PM ---

I'll touch base with him - haven't spoken to him in awhile and I'd like to discuss some other things with him as well. Still waiting on his call back.

Denise E Mills/DLNRIStateHiUS

Do you want me to call Barry?

Roy Hardy/DLNRIStateHiUS

Ken just raised a question about the BWS comments and ww reuse based on Commissioner Kiyosaki's comments from the last mtg. Though we included the 'contingency plan' condition for approval, we should probably ask BWS if the BWS could actually deliver water or if they've got some contractual agreements in place already with Gentry. Several of the wells are bouncing around 1,000 mg/l where they should be stopping pumping until they go down. In the meantime, they would need ww reuse to make up any deficiets or face fines if we raise enforcement priority on the caprock. I can check with Barry Usagawa at
ok-- I'll go with it...
Roy Hardy/DLNRIStateHiUS

I think they are good to go.
Denise E Mills/DLNRIStateHiUS

Just want to confirm that no further work is needed to complete the submittal for the Gentry WUPs.
Submittals are due on Thurs. this week, so I wanted to make sure I don't miss anything this time.
STAFF SUBMITTAL

for the meeting of the
COMMISSION ON WATER RESOURCE MANAGEMENT

January 22, 2009
Honolulu, Oahu

Gentry Homes, Ltd. and Ewa by Gentry Community Association
APPLICATIONS FOR WATER USE PERMITS
WUP No. 855, Future Irrigation Use, 66,085 gpd (Well No. 1901-08)
WUP No. 856, Modify Existing Irrigation Use to 194,768 gpd (Well No. 2001-05)
WUP No. 857, Modify Existing Irrigation Use to 224,615 gpd (Well No. 2001-12)
WUP No. 858, Modify Existing Irrigation Use to 36,975 gpd (Well No. 1901-05)
WUP No. 859, Future Irrigation Use, 255,108 gpd (Well Nos. 1900-24 and 2000-06)
Puuloa Ground Water Management Area, Oahu

APPLICANTS:

WUP Nos. 855, 857, 858, 859
Gentry Homes, Ltd.
P.O. Box 295
Honolulu, HI 96809

WUP No. 856
Ewa by Gentry Community Association
91-1795 Keaunui Drive
Ewa Beach, HI 96706

SUMMARY OF REQUEST:

Gentry Homes, Ltd. and the Ewa by Gentry Community Association (hereinafter referred to as “Gentry,” except when discussing details of an individual application or referring to only one applicant) are requesting approval to:

- Modify three existing water use permits (WUPA Nos. 856, 857, and 858) to increase the use of brackish water for irrigation of landscaped areas along roadways within the Ewa by Gentry
development project in Ewa Beach. The total quantity of water requested in these applications is 456,358 gallons per day (gpd). The existing permits allow use of 371,000 gpd for the same purposes.

- Obtain two new water use permits (WUPA Nos. 855 and 859) for new irrigation uses within the Ewa by Gentry development project. The total quantity of water requested in these two applications is 321,293 gpd.
- The total water use requested is 777,551 gpd (0.778 million gallons per day [mgd]).

LOCATION MAP: See Exhibit 1.

BACKGROUND:

On March 3, 1993, the Commission adopted the boundary of the Ewa caprock aquifer as a separate aquifer system area overlying the designated ground water management areas of the Waipahu-Waiawa, Ewa-Kunia, and Makaiwa aquifer system areas. Because of uncertainties regarding the nonpotable utility and sustainable yield of the caprock formation, the Commission had not adopted a sustainable yield estimate for the Ewa caprock aquifer.

Designation of the Ewa caprock aquifer as a water management area was precipitated by the City and County of Honolulu's (City's) urbanization plans for the Ewa Plain and adoption by the City of a local ordinance that requires dual water systems for all new developments. Potable water was to be provided through the municipal system, with non-potable water supply provided by two sources: (1) wells designed to pump from the caprock and (2) treated effluent from the Honouliuli Wastewater Treatment Plant. The projected future demand when this ordinance was adopted was 25 mgd, which is higher than the estimated natural recharge to the caprock aquifer of less than 16 mgd.1

In 1993, the Commission began approving 1-year temporary permits for new uses of caprock ground water. Temporary rather than permanent permits were issued in response to concerns about the future viability of the caprock to serve as a reliable water source of nonpotable water supply consequent to the loss of return of irrigation recharge from sugar cane agriculture. From 1993 until 2006, the Commission approved only 1-year temporary permits (later called interim permits) for the caprock aquifer. In analyzing water availability, the Commission used guidelines for estimating sustainable yields for the Puuloa, Kapolei, and Malakole aquifer system areas of the Ewa Caprock Aquifer Sector (hereinafter referred to as the caprock aquifer).

On March 13, 1996, the Commission adopted the following policy statement, clearing the way for application of reclaimed water on lands overlying the Ewa Caprock Aquifer Sector Area:

_It is the policy of the Commission on Water Resource Management (Commission) to promote the viable and appropriate reuse of reclaimed water in so far as it does not compromise beneficial uses of existing water resources._


2
I. Ewa Caprock

Recognizing that reclaimed water is a valuable resource in the Ewa Plain, direct or indirect reuse will be championed by the Commission. It is the policy of the Commission that the water resources of the Ewa Caprock Aquifer will be allocated only for non-potable uses.

On May 14, 1997, the Commission adopted a chloride concentration limit of 1,000 milligram per liter (mg/l) as a basis for regulating water use from wells completed in the caprock aquifer and to prevent degradation of the natural quality of ground water in the caprock aquifer. The intent was to restrict pumpage in any caprock well with a chloride concentration approaching 1,000 mg/l to prevent a build up of sodium in the clayey soils and to protect other adjacent users of caprock water from drawing water with chloride concentrations above 1,000 mg/l. This limit corresponds to the generally accepted upper limit of irrigation-quality water. Thus, in lieu of an aggregate sustainable yield figure, usually expressed as a volume of water, brackish ground water pumped from irrigation wells is required to have chloride concentrations below 1,000 mg/l.

In conjunction with extending annual interim permits during the 1990s and after the millennium, the Commission tracked progress on developing reclaimed water as an alternate source of non-potable supply for well owners in the Puuloa, Kapolei, and Malakole aquifer system areas. On July 20, 2000, an agreement was reached between the Honolulu Board of Water Supply (BWS), the City, and U.S. Filter, allowing the BWS to purchase the Honouliuli Wastewater Treatment Plant and become a purveyor of reclaimed water, with a goal of securing customers for 10 mgd by July 1, 2001. U.S. Filter would operate the plan for BWS under a 20-year service agreement. The City was to provide secondary effluent to the facility and take back 4 mgd of the reclaimed water for reuse by the City. Some of the reclaimed water was intended for use at the Campbell Industrial Park.

On July 18, 2001, the Commission extended the interim water use permits, subject to the standard water use permit conditions and certain special conditions for the caprock aquifer. At that time, the Commission also approved a new special condition that specified the term of interim permits to be through “...July 1, 2006 or (1) until treated wastewater is available and acceptable for use, or (2) until such time that a significant change in permitted, actual, or projected uses of water supply occurs.” Additionally, at the July 18, 2001 Commission meeting, staff recommended that the total allocation for the Puuloa Aquifer System Area should not exceed 15 mgd. The quantity of water currently allocated in this system is 14.817 mgd; however, actual pumpage on a 12-month moving average basis (12-MAV) is about one-fourth of this amount (see Exhibit 2).

On July 12, 2006, the Commission converted a total of 26 interim water use permits to permanent permits. This included the three existing permits for Gentry Homes, Ltd. (for Well Nos. 1901-05 and 2001-12) and Ewa by Gentry Community Association (for Well No. 2001-05). The total quantity of water use allowed by these three permits was 0.371 mgd (see Attachment A).

On October 8, 2008, the Commission received four complete water use permit applications from Gentry Homes, Ltd. and one water use permit application from the Ewa by Gentry Community Association. Three of these applications are to modify the existing water use permits that were made permanent on July 12, 2006. Two applications (WUPA No. 855 and 859) are for proposed new uses.
Brackish water is requested for irrigating landscape plantings along roadways within the Ewa by Gentry project and two park areas. The details of Gentry's five water use permit applications, including source information and a summary of public notices made, are provided in Attachment A. All of the applications are for water that will be used for irrigation of landscape plantings along roadways and some park irrigation within the Ewa by Gentry development. The locations of Gentry's existing and proposed new wells and the corresponding water use permit application (WUPA) number are shown in Exhibit 3. The areas of existing and proposed new uses are delineated in a site plan prepared as part of the Ewa by Gentry Irrigation Master Plan (Exhibit 4).

**Applications to Modify Existing Permits**

The water use permit modifications requested can be summarized as follows:

- **WUPA No. 856** – The Ewa by Gentry Community Association is seeking to increase the allocated quantity for Well No. 2001-05 (under WUP No. 792) from 66,000 gallons per day (gpd) up to 194,768 gpd, for a net change of 128,768 gpd. This part of the development is known as the Sun Terra Tot Lot.
  - The water would be used on multiple TMKs within an area along Kapolei Parkway and within areas generally bounded by Kapolei Parkway, Geiger Road, Fort Weaver Road, and Keaunui Drive. The total land area proposed for irrigation under this permit is 31.3 acres. (See also Exhibit 4.)
  - The proposed use TMKs for WUPA No. 856 are listed in Exhibit 5.

- **WUPA No. 857** – Gentry Homes, Ltd. is seeking a modification that will decrease the allocated quantity for Well No. 2001-12 (under WUP No. 793) from 249,000 down to 224,615, for a net reduction of 24,385 gpd. This part of the development is known as Keaunui Area 30.
  - The area covered by this application is bounded generally by Arizona Road to the north, Fort Weaver to the west, Iroquois Road and East-West Loch Road to the south, and various lots around Keaunui Drive. The total land area proposed for irrigation under this permit is 36.09 acres. (See Exhibit 4.)
  - The proposed use TMKs for WUPA No. 857 are listed in Exhibit 6.

- **WUPA No. 858** – Gentry Homes, Ltd. is seeking a modification that will decrease the allocated quantity for Well No. 1901-05 (under WUP No. 794) from 56,000 gpd down to 36,975 gpd, for a net reduction of 19,025 gpd. This part of the development is know as Gentry Area 13.
  - The area covered by this application is roadway landscaping along Geiger Road west of Kapolei Parkway, and within the area bounded generally by Geiger Road to the north, Kapolei Parkway to the east, Launahale Street to the south, and the eastern boundary of the Coral Creek Golf Course. The total land area proposed for irrigation under this permit is 5.94 acres. (See Exhibit 4.)
  - The proposed use TMKs for WUPA No. 858 are listed in Exhibit 7.
Applications for New Water Use Permits

The applications for new water uses, both requested by Gentry Homes, Ltd., are for a total of 321,108 gpd that would be supplied by three new wells (Well Nos. 1901-08, 1900-24, and 2000-06), which are not yet constructed.

- **WUPA No. 855** – The quantity of water requested is 66,085 gpd, for irrigation uses within the Gentry Area 45 portion of the Ewa by Gentry development.
  - The area covered by this application is within parcels along Kapolei Parkway. The total land area proposed for irrigation under this permit is 10.62 acres. (See Exhibit 4.)
  - The proposed use TMKs for WUPA No. 855 are listed in Exhibit 8.

- **WUPA No. 859** – The quantity of water requested is 255,108 gpd, for use on a total of 41.0 acres of roadway landscaping within the Gentry Area 35 portion of the Ewa by Gentry development.
  - The use area covered by this application is bounded generally by the north boundary of the Hawaii Prince Golf Club (located to south of the proposed use area), Fort Weaver Road to the west, Iroquois Road and East-West Loch Road to the north, and Makalea Street and Hoowalea Street to the east. (See Exhibit 4.)
  - The proposed use TMKs for WUPA No. 859 are listed in Exhibit 9.

The specific plant materials proposed for the Ewa by Gentry development, in each of the areas covered by Gentry’s five water use permit applications, are listed in Exhibit 10.

Gentry’s Water Use Under Existing Permits

A review of Gentry’s past water use from the Ewa by Gentry Community Association well (Well No. 2001-05) was 0.052 mgd through September 30, 2008, on a 12-month moving average basis (12-MAV), which is slightly under its allocation of 0.066 mgd (see Exhibit 11). Pumpage from this well has been increasing since approximately April 2008. If the current pattern of increased pumpage continues, water use under this permit could exceed the permitted quantity and lead to a permit violation. The quantity of water requested under WUPA No. 856 is approximately 3 times more than the current permitted quantity. Chloride concentrations in this well have ranged from 754 to 988 mg/l from January 2007 through September 2008, with an average concentration of 852 mg/l.

Pumpage records for the other two wells (Well Nos. 2001-12 and 1901-05) show that Gentry has pumped more water than the amount allocated under its existing permits. The quantity of water drawn from Well No. 2001-12 through September 30, 2008, on a 12-MAV basis, was 0.247 mgd, which is below the current allocation of 0.249 mgd (Exhibit 12). However, before September 2008, the 12-
MAV exceeded the permitted quantity with the average pumpage ranging from 0.276 to 0.303 between December 2007 and August 2008, which is a violation of the permit. Chloride concentrations in this well have ranged from 742 to 928 mg/l from January 2007 through September 2008, with an average concentration of 797 mg/l.

The quantity of water pumped from Well No. 1901-05 through September 30, 2008, on a 12-MAV basis, was 0.123 mgd (Exhibit 13). This is more than double the permitted quantity of 0.056 mgd for this well. Between December 2007 and August 2008, the 12-MAV for this well ranged between 0.140 and 0.168 mgd. These quantities are almost consistently 2.5 to 3 times higher than the allocated quantity; however, Gentry Homes' application to modify the existing permit for this well seeks to reduce the allocation from 0.056 mgd to 0.037 mgd. Chloride concentrations in this well have ranged from 864 to 1,110 mg/l from January 2007 through September 2008, with an average concentration of 987 mg/l. The concentration reported for three months in this period was 1,000 mg/l, and two measurements, reported in March and April 2008, were 1,026 mg/l and 1,110 mg/l, respectively. Concentrations in this well have remained in this range at least since the start of 2007.

ANALYSIS/ISSUES:

Section 174C-49(a) of the State Water Code establishes seven criteria that must be met to obtain a water use permit. An analysis of the proposed permits in relation to these criteria follows.

1. Water availability

   In establishing a sustainable capacity for irrigation wells, the Commission found the following:

   1. The Ewa caprock aquifer is a thin basal aquifer vulnerable to salinity intrusion (most salinity profiles indicate sharp salinity changes). Therefore, the quantity of developable water supply depends entirely on well location.

   2. Because the caprock aquifer lens is thin, salinity intrusion is a significant limitation, particularly for wells in the makai portion of the aquifer. If ground water withdrawal from the aquifer occurs primarily in mauka areas, more developable supply may be available.

   3. The aquifer's main source of recharge is ground water inflow (leakage) from the basalt aquifer at the inland margin of the interbedded coralline rock formations that comprise the Ewa caprock aquifer system. The amount of leakage cannot easily be quantified and is, in part, dependent upon the water levels in the basal aquifer.

   4. Sustainable yield is a theoretical number that assumes optimal well placement in an aquifer. The spatial distribution of chloride in the caprock aquifer, however, doesn't fit the notion of managing ground water allocations and withdrawals on the basis of a single sustainable yield pumpage number.
6. The magnitude of tidal influences are equal to or greater than pumping influences and thus makes water-level monitoring as a means for estimating sustainable yield and regulating water use extremely difficult.

7. The caprock aquifer is para-basal inland, which means that the bottom of the aquifer is truncated by the low-permeability clay layer that underlies the upper limestone aquifer.

8. The hydrology of the Ewa caprock aquifer is sufficiently unique to warrant consideration of alternative regulatory considerations. This is particularly appropriate given the change in irrigation returns and availability of reclaimed water to supplement the naturally-occurring recharge.

To respond to concerns about the viability of the caprock aquifer to meet future non-potable water demands in the Ewa region, staff performed quarterly monitoring of water levels and chloride concentrations in select caprock wells from 1994 to 2001. The monitoring network initially included some Malakole aquifer system area wells, but those wells were later dropped due to mainly industrial needs not dependent upon chloride concentrations and the focus placed on irrigation wells in the Kapolei and Puuloa aquifer systems in response to irrigation development pressures within the eastern portion of the Ewa Plain.

A total of 63 permitted and registered wells are known to be within the Puuloa Aquifer System Area (see Exhibit 14). Wells in the vicinity of the Ewa by Gentry development project are included in Exhibit 1. Brackish water from the caprock aquifer within this area is used primarily for a variety of irrigation purposes, as follows:

- Landscape and/or park irrigation (IRRLA, IRRPA) – 19 wells
- Golf course irrigation (IRRGC) – 19 wells
- Agriculture (crops and processing) (AGRCP) – 1 well (U.S. Navy)
- Habitat maintenance (IRRHM) – 1 well (U.S. Fish and Wildlife Service)

Of the remaining wells, two are permitted for industrial use (Well Nos. 1902-03 and -04), one is permitted for domestic use (Well No. 1901-02), ten are recorded as unused, four are maintained as observation (monitor) wells, and six are abandoned.

The total permitted quantity of water from the Puuloa Aquifer System Area is 14.817 mgd, allocated through 24 active water use permits (see Exhibit 2). The water use from wells within this system is 3.274 mgd (12-MAV), based on reports filed with the Commission; actual use of ground water in this area could be higher. For some wells, the 12-MAV was calculated from pumpage data through only December 2005; more recent quantities could not be calculated. Pumpage could not be calculated and is not known for 11 permits (noted as “N/R” in Exhibit 15) because there are no reports on record.
As noted in the Background section, above, at the July 18, 2001 Commission meeting, staff recommended that the total allocation for the Puuloa Aquifer System Area should not exceed 15 mgd. On this basis, then the quantity available for allocation is only 0.183 mgd. Gentry's water use applications propose to increase water use within the Ewa by Gentry development by 0.407 mgd. Although this increase, if approved, would bring the total permitted water use for the Puuloa system to 15.224 mgd, staff does not believe this would cause the aquifer to be overused nor at risk of becoming degraded for several reasons, including the examples given in the following paragraphs.

First, staff expects that follow-up on the findings of the 20-year review report, which will be provided to the Legislature in January 2009, will involve some combination of revocations or partial revocations for non-use, enforcement of the requirement for permittees to submit annual or monthly reports of their water use and chloride concentrations measured in their well water, or other actions. Staff anticipates re-examining the status of water use permits and water usage for the caprock aquifer to bring the permitted quantities in line with actual use. As noted earlier, available records indicate that actual use is approximately one-forth the total permitted quantity. Though slightly less than one-half have not reported use, of those that have some have reported either no use or use at a rate that is a fraction of the permitted quantity. For example, the U.S. Navy's average use through December 2007 was 0.238 mgd, which is only 4 percent of the quantity of 5.890 mgd allocated in WUP No. 189 (see Exhibit 2).

Second, as more reclaimed water from the Honouliuli Wastewater Treatment Plant becomes available for irrigation and other non-potable uses in the area, permitted quantities of and demand for ground water should be reduced. As water users in the area shift to reclaimed water as a source of non-potable water, demand for brackish ground water is expected to decline further. HASEKO (Ewa), for example, has entered into an agreement with the BWS to provide up to 0.600 mgd of reclaimed water, which offsets HASEKO’s ground water use by that amount. The quantity of water currently allocated for HASEKO’s use is 3.3 mgd. The availability of 0.600 mgd of reclaimed water effectively reduces HASEKO’s need for ground water to 2.7 mgd. Additionally, HASEKO’s reported water use (12-MAV) is only 0.079 mgd, which represents approximately 2 percent of its allocation (see Exhibit 2).

Pump test data show that the caprock aquifer is capable of producing large quantities of brackish water without causing much drawdown of the water table.

Staff believes that the quantity of water is available in the caprock aquifer is sufficient to meet the proposed uses for the following reasons:

- The aquifer is a thin basal aquifer, and the salinity impacts of withdrawals at an individual well site will likely be confined to the immediate vicinity of the pumping well.
Although the recommended total permitted quantity for the Puuolua Aquifer System Area is 15 mgd (a staff recommendation made at the October 18, 1998 Commission meeting), several factors indicate that there is sufficient brackish water available to permit the quantity requested in Gentry’s applications. These factors include:

- Water use records show that actual water use under existing permits issued for area wells is much lower;
- It is anticipated that, to follow up on the findings of the 20-year review, staff will identify and recommend to the Commission permits that should be revoked in whole or in part for nonuse; and
- Some users have already or are shifting to reclaimed water as a source of non-potable water supply, which leads to a corresponding reduction in demand for brackish ground water to meet their needs.

Based on the hydraulic properties of the caprock aquifer and an assessment of other uses in the vicinity of Ewa by Gentry project, it is unlikely that the proposed withdrawal of up to 0.778 mgd will interfere with other users in the area.

(2) Reasonable-beneficial

Section 174C-3 HRS defines "reasonable-beneficial use" as

"...the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is both reasonable and consistent with the state and county land use plans and the public interest."

I. Purpose of Use

The applicant is requesting approval to use a total of 0.778 mgd of brackish ground water to irrigate landscape plantings along roadways and in community park areas within the Ewa by Gentry development.

II. Quantity Justification

A letter included with each of the applications, provided by Browlie & Lee (see Exhibit 15), a firm that provides landscape and irrigation services for the Ewa by Gentry development, explains the basis for the water use quantities requested in Gentry’s applications. According to this letter, for 18 years Browlie & Lee has dealt with the requirement to provide low maintenance and drought-tolerant plantings within the development. The firm also cites its experience in applying water conservation efforts. Their estimates include a 15 percent inefficiency factor to account for the high percentage of small irregular planting areas among
the residential lots in the subdivision. The small size and density of lots shown on the irrigation master plan (Exhibit 4) and the accompanying inventory of proposed use TMKs listed in Exhibits 5 through 9, illustrate the disaggregated nature of the areas the planned irrigation systems will serve.

In comments submitted by OHA (see Exhibit 16), OHA agrees that potable water should not be used for the proposed purpose. Also, OHA asks whether the landscaping “will use drought-tolerant local or endemic [plant] species common to the area.” The plant materials provided as part of Gentry’s applications (see Exhibit 10) are drought-tolerant plants.

III. Efficiency of Use

Gentry states that spray heads will be used in its irrigation system for all of the use areas proposed in its water use permit applications. The proposed irrigation practice is to apply the amount of water needed to meet the demand. (This is stated as “irrigate to demand” on each of the applications.) Efficiency is also discussed in the preceding section, Quantity Justification.

IV. Analysis of Practical Alternatives

Gentry’s analysis of alternative potable and non-potable sources is summarized below.

1. Municipal Sources – The Board of Water Supply requires the use of non-potable water for irrigation in the Ewa region. The use of brackish water from the caprock aquifer effectively reduces the amount of potable water needed for the development.
2. Wastewater Reuse (Reclaimed Water) – Treated effluent from the Honouliuli Wastewater Treatment Plant is not available in this area.
3. Ditch System – No ditch system water is available for this area.
4. Desalinization – Desalinization is not financially practical.
5. Surface Water – A source of surface water for alternate supply is not available in this area.

The 2000 Legislature amended the Water Code to include a new section, §174C-51.5 HRS that provides the Commission with the authority to require dual line (potable and non-potable) water supply systems in new industrial and commercial developments located in water management areas. The statute (§174C-51.5(3)(b) HRS) requires county boards of water supply, in consultation with the state Department of Health, to adopt standards for non-potable water distributed through dual-line water supply systems and rules regarding the use of non-potable water. The City and County of Honolulu has addressed this requirement through the Ewa Development Plan and various project approvals.

The consistency of this application with other beneficial-reasonable use criteria is discussed in the following sections.
(3) **Interference with other existing legal uses**

A discussion of other ground water users in the vicinity of the Ewa by Gentry development and within the Puuloa Aquifer System Area is provided above in Section 1, Water Availability.

All of Gentry’s applications state that there are no known conflicts with any existing legal uses. Staff does not believe Gentry’s proposed use will interfere with other legal water uses in the area.

(4) **Public interest**

In each of its applications, Gentry explains that the use of brackish water [for the proposed irrigation uses] preserves potable water that would otherwise be used for irrigation. This assessment is consistent with the Ewa Development Plan, which requires non-potable water use in the Ewa region for the purpose of preserving potable water supplies for other uses that require lower levels of chloride and total dissolved solids.

No public comments and no objections were received on any of Gentry’s applications.

(5) **State and county general plans and land use designations**

Based on comments received from the State Land Use Commission (LUC) and from the City and County of Honolulu, Department of Planning and Permitting (DPP), the proposed uses are consistent with state and county general plans and land use designations.

The LUC confirms that the Ewa by Gentry development is located within the State Land Use Urban District. Activities and uses with the Urban District are under the jurisdiction of the City and County of Honolulu, Department of Planning and Permitting (DPP).

In the DPP’s comments on Gentry’s water use permit applications (Exhibit 17), it states that the proposed use for roadway landscaping irrigation and park irrigation (proposed only in WUPA No. 856 and 857) is consistent with local zoning. The DPP further notes that the proposed use of brackish caprock water is consistent with Section 4.2.1 of the Ewa Development Plan, which requires (when necessary) a dual water system and non-potable water use to conserve potable water in the Ewa region.

Comments from the BWS are included in the comment letter provided by the DPP (Exhibit 17). The BWS requests contingency plans for the new proposed wells, Well Nos. 1901-08, 1900-24, and 2000-06, in the event that chloride levels in these wells exceeds the 1,000 mg/l limit.
(6) County land use plans and policies

The proposed uses are consistent with local land use plans and policies, as discussed under Section 5, above.

(7) Interference with Hawaiian home lands rights

All permits approved by the Commission are subject to the prior rights of Hawaiian home lands, as set forth in the Hawaiian Homes Commission Act (§221 HRS).

Gentry’s applications state that the proposed water uses will not interfere with the rights of Hawaiian home lands. The Department of Hawaiian Home Lands (DHHL) and OHA were provided a copy of Gentry’s applications for review and comment. In its comments (see Exhibit 15), OHA asks for assurances from the Commission that uses from each of the proposed sources “will not adversely affect constitutionally protected Native Hawaiian uses in the area as protected in the state water code.”

Standard conditions 3.g., 6., and 9.f. of all water use permits (see Attachment B) provide notice to all permittees that the Commission’s approval is subject to the requirements of the Hawaiian Homes Commission Act, as amended, and cannot interfere with Hawaiian home land rights, in accordance with §174C-101(a) HRS. Given these conditions, it is unlikely that Gentry’s proposed water uses will interfere with Hawaiian home land rights, provided it fully complies with these and other permit conditions. The assurance requested by OHA, therefore, can be addressed by monitoring Gentry’s performance with respect to the permit conditions and promptly addressing any violations that have the potential to interfere with the rights of Hawaiian home lands.

OTHER

As noted in the Background section, Gentry’s water use under two existing permits has exceeded the allocated quantities. These pumpage violations are identified in the report on the 20-year review of the water use permits that will be provided to the Legislature in January 2009.

The results of the 20-year review provide an opportunity to look at the permit process, permit compliance, and information management (maintenance) in a holistic way, rather than addressing issues such as overpumping on a case-by-case basis. For example, a comprehensive review of active caprock permits and pumpage records would aid reassessment and refinement of the quantity of ground water available for allocation. This would help identify permits in which the allocation should be adjusted to reflect actual use, and which permits and how many permits should be revoked in whole or in part.

RECOMMENDATION:

Staff recommends that the Commission approve issuance of five water use permits, as follows:
Staff Submittal

1. Water use permit no. 855 to Gentry Homes, Ltd., for the reasonable and beneficial use of 66,085 gallons per day of brackish water from the Ewa caprock aquifer (Well No. 1901-08, a proposed new well).

2. Water use permit no. 856 to the Ewa by Gentry Community Association for the reasonable and beneficial use of 194,768 gallons per day of brackish water from the Ewa caprock aquifer (Well No. 2001-05, an existing well). This modifies and supersedes water use permit no. 792.

3. Water use permit no. 857 to Gentry Homes, Ltd., for the reasonable and beneficial use of 224,615 gallons per day of brackish water from the Ewa caprock aquifer (Well No. 2001-12, an existing well). This modifies and supersedes water use permit no. 793.

4. Water use permit no. 858 to Gentry Homes, Ltd., for the reasonable and beneficial use of 36,975 gallons per day of brackish water from the Ewa caprock aquifer (Well No. 1901-05, an existing well). This modifies and supersedes water use permit no. 794.

5. Water use permit no. 859 to Gentry Homes, Ltd., for the reasonable and beneficial use of 255,108 gallons per day of brackish water from the Ewa caprock aquifer (Well Nos. 1900-24 and 2000-06, two proposed new wells).

Approval of these permits should be subject to (1) the standard water use permit conditions listed in Attachment B; (2) the following special conditions, and (3) the conservation conditions Ewa caprock water use permits listed in Attachment C.

1. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.

2. This permit is approved under the assumption that reclaimed wastewater will become available for reuse as an alternative supply source.

3. Pumping shall cease immediately if chloride measurements show that the brackish water drawn by the well exceeds 1,000 mg/l of chloride, unless a variance from the chloride limit has been granted. The authority to approve variance requests is delegated to the Chairperson.

4. The permittee shall submit a contingency plan for water use in the event the chloride concentration in the permitted well(s) exceeds the 1,000 mg/l sustainable capacity limit established for Ewa caprock aquifer sources, the permittee shall seek an alternative source of supply. The contingency plan shall be submitted to the Commission within 30 days of the issuance of this permit.

5. In the event that the tax map key(s) at the location(s) of the water use is changed, the permittee shall notify the Commission in writing of the tax map key change(s) within thirty (30) days after the permittee receives notice of the change(s).
6. Standard Condition 16 is waived for brackish water wells.

Respectfully submitted,

KEN C. KAWAHARA, P.E.
Deputy Director

Attachment(s):
A Water Use Permit Detailed Information
B Water Use Permit Standard Conditions
C Conservation Conditions for Ewa Caprock Water Use Permits

Exhibit(s):
1 Location Map
2 Active Water Use Permits in the Puuloa Aquifer System Area
3 Ewa by Gentry Well Locations
4 Ewa by Gentry Irrigation Master Plan
5 Proposed Irrigation Plan and Use TMKs for WUPA No. 856
6 Proposed Irrigation Plan and Use TMKs for WUPA No. 857
7 Proposed Irrigation Plan and Use TMKs for WUPA No. 858
8 Proposed Irrigation Plan and Use TMKs for WUPA No. 855
9 Proposed Irrigation Plan and Use TMKs for WUPA No. 859
10 Proposed Plant Materials and Irrigated Acres
11 Well No. 2001-05 Pumpage Data, Ewa by Gentry Community Association
12 Well No. 2001-12 Pumpage Data, Gentry Homes, Ltd.
13 Well No. 1901-05 Pumpage Data, Gentry Homes, Ltd.
14 Nearby Wells and Water Uses
15 Basis for Quantity Estimate Prepared by Brownlie & Lee for Gentry
16 Comments from Office of Hawaiian Affairs
17 Comments from C&C Honolulu, Department of Planning and Permitting

APPROVED FOR SUBMITTAL:

LAURA H. THIELEN
Chairperson
### WATER USE PERMIT DETAILED INFORMATION

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**Source Information**

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**Notes:**

1. Ewa by Gentry Community Association
2. The current permitted pump capacity is 110 gpm. Applicant has applied for a new pump installation permit to increase the capacity to 200 gpm.

---

ATTACHMENT A
Use Information

Quantity Requested
- WUPA No. 855 (new use, one new well) 66,085 gpd
- WUPA No. 856 (modify use, one existing well) 194,768 gpd
- WUPA No. 857 (modify use, one existing well) 224,615 gpd
- WUPA No. 858 (modify use, one existing well) 36,975 gpd
- WUPA No. 859 (new use, two new wells) 255,108 gpd

Total quantity requested 777,551 gpd

Proposed type of water use: Irrigation (landscaped areas, park)

Place of water use: Multiple TMKs within the Ewa by Gentry development
(proposed use TMKs are shown in Exhibits 5 through 9)

Water Usage (12-MAV) Reported by Gentry (Ewa by Gentry development)¹
- Ewa by Gentry Community Association (Well No. 2001-05), 0.066 mgd
- Gentry Homes (Well No. 2001-12), 0.249 mgd
- Gentry Homes (Well No. 1901-05), 0.056 mgd

Puuloa Aquifer System Area
Current 12-MAV Withdrawal (See Exhibit 2) 3.274 mgd

¹ Also see Exhibit 2 for water usage reported by other well operators within the Puuloa Aquifer System Area.

Nearby Surrounding Wells and Other Registered Ground Water Use

Exhibit 14 lists other permitted and registered wells that are constructed within the Puuloa Aquifer System Area, and Exhibit 15 shows the well locations. A total of 63 wells are known to be in the area. Brackish ground water drawn from the Ewa caprock aquifer in this area is primarily used for a variety of irrigation purposes, as follows:

- Landscape and/or park irrigation (IRRLA, IRRPA) – 19 wells
- Golf course irrigation (IRRGC) – 19 wells
- Agriculture (crops and processing) (AGRCP) – 1 well (U.S. Navy)
- Habitat maintenance (IRRHM) – 1 well (U.S. Fish and Wildlife Service)

Of the remaining wells, two are permitted for industrial use (Well Nos. 1902-03 and -04), one is permitted for domestic use (Well No. 1901-02), ten are recorded as unused, four are maintained as observation (monitor) wells, and six are abandoned.

The total permitted quantity of water from the Puuloa Aquifer System Area is 14.817 mgd (see Exhibit 2), allocated through 25 active water use permits. The reported water use from wells within this system is 3.274 mgd (12-MAV), based on water use reports filed with the Commission; actual existing use of ground water in this area could be higher.

ATTACHMENT A
Public Notice

In accordance with §13-171-17, HAR, public notices were published in the Honolulu Star Bulletin on October 29, 2008 and November 5, 2008, and a copy of both notices sent to Mayor Hannemann's office. Copies of the completed application were sent to the Honolulu Board of Water Supply, the City and County of Honolulu Department of Planning and Permitting, the state Departments of Health and Department of Hawaiian Home Lands, various divisions of the Department of Land and Natural Resources, the Land Use Commission, and the Office of Hawaiian Affairs. Comments and objections to the proposed permit were to be filed with the Commission by November 20, 2008.

Comments were received from most of the review agencies and are addressed in the analysis of the application and the recommended permit special conditions. No comments were received from the general public or other interest groups.

Objections

The public notice specifies that an objector meet the following requirements: (1) state property or other interest in the matter; (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; (3) state all grounds for objections to the proposed permits, (4) provide a copy of the objection letter(s) to the applicant, and (5) submit objections meeting the previous requirements to the Commission by November 20, 2008.

No objections were filed.
STANDARD WATER USE PERMIT CONDITIONS

1. The water described in this water use permit may only be taken from the location described and used for the reasonable-beneficial use described at the location described above. Reasonable beneficial uses means "the use of water in such a quantity as is necessary for economic and efficient utilization which is both reasonable and consistent with State and County land use plans and the public interest." (HRS § 174C-3)

2. The right to use ground water is a shared use right.

3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
   a. Can be accommodated with the available water source;
   b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
   c. Will not interfere with any existing legal use of water;
   d. Is consistent with the public interest;
   e. Is consistent with State and County general plans and land use designations;
   f. Is consistent with County land use plans and policies; and
   g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).

4. The ground-water use here must not interfere with surface or other ground-water rights or reservations.

5. The ground-water use here must not interfere with interim or permanent instream flow standards. If it does, then:
   a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
   b. The interim or permanent instream flow standard, as applicable, must be amended.

6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

7. The water use permit application and submittal, as amended, approved by the Commission at its December 17, 2008 meeting are incorporated into this permit by reference.

8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.

9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
   a. Protect the water sources (quantity or quality);
   b. Meet other legal obligations including other correlative rights;
   c. Insure adequate conservation measures;
   d. Require efficiency of water uses;
   e. Reserve water for future uses, provided that all legal existing uses of water as of June, 1987 shall be protected;
   f. Meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
   g. Carry out such other necessary and proper exercise of the State's and the Commission's police powers under law as may be required.

ATTACHMENT B
Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.

10. An approved flowmeter(s) must be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a monthly basis (attached).

11. This permit shall be subject to the Commission’s periodic review for the Puuloa Aquifer System Area’s sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the Puuloa Aquifer System Area, or relevant modified aquifer(s), is reduced.

12. A permit may be transferred, in whole or in part, from the permittee to another, if:
   a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of the use, remain the same; and
   b. The Commission is informed of the transfer within ninety days.
   Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer, which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

13. The use(s) authorized by law and by this permit do not constitute ownership rights.

14. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances that will affect the permittee’s water use.

15. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservation, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period of forfeiture.

16. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee's water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the Puuloa Ground Water Management Area.

17. The water use permit shall be subject to the Commission's establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.

18. The permittee understands that any willful violation of any of the above conditions or any provisions of HRS § 174C or HAR § 13-171 may result in the suspension or revocation of this permit.

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

ATTACHMENT B
1. The permittee shall adopt self-administered water conservation programs and plans with collective monitoring to protect and maintain the caprock resource. Water conservation programs and plans shall be submitted to the Commission within 60 days from the date of Commission approval.

2. Water conservation programs and plans shall address (as applicable) but not be limited to the following:
   
   a. Reduce the demand for non-potable water by:
      
      - Identifying and utilizing water efficient plants and drought tolerant plants for landscaping and quantifying their demands (Xeriscape);
      - Mulching planting areas with organic materials, etc., to minimize evaporation;
      - Efficiently maintaining the plants;
      - Improving land management practices to conserve water.

   b. Improve efficiency in use and reduce losses and waste of non-potable water by:
      
      - Using efficiently designed landscaping and irrigation systems;
      - Monitoring irrigation requirements and controlling usage accordingly;
      - Managing irrigation scheduling to minimize water demand;
      - Eliminating opportunities for water wastage;
      - Maintaining and improving irrigation systems as necessary.

   c. Industrial users should employ the recirculation of cooling water and the reuse of cooling and process water.

3. The permittee shall pursue and participate in alternative non-potable water source development and use such as wastewater reuse (direct reuse and/or recharge injection).

4. In the event that water conservation programs and plans are not complied with or that a waste of water is occurring, the Commission shall proceed with the necessary actions to revoke this permit.
### Aquifer System Water Use Permit Index  
**ISLAND OF OAHU**

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<th>Well No.</th>
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**Tuesday, December 02, 2008**

**EXHIBIT 2**
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<td>7/12/2006</td>
<td>AOAO SUNCREST/SHORES/LOM</td>
<td>2001-10</td>
<td>GENTRY AREA 24</td>
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</table>

Summary for 'SYSTEM' = PUUOLOA (44 detail records)

Totalling 14.817 3.244 reported

Available
EWA BY GENTRY

Water Supply Wells for Irrigation Master Plan

WUPA Nos. 855 through 859

Existing wells: 1901-01, 2001-05, 2001-12

New proposed wells: 1900-24, 1901-08, 2000-06

EXHIBIT 3

http://maps.google.com/maps?f=q&hl=en&geocode=&q=keaunui+drive,+ewa+beach&sl... 10/16/2008
## Table 1: LAND USE CONSISTENCY / EFFICIENCY - Soda Creek III Well

### LAND USE CONSISTENCY

<table>
<thead>
<tr>
<th>Purpose/Water Use Category</th>
<th>Development Designation</th>
<th>USE TMK</th>
<th>State Land Use District</th>
<th>CDUP Req'd Y/(date app)</th>
<th>County Zoning Code</th>
<th>SMAP Y/(date app)</th>
<th>Quantity of Use (GPD)</th>
<th>Sub-Metered Y/N</th>
<th>Units of Net Acreage</th>
<th>Applicant's Justification for Quantity of Requested Use for Item 7</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td>NA (not acquired)</td>
<td>NA (not acquired)</td>
<td>NA (not acquired)</td>
<td>NA</td>
<td>N</td>
<td>NA</td>
<td>All irrigation use is based on actual use for Ewa by Gentry, see attached letter dated July 2, 2008 for application rate. For overall irrigation area locations see attached Ewa By Gentry Irrigation Master Plan, dated 4-22-08</td>
</tr>
<tr>
<td>Roadway/Park Irr - IRRLA &amp; PA</td>
<td>Sun Terra</td>
<td>9-1-70:42 &amp; 132</td>
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<td>9-1-82:009 to 24</td>
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**TOTAL USE REQUESTED** (the sum of total potable use and non-potable use in the table above) = 194,768

31.3
### Table 1: LAND USE CONSISTENCY / EFFICIENCY - Gentry Keaunui Well

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<th>Purpose/Well Use Category</th>
<th>Development Designation</th>
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<th>State Land Use District</th>
<th>CDUPReqdY(date app)</th>
<th>County Zoning Code</th>
<th>SMAP Y(date app)</th>
<th>Quantity of Use (GPD)</th>
<th>Sub-Metered Y(YN)</th>
<th>Units or Net Acreage</th>
<th>Applicant's Justification for Quantity of Requested Use for Item 7.</th>
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<tbody>
<tr>
<td><strong>USES THAT DO NOT REQUIRE POTABLE WATER</strong></td>
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<tr>
<td>Road Irrigation - IRRLA</td>
<td>Area 26 frontage</td>
<td>9-1-102 (Keaunui ROW)</td>
<td>Urban</td>
<td>NA</td>
<td>R-5</td>
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<td>All irrigation use is based on actual use for Ewa by Gentry, see attached Brownlie and Lee letter dated July 2, 2008 for application rate. For overall irrigation area locations see attached Ewa By Gentry Irrigation Master Plan, dated 4-22-08</td>
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<tr>
<td>Road Irrigation - IRRLA</td>
<td>Area 28 frontage</td>
<td>9-1-107:052 (buffer strip lot)</td>
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**TOTAL USE REQUESTED** (the sum of total potable use and non-potable use in the table above) = 224,615 36.09
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<th>Purpose/Water Use Category</th>
<th>Development Designation</th>
<th>USE TMK</th>
<th>State Land Use District</th>
<th>CDUP Req'd Y (date app) NA (not acquired)</th>
<th>County Zoning Code</th>
<th>SMAP Y (date app) NA (not acquired)</th>
<th>Quantity of Use (GPD)</th>
<th>Sub-Metered (Y/N)</th>
<th>Units or Net Acreage</th>
<th>Applicant's Justification for Quantity of Requested Use for Item 7</th>
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<tbody>
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<td>All irrigation use is based on actual use for Ewa by Gentry, see attached Brownlie and Lee letter dated July 2, 2008 for application rate.</td>
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<td>For overall irrigation area locations see attached Ewa By Gentry Irrigation Master Plan, dated 4-22-08</td>
</tr>
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<td>Road Irrigation - IRLA</td>
<td>9-1-116:2v</td>
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**TOTAL USE REQUESTED** (the sum of total potable use and non-potable use in the table above) = 36,975 5.84
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<th>CDUP Req'd Y(date app)</th>
<th>County Zoning Code</th>
<th>SMAP Y(date app)</th>
<th>Quantity of Use (GPD)</th>
<th>Sub-Metered (Y/N)</th>
<th>Units or Net Acreage</th>
<th>Applicant’s Justification for Quantity of Requested Use for Item 7.</th>
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<td>USES THAT DO NOT REQUIRE POTABLE WATER</td>
<td>Roadway Irrigation - IRRLA</td>
<td>Area 41, 45/46, 48, 40, &amp; Keaulenui west.</td>
<td>9-1-69;portion 005</td>
<td>Urban</td>
<td>NA</td>
<td>NA</td>
<td>N</td>
<td>All irrigation use is based on actual use for Ewa by Gentry, see attached Brownlie and Lee letter dated July 2, 2008 for application rate. For overall irrigation area locations see attached Ewa By Gentry Irrigation Master Plan, dated 4-22-08</td>
<td></td>
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<tr>
<td></td>
<td>Roadway Irrigation - IRRLA</td>
<td>Kapolei Parkway @ Area 14</td>
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*Corrected per phone conversation w/ Greg Fukumitsu (TNWRE) on 10/14/08*
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<td>For overall irrigation area locations see attached Ewa By Gentry Irrigation Master Plan, dated 4-22-08</td>
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**TOTAL USE REQUESTED** (the sum of total potable use and non-potable use in the table above) = 255,108 41.0
Table 2: IRRIGATION INFORMATION

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* Asterisk denotes use of the following shrubs (drought/salt-tolerant) used but not listed

Hibiscus
Croton
Spider Lily
Eldorado
Eranthemum
Dwarf Date Palm
Metal Bale
12 Month Moving Average

Well ID: 3-2001-005  Well Name: Soda Creek III  WUP MGD: 0.066  Beginning: 1/1/2007  Ending: 12/31/2008

WULPA No. 356
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**12 Month Moving Average**

![Graph showing 12 Month Moving Average](image)

**EXHIBIT 12**

*Thursday, December 04, 2008*
### Puuolua Aquifer System / Ewa Caprock Aquifer Wells, Well Status, and Water Uses

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<td>1902-06</td>
<td>Holes 12, 13, 14</td>
<td>Coral Creek</td>
<td>1,410</td>
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</tr>
<tr>
<td>1902-07</td>
<td>Holes 15, 16 Mau</td>
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</tr>
<tr>
<td>1902-08</td>
<td>Holes 15, 16 Mak</td>
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<td>1902-09</td>
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<td>925</td>
<td>0.288</td>
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<tr>
<td>1902-10</td>
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<td>Haseko Hawaii Inc.</td>
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<tr>
<td>1902-11</td>
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<tr>
<td>1909-08</td>
<td>Dug D</td>
<td>Sogo Haw Inc</td>
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<tr>
<td>2000-01</td>
<td>EP 21</td>
<td>Campbell Estate</td>
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<td>2001-02</td>
<td>Gentry Entry Irr</td>
<td>Ewa Gentry Comm Assn</td>
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<td>2001-03</td>
<td>Geiger Park</td>
<td>C&amp;C Parks &amp; Rec</td>
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**EXHIBIT 14**
### Puuola Aquifer System / Ewa Caprock Aquifer
#### Wells, Well Status, and Water Uses

<table>
<thead>
<tr>
<th>WELL NO.</th>
<th>WELL NAME</th>
<th>OWNER / USER</th>
<th>INIT / CL</th>
<th>PUMP MOD</th>
<th>USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-04</td>
<td>Sunrise</td>
<td>Gentry Companies</td>
<td></td>
<td></td>
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<td>Soda Creek III</td>
<td>Ewa by Gentry Comm Assn</td>
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<td>2001-06</td>
<td>Palm Villa I</td>
<td>Palm Vilal 1 Association</td>
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<td></td>
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</tr>
<tr>
<td>2001-07</td>
<td>Arbors GV 1</td>
<td>Arbors Assoc</td>
<td>690</td>
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<tr>
<td>2001-08</td>
<td>Palm Villa 2</td>
<td>Palm Vil 2 Ass</td>
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<td>2001-09</td>
<td>Coronado</td>
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<td>0.158</td>
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<td>2001-12</td>
<td>Keaunui Area 30</td>
<td>Gentry Companies</td>
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<td>IRRGC</td>
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<tr>
<td>2001-13</td>
<td>Coral Creek 4</td>
<td>Coral Creek Golf Inc</td>
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<tr>
<td>2001-14</td>
<td>Lake 10</td>
<td>Coral Creek Golf Inc</td>
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<td>2001-15</td>
<td>Holes 5,6,7</td>
<td>Coral Creek Golf Inc</td>
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<td>2001-16</td>
<td>Coral Creek 3</td>
<td>Coral Creek</td>
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<td>OBS</td>
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<td>2002-12</td>
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<td>2002-13</td>
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<tr>
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<td>2002-19</td>
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<td>2002-20</td>
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<tr>
<td>2101-14</td>
<td>Honolulu</td>
<td>U S Fish &amp; Wildlife</td>
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<td></td>
<td>IRRHM</td>
</tr>
</tbody>
</table>

**EXHIBIT 14**
July 2, 2008

Mr. Greg Fukumitsu
Tom Nance
Water Resources Engineering
680 Ala Moana Boulevard, Suite 406
Honolulu, Hawaii 96813

Subject: **EWA WUP PERMIT**

Dear Greg:

We have been responsible for virtually all of the landscape and irrigation system design at Ewa by Gentry since 1990. Based on our 18 years of experience with this development and dealing with the requirement for low maintenance, drought and brackish water tolerant planting we have found through our water conservation efforts that the average daily irrigation requirement is approximate 1.0 gallons per square foot of planting area per week. We have established this irrigation water demand through both on site field experimentation and the following calculation:

**Irrigation Application Rate Calculation**

Ewa 15-year average annual pan evaporation rate: 86.56 inches per year
Less Ewa Gentry average annual rainfall (18.75-inches), derated 25%
Evapotranspiration Rate (14.06) inches per year
72.50 inches per year

72.5 inches per year = 0.87 gals./s.f./week
15% irrigation inefficiency factor, high percentage of small irregular planting areas = 0.13 gals./s.f./week
Total weekly irrigation demand = 1.0 gals./s.f./week

We have found that the rainfall contribution to irrigation must be derated at least 25% based on field experience and the irrigation inefficiency factor is approximately 15% due in large part to the high percentage of small irregular planting areas within the housing parcels.

The irrigation well service areas are outlined on the Irrigation Master Plan prepared by our office. The bulk service area irrigation demand are as follows:
<table>
<thead>
<tr>
<th>Area Well</th>
<th>Service Area</th>
<th>Gallons per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 35 Well</td>
<td>1,785,756 s.f.</td>
<td>255,108</td>
</tr>
<tr>
<td>Keaunui Well</td>
<td>1,572,305 s.f.</td>
<td>224,615</td>
</tr>
<tr>
<td>Sun Terra Tot Well</td>
<td>1,363,373 s.f.</td>
<td>194,768</td>
</tr>
<tr>
<td>Area 13 Well</td>
<td>258,825 s.f.</td>
<td>36,975</td>
</tr>
<tr>
<td>Area 45 Well</td>
<td>462,595 s.f.</td>
<td>66,085</td>
</tr>
</tbody>
</table>

If you have questions regarding this information, please contact me.

Sincerely,
BROWNIE & LEE

Richard C. Brownlie, ASLA
Principal

cc: Darian Chun
   Gentry Homes, Ltd.
November 19, 2008

Denise Mills
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawai‘i 96809


Aloha e Denise Mills,

The Office of Hawaiian Affairs (OHA) is in receipt of the above-mentioned letter dated October 28, 2008. OHA has reviewed the project and offers the following comments.

OHA notes that the proposed use is for irrigation and landscaping purposes and that the applicant seeks to use brackish water for this purpose. OHA asks if the landscaping is with drought tolerant local or endemic species common to the area. If there has been little to no effort to reasonably conserve this scarce resource in terms of landscaping, it could cast this request in questionable or unreasonable lighting. If thirsty exotics are being watered, that would also not be compatible with the city Watershed Management Plan and Ewa Development Plan. (Ewa Development Plan, page 4-21)

The applicant is proposing to use a total of 582,783 gallons per day of water for irrigation. If these WUPAs are combined with the nearly identical WUPA No. 856, then this total goes up to 777,551 gallons per day. This amount of water for accessory irrigation should be scrutinized to ensure that the request is reasonable and the use is beneficial. Certainly we agree that potable water should not be used for this proposed purpose.

We request that the applicant use recycled water if possible, or be required to do so when it does become available for this proposed use. OHA notes that the Ewa Development Plan projects future nonpotable demand for this area to be 31 mgd. (Ewa Development Plan, page 4-
19) The demand for this use is to be met with uses such as this proposal, from low chloride irrigation water sources. However, strategies in the city Watershed Management Plan for this area include development of infrastructure not currently in existence or proposed and sources which have since been abandoned such as the Kalaeloa desalinization plant. (Honolulu Advertiser article, 11-17-08 *Kalaeloa desalination plant put on hold*)

We request assurances that uses from this source will not adversely affect constitutionally protected Native Hawaiian uses in the area as protected in the state water code. We also ask if this nonpotable source is low in total dissolved solids that may affect water quality in the quantities requested.

Thank you for the opportunity to comment. If you have further questions, please contact Grant Arnold by phone at (808) 594-0263 or e-mail him at granta@oha.org.

'O wau iho nō me ka 'oiaʻiʻo,

Clyde W. Nāmuʻo
Administrator
November 19, 2008

Denise Mills  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawai‘i 96809

RE: Request for comments on the proposed Water Use Permit Application (WUPA), Pu‘uola Ground Water Management Area, O‘ahu, TMK: 9-1-70: 132.

Aloha e Denise Mills,

The Office of Hawaiian Affairs (OHA) is in receipt of the above-mentioned letter dated October 28, 2008. OHA has reviewed the project and offers the following comments.

OHA notes that the proposed use is for irrigation and landscaping purposes and that the applicant seeks to use brackish water for this purpose. OHA asks if the landscaping is with drought tolerant local or endemic species common to the area. If there has been little to no effort to reasonably conserve this scarce resource in terms of landscaping, it could cast this request in questionable or unreasonable lighting.

We request that the applicant use R-2 water if possible, or be required to do so when it does become available for this proposed use. We request assurances that uses from this source will not adversely affect constitutionally protected Native Hawaiian uses in the area as protected in the state water code.

Thank you for the opportunity to comment. If you have further questions, please contact Grant Arnold by phone at (808) 594-0263 or e-mail him at granta@oha.org.

‘O wau iho nō me ka ‘oia‘i‘o,

Clyde W. Nāmu‘o
Administrator
Ms. Laura H. Thielen, Chairperson  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  
P.O. Box 621  
Honolulu, Hawaii 96809

Subject: Water Use Permit Application, Puuloa Ground Water Management Area, Ewa Beach, Oahu, Tax Map Keys: 9-1-116:013, 9-1-102:064, 9-1-136:064, and 9-1-069:005

We have reviewed Water Use Permit Applications (WUPA) 855, 857, 858, and 859 submitted by Gentry Homes, Ltd. and have the following comments to offer.

1. **WUPA 855**: The area identified by the TMK in Table 1 of the application is zoned A-2 Medium Apartment District as stated in Table 1. The proposed use of water for roadway landscaping irrigation in areas of the Ewa by Gentry development is consistent with supporting A-2 zoned areas of the Ewa by Gentry development. The proposed use of brackish caprock water is consistent with Section 4.2.1 of the Ewa Development Plan requiring (when necessary) a dual water system and non-potable water use to conserve potable water in the Ewa region.

2. **WUPA 857**: The areas identified by the TMKs in Table 1 of the application are zoned R-5 Residential District, A-1 Low Density Apartment District, and P-2 General Preservation District as stated in Table 1. The proposed use of water for roadway landscaping and park irrigation in areas of the Ewa by Gentry development is consistent with supporting R-5, A-1, and P-2 zoned areas of the Ewa by Gentry development. The proposed use of brackish caprock water is consistent with Section 4.2.1 of the Ewa Development Plan requiring (when necessary) a dual water system and non-potable water use to conserve potable water in the Ewa region.

**EXHIBIT 17**
3. **WUPA 858:** The areas identified by the TMKs in Table 1 of the application are zoned A-1 Low Density Apartment District as stated in Table 1. The proposed use of the water for roadway landscaping in areas of the Ewa by Gentry development is consistent with supporting A-1 zoned areas of the Ewa by Gentry development. The proposed use of brackish caprock water is consistent with Section 4.2.1 of the Ewa Development Plan requiring (when necessary) a dual water system and non-potable water use to conserve potable water in the Ewa region.

4. **WUPA 859:** The areas identified by the TMKs in Table 1 of the application are zoned R-5 Residential District and A-1 Low Density Apartment District as stated in Table 1. The proposed use of water for roadway landscaping and park irrigation in areas of the Ewa by Gentry development is consistent with supporting R-5 and A-1 zoned areas of the Ewa by Gentry development. The proposed use of brackish caprock water is consistent with Section 4.2.1 of the Ewa Development Plan requiring (when necessary) a dual water system and non-potable water use to conserve potable water in the Ewa region.

The locations of the two (2) existing and three (3) proposed wells, and the areas identified by the TMKs in all four (4) applications are not in the Special Management Area.

The Board of Water Supply requests contingency plans for well nos. 1901-08, 1900-24, and 2000-06, should the chloride levels of these wells exceed the 1,000 ppm CWRM limit.

Should you have any questions, please contact Tim Hata of our staff at 768-8043.

Very truly yours,

Henry Eng, FAICP, Director
Department of Planning and Permitting

HE: lh
p:DivFunction/WUP/2008elog2678

cc: Board of Water Supply, Attn: Glenn Oyama
November 10, 2008

Ms. Laura H. Thielen, Chairperson  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  
Box 621  
Honolulu, Hawaii 96809

Dear Ms. Thielen:

Subject: Water Use Permit Application, Puuloa Ground Water Management Area, Ewa Beach, Oahu, Tax Map Key: 9-1-070:132

We have reviewed the application and have the following comments to offer.

The areas identified by the TMKs in Table 1 of the application are zoned R-5 and A-1 as stated in Table 1. The proposed use of the water for roadway landscaping and park irrigation in areas of the Ewa by Gentry development is consistent with supporting the R-5 and A-1 zoned areas of the Ewa by Gentry development. The proposed use of brackish caprock water is consistent with Section 4.2.1 of the Ewa Development Plan requiring (when required) a dual water system and non-potable water use to conserve potable water in the Ewa region.

The Soda Creek Well (Well No. 2001-05) and those parcels in Table 1 are not in the Special Management Area.

Should you have any questions, please contact Tim Hata of our staff at 768-8043.

Very truly yours,

Henry Eng, FAICP, Director  
Department of Planning and Permitting

HE:js

p:DivFunction/WUP/2008elog2679
### WATER USE PERMIT DETAILED INFORMATION

<table>
<thead>
<tr>
<th>Well Number and Name</th>
<th>1901-08 Gentry Area 45</th>
<th>2001-05 Soda Creek III</th>
<th>2001-12 Keaumui Area 30</th>
<th>1901-05 Gentry Area 13</th>
<th>1900-24 Gentry Area 35, 1</th>
<th>2000-06 Gentry Area 35, 2</th>
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<td>856</td>
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<td>194,768</td>
<td>224,615</td>
<td>36,975</td>
<td>255,108</td>
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#### Source Information

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<tr>
<td>Owner/Operator</td>
<td>Gentry Homes</td>
<td>Ewa by Gentry</td>
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<td>Year drilled</td>
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<td>1999</td>
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<td>1.0</td>
<td>--</td>
<td>1.0</td>
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<td>Ground surface</td>
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<td>31</td>
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<td>Bottom of solid casing</td>
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<td>1</td>
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<td>-2</td>
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<td>Bottom of perforated casing</td>
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<td>-24</td>
<td>-8</td>
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<td>Bottom of open hole</td>
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<td>-24</td>
<td>-8</td>
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<td>Total depth (ft)</td>
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<td>100 (proposed)</td>
<td>200 (proposed)</td>
<td>430</td>
<td>355</td>
<td>150 (proposed)</td>
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**Notes:**

1. Ewa by Gentry Community Association
2. The current permitted pump capacity is 110 gpm. Applicant has applied for a new pump installation permit to increase the capacity to 200 gpm.

---

**ATTACHMENT A**
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<tr>
<th>SRC/</th>
<th>COST</th>
<th>PROJECT</th>
<th>PH</th>
<th>ACT</th>
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<td>OBJ</td>
<td>CTR</td>
<td>PH AMOUNT</td>
<td>NAME/DESCRIPTION (WANG INPUT)</td>
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<td>Gentry Homes, Ltd.</td>
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<td>(2)</td>
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<td>(4)</td>
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<td>(5)</td>
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<td>(8)</td>
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<td>(9)</td>
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REMARKS: LINE (1) Reimbursement for Public Notice costs for WUP No. 855, 857, 858 & 859

LINE (2)
LINE (3)
LINE (4)
LINE (5)
LINE (6)
LINE (7)
LINE (8)
LINE (9)
LINE (10)
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<td>580.77</td>
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Check totals: 580.77
CWRM Water Use Permit
Reviewer Comments / Routing

WUPA No.: 855
CWRM Contact: Denise Mills, Hydrologist

Review start date: 28-Oct-08
Comment deadline: 20-Nov-08
Public notice publication: October 29 and November 5, 2008

<table>
<thead>
<tr>
<th>Reviewer</th>
<th>Comments Received</th>
<th>Date</th>
<th>Comments</th>
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<td>DLNR Divisions</td>
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<td>Aquatic Resources</td>
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<td>11/19/08</td>
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<td>Forestry and Wildlife/NARS</td>
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<td>11/19/08</td>
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<td>Historic Preservation</td>
<td>✓</td>
<td>11/24/08</td>
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<td>Land Division, Atta</td>
<td>✓</td>
<td>11/26/08</td>
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<td>LUC (Dave Davidson)</td>
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<td>11/31/08</td>
<td></td>
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<td>DHHL (Hon. Micah Kane)</td>
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<td>DOH (Hon. C.L. Fukino)</td>
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<td>WW Branch (T. See)</td>
<td>✓</td>
<td>11/5/08</td>
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<td>SDW Branch (S. Yamada)</td>
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<td>10/30/08</td>
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<td>Office of Hawaiian Affairs</td>
<td>✓</td>
<td>12/3/08</td>
<td>See letter</td>
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<td>Chester Lao</td>
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<td>Contingency plan if fluoride levels exceed 5000 ppm threshold.</td>
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<td>Barry Usegawa</td>
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<td>C&amp;C of Honolulu</td>
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<td>Mayor's Office</td>
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<tr>
<td>Dept of Planning &amp; Permitting</td>
<td>✓</td>
<td>11/26/08</td>
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</tbody>
</table>

Other interested parties
1
2
3
4
5
November 19, 2008

Denise Mills
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawai‘i 96809


Aloha e Denise Mills,

The Office of Hawaiian Affairs (OHA) is in receipt of the above-mentioned letter dated October 28, 2008. OHA has reviewed the project and offers the following comments.

OHA notes that the proposed use is for irrigation and landscaping purposes and that the applicant seeks to use brackish water for this purpose. OHA asks if the landscaping is with drought tolerant local or endemic species common to the area. If there has been little to no effort to reasonably conserve this scarce resource in terms of landscaping, it could cast this request in questionable or unreasonable lighting. If thirsty exotics are being watered, that would also not be compatible with the city Watershed Management Plan and Ewa Development Plan. (Ewa Development Plan, page 4-21)

The applicant is proposing to use a total of 582,783 gallons per day of water for irrigation. If these WUPAs are combined with the nearly identical WUPA No. 856, then this total goes up to 777,551 gallons per day. This amount of water for accessory irrigation should be scrutinized to ensure that the request is reasonable and the use is beneficial. Certainly we agree that potable water should not be used for this proposed purpose.

We request that the applicant use recycled water if possible, or be required to do so when it does become available for this proposed use. OHA notes that the Ewa Development Plan projects future nonpotable demand for this area to be 31 mgd. (Ewa Development Plan, page 4-
19) The demand for this use is to be met with uses such as this proposal, from low chloride irrigation water sources. However, strategies in the city Watershed Management Plan for this area include development of infrastructure not currently in existence or proposed and sources which have since been abandoned such as the Kalaeloa desalinization plant. (Honolulu Advertiser article, 11-17-08 *Kalaeloa desalination plant put on hold*)

We request assurances that uses from this source will not adversely affect constitutionally protected Native Hawaiian uses in the area as protected in the state water code. We also ask if this nonpotable source is low in total dissolved solids that may affect water quality in the quantities requested.

Thank you for the opportunity to comment. If you have further questions, please contact Grant Arnold by phone at (808) 594-0263 or e-mail him at granta@oha.org.

'O wau iho nō me ka 'oia'i'o,

Clyde W. Nāmu'o
Administrator
November 20, 2008

Ken C. Kawahara, P.E., Deputy Director  
Commission on Water Resource Management  
Department of Land and Natural Resources  
P.O. BOX 621  
Honolulu, Hawai'i 96813

Dear Mr. Kawahara:

SUBJECT:  Chapter 6E-42 Historic Preservation Review –  
Four Water Use Permit Applications – Pu‘uloa Ground Water Management Area  
Honouliuli Ahupua‘a, ‘Ewa District, Island of O‘ahu  
TMK: (1) 9-1-069:005, 9-1-136:064, 9-1-102:064, 9-1-116:013

Thank you for the opportunity to comment on the aforementioned project. We received the submittal on October 30, 2008. The proposed undertaking involves using water from Well Nos. 1901-08, 2001-12, 1901-05, 2000-06, and 1900-24 for irrigation purposes.

We determine that no historic properties will be affected by this undertaking because:

- Intensive cultivation has altered the land
- Residential development/urbanization has altered the land
- Previous grubbing/grading has altered the land
- An accepted archaeological inventory survey (AIS) found no historic properties
- SHPD previously reviewed this project and mitigation has been completed
- Other: Water will be used from existing wells and no ground disturbing activities are proposed

However, in the event that historic resources, including human skeletal remains, are identified during the construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional disturbance, and the State Historic Preservation Division, O‘ahu Section, needs to be contacted immediately at (808) 692-8015.

Please contact Teresa Kaneakua-Davan at (808) 692-8015 if you have any questions or concerns regarding this letter.

Aloha,

Nancy A. McMahon  
 Archaeology and Historic Preservation Manager  
State Historic Preservation Division
November 19, 2008

TO: Laura H. Thielen, Chairperson  
Commission on Water Resource Management  
Department of Land and Natural Resources

FROM: Orlando "Dan" Davidson, Executive Officer

SUBJECT: Water Use Permit Application  
Puuloa Groundwater Management Area, Oahu

We have reviewed the subject applications forwarded by your transmittal dated October 28, 2008. Based on the representation of Well Nos. 1901-08, 2001-12, 1901-05, 2000-06, 1900-24 on the accompanying maps, we find that they are located within the State Land Use Urban District.

With respect to your request as to whether the current designation is appropriate for the proposed project, please be advised that pursuant to section 205-2(b), Hawaii Revised Statutes, activities or uses within the Urban District are the jurisdiction of the respective counties as provided by their ordinances or regulations. As such, we suggest that you contact the City and County of Honolulu Department of Planning and Permitting directly for their comments on this matter.

Thank you for the opportunity to comment on the subject applications. As requested, we are returning the cover memo for the subject applications.

Please feel free to contact Bert Saruwatari of my office at 587-3822, should you require clarification or any further assistance.

Enclosure
October 28, 2008

TO: Mr. Dan Davidson, Executive Officer
Land Use Commission

FROM: Laura H. Thielen, Chairperson
Commission on Water Resource Management

SUBJECT: WATER USE PERMIT APPLICATION
Puuloa Ground Water Management Area, Oahu

Transmitted for your review and comment are copies of four water use permit applications (WUPA Nos. 855, 857, 858, and 859) submitted by Gentry Homes, Ltd. for Well Nos. 1901-08, 2001-12, 1901-05, 2000-06, and 1900-24. Public notice of these applications will be published in the Honolulu Star Bulletin issues of October 29, 2008 and November 5, 2008.

We would appreciate your review of the proposed uses is described in the attached (see application Items 6, 7, 11, and 12). Specifically, we request that you inform us of the current state land use designation for the TMK parcels listed or TMK portions for the proposed use areas. Please also tell us whether the current state land use designation is appropriate for the project. Two maps are included with each application that show the proposed use areas: (1) a TMK map and (2) a map illustrating the Ewa by Gentry Irrigation Master Plan.

Please respond by returning this cover memo along with your review comments by November 20, 2008, which is the legal deadline for objections. If we do not receive your comments by this date, we will assume you have no objections to these applications.

If you have any questions, require additional information, or would like to request an extension of the review period, please contact Denise Mills at 587-0251.

DM:ss
Attachment(s)

Response:

[ ] We have no objections or comments.
[ ] Objections attached.
[ ] Only comments attached.

Contact person: BERT SARUWATARI
Phone: 587-3824
Date: November 18, 2008
November 17, 2008

Ref: WUP 855 857 858 859.invoice

Mr. Mark Brant, P.E.
Gentry Homes, Ltd.
P.O. Box 295
Honolulu, HI 96809

Dear Mr. Brant:

Invoice for Public Notice – Water Use Permit Applications
WUPA No. 855 (Well No. 1901-08)
WUPA No. 857 (Well No. 2001-12)
WUPA No. 858 (Well No. 1901-05)
WUPA No. 859 (Well Nos. 1900-24 and 2000-06)

We are attaching a copy of the Affidavit of Publication and the Invoice/Receipt for the subject notice. Please submit a check payable to the Department of Land and Natural Resources at the address shown above for the amount due by the date specified below.

Amount Due: $580.77
Due Date: December 1, 2008

All water use permit applicants are required to pay the cost to publish the public notice(s) of their application(s). Payment is required to complete your application. Failure to submit the full amount due by December 1, 2008 will result in a rejection of your application. If you decide to proceed with this project in the future, a new water use permit application must be made, and you will be required to pay for the costs of both this public notice and the new public notice.

If you have any questions, please contact Denise Mills at 587-0251.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

DEMA:ss
Enclosure
c: Suzanne Alawa
   Tom Nance
Ms. Laura H. Thielen, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Subject: Water Use Permit Application, Puuloa Ground Water Management Area, Ewa Beach, Oahu, Tax Map Keys: 9-1-116:013, 9-1-102:064, 9-1-136:064, and 9-1-069:005

We have reviewed Water Use Permit Applications (WUPA) 855, 857, 858, and 859 submitted by Gentry Homes, Ltd. and have the following comments to offer.

1. **WUPA 855**: The area identified by the TMK in Table 1 of the application is zoned A-2 Medium Apartment District as stated in Table 1. The proposed use of water for roadway landscaping irrigation in areas of the Ewa by Gentry development is consistent with supporting A-2 zoned areas of the Ewa by Gentry development. The proposed use of brackish caprock water is consistent with Section 4.2.1 of the Ewa Development Plan requiring (when necessary) a dual water system and non-potable water use to conserve potable water in the Ewa region.

2. **WUPA 857**: The areas identified by the TMKs in Table 1 of the application are zoned R-5 Residential District, A-1 Low Density Apartment District, and P-2 General Preservation District as stated in Table 1. The proposed use of water for roadway landscaping and park irrigation in areas of the Ewa by Gentry development is consistent with supporting R-5, A-1, and P-2 zoned areas of the Ewa by Gentry development. The proposed use of brackish caprock water is consistent with Section 4.2.1 of the Ewa Development Plan requiring (when necessary) a dual water system and non-potable water use to conserve potable water in the Ewa region.
Ms. Laura H. Thielen, Chairperson  
Commission on Water Resource Management  
Department of Land and Natural Resources  
November 18, 2008  
Page 2

3. **WUPA 858:** The areas identified by the TMKs in Table 1 of the application are zoned A-1 Low Density Apartment District as stated in Table 1. The proposed use of the water for roadway landscaping in areas of the Ewa by Gentry development is consistent with supporting A-1 zoned areas of the Ewa by Gentry development. The proposed use of brackish caprock water is consistent with Section 4.2.1 of the Ewa Development Plan requiring (when necessary) a dual water system and non-potable water use to conserve potable water in the Ewa region.

4. **WUPA 859:** The areas identified by the TMKs in Table 1 of the application are zoned R-5 Residential District and A-1 Low Density Apartment District as stated in Table 1. The proposed use of water for roadway landscaping and park irrigation in areas of the Ewa by Gentry development is consistent with supporting R-5 and A-1 zoned areas of the Ewa by Gentry development. The proposed use of brackish caprock water is consistent with Section 4.2.1 of the Ewa Development Plan requiring (when necessary) a dual water system and non-potable water use to conserve potable water in the Ewa region.

The locations of the two (2) existing and three (3) proposed wells, and the areas identified by the TMKs in all four (4) applications are not in the Special Management Area.

The Board of Water Supply requests contingency plans for well nos. 1901-08, 1900-24, and 2000-06, should the chloride levels of these wells exceed the 1,000 ppm CWRM limit.

Should you have any questions, please contact Tim Hata of our staff at 768-8043.

Very truly yours,

Henry Eng, FAICP, Director  
Department of Planning and Permitting

HE: lh  
p:DivFunction/WUP/2008elog2678

cc: Board of Water Supply, Attn: Glenn Oyama
TO:    
Aquatic Resources  
Forestry and Wildlife/Natural Area Reserve System  
Historic Preservation  
State Parks
FROM:    Ken C. Kawahara, P.E., Deputy Director  
Commission on Water Resource Management
SUBJECT:    Request for Comments  
Four Water Use Permit Applications  
Puuloa Ground Water Management Area, Oahu

Transmitted for your review and comment are copies of four water use permit applications (WUPA Nos. 855, 857, 858, and 859) submitted by Gentry Homes, Ltd. for Well Nos. 1901-08, 2001-12, 1901-05, 2000-06, and 1900-24. Public notice of these applications will be published in the Honolulu Star Bulletin issues of October 29, 2008 and November 5, 2008.

We would appreciate your review of the attached applications for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please respond by returning this cover memo form by November 20, 2008 which is the legal deadline for objections. If we do not receive your comments by this date, we will assume you have objections to this application.

If you have any questions, require additional information, or would like to request an extension of the review period, please contact Denise Mills at 587-0251.

DM:ss
Attachment(s)

Response:
[ ] We have no objections or comments.
[ ] Objections attached.
[ ] Only comments attached.

Contact person:    Glenn Higashi  
Phone:  587-0112
Signed:  
Date:  11/18/08
STATE OF HAWAII
Department of Land and Natural Resources
DIVISION OF AQUATIC RESOURCES

MEMORANDUM

TO: Dan A. Polhemus, Administrator
FROM: Glenn R. Higashi, Aquatic Biologist
SUBJECT: Comments on Water Use Permit Application (WUPA No. 855)

Comments
Requested By: Commission on Water Resource Management
Date of Request: 10/28/08 Date Received: 10/29/08

Summary of Project

Title: Water Use Permit Application (WUPA No. 855) submitted by Gentry Homes, Ltd. for Well No. 1901-08.

Project By: Gentry Homes, Ltd.
Kapolei, HI 96707

Location: Puuloa System, Ewa Caprock Sector, Kapolei, Oahu TMK: (1) 9-1-069: 005

Brief Description:
The applicant, Gentry Homes, Ltd. is proposing a new brackish water well (Well No. 1901-08) to be constructed about 250 ft. south of Keaunui Dr. and west of Fort Weaver Rd., Oahu, Tax Map Key (1) 9-1-069: 005, portion (Kapolei Parkway extension). The quantity of water requested for the new well is 0.066 millions gallons per day and will be used for irrigation of 10.62 acres of roadway landscaping.

Comments:
The Division of Aquatic Resources (DAR) has no objections to this request since the proposed project is not expected to have significant adverse impact on aquatic resources values in the area and there are no anchialine ponds in the area.
October 28, 2008

TO: Morris Atta, Administrator
   Land Division

FROM: Ken C. Kawahara, P.E., Deputy Director
      Commission on Water Resource Management

SUBJECT: Request for Comments
         Water Use Permit Application
         Puuloa Ground Water Management Area, Oahu

Transmitted for your review and comment are copies of four water use permit applications (WUPA Nos. 855, 857, 858, and 859) submitted by Gentry Homes, Ltd. for Well Nos. 1901-08, 2001-12, 1901-05, 2000-06, and 1900-24. Public notice of these applications will be published in the Honolulu Star Bulletin issues of October 29, 2008 and November 5, 2008. (Copies of the well construction/pump installation permit applications for Well Nos. 1901-08, 2000-06, and 1900-24 will be sent to you under separate cover for review and comment. We plan to process the well permit applications concurrently with the associated water use permit applications.)

We would appreciate your review of the attached water use permit applications for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please respond by returning this cover memo form by November 20, 2008, which is the legal deadline for objections. If we do not receive your comments by this date, we will assume you have no objections to this application.

If you have any questions, require additional information, or would like to request an extension of the review period, please contact Denise Mills at 587-0251.

DM:ss
Attachment(s)
Response:

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

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

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

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

[ ] No objections

[ ] Other comments:

Contact person: Gary Martin

Signed: [Signature]

Phone: 587-0421
Date: Nov 18, 2008
TO: Aquatic Resources  
Forestry and Wildlife/Natural Area Reserve System  
Historic Preservation  
State Parks
FROM: Ken C. Kawahara, P.E., Deputy Director  
Commission on Water Resource Management
SUBJECT: Request for Comments  
Four Water Use Permit Applications  
Puuloa Ground Water Management Area, Oahu

Transmitted for your review and comment are copies of four water use permit applications (WUPA Nos. 855, 857, 858, and 859) submitted by Gentry Homes, Ltd. for Well Nos. 1901-08, 2001-12, 1901-05, 2000-06, and 1900-24. Public notice of these applications will be published in the Honolulu Star Bulletin issues of October 29, 2008 and November 5, 2008.

We would appreciate your review of the attached applications for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please respond by returning this cover memo form by November 20, 2008 which is the legal deadline for objections. If we do not receive your comments by this date, we will assume you have no objections to this application.

If you have any questions, require additional information, or would like to request an extension of the review period, please contact Denise Mills at 587-0251.

DM:ss  
Attachment(s)

Response:  
[ ] We have no objections or comments.  
[ ] Objections attached.  
[ ] Only comments attached.

Contact person: Paul J. Camm  
Phone: 7-4175
Signed: Paul J. Camm  
Date: Nov 17 2008
TO: Aquatic Resources
Forestry and Wildlife/Natural Area Reserve System
Historic Preservation
State Parks

FROM: Ken C. Kawahara, P.E., Deputy Director
Commission on Water Resource Management

SUBJECT: Request for Comments
Four Water Use Permit Applications
Puuloa Ground Water Management Area, Oahu

Transmitted for your review and comment are copies of four water use permit applications (WUPA Nos. 855, 857, 858, and 859) submitted by Gentry Homes, Ltd. for Well Nos. 1901-08, 2001-12, 1901-05, 2000-06, and 1900-24. Public notice of these applications will be published in the Honolulu Star Bulletin issues of October 29, 2008 and November 5, 2008.

We would appreciate your review of the attached applications for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please respond by returning this cover memo form by November 20, 2008 which is the legal deadline for objections. If we do not receive your comments by this date, we will assume you have no objections to this application.

If you have any questions, require additional information, or would like to request an extension of the review period, please contact Denise Mills at 587-0251.

DM:ss
Attachment(s)

Response:
[ ] We have no objections or comments.
[ ] Objections attached.
[ ] Only comments attached.

Contact person: Daniel S. Quinn

Signed: [Signature]

Phone: 587-0290
Date: 11/8/08
TO: 
Honorable Micah Kane, Chairperson
Department of Hawaiian Home Lands

Honorable Chiyome L. Fukino, M.D., Director
Department of Health

Attn: Mr. Tomas See, Chief, Wastewater Branch
Attn: Stuart Yamada, Chief, Safe Drinking Water Branch

Mr. Clyde W. Namu’o, Administrator
Office of Hawaiian Affairs

Mr. Clifford Lum, Manager
Honolulu Board of Water Supply
Attn: Mr. Chester Lao
Attn: Mr. Barry Usugawa

FROM: Laura H. Thielen, Chairperson
Commission on Water Resource Management

SUBJECT: Water Use Permit Application
Puuloa Ground Water Management Area, Oahu

Transmitted for your review and comment are copies of four water use permit applications
(WUPA Nos. 855, 857, 858, and 859) submitted by Gentry Homes, Ltd. for Well Nos. 1901-08, 2001-12, 1901-05, 2000-06, and 1900-24. Public notice of these applications will be published in the Honolulu Star Bulletin issues of October 29, 2008 and November 5, 2008.

We would appreciate your review of the proposed use that is described in the attached applications for any conflicts or inconsistencies with the land use designations, plans, policies, programs, or objectives specific to your organization or department only. Please respond by returning this cover memo form by November 20, 2008, which is the legal deadline for objections. If we do not receive your comments by this date, we will assume you have no objections to these applications.

If you have any questions, require additional information, or would like to request an extension of the review period, please contact Denise Mills at 587-0251.

DM:ss
Attachment(s)

Response:
[ ] We have no objections or comments.
[ ] Objections attached.
[ ] Only comments attached.

Contact person: Johnny Ong, Eng. on Oahu 586-4294
Signed: Ron Montemayor
Date: 10-31-08
Date: 10-31-08

To: Commission on Water Resource Management
Department of Land & Natural Resources
State of Hawaii

Attn: Denise Mills

From: Lori Morikami, Planner
Planning & Design Section
Ph: 586-4294 Fax 586-4300
Email: lori.morikami@doh.hawaii.gov

Subject: Well Construction/Pump Installation Permit/Water Use Permit for
Well No. 1906-09-710 Hailakole grd water
Well No. 1901-08, 2001-12, 1901-05, 2000-06 9 1900-24 Punaoa grd water
Well No. 2001-05 Punaoa grd water

Please find enclosed the application of the above subject project.
TO: Honorable Micah Kane, Chairperson Department of Hawaiian Home Lands
Honorable Chiyome L. Fukino, M.D., Director Department of Health
Attn: Mr. Tomas See, Chief, Wastewater Branch
Attn: Stuart Yamada, Chief, Safe Drinking Water Branch

Mr. Clyde W. Namu'o, Administrator Office of Hawaiian Affairs
Mr. Clifford Lum, Manager Honolulu Board of Water Supply
Attn: Mr. Chester Lao
Attn: Mr. Barry Usugawa

FROM: Laura H. Thielen, Chairperson Commission on Water Resource Management

SUBJECT: Water Use Permit Application
Punahou Ground Water Management Area, Oahu

Transmitted for your review and comment are copies of four water use permit applications (WUPA Nos. 655, 857, 858, and 859) submitted by Geary Homes, Ltd. for Well Nos. 1901-08, 2001-12, 1901-05, 3506-06, and 1900-24. Public notice of these applications will be published in the Honolulu Star Bulletin issues of October 29, 2008 and November 5, 2008.

We would appreciate your review of the proposed use that is described in the attached applications for any conflicts or inconsistencies with the land use designations, plans, policies, programs, or objectives specific to your organization or department only. Please respond by returning this cover memo form by November 20, 2008, which is the legal deadline for objections. If we do not receive your comments by this date, we will assume you have no objections to these applications.

If you have any questions, require additional information, or would like to request an extension of the review period, please contact Denise Mills at 587-0251.

DM:ss
Attachment(s)

Response:
[ ] We have no objections or comments.
[ ] Objections attached.
[ ] Only comments attached.

Contact person: ____________________________ Phone: ____________________________
Signed: ____________________________ Date: 10/30/08
COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: 10/14/08

TO: IN IT. TO:

CHENG, C.
CHING, F.
CHONG, R.
DANBARA, S.
ENGLAND, D.
FUJII, N.
HARDY, R.
HOAGBIN, S.
ICE, C.
IMATA, R.
KAWAHARA, K.
KIMURA, J.
KUNIMURA, I.
LEROUX, E.
MILLS, D.
OHYE, L.
OHYE, M.
OSHIRO, K.
SAKODA, E.
SWANSON, S.
TORRES, R.
UYENO, D.
YODA, K.
YOSHINAGA, M.

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

Review transmittals for 5 WUPAs: Ewa by Gentry Comm. Assoc. WUPA 856
Gentry Homes WUPAs 855, 857, 858, 859 (I still have the copies of these applications, making corrections/notations on them for reviewers.) Shall we try for Oct 29 & Nov 5 with Nov. 20 deadline, shall go out ASAP to allow maybe 60 days before 12/17 curr mtg.
Mr. Mark Brant, P.E.
Gentry Homes, Ltd.
P.O. Box 295
Honolulu, HI 96809

Dear Mr. Brant:

We acknowledge receipt, on October 8, 2008, of your completed water use permit applications for two new water use permits and modification of two existing water use permits, as follows:

1. WUPA No. 855 for Gentry Area 45 (new use; new Well No. 1901-08)
2. WUPA No. 857 for Keaunui Area 30 (application to modify WUP No. 793; Well No. 2001-12)
3. WUPA No. 858 for Gentry Area 13 (application to modify WUP No. 794; Well No. 1901-05)
4. WUPA No. 859 for Gentry Area 35 (new use; two new wells, Well Nos. 1900-24 and 2000-06)

You can expect your applications to be processed within ninety (90) days from the date of receipt unless there are objections to one or all of your the applications.

Enclosed is a copy of the public notice for your water use permit application which will be published in the Honolulu Star Bulletin issues of October 29, 2008 and November 5, 2008. You will be required to pay the cost to publish the public notice. The cost in most cases is around $400, but can be expected to be more for yours since we are combining the information for all four permits into one notice. We will send an invoice shortly after the notice has been published.

Please be aware that there could be objections to your application. If objections are made, the objector is required to file such objections with the Commission and is required to send you a copy of the objections.

You or any other party, may respond to any objections filed with the Commission by filing a brief in support of your application with the Commission within ten (10) days after an objection has been filed. You or the other party, must also send a copy of your response to the objector.

If you have any questions about the permit process, please contact Denise Mills at 587-0251.

Sincerely,

[Signature]

KEN C. KAWAHARA, P.E.
Deputy Director

DM:ss
Enclosure

c: Suzanne Alawa
   Tom Nance
TO: Aquatic Resources
    Forestry and Wildlife/Natural Area Reserve System
    Historic Preservation
    State Parks

FROM: Ken C. Kawahara, P.E., Deputy Director
    Commission on Water Resource Management

SUBJECT: Request for Comments
    Four Water Use Permit Applications
    Puuloa Ground Water Management Area, Oahu

Transmitted for your review and comment are copies of four water use permit applications (WUPA Nos. 855, 857, 858, and 859) submitted by Gentry Homes, Ltd. for Well Nos. 1901-08, 2001-12, 1901-05, 2000-06, and 1900-24. Public notice of these applications will be published in the Honolulu Star Bulletin issues of October 29, 2008 and November 5, 2008.

We would appreciate your review of the attached applications for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please respond by returning this cover memo form by November 20, 2008 which is the legal deadline for objections. If we do not receive your comments by this date, we will assume you have no objections to this application.

If you have any questions, require additional information, or would like to request an extension of the review period, please contact Denise Mills at 587-0251.

DM:ss
Attachment(s)

Response:

[ ] We have no objections or comments.
[ ] Objections attached.
[ ] Only comments attached.

Contact person: ___________________________ Phone: ___________________________

Signed: ___________________________ Date: ___________________________
Transmitted for your review and comment are copies of four water use permit applications (WUPA Nos. 855, 857, 858, and 859) submitted by Gentry Homes, Ltd. for Well Nos. 1901-08, 2001-12, 1901-05, 2000-06, and 1900-24. Public notice of these applications will be published in the Honolulu Star Bulletin issues of October 29, 2008 and November 5, 2008. (Copies of the well construction/pump installation permit applications for Well Nos. 1901-08, 2000-06, and 1900-24 will be sent to you under separate cover for review and comment. We plan to process the well permit applications concurrently with the associated water use permit applications.)

We would appreciate your review of the attached water use permit applications for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please respond by returning this cover memo form by November 20, 2008, which is the legal deadline for objections. If we do not receive your comments by this date, we will assume you have no objections to this application.

If you have any questions, require additional information, or would like to request an extension of the review period, please contact Denise Mills at 587-0251.

DM:ss
Attachment(s)
Response:
[ ] A water lease/permit is required of this applicant and an application for such will be requested by our division.
[ ] A water lease/permit is not required of this applicant.
[ ] A water lease/permit has been obtained by the applicant through lease no.
[ ] Other relevant Land Division rules/regulations, information, or recommendations are attached.
[ ] No objections
[ ] Other comments:

Contact person: _________________________ Phone: _________________________
Signed: _________________________ Date: _________________________
TO: Honorable Micah Kane, Chairperson
   Department of Hawaiian Home Lands

   Honorable Chiyome L. Fukino, M.D., Director
   Department of Health
   Attn: Mr. Tomas See, Chief, Wastewater Branch
   Attn: Stuart Yamada, Chief, Safe Drinking Water Branch

   Mr. Clyde W. Namu'o, Administrator
   Office of Hawaiian Affairs

   Mr. Clifford Lum, Manager
   Honolulu Board of Water Supply
   Attn: Mr. Chester Lao
   Attn: Mr. Barry Usugawa

FROM: Laura H. ThieLEN, Chairperson
      Commission on Water Resource Management

SUBJECT: Water Use Permit Application
         Puuloa Ground Water Management Area, Oahu

Transmitted for your review and comment are copies of four water use permit applications
(WUPA Nos. 855, 857, 858, and 859) submitted by Gentry Homes, Ltd. for Well Nos. 1901-08, 2001-
12, 1901-05, 2000-06, and 1900-24. Public notice of these applications will be published in the Honolulu

We would appreciate your review of the proposed use that is described in the attached
applications for any conflicts or inconsistencies with the land use designations, plans, policies, programs,
or objectives specific to your organization or department only. Please respond by returning this cover
memo form by November 20, 2008, which is the legal deadline for objections. If we do not receive
your comments by this date, we will assume you have no objections to these applications.

If you have any questions, require additional information, or would like to request an extension of
the review period, please contact Denise Mills at 587-0251.

DM: ss
Attachment(s)

Response:
[ ] We have no objections or comments.
[ ] Objections attached.
[ ] Only comments attached.

Contact person: ___________________________ Phone: ___________________________
Signed: ___________________________ Date: ___________________________
October 28, 2008

TO: Mr. Dan Davidson, Executive Officer
   Land Use Commission

FROM: Laura H. Thielen, Chairperson
   Commission on Water Resource Management

SUBJECT: WATER USE PERMIT APPLICATION
   Puuloa Ground Water Management Area, Oahu

Transmitted for your review and comment are copies of four water use permit applications (WUPA Nos. 855, 857, 858, and 859) submitted by Gentry Homes, Ltd. for Well Nos. 1901-08, 2001-12, 1901-05, 2000-06, and 1900-24. Public notice of these applications will be published in the Honolulu Star Bulletin issues of October 29, 2008 and November 5, 2008.

We would appreciate your review of the proposed uses is described in the attached (see application Items 6, 7, 11, and 12). Specifically, we request that you inform us of the current state land use designation for the TMK parcels listed or TMK portions for the proposed use areas. Please also tell us whether the current state land use designation is appropriate for the project. Two maps are included with each application that show the proposed use areas: (1) a TMK map and (2) a map illustrating the Ewa by Gentry Irrigation Master Plan.

Please respond by returning this cover memo along with your review comments by November 20, 2008, which is the legal deadline for objections. If we do not receive your comments by this date, we will assume you have no objections to these applications.

If you have any questions, require additional information, or would like to request an extension of the review period, please contact Denise Mills at 587-0251.

DM:ss
Attachment(s)

Response:

[ ] We have no objections or comments.
[ ] Objections attached.
[ ] Only comments attached.

Contact person: ___________________________ Phone: ________________
Signed: ___________________________ Date: ________________
TO: Mr. Henry Eng, FAICP, Director  
Department of Planning and Permitting  
City and County of Honolulu

FROM: Laura H. Thielen, Chairperson  
Commission on Water Resource Management

SUBJECT: WATER USE PERMIT APPLICATION  
Puuloa Ground Water Management Area, Oahu

For your review and record, we are forwarding a copy of four water use permit applications (WUPA Nos. 855, 857, 858, and 859) submitted by Gentry Homes, Ltd. for Well Nos. 1901-08, 2001-12, 1901-05, 2000-06, and 1900-24, for confirmation of the zoning designation for the proposed uses on the attached application, confirmation of the consistency of the proposed projects with the current zoning designation, and any special management area issues. Public notice of these applications will be published in the Honolulu Star Bulletin on October 29, 2008 and November 5, 2008.

Please respond by returning this cover memo form by November 20, 2008, which is the legal deadline for objections. If we do not receive your comments by this date, we will assume you have no objections to this application.

If you have any questions, require additional information, or would like to request an extension of the review period, please contact Denise Mills at 587-0251.

DM:ss
Attachment(s)

Response:

[ ] The proposed water use(s) is consistent with the current zoning designation(s).

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

[ ] Comments attached.

Contact person: ___________________________  Phone: ___________________________

Signed: ___________________________  Date: ___________________________
October 28, 2008

Honorable Mufi Hannemann, Mayor
City & County of Honolulu
City Hall
Honolulu, HI  96813

Dear Mayor Hanneman:

Notice of Water Use Permit Applications
Ewa by Gentry Project
Puuloa Ground-Water Management Area, Oahu

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-171-17(a), we are sending you copies of the public notice and four water use permit applications (WUPA Nos. 855, 857, 858, and 859) submitted by Gentry Homes, Ltd. for Well Nos. 1901-08, 2001-12, 1901-05, 2000-06, and 1900-24, which will be published in the Honolulu Star Bulletin.

In addition, Section 13-171-13(b), of our Administrative Rules, states:

"Within sixty days after receipt of notice of a permit application, the county shall inform the commission if the proposed use is inconsistent with the county land use plans and policies."

In accordance with the procedure that has been established between our staff and the City’s Department of Planning and Permitting (DPP), we have sent copies of the four applications to DPP and the Board of Water Supply for review and comment. We look forward to receiving comments from DPP and BWS within the next sixty (60) days, on whether the proposed water use is consistent with the City’s plans, policies, land use designations, and zoning.

Sincerely,

Laura H. Thielen
Chairperson

DM:ss
Enclosures
TO: Other Interested Parties

FROM: Ken C. Kawahara, P.E., Deputy Director
Commission on Water Resource Management

SUBJECT: Request for Comments
Water Use Permit Applications for the Ewa by Gentry Project
Puuloa Ground Water Management Area, Oahu

In addition to serving you notice, as required by 174C-52 (a), Hawaii Revised Statutes, we transmit for your review and comment copies of four water use permit applications (WUPA Nos. 855, 857, 858, and 859) submitted by Gentry Homes, Ltd. for Well Nos. 1901-08, 2001-12, 1901-05, 2000-06, and 1900-24. (Well Nos. 1901-08, 2000-06, and 1900-24 are proposed new sources of water supply for the project.) Public notice of the attached applications will be published in the Honolulu Star Bulletin issues of October 29, 2008 and November 5, 2008.

We would appreciate your review of the attached applications for any conflicts or inconsistencies with the programs, plans, and objectives of the organization or agency that you represent. Written objections should be made in accordance with Section 13-171-18, Hawaii Administrative Rules, and must be filed by the November 20, 2008 deadline. If we do not receive your comments by this date, we will assume you have no objections to these applications.

If you have any questions, require additional information, or would like to request an extension of the review period for these applications, please contact Denise Mills at 587-0251.

DM:ss
Attachment(s)

Response:

[ ] We have no objections or comments.

[ ] Objections attached.

[ ] Only comments attached.

Contact person: ____________________________ Phone: ____________________________

Signed: ____________________________ Date: ____________________________
PUBLIC NOTICE

Applications for Water Use Permits
Puuloa Ground Water Management Area, Oahu

The Commission on Water Resource Management has received four water use permit applications from Gentry Homes, Ltd. Two of these applications are for new water use supplied by three new water supply wells, and two are to modify existing water use supplied by two existing water supply wells. The Commission's receipt of these applications is hereby made public in accordance with Section 13-171, Hawaii Administrative Rules, "Designation and Regulation of Water Management Areas."

**Applicant:** Gentry Homes, Ltd.
P.O. Box 295
Honolulu, HI 96809

**Landowner:** Gentry Homes, Ltd.
P.O. Box 295
Honolulu, HI 96809

**Date Applications Filed as Complete:** October 8, 2008

**Hydrologic Unit:** Aquifer Areas: Puuloa System, Ewa Caprock Sector, Oahu

The two applications for new water use permits are:

- **WUPA No. 855**
  - **Water Source:** Gentry Area 45 Well (Well No. 1901-08)
  - **Quantity Requested:** 0.066 million gallons per day
  - **Existing/New Use:** New / Irrigation of 10.62 acres of roadway landscaping
  - **Place of Water Use:** Gentry Area 45 (Well No. 1901-08), a proposed new well to be constructed about 250 ft south of Keaunui Dr and west of Fort Weaver Rd, Oahu, Tax Map Key (1) 9-1-069-005

- **WUPA No. 859**
  - **Water Source:** Gentry Area 35 (Well Nos. 1900-24 and 2000-06)
  - **Quantity Requested:** 0.255 million gallons per day
  - **Existing/New Use:** New / Irrigation of 41.0 acres of roadway landscaping
  - **Place of Water Use:** Gentry Area 35, Wells #1 and #2 (Well Nos. 1900-24 and 2000-06). Two proposed new wells to be constructed near Hoowalea St (2000-06) and near the intersection of Kuanoo St and Hoomahana St (1900-24), Oahu, Tax Map Key (1) 9-1-136-064

The two applications to modify existing water use permits are:

- **WUPA No. 857**
  - **Water Source:** Keaunui Area 30 (Well No. 2001-12)
  - **Quantity Requested:** 0.225 million gallons per day
  - **Existing/New Use:** Existing / Irrigation of 36.09 acres of roadway landscaping
  - **Place of Water Use:** Keaunui Area 30 (Well No. 2001-12) on Keaunui Dr at Ma'ana St, Oahu, Tax Map Key (1) 9-1-102:064

Roadway landscaping within the area bounded generally by the Hawaii Prince Golf Club north boundary to the south, Ft Weaver Rd to the west, Iroquois Rd and East-West Loch Rd to the north, and Makalea St and Hoowalea St to the east.
**WUPA No. 858**

**Water Source:** Gentry Area 13 (Well No. 1901-05)

**Water Source:** Gentry Area 13 (Well No. 1901-05) on Launahale St near Kapolei Parkway, Oahu, Tax Map Key (1) 9-1-116:013

**Quantity Requested:** 0.035 million gallons per day.

**Existing/New Use:** Existing / Irrigation of 5.94 acres of roadway landscaping

**Place of Water Use:** Multiple TMKs. Roadway landscaping along Geiger Rd west of Kapolei Parkway, and within the area bounded generally by the Geiger Rd to the north, Kapolei Parkway to the east, Launahale St to the south, and the eastern boundary of the Coral Creek Golf Course.

A map showing the Irrigation Master Plan for the Ewa by Gentry project with specific irrigation zones to covered by these water use permit applications is available for public viewing on the Commission’s website at [http://www.hawaii.gov/dlnr/cwrm/...](http://www.hawaii.gov/dlnr/cwrm/...), or at 1151 Punchbowl Street, Room 227, Honolulu, Hawaii.

Written objections or comments on the above application may be filed by any person who has property interest in any land within the hydrologic unit of the source of water supply, any person who will be directly and immediately affected by the proposed water use, or any other interested person. Written objections shall: (1) state property or other interest in the matter (provide TMK information); (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; and (3) state all grounds for objections to the proposed permit. Written objections must be received by November 20, 2008. Objections must be sent to (1) the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809; and (2) the applicant at the above address.

**COMMISSION ON WATER RESOURCE MANAGEMENT**

KEN C. KAWAHARA, P.E., Deputy Director for
LAURA H. THIELEN, Chairperson

Dated: October 23, 2008

Thanks for your help on this. I have finished my part to begin processing the permits, and we estimate it will be 1-2 weeks before all the paperwork is done on our end and notices are submitted for publishing. You'll receive a copy of our acceptance letters to Mike Brant and Suzanne Alawa. We accepted the applications as complete on Oct. 8, which triggers the 90-day timeline for processing unless there are objections.

I'll contact you if we have questions about the irrigation plans for each area.

-Denise

Denise,

The client confirmed its OK to proceed with the Public Notice.

Thanks,

Greg Fukumitsu

--
Tom Nance Water Resource Engineering
680 Ala Moana Blvd., Suite 406
Honolulu, Hawaii 96813
Ph: 808-537-1141
Fax: 808-538-7757
Roy-- The notices as drafted are OK'd by Gentry. So it looks like they're ready to move forward. --dm

--- Forwarded by Denise E Mills/DLNRIStateHiUS on 10/16/2008 07:32 AM ---

Denise,

The client confirmed its OK to proceed with the Public Notice.

Thanks,

Greg Fukumitsu

--

Tom Nance Water Resource Engineering
680 Ala Moana Blvd., Suite 406
Honolulu, Hawaii 96813
Ph: 808-537-1141
Fax: 808-538-7757
FYI-- Hopefully we'll hear from Gentry soon if any corrections are needed on the notices.

--Denise

--- Forwarded by Denise E Mills/DLNR/StateHiUS on 10/15/2008 07:00 AM ----

Denise,

Thanks, I'm sending this to Gentry for their review.. it looks OK.. wait till I hear from them.

Thank, Greg

On Tue, Oct 14, 2008 at 8:00 AM, <Denise.E.Mills@hawaii.gov> wrote:

Hi Greg,
I've drafted the public notices for the Gentry Homes and Ewa by Gentry water use permit applications. We will combine the four Gentry Homes applications into one notice, and will have a second notice for the Ewa by Gentry Community Association application. I would appreciate it if you would review the draft notices for accuracy and let me know if corrections are needed.

Rather than listing use TMKs on the notices (there are too many for all but one of the applications), I have prepared general descriptions of the proposed use areas based on the Irrigation Master Plan. This is just to help public reviewers, those who may be interested, navigate the areas that each application covers. We will also plan to post the Irrigation Master Plan on our website for public viewing--

The draft notices are attached for your review and comment. When you open this document, you will be prompted with a message regarding macros-- select "No." (Dates, noted in these drafts with XXX placeholders, will be added when we are ready to publish the notices.)

Thanks for your help! Denise
Hi Greg,

I've drafted the public notices for the Gentry Homes and Ewa by Gentry water use permit applications. We will combine the four Gentry Homes applications into one notice, and will have a second notice for the Ewa by Gentry Community Association application. I would appreciate it if you would review the draft notices for accuracy and let me know if corrections are needed.

Rather than listing use TMKs on the notices (there are too many for all but one of the applications), I have prepared general descriptions of the proposed use areas based on the Irrigation Master Plan. This is just to help public reviewers, those who may be interested, navigate the areas that each application covers. We will also plan to post the Irrigation Master Plan on our website for public viewing--

The draft notices are attached for your review and comment. When you open this document, you will be prompted with a message regarding macros—select "No." (Dates, noted in these drafts with XXX placeholders, will be added when we are ready to publish the notices.)

Thanks for your help! Denise

Gentry_WUPA draft notices.doc
October 14, 2008

PUBLIC NOTICE

Applications for Water Use Permits
Puuloa Ground Water Management Area, Oahu

The Commission on Water Resource Management has received four water use permit applications from Gentry Homes, Ltd. Two of these applications are for new water use supplied by three new water supply wells, and two are to modify existing water use supplied by two existing water supply wells. The Commission’s receipt of these applications is hereby made public in accordance with Section 13-171, Hawaii Administrative Rules, “Designation and Regulation of Water Management Areas.”

Applicant: Gentry Homes, Ltd.
P.O. Box 295
Honolulu, HI 96809

Landowner: Gentry Homes, Ltd.
P.O. Box 295
Honolulu, HI 96809

Date Applications Filed as Complete: October 8, 2008
Hydrologic Unit: Aquifer Areas: Puuloa System, Ewa Caprock Sector, Oahu

The two applications for new water use permits are:

- **WUPA No. 855**
  - Water Source: Gentry Area 45 Well (Well No. 1901-08)
  - Gentry Area 45 (Well No. 1901-08), a proposed new water supply well to be constructed about 250 ft south of Keaunui Dr and west of Fort Weaver Rd, Oahu, Tax Map Key (1) 9-1-069:005
  - Quantity Requested: 0.066 million gallons per day
  - Existing/New Use: New / Irrigation of 10.62 acres of roadway landscaping
  - Place of Water Use: Tax Map Key (1) 9-1-069:005, portion (Kapolei Parkway extension).

- **WUPA No. 859**
  - Water Source: Gentry Area 35, Wells #1 and #2 (Well Nos. 2000-06 and 1900-24). Two proposed new wells to be constructed near Hoowalea St (2000-06) and near the intersection of Kuanoo St and Hoomahana St (1900-24), Oahu, Tax Map Key (1) 9-1-069:005, portion (Kapolei Parkway extension).
  - Quantity Requested: 0.255 million gallons per day
  - Existing/New Use: New / Irrigation of 41.0 acres of roadway landscaping
  - Place of Water Use: Multiple TMKs or portions of TMKs. Roadway landscaping within the area bounded generally by the Hawaii Prince Golf Club north boundary to the south, Ft Weaver Rd to the west, Iroquois Rd and East-West Loch Rd to the north, and Makalea St and Hoowalea St to the east.

The two applications to modify existing water use permits are:

- **WUPA No. 857**
  - Water Source: Keaunui Area 30 (Well No. 2001-12)
  - Keaunui Area 30 (Well No. 1904-08) on Keaunui Dr at Ma'ana St, Oahu, Tax Map Key (1) 9-1-102:064
  - Quantity Requested: 0.225 million gallons per day
  - Existing/New Use: Existing / Irrigation of 36.09 acres of roadway landscaping
  - Place of Water Use: Multiple TMKs or portions of TMKs. Roadway landscaping within the area bounded generally by Arizona Rd to the north, Ft Weaver Rd to the west, Iroquois Rd and East-West Loch Rd to the south, and various lots around Keaunui Dr.
The following application to modify an existing water use permit has been received by the Commission on Water Resource Management. The Commission's receipt of this application is hereby made public in accordance with Section 13-171, Hawaii Administrative Rules, "Designation and Regulation of Water Management Areas."

WUPA No. 856

Soda Creek III (Well No. 2001-05)

Applicants: Ewa by Gentry Community Association
91-1795 Keaunui Drive
Ewa Beach, HI 96706

Landowners: Ewa by Gentry Community Association
91-1795 Keaunui Drive
Ewa Beach, HI 96706

Date Application Filed as Complete: October 8, 2008

Hydrologic Unit: Aquifer Areas: Puuloa System, Ewa Caprock Sector, Oahu

Water Source: Soda Creek III (Well No. 2001-05; aka Sun Terra Tot Lot Well) near Launahele Street south of Geiger Road, Oahu, Tax Map Key (1) 9-1-070:132

Quantity Requested: 0.195 million gallons per day

Existing/New Use: Existing / Irrigation of 31.3 acres of roadway and park irrigation

Place of Water Use: Multiple TMKs. Landscaping along Kapolei Parkway and areas bounded generally by Kapolei Parkway, Geiger Road, Fort Weaver Road, and Keaunui Drive. A map showing the Irrigation Master Plan for the Ewa by Gentry project with the irrigation zone covered by this water use permit application is available for public viewing on the Commission’s website at http://www.hawaii.gov/dlnr/cwrm/... or at 1151 Punchbowl Street, Room 227, Honolulu, Hawaii.

Written objections or comments on the above application may be filed by any person who has property interest in any land within the hydrologic unit of the source of water supply, any person who will be directly and immediately affected by the proposed water use, or any other interested person. Written objections shall: (1) state property or other interest in the matter (provide TMK information); (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; and (3) state all grounds for objections to the proposed permit. Written objections must be received by XXX. Objections must be sent to: (1) the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809 and (2) the applicant at the above address.

COMMISSION ON WATER RESOURCE MANAGEMENT

LAURA H. THIELEN
Chairperson

Dated:

Publish in: Honolulu Star Bulletin issues of XXX and XXX
Hi Greg,

Based on our conversation yesterday about Table 2, the additional general information we agreed on should be sufficient. For our model assessment, I will extrapolate the information to nearly TMKs, which are very likely to have the same or very similar soil conditions and water needs. I'm trying to keep it simple to make it work with the level of detail you're able to provide.

Based on your new map, I designated the Area 35 Well #1 (the south well) as state well no. 1900-24 and Area 35 #2 as 2000-06. (I had these reversed before getting your updated map yesterday.) Because the wells haven't been constructed yet and the permit hasn't been issued, it's easy to change the state well numbers at this stage in the process. It's messier to do it later, so thank you for checking.

I hope this helps.

-Denise

"Greg Fukumitsu" <greg@tnwre.com>

Denise,

Thanks for the confirmation on my submittal. I'm assuming we're current on all the information you asked for except the Table 2 data for each WUP application. Gentry's landscape architect is currently working on the Table 2 data to complete our initial submittal. So we don't confuse the Area 35 Well Nos. 1 & 2, can you recheck it against your GIS system and confirm which SW # 1900-24 and 2000-06 is Well No. 1 and 2. Note, both skimming wells are on one WCR/PI permit.

Thanks, Greg Fukumitsu

On Fri, Sep 26, 2008 at 9:19 AM, <Denise.E.Mills@hawaii.gov> wrote:

Thank you for the information Greg.

We have updated our well information data base with the correct GPS coordinates for the Area 30
Keaunui Well (Well No. 2001-12) and the Area 13 Well (Well No. 1901-05).

As noted in our September 17 letter, we are planning to process the well construction/pump installation permits for the new wells (Nos. 1900-24, 1901-08, and 2000-06) with the Water Use Permit Applications once we receive the landscape irrigation information from you.

--Denise

Denise E. Mills
HYDROLOGIST

Hawaii Department of Land and Natural Resources
Commission on Water Resource Management
1151 Punchbowl Street, Room 227
Honolulu, Hawaii 96813
Phone: (808) 587-0251
Denise.E.Mills@hawaii.gov

"Greg Fukumitsu" <greg@tnwre.com>  To "Mills, Denise" <denise.e.mills@hawaii.gov>
cc "Chun, Darian" <DarianC@GentryHawaii.com>, "Nance, Tom" <tom@tnwre.com>

09/25/2008 01:52 PM

Denise,

We're working on the WUP permit table 2 data with our landscape architect and hope to have it soon. The following will address the other items listed on your September 17, 2008 letter to us:

**Water Use Permit Applications:**

1. WUP No. 857 (modify WUP No. 793) - Area 30 Keaunui Well (SW# 2001-12). Please note the TMK on the WUP application is correct. Attached is the revised USGS map for this well with the Latitude and Longitude location for this well. GPS location confirmed by field verification on 9-24-08.

2. WUP No. 858 (modify WUP No. 794) - Area 13 Well (SW# 1901-05). Please note the TMK on the WUP application is correct. Attached is the revised USGS map for this well with the Latitude and Longitude location for this well. GPS location confirmed by field verification on 9-24-08.
Well Construction/Pump Installation Permit Application:

3. Gentry Area 35 Well Nos. 1 & 2 (SW Nos. 2000-06 AND 1900-24). I've attached the revised USGS map showing the well locations.

a.) Attached is a pdf with photographs of both wells as requested. Please note Area 35 No. 1 will be the southern well on this map.

b.) Section 23. SHPD approval. See attached Partial EIS.pdf. It contains the SHPD clearance for both Area 35 and 45 proposed irrigation wells.

Please call me if you have any questions on this submittal.

Thanks,

Greg Fukumitsu

Tom Nance Water Resource Engineering
680 Ala Moana Blvd., Suite 406
Honolulu, Hawaii 96813
Ph: 808-537-1141
Fax: 808-538-7757
September 17, 2008

Mr. Tom Nance
Tom Nance Water Resource Engineering
680 Ala Moana Boulevard, Suite 406
Honolulu, HI 96813-5411

Dear Mr. Nance:

Ground Water Use Permit (WUP) Applications for
WUP No. 855 (new use) – Well No. 1901-08
WUP No. 856 (modify WUP No. 792) – Well No. 2001-05
WUP No. 857 (modify WUP No. 793) – Well No. 2001-12
WUP No. 858 (modify WUP No. 794) – Well No. 1901-05
WUP No. 859 (new use) – Well Nos. 1900-24 and 2000-06

Well Construction/Pump Installation Permit Applications
Well Nos. 1901-08, 1900-24, and 2000-06

We received, on August 18, 2008, the five captioned ground water use permit applications (WUPAs), two well construction/pump installation permit applications for three new wells, and the required filing fees. For time and cost efficiency, we would prefer to process your well construction/pump installation permit applications concurrently with the WUPAs, unless there are reasons that we should process your well construction/pump installation applications in advance of the WUPAs. We have reviewed each of these applications for completeness and have identified certain matters that must be addressed before we can accept these applications for processing.

Ground Water Use Permit Applications

1. WUP No. 855 (application for new use) – Item 12 (Table 2) has not been completed. Table 2 is applicable to the proposed use permit and therefore must be completely filled in and submitted to complete this application. Though your cover letter identifies total S.F. serviced and landscape irrigation, we need to know your declared information on irrigation practices (items E through H.) and types of landscape vegetation present (see Table 2 from IWREDSS attached). We enter the information requested on Table 2 as input values for a model that we use to evaluate the quantity(ies) of water requested for irrigation. Please note that the instructions at the top of Table 2 clearly state, "...including landscape and golf course irrigation uses." (emphasis added) The information should include the type(s) of grass (e.g., zoysia, bluegrass) that will be irrigated, or if grasses are not planned, the type(s) of shrubs and trees that may be planted; every plant does not need to be named...
individually. Without this information, we are unable to accurately assess whether the total quantity of water requested is reasonable for the proposed uses and use locations.

2. **WUP No. 856 (application to modify WUP No. 792)** – Item 12 (Table 2) must be completely filled in and submitted as described earlier.

3. **WUP No. 857 (application to modify WUP No. 793)**
   a) Item 12 (Table 2) must be completely filled in and submitted as described previously.
   b) The well location information provided for Well No. 2001-12 on the WUPA and on the maps attached to the WUPA is inconsistent both within your application and with the information contained in our well index. These inconsistencies and the information required to address them include:
      - Our record shows that Well No. 2001-12 is located within TMK 1-9-102:031, not the TMK listed on your application. Please confirm for us that the TMKs within this portion of the Gentry Homes' development have been changed since the well was completed in 1999.
      - The well location shown on the USGS quad map included with your application is different from the location shown on your TMK map. The USGS map location places the well within TMK 1-9-102:009. Please provide the correct map location for this well and submit corrected USGS and TMK maps.
      - The latitude and longitude for this well in our well index are 21°20'22" and 158°01'27" (NAD 83). These coordinates place the well at a location that is approximately 2,200 feet south of the location shown on your application. Please provide a GPS coordinate reading for this well to verify the well location.

4. **WUP No. 858 (application to modify WUP No. 794)**
   a) Item 12 (Table 2) must be completely filled in and submitted as described previously.
   b) The well location information provided for Well No. 1901-05 on the WUPA and on the maps attached to the WUPA is inconsistent both within your application and with the information contained in our well index. These inconsistencies and the information required to address them include:
      - Our record shows that Well No. 1901-05 is located within TMK 1-9-069:008, not the source TMK given on the WUPA. Also, the TMK map included with your application appears to place the well within TMK 1-9-069-019, which is also inconsistent with the location listed on the application. Please provide the correct TMK data for Well No. 1901-05.
      - The latitude and longitude for this well in our well index are 21°19'44" and 158°01'09" (NAD 83). These coordinates place the well at a location that is approximately 3,100 feet southeast of the location shown on your application, east of Fort Weaver Road. Please provide a GPS coordinate reading for this well to verify the well location.
      - Please submit corrected USGS and TMK maps.

5. **WUP No. 859 (application for new use)** – Item 12 (Table 2) must be completely filled in and submitted as described previously.
Well Construction/Pump Installation Permit Applications

1. **Both applications** – Applications for well construction/pump installation permits are required to be made by a contractor with a valid and active C-57, C-57a, or A license and who will perform the work, in accordance with the State Water Code (§ 174C-84(a), HRS). Because you have not identified a qualifying contractor, your application will not be accepted as complete until a qualifying contractor signs and completes sections 24 and 25 on the application form. However, we will process your incomplete application for review and if the review warrants the issuance of a permit, a letter of assurance will be issued in lieu of the permit. The letter of assurance will state that our intention to issue a permit when the contractor signs the application and the following conditions are met: (a) the contractor has no outstanding issues with the Commission; (b) there have been no significant changes to the application; (c) there have been no significant changes to applicable laws, rules, regulations; (d) there have been no significant changes to hydrologic conditions at or near the proposed well location.

2. **Well No. 1901-08 (Gentry Area 45)** – Contractor signatures required in Sections 24 and 25 (see Comment 1, above).

3. **Well Nos. 2000-06 and 1900-24 (Gentry Area 35, #1 and #2)**
   a) Please provide a photograph of the proposed well site.
   b) Section 23. State Historic Preservation Division (SPHD) – Please provide documentation from the SHPD showing the record of Gentry Homes’ consultation with the HPD for the project.
   c) Contractor signatures required in Sections 24 and 25 (see Comment 1, above).

We will accept the captioned WUPAs as complete upon receipt of the information outlined above, and we will accept your well construction/pump installation permit applications for processing upon receipt of the required information to complete the application for Well Nos. 2000-06 and 1900-24. You can expect these applications to be processed within 90 days from the date we receive the required information. You should be aware that WUPA processing could take longer if there are objections from the public and that pump installation permits cannot be issued until WUPs associated with those wells are first obtained.

Please contact Denise Mills of the Commission staff at 587-0251 if you have any questions concerning these applications.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

DM:ss
Attachment

c: Mike Brant, Gentry Homes, Ltd
   Suzanne Alawa, Ewa by Gentry Community Association
Mr. Ken Kawahara  
Deputy Director  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  
P. O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Kawahara:

Well Construction/Pump Installation Permit Application and  
Ground Water Use Permit Application for New Use  
for the Gentry Area 45 Well in the Puuola Aquifer System

On behalf of Gentry Homes, Ltd., I am pleased to submit the Well Construction/Pump Installation Permit and Ground Water Use Permit Applications, $50 filing fee, and other attachments for the Gentry Area 45 Well in the Puuola Aquifer System. Since the drilling contractor has not been selected yet, we understand that a Letter of Assurance would be issued for the Well Construction Permit pending the contractor's selection.

If you have any questions or need additional information, feel free to call me or Mike Brant of Gentry Homes, Ltd. at 599-8229. Thank you for your attention to this matter.

Sincerely,

Tom Nance

cc: Mike Brant  
Darian Chun

Attachments
<table>
<thead>
<tr>
<th>F YR</th>
<th>APP D</th>
<th>COST OBJ</th>
<th>CTR S</th>
<th>PROJECT</th>
<th>PH ACT</th>
<th>AMOUNT</th>
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<td>09</td>
<td>326</td>
<td>C</td>
<td>1026</td>
<td>0752</td>
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**TOTAL $175.00**

**REMARKS:**

LINE (1) Manawai-Felton Well
LINE (2) Gentry 45 Well (WCPA/PIPAWUPA)
LINE (3) WUP No. 792
LINE (4) WUP No. 793
LINE (5) WUP No. 794
LINE (6) Gentry Area 35 Well Nos. 1 & 2 (WGPA/PIPAWUPA)
LINE (7) 
LINE (8) 
LINE (9) 
LINE (10) 

**DATE:** August 20, 2008
**MISSION ON WATER RESOURCE MANAGEMENT**

**ROUTE SLIP FOR NEW APPLICATIONS**

**FROM:** DENISE  
**DATE:** 26-Aug-08  
**SUSPENSE DATE:** 2-Sep-08

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<th>TO</th>
<th>INIT</th>
<th>FOR</th>
<th>PLEASE</th>
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<td>CHING, F.</td>
<td></td>
<td></td>
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<td>Approval</td>
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<tr>
<td>FUJII, N.</td>
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<td></td>
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<td>Mills, D.</td>
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<tr>
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<td>NAKAMA, L.</td>
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<tr>
<td>HARDY, R.</td>
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<td>OHYE, M.</td>
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<td>HIGA, D.</td>
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<td>SAKODA, E.</td>
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<td>UYENO, D.</td>
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<td>IMATA, R.</td>
<td></td>
<td></td>
<td>YODA, K.</td>
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<tr>
<td>KAWAHARA, K.</td>
<td></td>
<td></td>
<td>YOSHINAGA, M.</td>
<td></td>
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It came out of Denise's file folders by Ken. CM

**WELL NUMBER** 1901-08  
**WELL NAME** Gentry 45  
**WUP Number** 855

- [x] WELL CONSTRUCTION  
- [ ] PUMP INSTALLATION
- [ ] WUPA

**ATTACHMENTS FOR APPLICATION PROCESSING** - Both applicant & staff generated

1. TRANS. LETTER
2. PERMIT PROCESS TABLE
3. CWRM MAP
4. APPL. FORM (11 COPIES)
5. USGS MAPS (11 COPIES)
6. TAX MAPS (11 COPIES)
7. PARCEL OWNER VERIF.
8. CONTRACTOR VERIF.
9. ALL INFO FILLED IN
10. BACKGROUND CHECK
11. $25 FEE DEPOSIT SLIP
12. DHP/CDUP/SMA pre-screen

**WUP PUMP**  
855 (1901-08)  
856 (2001-05)  
857 (2001-12)  
858 (1901-05)  
859 (1905-24)  
860 (2006-06)

- [ ] Made new file folder, attached
- [ ] File folder already made, in file cabinet

**INCOMPLETE ACTION DATES:**

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<th>DATE</th>
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<td>will need to run IWREDDS model before CWRM mtg.</td>
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<td>Request app to complete Table 2 of GMUAPA-N</td>
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<td>Development Designation</td>
<td>Plant Materials</td>
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<td><strong>Area 35 Well</strong></td>
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<tr>
<td>Ice Plant</td>
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</tr>
<tr>
<td>Wedelia &amp; Shrubs *</td>
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<tr>
<td>Bermuda Grass</td>
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<tr>
<td>Seashore Paspalum</td>
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<tr>
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<td>NA</td>
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<td>Wedelia &amp; Shrubs *</td>
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<tr>
<td>Pohinahina &amp; Shrubs *</td>
<td>NA</td>
</tr>
<tr>
<td>Akulikuli &amp; Scrubs *</td>
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<td><strong>Area 13 Well</strong></td>
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<td>Pohinahina &amp; Shrubs *</td>
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</tr>
<tr>
<td>Seashore Paspalum</td>
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<tr>
<td>Zoysia 'El Toro'</td>
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</tr>
<tr>
<td><strong>Keaunui Well</strong></td>
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</tr>
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<td>Lau'a &amp; Monstera</td>
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<td>Zoysia 'El Toro'</td>
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<td><strong>Sun Terra Tot Lot</strong></td>
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<td>Pink Asystasia &amp; Shrubs *</td>
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<td>Ice Plant</td>
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<tr>
<td>Wedelia &amp; Shrubs *</td>
<td>NA</td>
</tr>
<tr>
<td>Bermuda Grass</td>
<td>NA</td>
</tr>
<tr>
<td>Zoysia 'El Toro'</td>
<td>NA</td>
</tr>
</tbody>
</table>

* Asterisk denotes use of the following shrubs (drought/salt-tolerant) used but not listed
  - Hibiscus
  - Croton
  - Spider Lily
  - Eldorado
  - Eranthemum
  - Dwarf Date Palm
  - Natal Palm
  - Naupaka
Denise,

The landscape architect found some minor typos and corrected the plantings. The numbers did not change. So please dump the other table and replace with this one.

Greg

Tom Nance Water Resource Engineering
680 Ala Moana Blvd., Suite 406
Honolulu, Hawaii 96813
Ph: 808-537-1141

Fax: 808-538-7757 Table 2 rev 10-8-08.xls
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

APPLICATION FOR GROUND WATER USE PERMIT FOR
PROPOSED NEW USE IN A DESIGNATED GROUND WATER
MANAGEMENT AREA

FORM GWUPA-N

For Official Use Only:

For Official Use Only:

08 AUG 18

COMMISSION ON WATER
RESOURCE MANAGEMENT

For detailed instructions on filling out this application form completely, refer to the attached instructions. Incomplete applications will not be accepted for processing.

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

- Portion of 7.5-Minute Series USGS topographic map (scale 1:24,000) with source location labeled and include the name of the quad map.
- Property tax map, showing source location referenced to established property boundaries.
- Photograph(s) of the source(s) and location(s) of proposed end use(s), if applicable.

APPLICANT INFORMATION

Note: In accordance with §174C-51(1), HRS, the landowner shall be the joint applicant in the event the applicant is a lessee, licensee, developer, or any person with a terminable interest or estate in the land that is the water source of the permitted water.

1. APPLICANT’S INFORMATION

Name/Company
Gentry Homes, Ltd.
Contact Person
Mike Brant
Mailing Address
P. O. Box 295
Honolulu, Hawaii 96809
Phone
599-8229
Fax
599-8240
E-mail
mikeb@gentryhawaii.com

2. SOURCE LANDOWNER’S INFORMATION

Name/Company
Gentry Investment Properties
Contact Person
Mike Brant
Mailing Address
P. O. Box 295
Honolulu, Hawaii 96809
Phone
599-8229
Fax
599-8240
E-mail
mikeb@gentryhawaii.com

SOURCE INFORMATION

3. ISLAND

Oahu

4. GROUND-WATER MANAGEMENT AREA

Puu olo Aquifer System

5. SOURCE INFORMATION

Attach additional sheets, if necessary.

<table>
<thead>
<tr>
<th>Well Number (if known)</th>
<th>Well Name</th>
<th>Existing or Proposed?</th>
<th>TMK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gentry Area 45</td>
<td>Proposed</td>
<td>9 1 69 005</td>
</tr>
</tbody>
</table>

6. TOTAL QUANTITY OF WATER REQUESTED: In the space below, enter total from Box M in Item 11 (Table 1) of this application.

66,085 gallons per day, averaged over 1 year.

7. PROPOSED USE(S):

☐ Agriculture  ☐ Domestic  ☐ Industrial

☐ Irrigation  ☐ Military  ☐ Municipal

8. LOCATION OF PROPOSED WATER USE(S): Show the location of the proposed use on the same USGS and TMK maps as the proposed source location. Otherwise, attach similar maps. See Item 11 (Table 1, column B) of this application.

NOTE: Signing below indicates that the signatories understand and affirm that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories understand that: 1) if necessary, further information may be required before the application is considered complete; 2) if a water use permit is granted by the Commission, this permit is subject to any existing legal uses, changes in sustainable yields and instream flow standards, reserved uses as defined by the Commission, and Hawaiian Home Lands future uses, and 3) the applicant is responsible for paying the public notice fees associated with this application.

9. APPLICANT

Gentry Homes, Ltd.

Michael J. Brant, P. E.
Vice President, Engineering

Signature
Printed Name
Date

10. SOURCE LANDOWNER

Gentry Investments Properties

Michael J. Brant, P. E.
Vice President, Engineering

Signature
Printed Name
Date
### Table 1: Land Use Consistency / Efficiency of Use

<table>
<thead>
<tr>
<th>Uses That Require Potable (Drinking) Water</th>
<th>Uses That Do Not Require Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

**TOTAL POTABLE USE** K GPD

**TOTAL NON-POTABLE USE** L GPD

**TOTAL QUANTITY OF WATER REQUESTED** (sum of total potable use and total non-potable use) = M GPD

Please explain if there are any limitations (e.g., legal, contractual) on the proposed water use(s) described in Table 1. Ref. §174C-51(5), HRS.
<table>
<thead>
<tr>
<th>Purpose/Water Use Category</th>
<th>Development Designation</th>
<th>USE TMK</th>
<th>State Land Use District</th>
<th>CDPRA Requested Y(date app)</th>
<th>County Zoning Code</th>
<th>SMAP Requested Y(date app)</th>
<th>Quantity of Use (GPD)</th>
<th>Sub-Metered (YN)</th>
<th>Units or Net Acreage</th>
<th>Applicant's Justification for Quantity of Requested Use for Item 7</th>
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<tbody>
<tr>
<td>Roadway Irrigation - IRRLA</td>
<td>Area 41, 45/46, 48, 40, &amp; Keaunui west</td>
<td>9-1-69;portion 005</td>
<td>Urban</td>
<td>NA</td>
<td>NA</td>
<td>N</td>
<td>All irrigation use is based on actual use for Ewa by Gentry, see attached Brownlee and Lee letter dated July 2, 2008 for application rate.</td>
<td></td>
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<tr>
<td>Roadway Irrigation - IRRLA</td>
<td>Kapiolani Parkway @ Area 14</td>
<td>9-1-49;005, Bpr.p.</td>
<td>Urban</td>
<td>NA</td>
<td>NA</td>
<td>N</td>
<td>For overall irrigation area locations see attached Ewa By Gentry Irrigation Master Plan, dated 4-22-08</td>
<td></td>
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</table>

TOTAL USE REQUESTED (the sum of total potable use and non-potable use in the table above) = 66,086

10.82

*Corrected per phone conversation w/ Greg Fukumitsu (TNW RE) on 10/14/08
12. TABLE 2: Irrigation Information

List all crops that will be grown, including landscape and golf course irrigation uses. Copy Table 2 and attach additional sheets to complete your file if necessary.

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<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
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<tr>
<td>TGR FOR PROPOSED LOCATION OF USE</td>
<td>CROP</td>
<td>TOTAL ACREAGE</td>
<td>NET IRRIGATED ACREAGE</td>
<td>BEGIN GROWTH PERIOD (month)</td>
<td>END GROWTH PERIOD (month)</td>
<td>IRRIGATION SYSTEM (refer to instructions)</td>
<td>IRRIGATION PRACTICE (refer to instructions)</td>
<td>COMMENTS (Continue comments below, if more space is needed)</td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments (continued from Column I). Please clearly indicate the crop (i.e., the row in table) these comments relate to.
13. TABLE 3: ALTERNATIVES ANALYSIS

<table>
<thead>
<tr>
<th>Municipal sources</th>
<th>A. Analysis of potable alternatives</th>
<th>B. Analysis of non-potable alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BWS requires the use of non-potable water for irrigation.</td>
<td>Use of onsite brackish groundwater will reduce potable water use</td>
</tr>
<tr>
<td>Wastewater reuse</td>
<td>Treated effluent from the Honouliuli WWTP is not available in this area.</td>
<td>Not Available</td>
</tr>
<tr>
<td>Ditch system</td>
<td>No ditch system available for this area.</td>
<td>Not Viable</td>
</tr>
<tr>
<td>Desalination</td>
<td>Not Financially Practical</td>
<td>Not Financially Practical</td>
</tr>
<tr>
<td>Surface water</td>
<td>None is Available</td>
<td>None is Available</td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. PUBLIC INTEREST

§174C-2(C), HRS states: The state water code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses. However, adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation. Such objectives are declared to be in the public interest.

Explain below how the proposed new use(s) in your application are consistent with the public interest.

Use of onsite brackish groundwater preserves potable water which would otherwise be used for irrigation.

15. INTERFERENCE WITH THE RIGHTS OF THE DEPARTMENT OF HAWAIIAN HOME LANDS

Explain below how the proposed new use(s) of water will not interfere with the rights of the Department of Hawaiian Home Lands, as provided in section 221 of the Hawaiian Homes Commission Act.

There are no known conflicts or interference with DHHL rights.

16. INTERFERENCE WITH ANY EXISTING LEGAL USES

Explain below how the proposed new use(s) of water will not interfere with any other existing legal use(s) of water.

There are no known conflicts with any existing legal uses.
### Details

<table>
<thead>
<tr>
<th>Property Details</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMK:</td>
<td>9-1-069:005</td>
</tr>
<tr>
<td>Historical TMK Sequence:</td>
<td>95</td>
</tr>
<tr>
<td>Area (sq ft):</td>
<td>7927920</td>
</tr>
<tr>
<td>Area (acres):</td>
<td>182</td>
</tr>
<tr>
<td>Lot Number:</td>
<td>80000</td>
</tr>
<tr>
<td>Ohana:</td>
<td>(None)</td>
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</table>

### LAND CONTROL CODES

<table>
<thead>
<tr>
<th>Code Type</th>
<th>Code Description</th>
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<tbody>
<tr>
<td>FLOOD ZONE</td>
<td>FIRM ZONE D</td>
</tr>
<tr>
<td>HEIGHT LIMIT</td>
<td>25 FEET</td>
</tr>
<tr>
<td>HEIGHT LIMIT</td>
<td>30 FEET</td>
</tr>
<tr>
<td>HISTORIC SITE REGISTER</td>
<td>NO</td>
</tr>
<tr>
<td>LOT RESTRICTIONS</td>
<td>NONE</td>
</tr>
<tr>
<td>SMA/SHORELINE</td>
<td>NOT IN SMA</td>
</tr>
<tr>
<td>SPECIAL DISTRICT</td>
<td>NOT IN SPECIAL DISTRICT</td>
</tr>
<tr>
<td>STATE LAND USE</td>
<td>URBAN DISTRICT</td>
</tr>
<tr>
<td>STREET SETBACK</td>
<td>NONE</td>
</tr>
<tr>
<td>ZONING (LUO)</td>
<td>A-1 LOW DENSITY APARTMENT</td>
</tr>
<tr>
<td>ZONING (LUO)</td>
<td>P-2 GENERAL PRESERVATION</td>
</tr>
<tr>
<td>ZONING (LUO)</td>
<td>R-5 RESIDENTIAL DISTRICT</td>
</tr>
</tbody>
</table>

### FACILITIES

<table>
<thead>
<tr>
<th>Facility Code</th>
<th>Year Built</th>
<th>No. of Floors</th>
<th>Total Floor Area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

No data available.

### TMK SEPARATIONS

<table>
<thead>
<tr>
<th>Activity Code</th>
<th>Census Tract</th>
<th>Census Block</th>
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<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

No data available.

### Address List:

No data available.

---

July 2, 2008

Mr. Greg Fukumitsu  
Tom Nance  
Water Resources Engineering  
680 Ala Moana Boulevard, Suite 406  
Honolulu, Hawaii 96813

Subject: **EWA WUP PERMIT**

Dear Greg:

We have been responsible for virtually all of the landscape and irrigation system design at Ewa by Gentry since 1990. Based on our 18 years of experience with this development and dealing with the requirement for low maintenance, drought and brackish water tolerant planting we have found through our water conservation efforts that the average daily irrigation requirement is approximate 1.0 gallons per square foot of planting area per week. We have established this irrigation water demand through both on site field experimentation and the following calculation:

**Irrigation Application Rate Calculation**

| Ewa 15-year average annual pan evaporation rate: | 86.56 inches per year |
| Less Ewa Gentry average annual rainfall (18.75-inches), derated 25% | (14.06) inches per year |
| Evapotranspiration Rate | 72.50 inches per year |

72.5 inches per year = 0.87 gals./s.f./week

15% irrigation inefficiency factor, high percentage of small irregular planting areas = 0.13 gals./s.f./week

Total weekly irrigation demand = 1.0 gals./s.f./week

We have found that the rainfall contribution to irrigation must be derated at least 25% based on field experience and the irrigation inefficiency factor is approximately 15% due in large part to the high percentage of small irregular planting areas within the housing parcels.

The irrigation well service areas are outlined on the Irrigation Master Plan prepared by our office. The bulk service area irrigation demand are as follows:
<table>
<thead>
<tr>
<th>Area Well</th>
<th>Service Area</th>
<th>Gallons per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 35 Well</td>
<td>1,785,756 s.f.</td>
<td>255,108</td>
</tr>
<tr>
<td>Keaunui Well</td>
<td>1,572,305 s.f.</td>
<td>224,615</td>
</tr>
<tr>
<td>Sun Terra Tot Well</td>
<td>1,363,373 s.f.</td>
<td>194,768</td>
</tr>
<tr>
<td>Area 13 Well</td>
<td>258,825 s.f.</td>
<td>36,975</td>
</tr>
<tr>
<td>Area 45 Well</td>
<td>462,595 s.f.</td>
<td>66,085</td>
</tr>
</tbody>
</table>

If you have questions regarding this information, please contact me.

Sincerely,
BROWNIE & LEE

[Signature]
Richard C. Brownlie, ASLA
Principal

cc: Darian Chun
    Gentry Homes, Ltd.
MEMO and ROUTE SLIP (ver. 5/11/10)  06/29/11
WCR 1 Check for Well No.  1901-08  (GW regulation route)

1. From Roy (initial)  
   Initial entry into well index  
   Ingrid’s spreadsheet updated needed/done  
   Pump Tests Check
   Step-Drawdown Test: followed WCPI Stds analysis attached  
   Constant Rate Test: followed WCPI Stds analysis attached  
   Potential Well Interference:  
   Potential Stream Impacts: If yes, stream name(s):  
   Additional Testing or Data Required:  
   Pump Test Comments Attached:  
   Proposed Pump Capacity is OK.:  

2. Well Log Check  
   Geology Code for Well Index:  
   Fm. Name:  

3. Construction Check  
   Charley/Ryan (initial)  
   ATTACHMENTS FOR PUMP INSTALLATION PERMIT (2x):  
   1 COVER LETTER  
   2 COUNTY COMMENTS (DWS/SMA)  
   3 DOH COMMENTS  
   4 DLNR COMMENTS (LD/OCCUDHP)  
   5 WCR 1 Accept  
   6 WELL CONST. COMPLETION CERTIFICATE  
   7 USGS MAP UPDATED  
   8 PARCEL CHECK  
   9 WELL DATABASE INPUT CHECK  
   10 PUMP TEST WORKSHEET  
   11 WELL As-Built CHECK PRINT  

4. Roy (initial) check (Entered WCR 1/WCCC accept date into database)  
5. Susan H. (initial) finalize  
6. Bill (initial) signature  
7. Charley/Ryan File & Enter PIP issue date if attached/required
Mr. Mike Brant  
Gentry Homes, Ltd.  
P.O. Box 295  
Honolulu, HI 96809

Dear Mr. Brant:

Certificate of Well Construction Completion for Well No. 1901-08 (TMK 9-1-149:028)

We are pleased to inform you that the Well Construction work permitted for the Gentry 45 Well (Well No. 1901-08) is complete and acceptable.

To protect Hawaii’s natural ground water resources for the benefit of all, the following requirements apply to the use of your well:

1. Before this well can be pumped on a regular basis, a certificate of pump installation completion must be obtained.
2. If the well is not in use it must be properly capped.
3. If the well is to be abandoned then the landowner must cause a licensed contractor to apply for a well abandonment permit in accordance with §13-168-12(f), HAR, prior to any well sealing or plugging work.
4. In the event that the well operator and/or landowner changes, the Commission shall be notified prior to the change.
5. In the event the benchmark in the concrete base of the well is altered in any way, an updated version of the Well Elevation page of the Well Completion Report Part I shall be submitted to the Commission. If a licensed surveyor had estimated the original benchmark elevation then a licensed surveyor must establish the new benchmark elevation. The Well Elevation portion of the Well Completion Report Part I can be obtained by contacting Commission staff or at our website at www.hawaii.gov/dlnr/cwrmlresources-permits.htm.

Because ground water in Hawaii is a public trust, and adverse effects at one well may affect other water resources, any violation of the above conditions or any other provision of the Hawaii Administrative Rules may be subject to fines of up to $5,000 per day. The Commission needs your help and asks that you to do your part in utilizing this shared resource. We prefer to work with you in meeting the goal of protecting our ground water resources together.

If you have any questions, please contact Ryan Imata of the Commission staff at 587-0255.

Sincerely,

WILLIAM M. TAM  
Deputy Director

RI:ss  
c: Beylik Drilling and Pump Service
November 14, 2011

Ms. Toni Gonsalves  
Beylik Drilling and Pump Service  
91-259A Olai Street  
Kapolei, HI 96707

Dear Ms. Gonsalves:

Well Completion Report Part I for Well No. 1901-08

We received your Well Completion Report Part I for the Gentry 45 Well (Well No. 1901-08) on November 3, 2011 and acknowledge that it is complete.

This completes your obligation under the well construction permit. A certificate of well construction completion will be issued to the well operator/landowner and you will receive a copy. This certificate transfers responsibility of specific aspects of well usage and maintenance from you to the well operator/landowner.

If you have any questions, please contact Ryan Imata of the Commission staff at 587-0255.

Sincerely,

WILLIAM M. TAM  
Deputy Director

RI:ss

c: Gentry Homes Ltd.  
    Gentry Investment Properties
<table>
<thead>
<tr>
<th>Taxkey</th>
<th>Subdiv/Condo Tnr Address Owner/Lessee</th>
<th>Bds</th>
<th>Bths</th>
<th>Land area</th>
<th>Liv area</th>
<th>Last Sale</th>
<th>Instr Pri</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9-1-149-28</td>
<td>LAULANI IX F Apt 209 GENTRY HOMES LTD</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1/1/1900</td>
<td></td>
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<td>1-9-1-149-28-1</td>
<td>LAULANI IX F Apt 210 GENTRY HOMES LTD</td>
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<td>LAULANI IX F Apt 212 GENTRY HOMES LTD</td>
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<td>1/1/1900</td>
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<td>1-9-1-149-28-4</td>
<td>LAULANI IX F Apt 213 GENTRY HOMES LTD</td>
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<td>1/1/1900</td>
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<td>1-9-1-149-28-5</td>
<td>LAULANI IX F Apt 214 GENTRY HOMES LTD</td>
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<td>1/1/1900</td>
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<td>1-9-1-149-28-6</td>
<td>LAULANI IX F Apt 215 GENTRY HOMES LTD</td>
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<td>1-9-1-149-28-7</td>
<td>LAULANI IX F Apt 216 GENTRY HOMES LTD</td>
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<td>LAULANI IX F Apt 218 GENTRY HOMES LTD</td>
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### Well Check Program
4/1/04 - Revised for update to Well Standards (February 2004)

#### Data Input

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<th>Data Input</th>
<th>Value</th>
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<td>Well Number</td>
<td>1901-08</td>
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<tr>
<td>Well Name</td>
<td>Gentry Area 45</td>
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<tr>
<td>Ground Elevation</td>
<td>23.87</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>20</td>
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<tr>
<td>Grouting Method</td>
<td>other</td>
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<tr>
<td>Hole Diameter</td>
<td>22</td>
</tr>
<tr>
<td>Total Depth</td>
<td>32.66</td>
</tr>
<tr>
<td>Water Level</td>
<td>2.1</td>
</tr>
<tr>
<td>Public Water Supply Well?</td>
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</tr>
<tr>
<td>Solid Casing Material</td>
<td>PVC plastic</td>
</tr>
<tr>
<td>Solid Casing Specification</td>
<td>Schedule 80</td>
</tr>
<tr>
<td>Solid Casing Length</td>
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<tr>
<td>Solid Casing Diameter</td>
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<tr>
<td>Solid Casing Wall Thickness</td>
<td>0.750</td>
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<tr>
<td>Open Casing Length</td>
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#### Results

<table>
<thead>
<tr>
<th>Results</th>
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<tr>
<td>Theoretical Thickness of Aquifer</td>
<td>86.1</td>
</tr>
<tr>
<td>1/4 Aquifer Thickness</td>
<td>21.525</td>
</tr>
<tr>
<td>Depth of Well below Sea Level</td>
<td>-8.79 okay</td>
</tr>
<tr>
<td>Minimum Wall Thickness Material</td>
<td>PVC plastic</td>
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<tr>
<td>Minimum Thickness per standards</td>
<td>no requirement</td>
</tr>
<tr>
<td>Wall Thickness Provided</td>
<td>0.75 no standard</td>
</tr>
<tr>
<td>Length of Solid Casing Provided</td>
<td>22 okay</td>
</tr>
<tr>
<td>Casing Material</td>
<td>Schedule 80 in compliance</td>
</tr>
<tr>
<td>(for PVC only - check for 200' limit)</td>
<td>okay</td>
</tr>
<tr>
<td>Depth of Grouting</td>
<td>15.239</td>
</tr>
<tr>
<td>Depth of Grouting provided</td>
<td>20 okay</td>
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<tr>
<td>Minimum Annular Space required</td>
<td>2</td>
</tr>
<tr>
<td>Thickness of Annular Space</td>
<td>4.625 okay</td>
</tr>
</tbody>
</table>

Section 2.2

Section 2.4(b)

Section 2.4(c)

Section 2.4(d)

Section 2.6(c)

Section 2.6(d)
PUBLIC RECORD DATA

Owner: GENTRY INVESTMENT PROPERTIES
Tax Payer: GENTRY INVESTMENT PROPERTIES
Tax Bill: PO BOX 295, HONOLULU, HI 96809 USA

PITM # 1-9-1-69-34
FORT WEAVER RD

Tenure: Fee Simple
Annual Tax (2010): $19,109.00
Zoning: PITT Code: 1-RESIDENTIAL
(Hawaii, Maui, Oahu)

Land: $5,337,800 $0 23.21 ac Dwellings: 0

Total Buildings: $0 $0 0 sq ft Subdivision: Land Use: 0

Total: $5,337,800 $0 Project: Census Tract:

Bedrooms/Baths: 0/0 Lot#:

BUILDING PERMITS FROM REAL PROPERTY TAX

<table>
<thead>
<tr>
<th>Date</th>
<th>Number</th>
<th>Amount</th>
<th>Status</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/9/2009</td>
<td>646602</td>
<td>$300,000</td>
<td>Pending</td>
<td>ELECTRICAL</td>
</tr>
</tbody>
</table>

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NAD83:
Latitude: 21 degrees 19 min 13 sec
Longitude: -158 degrees 01 min 19 sec

EWA BY GENTRY - AREA 45/46
WELL LOCATION
AT HONOLULU, EWA, OAHU, HAWAII
Aloha Ryan,

Please see attached revised WCR Part I (page 4 of 5). Good catch.

Please let me know if this is sufficient or if you would like a complete WCR Part I hardcopy mailed to you. Thank you.

v/f,
Fred G. Camero, Jr.

Wayne Teruya
Licensed Land Surveyor
ParEn, Inc. dba Park Engineering
Pacific Park Plaza
711 Kapiolani Blvd, Suite 1500
Honolulu, Hawaii 96813
Tel: (808) 593-1676 (ext.121)
Cell: (808)-291-9086
Fax: (808) 593-1607

Fred:
Attached is the corrected plate. Sorry for the delay.

Wayne M. Teruya
Licensed Land Surveyor
ParEn, Inc. dba Park Engineering
Pacific Park Plaza
711 Kapiolani Blvd, Suite 1500
Honolulu, Hawaii 96813
Tel: (808) 593-1676 (ext.121)
Cell: (808)-291-9086
Fax: (808) 593-1607

Hi Wayne,

Just checking if I have your email address correct and that you received the below request. Please confirm. Thank you.

v/f,
Fred G. Camero, Jr.
Branch Manager
Beylik Drilling & Pump Service, Inc.
Ph 808 478-7114

From: Fred Camero
Aloha Wayne,

Please confirm the correct latitude for the well location (the numbers for the seconds are switched). Thank you.

v/r,

Fred G. Camero, Jr.
Ryan,

Gentry confirmed the current TMK is **9-1-149: 028**. The TMK changes because of ongoing subdivision of parcel taking place, this should be the final TMK.

Greg

Tom Nance Water Resource Engineering  
Gentry Pacific Design Center  
560 N. Nimitz Hwy. - Suite 213  
Honolulu, Hawaii  96817  
Ph: 537-1141  Fax: 538-7757
TO
COMMISSION ON WATER RESOURCE MGMT
PO BOX 621
HONOLULU, HI 96809

WE ARE SENDING YOU  X Attached  □ Under separate cover via ______________________________ the following items:

□ Shop drawings  □ Prints  □ Plans  □ Samples  □ Specifications
□ Copy of letter  □ Change order  □ ____________________________

COPIES  DATE  NO.  DESCRIPTION

1  WCR PART I

THESE 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 ____________________________  □ PRINTS RETURNED AFTER LOAN TO US

REMARKS
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

COPY TO  C: FILE / 9429F

SIGNED:  ________________

If enclosures are not as noted, kindly notify us at once.  FOR: FRED CAMERO
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
WELL COMPLETION REPORT - PART I
Well Construction

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 887-0225. For updates to this form or additional information, please visit our website at http://www.state.hi.us/lndnrmr/cwrrm/

1. State Well No.: 1901-08 Well Name: Gentry Area 45 Island: Oahu
2. Address: Keaunui Drive, Ewa Beach, HI 96706 Tax Map Key: 9-1-069:034
4. Drilling method used during construction: ☑ Rotary □ Percussion □ Other (describe)
5. Date Well Construction (drilled,cased,grouted) completed: 1-27-11
6. Was the subject well cored? □ Yes ☑ No
7. Step-Drawdown Test completed? □ No ☑ Yes Attach Step-Drawdown Test form (12/17/97 SDPTD Form)
8. Constant Rate Aquifer Test completed? □ No ☑ Yes Attach Constant Rate Aquifer Test form (12/17/97 CRPTD Form)

<table>
<thead>
<tr>
<th>Water Level Data:</th>
<th>Reference point elevation</th>
<th>Depth to water (feet)</th>
<th>Water Level ft. above mean sea level (see note below)</th>
<th>Date/time of measurement</th>
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<tr>
<td>9. Initial encountered during drilling</td>
<td>23.87 Ground = 23.87 ft msl</td>
<td>22.04</td>
<td>1.83</td>
<td>1/18/11 @ 10:30am</td>
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<tr>
<td>10. Just prior to casing installation</td>
<td>22.01 Ground = 22.01 ft msl</td>
<td>21.94</td>
<td>1.86</td>
<td>1/20/11 @ 11:30am</td>
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<td>11. After casing installation</td>
<td>21.94</td>
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<td>1/21/11 @ 9:45am</td>
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Chloride: 900 ppm, Temperature: 78.9 °F

Note: for all elevations referenced to mean sea level, take the ground elevation (surveyed or estimated if survey not required at this time) and subtract the depth to the water level.

12. As-built section filled in completely ☑
13. Photograph of well and concrete pad showing benchmark on concrete pad attached ☑
14. GPS coordinates provided in degrees, minutes, seconds ☑
15. If a pump is not planned to be installed, please describe (below in the remarks section) how well is secured to prevent unauthorized access (example: lockable cover, threaded coupling, etc.)
16. Remarks: Threaded plug with set screws

Licensed Driller (print) Beylik Drilling & Pump Service, Inc. C-57 Lic. No. AC-21896
Signature: ____________________________, Date: 6/03/2011
12. AS-BUILT WELL SECTION

(Please attach as-built if different from diagram provided below)

Grouting method:
- Positive displacement (if annular space is less than two inches, attach photo of tremie)
- Other

Solid Casing Material:
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
  And compliant with (check one or more): □ ASTM A242 or A606 □ Type E □ Type S □ Grade B □ Other
- Stainless Steel: (check one):
  □ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one) □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one)
  □ Filament Wound Resin Pipe conforming to ASTM D2996
  □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
  □ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
  And compliant with (check one or more): □ ASTM A242 or A606 □ Type E □ Type S □ Grade B □ Other
- Stainless Steel: (check one):
  □ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one) □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one)
  □ Filament Wound Resin Pipe conforming to ASTM D2996
  □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
  □ FEP Fluorocarbon Tubing conforming to ASTM D3296

WCR1 Form 6/12/07 Page 2 of 5
DRILLER'S LOG

WELL NUMBER: 1901-08

In addition to the driller's log, if a geologic log was prepared, please submit with this form.

<table>
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<tr>
<th>Depths (ft.)</th>
<th>Rock Description</th>
<th>Water Level</th>
<th>CI- Dates</th>
<th>Depths (ft.)</th>
<th>Rock Description</th>
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Remarks:
FUTURE APARTMENT UNITS

EWA BY GENTRY - AREA 45/46
WELL LOCATION
AT HONOLULU, EWA, OAHU, HAWAII

NAD83:
Latitude: 21 degrees 19 min 31 sec
Longitude: -158 degrees 01 min 19 sec
I certify that the elevation shown above:

1) Was done in accordance with acceptable surveying practices
2) Is accurate to the nearest 0.01 ft.
3) Is referenced to mean sea level

[Signature]

Wayne M. Tanaka
Surveyor

License No. 6297

Date 2/2/11
## STEP-DRAWDOWN PUMP TEST DATA

**Pumped Well No.** 1901-08  
**Observation Well No.**  

**Pumped Well Name** Gentry Area 45  
**Target Q** 122 gpm  
**Reference pt. for depth to water** 27.21 ft. msl  
**Static Water Level @ start of test** 1.91 ft. msl

**START TEST Date** 1/24/2011  
**Time of day:** 12:20PM  
**Flow Meter Reading Start:** 3,070,470 gal

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<th>Actual Elapsed time (min)</th>
<th>Depth to water (nearest 0.1 ft)</th>
<th>Drawdown S (unadj) To nearest 0.1 ft</th>
<th>Pumping rate Q at least 3 steps (gpm)</th>
<th>Specific Conductance (μS/cm)</th>
<th>Cl(^+) (mg/l)</th>
<th>Temp (<em>{F} or (</em>{C})</th>
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Data in this table is for:  
Pumped Well _X_  
Observation Well _X_  
Remarks

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End Time: 12:50 PM
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<th>Actual Elapsed time (min)</th>
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<th>Drawdown S (unadj.) To nearest 0.1 ft.</th>
<th>Pumping rate Q at least 3 steps (gpm)</th>
<th>Specific Conductance (μS/cm)</th>
<th>Cl⁺ (mg/l)</th>
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Data in the table is for: Pumped Well x Observation Well y

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End Time: 1:20 PM
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<th>Actual Elapsed time (min)</th>
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<th>Drawdown S (unadj. To nearest 0.1 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>Specific Conductance (µS/cm)</th>
<th>CI* (mg/l)</th>
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Observation Well __
Remarks __

Start Time: 1:20 PM
End Time: 1:50 PM
### Step Test Recovery Follow Up

**Date:** 1-24-11; **Time:** 1:50 pm

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<th>Actual time (min)</th>
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<th>Drawdown S (unadj. to nearest 0.1 ft)</th>
<th>Pumping rate Q at least 3 steps (gpm)</th>
<th>Specific Conductance (μS/cm)</th>
<th>CI* (mg/l)</th>
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**END TEST**

**Date:** 1/24/2011; **Time of Day:** 2:20 PM

**Additional Remarks:**

**Person in charge of pump test:** MURIS MITCHELL

**Signature:**

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
## CONSTANT RATE PUMP TEST DATA

### Pumped Well No.
1901-08

### Pumped Well Name
Gentry Area 45

### Target Q
150 gpm

### Reference pt. for depth to water
27.21 ft. msl

### Static Water Level @ start of test
1.86 ft. msl

### START TEST
Date: 1/24/2011
Time of day: 2:20PM

### Flow Meter Reading Start:
3,084.970 gal

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Date: 1-25-11

Specific Data in this table is for: Pumped Well ___ Observation Well ___

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**END TEST**

Date: 1/25/2011
Time of Day: 2:55 PM

**ADDITONAL REMARKS:**

Person in charge of pump test (print): MURIS MITCHELL
Signature: [Signature]

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.

**Final Meter Reading:** 3302581.5

**End Recovery**
Note: This permit shall be prominently displayed at the site until the work is completed.

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Gentry 45 Well (Well No. 1901-08) at TMK 9-1-069:005, Oahu, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules (HAR).

2. No withdrawal of water shall be made other than for testing until a Certificate of Pump Installation Completion has been issued by the Commission.

3. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

4. The pump installation permit shall be for installation of a 100 gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.

5. A water-level measurement access shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels.

6. The permittee shall install an approved meter or other appropriate means for measuring and reporting withdrawals and appropriate devices or means for measuring chlorides and temperature at the well head.

7. Well Completion Report Part II shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dlnr/cwrm/resources_permits.htm for current form).

8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.

9. The pump installation permit application and, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.

10. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

11. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

12. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.

13. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

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

Date of Approval: January 7, 2011
Expiration Date: January 7, 2013

WILLIAM J. AILA, JR., Chairperson
Commission on Water Resource Management

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

Installer's Signature: [Signature]
Printed Name: Toni Gonsalves
Firm or Title: Beylik Drilling and Pump Service, Inc.

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

Attachments
WELL CONSTRUCTION PERMIT

Gentry 45 Well, Well No. 1901-08

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management’s Administrative Rules, Section 13-168, entitled “Water Use, Wells, and Stream Diversion Works”, this document permits the construction and testing of Gentry 45 Well (Well No. 1901-08) at TMK 9-1-069:005, Oahu, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-12, Hawaii Administrative Rules (HAR).

2. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

3. The well construction permit shall be for construction and testing of the well only. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the HWCPIS (the latest pump test worksheet can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrmlresources_permits.htm). The permittee shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson. No withdrawal of water shall be made for purposes other than testing without a Certificate of Pump Installation Completion. The permitted pump capacity described on the pump installation permit may be reduced in the event that the pump test does not support the capacity.

4. In basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson. If it can be shown that the well does not tap basal ground water then this condition may be waived after consultation with and acceptance by Commission staff. However, in no instance can the well be drilled deeper than one-half (1/2) of the theoretical thickness without Commission approval.

5. The permittee shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.

6. In the event that historically significant remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work immediately and contact the Department of Land and Natural Resources’ State Historic Preservation Division. Work may recommence only after written concurrence by the Historic Preservation Division.

7. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of correlative water rights.

8. The Well Completion Report Part I shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dlnr/cwrmlresources_permits.htm for current form).

9. The permittee shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

10. The well construction permit application and, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.

11. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

12. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

13. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.

14. If the well is not to be used it must be properly capped. If the well is to be abandoned during the course of the project then the permittee must apply for a well abandonment permit in accordance with §13-168-12(f), HAR, prior to any well sealing or plugging work.

15. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

16. This permit shall apply to the location shown on the application only. If the well is to be relocated, the permittee shall apply for a new well construction/pump installation permit in accordance with §13-168-12(f), HAR.

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

Date of Approval: January 7, 2011
Expiration Date: January 11, 2013

WILLIAM J. AILA, JR., Chairperson
Commission on Water Resource Management

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

Driller’s Signature: [Signature]
C-57 License #: AC-21896
Printed Name: Toni Gonsalves
Firm or Title: Beylik Drilling and Pump Service, Inc.

Please sign both copies of this permit, return one copy to the Commission office, and retain the other for your records.
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
APPLICATION FOR A WELL CONSTRUCTION / PUMP INSTALLATION PERMIT

Instructions: Please print in ink or type and send complete application with attachments to the Commission on Water Resource Management, P.O. Box 521, Honolulu, Hawaii 96809. Application must be accompanied by 10 copies and a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-2295. Further information and updates to this application form, visit http://www.hawaii.gov/dlnr/cwrm.

WELL LOCATION INFORMATION
1. STATE WELL NO. (if already assigned) 14P1-08
2. WELL NAME Gentry 45 Well
3. ISLAND Oahu
4. TMK 0 1 69 005

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

5. OPERATOR’S NAME/COMPANY
Gentry Homes, Ltd.
Well Operator’s Name/Contact
Mike Brant
Well Operator’s Mailing Address
P. O. Box 295
Honolulu, Hawaii 96809

6. LANDOWNER’S NAME/COMPANY
Gentry Investment Properties
Landowner’s Name/Contact
Mike Brant
Landowner’s Mailing Address
P. O. Box 295
Honolulu, Hawaii 96809

7. Proposed Work
• Construct New Well
• Modify Existing Well
• Abandon/Seal Well

8. Construction Type
• Drilled
• Dug
• Shaft
• Tunnel

9. Is this well part of a battery of wells? □ Yes □ No

10. Proposed Work
• Install New Pump
• Replace Pump

11. Proposed Pumping Rate, gpm
50

12. Proposed Amount of Withdrawal, gpd
66,085

13. Method of flow measurement
Flowmeter
Other (explain)

14. Proposed Surveyor name and license number (a surveyor is required for all Well Construction Permits and may be required for some Pump Installation Permits)
Wayne Teruya - License No. LS-6297

PROPOSED WELL CONSTRUCTION

PROPOSED PUMP INSTALLATION

OTHER LEGAL REQUIREMENTS if required, Items 21 and 22. must be obtained before the Commission can legally issue a permit:

21. Conservation District Use Permit (CDUP)
□ Well is in Conservation District
□ Required, CDUP # date approved
□ Not Required (attach documentation from OCCL)
□ I have not checked with OCCL prior to making this application will expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.
□ Well is not in Conservation District
□ I have not checked if well is in or out of Conservation District. I understand that if checking if the well is in a Conservation District may expedite my review. I further understand that issues raised may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.

22. Special Management Area Permit (SMAP)
□ Required, SMA # date approved
□ Not Required (attach documentation from applicable County agency)
□ I have not checked with the County about whether or not an SMA Permit is required. I understand that checking with the County prior to making this application may expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.

23. State Historic Preservation Division (SHPD) of the Department of Land and Natural Resources
□ I have consulted with the HPD regarding potential impacts of well construction activities on historic sites. I have attached applicable documentation from the HPD.
□ I have not consulted with the HPD regarding potential impacts of well construction activities on historic sites. I understand that checking with the HPD prior to making this application may expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued. Additionally, the history of past land use is attached.

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

NOTE: Making any box indicates that the signatories understand and agree that the information provided is accurate and true to the best of their knowledge. Further, they understand that upon approval: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor is subject to the Commission a well completion/abandonment report within 60 days after the completion data of the permitted work; 3) in the event the final application is not completed correctly, any permit may be suspended until the item is brought in to compliance, and any work done while the permit is suspended may result in fines of up to $5000/day.

24. WELL DRILLER (Must be listed out if application is for Well Construction)

25. PUMP INSTALLER (Must be listed out if application is for Pump Installation)

WCRI Application Form 02/26/2007
**COMMISSION ON WATER RESOURCE MANAGEMENT**

**ROUTE SLIP FOR PERMIT ISSUANCE 3/31/11**

FROM: RYAN

DATE: 3/31/11

TO: CHONG, R.

INIT: KIMURA, J.

TO: DANBARA, S.

INIT: OHYE, L.

TO: FUJI, N.

INIT: 3

FOR: TAM, B.

SUSPENSE DATE:

PLEASEx:

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**NOTES:**

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</tr>
<tr>
<td>phone</td>
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</tr>
<tr>
<td>fax</td>
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</tbody>
</table>
Ms. Toni Gonsalves  
Beylik Drilling and Pump Service, Inc.  
91-259A Olai Street  
Kapolei, HI  96707

Dear Ms. Gonsalves:

Pump Installation Permit  
**Gentry 45 Well (Well No. 1901-08)**

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

**Special Conditions**

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

2. Attached for your information are copies of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities. Also, please contact the Noise Radiation and Indoor Air Quality Branch at 586-4700 to check compliance with construction noise permit requirements for this project.

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

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

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

If you have any questions, please call Ryan Imata of the Commission staff at 587-0255.

Sincerely,

William J. Aila, Jr.  
Chairperson

Enclosure

c: Gentry Homes, Ltd.
PUMP INSTALLATION PERMIT
Gentry 45 Well, Well No. 1901-08

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Gentry 45 Well (Well No. 1901-08) at TMK 9-1-069:005, Oahu, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules (HAR).

2. No withdrawal of water shall be made other than for testing until a Certificate of Pump Installation Completion has been issued by the Commission.

3. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

4. The pump installation permit shall be for installation of a 100 gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.

5. A water-level measurement access shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels.

6. The permittee shall install an approved meter or other appropriate means for measuring and reporting withdrawals and appropriate devices or means for measuring chlorides and temperature at the well head.

7. Well Completion Report Part II shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dlnr/cwrm/resources_permits.htm for current form).

8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.

9. The pump installation permit application and, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.

10. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

11. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

12. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.

13. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

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

Date of Approval: January 7, 2011
Expiration Date: January 7, 2013

WILLIAM J. AILA, JR., Chairperson
Commission on Water Resource Management

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

Installer's Signature: ____________________________ C-57, C-57a, or A License #: AC-21896 Date: __________

Printed Name: Toni Gonsalves Firm or Title: Beylik Drilling and Pump Service, Inc.

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

Attachments
Ms. Toni Gonsalves
Beylik Drilling and Pump Service, Inc.
91-259A Olai Street
Kapolei, HI 96707

Dear Ms. Gonsalves:

Well Construction Permit
Gentry 45 Well (Well No. 1901-08)

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

Special Conditions

1. Attached for your information are copies of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities. Also, please contact the Noise Radiation and Indoor Air Quality Branch at 586-4700 to check compliance with construction noise permit requirements for this project.

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

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

Please sign both permit originals and return one copy to the Commission office for our files. For copies of the aquifer pump test worksheet, please call staff or visit www.state.hi.us/dlnr/cwrmlforms.htm.

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

If you have any questions, please call Ryan Imata of the Commission staff at 587-0255 or toll-free at 974-4000 (Hawaii), 274-3141 (Kauai), 984-2400 (Maui), or 1-800-468-4644 (Lanai & Molokai), extension 70255.

Sincerely,

William J. Aila, Jr.
Chairperson

Enclosures

c: Gentry Homes, Ltd.
WELL CONSTRUCTION PERMIT
Gentry 45 Well, Well No. 1901-08

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Gentry 45 Well (Well No. 1901-08) at TMK 9-1-069:005, Oahu, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules (HAR).

2. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

3. The well construction permit shall be for construction and testing of the well only. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the HWCPIS (the latest pump test worksheet can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrmlresources_permits.htm). The permittee shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson. No withdrawal of water shall be made for purposes other than testing without a Certificate of Pump Installation Completion. The permitted pump capacity described on the pump installation permit may be reduced in the event that the pump test does not support the capacity.

4. In basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson. If it can be shown that the well does not tap basal ground water then this condition may be waived after consultation with and acceptance by Commission staff. However, in no instance can the well be drilled deeper than one-half (1/2) of the theoretical thickness without Commission approval.

5. The permittee shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.

6. In the event that historically significant remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall immediately contact the Department of Land and Natural Resources’ State Historic Preservation Division. Work may recommence only after written concurrence by the State Historic Preservation Division.

7. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of correlative water rights.

8. The Well Completion Report Part I shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dlnr/cwrmlresources_permits.htm for current form).

9. The permittee shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

10. The well construction permit application and, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.

11. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

12. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

13. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.

14. If the well is not to be used it must be properly capped. If the well is to be abandoned during the course of the project then the permittee must apply for a well abandonment permit in accordance with §13-168-12(f), HAR, prior to any well sealing or plugging work.

15. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

16. This permit shall apply to the location shown on the application only. If the well is to be relocated, the permittee shall apply for a new well construction/pump installation permit in accordance with §13-168-12(f), HAR.

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

Date of Approval: January 7, 2011
Expiration Date: January 11, 2013

WILLIAM J. AILA, JR., Chairperson
Commission on Water Resource Management

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

Driller's Signature: __________________________ C-57 License #: AC-21896 Date: __________________________
Printed Name: Tony Gonsalves Firm or Title: Beylik Drilling and Pump Service, Inc.

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

Attachment
January 27, 2009

Mr. Mike Brant
Gentry Homes, Ltd.
P.O. Box 295
Honolulu, HI 96809

Dear Mr. Brant:

Letter of Assurance for Well Nos. 1901-08, 1900-24, and 2000-06

We have completed the review process for the three captioned Well Construction/Pump Installation Permit applications, which we accepted as complete on September 25, 2008. Your well construction permit and pump installation permits are ready to be issued. However, in accordance with the State Water Code, HRS § 174C-84(a), these permits can only be issued to a licensed contractor and, to date, one has not been identified for your well work.

Once you have selected a licensed contractor, please have the contractor sign and return to the Commission a copy of the original application. Item 24 on the application must be signed by your contractor before we will issue a well construction permit; Item 25 must be signed before we will issue a pump installation work. Upon receiving a signed application for each of the captioned wells, we will issue permits to your contractor(s) provided that the following conditions are met:

1. The contractor has no outstanding issues with the Commission.
2. There are no significant changes to the application.
3. There have been no significant changes to applicable laws, rules or regulations since the application date.
4. There have been no significant changes to the local hydrogeologic conditions since the application date.

Also, on January 22, 2009, the Commission on Water Resource Management approved your applications for two new existing water use permits for these wells. We will send your water use permits to you under separate cover. As you know, we postponed issuance of this letter of assurance until the Commission acted on your water use permit applications.

If you have any questions, please contact Denise Mills of the Commission staff at 587-0251.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

DM:ss

c: Tom Nance Water Resource Engineering
November 18, 2008

Ms. Laura H. Thielen, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Subject: Water Use Permit Application, Puuloa Ground Water Management Area, Ewa Beach, Oahu, Tax Map Keys: 9-1-116:013, 9-1-102:064, 9-1-136:064, and 9-1-069:005

We have reviewed Water Use Permit Applications (WUPA) 855, 857, 858, and 859 submitted by Gentry Homes, Ltd. and have the following comments to offer.

1. **WUPA 855**: The area identified by the TMK in Table 1 of the application is zoned A-2 Medium Apartment District as stated in Table 1. The proposed use of water for roadway landscaping irrigation in areas of the Ewa by Gentry development is consistent with supporting A-2 zoned areas of the Ewa by Gentry development. The proposed use of brackish caprock water is consistent with Section 4.2.1 of the Ewa Development Plan requiring (when necessary) a dual water system and non-potable water use to conserve potable water in the Ewa region.

2. **WUPA 857**: The areas identified by the TMKs in Table 1 of the application are zoned R-5 Residential District, A-1 Low Density Apartment District, and P-2 General Preservation District as stated in Table 1. The proposed use of water for roadway landscaping and park irrigation in areas of the Ewa by Gentry development is consistent with supporting R-5, A-1, and P-2 zoned areas of the Ewa by Gentry development. The proposed use of brackish caprock water is consistent with Section 4.2.1 of the Ewa Development Plan requiring (when necessary) a dual water system and non-potable water use to conserve potable water in the Ewa region.
3. **WUPA 858**: The areas identified by the TMKs in Table 1 of the application are zoned A-1 Low Density Apartment District as stated in Table 1. The proposed use of the water for roadway landscaping in areas of the Ewa by Gentry development is consistent with supporting A-1 zoned areas of the Ewa by Gentry development. The proposed use of brackish caprock water is consistent with Section 4.2.1 of the Ewa Development Plan requiring (when necessary) a dual water system and non-potable water use to conserve potable water in the Ewa region.

4. **WUPA 859**: The areas identified by the TMKs in Table 1 of the application are zoned R-5 Residential District and A-1 Low Density Apartment District as stated in Table 1. The proposed use of water for roadway landscaping and park irrigation in areas of the Ewa by Gentry development is consistent with supporting R-5 and A-1 zoned areas of the Ewa by Gentry development. The proposed use of brackish caprock water is consistent with Section 4.2.1 of the Ewa Development Plan requiring (when necessary) a dual water system and non-potable water use to conserve potable water in the Ewa region.

The locations of the two (2) existing and three (3) proposed wells, and the areas identified by the TMKs in all four (4) applications are not in the Special Management Area.

The Board of Water Supply requests contingency plans for well nos. 1901-08, 1900-24, and 2000-06, should the chloride levels of these wells exceed the 1,000 ppm CWRM limit.

Should you have any questions, please contact Tim Hata of our staff at 768-8043.

Very truly yours,

[Signature]

Henry Eng, FAICP, Director
Department of Planning and Permitting

HE: lh
p:DivFunction/WUP/2008elog2678
cc: Board of Water Supply, Attn: Glenn Oyama
October 28, 2008

TO: Morris Atta, Administrator
   Land Division

FROM: Ken C. Kawahara, P.E., Deputy Director
       Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
         Gentry Area 45 well (Well No. 1901-08), TMK (1) 9-1-069:005

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by November 20, 2008. If we do not hear from you by that date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Denise Mills of the Commission staff at 587-0251.

RESPONSE:

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

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

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

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

[ ] No objections

[ ] Other comments:

Contact Person: Gary Martin
Phone: 587-0421
Date: Nov 18, 2008

Signed: Gary Martin
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: Demet

DATE: 10/14/08

TO: CHENG, C.
CHING, F.
CHONG, R.
DANBARA, S.
ENGLAND, D.
FUJII, N.
HARDY, R.
HOAGBIN, S.
ICE, C.
IMATA, R.
KAWAHARA, K.
KIMURA, J.

INIT: 1
INIT: 2
INIT: 3
INIT: 4
INIT: 5

FOR: Approval
Signature
Information

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

WCPIA review transmittals
Gentry Homes -
Wells 1901-08, 2000-06,
1900-24
Mr. Mike Brant  
Gentry Homes, Ltd.  
P.O. Box 295  
Honolulu, HI 96809

Dear Mr. Brant:

Well Construction/Pump Installation Permit Application for Well No. 1901-08

We acknowledge receipt, on September 25, 2008, of your Well Construction/Pump Installation permit application and filing fee for the proposed Gentry Area 45 well (Well No. 1901-08). However, applications for permits are required to be made by a contractor with a valid and active C-57, C-57a or A license and who will perform the work, in accordance with the State Water Code, § 174C-84(a), HRS.

Because you have not identified a qualified contractor, your application will not be accepted as complete until a qualifying contractor signs and completes items 24 and 25 on the application form. We will, however, process your incomplete application for review, and if the review warrants issuance of a permit, we will issue a letter of assurance in lieu of the permit. The letter of assurance will indicate that a permit will be issued when the contractor signs the application and the following conditions are met: (a) the contractor has no outstanding issues with the Commission; (b) there have been no significant changes to the application; (c) there have been no significant changes to applicable laws, rules or regulations; and (d) there have been no significant changes to hydrologic conditions at the proposed well site.

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

By this letter, we are also notifying you that upon acceptable completion of the well construction and pump installation work required under the permits, we will issue certificates of well construction and pump installation completion to Gentry Homes, Ltd. These certificates will transfer all responsibility for well care, maintenance, and pumpage from to Gentry Homes. Until that time, your drilling and pump installation contractor will be responsible for complying with all permit conditions.

If you have any questions about your permit application, please contact Denise Mills of the Commission staff at 587-0251.

Sincerely,

KEN C. KAWAHARA, P.E.  
Deputy Director

DM:ss
Attachment

c: Tom Nance
TO: Morris Atta, Administrator  
Land Division  

FROM: Ken C. Kawahara, P.E., Deputy Director  
Commission on Water Resource Management  

SUBJECT: Well Construction/Pump Installation Permit Application  
Gentry Area 45 well (Well No. 1901-08), TMK (1) 9-1-069:005  

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by November 20, 2008. If we do not hear from you by that date, we will assume you have no comments.  

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Denise Mills of the Commission staff at 587-0251.  

DEM: ss  
Attachment(s)  

RESPONSE:  

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

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

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

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

[ ] No objections  

[ ] Other comments:  

Contact Person: __________________________ Phone: ________________  

Signed: __________________________ Date: ________________  

Printed Name: __________________________
Mr. Clifford Lum, Manager and Chief Engineer  
Board of Water Supply  
City and County of Honolulu  
630 South Beretania Street  
Honolulu, HI 96843

Dear Mr. Lum:

Well Construction/Pump Installation Permit Review  
Well Construction/Pump Installation Permit Application  
Gentry Area 45 well (Well No. 1901-08)

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application. **Please submit any comments on this application, if any, by November 20, 2008.** If we do not hear from you by that date, we will assume you have no comments.

If you have any questions about this permit application, please contact Denise Mills of the Commission staff at 587-0251.

Sincerely,

[Signature]

LAURA H. THIELEN  
Chairperson

DM:ss
Ewa by Gentry
Water Supply Wells for Irrigation Master Plan
WUPA Nos. 855 through 859

Existing wells: 1901-05, 2001-12
New proposed wells: 1900-24, 1901-08, 2000-06

http://maps.google.com/maps?f=q&hl=en&geocode=&q=keaunui+drive,+ewa+beach&sl... 10/16/2008
Assessed Values reflect tax year 2008.

Search criteria: TMK Taxkey 1-9-1-69-5

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This information has been supplied by third parties and has not been independently verified by Hawaii Information Service and is, therefore, not guaranteed.

Copyright ©9/3/2008 by Hawaii Information Service
Well Check Program
4/1/04 - Revised for update to Well Standards (February 2004)

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<tr>
<td>Minimum Wall Thickness</td>
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</tr>
<tr>
<td>Material</td>
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<td>Wall Thickness Provided</td>
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<tr>
<td>Minimum Length of Solid Casing</td>
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<tr>
<td>90% of ground to top of aquifer</td>
<td>20.97</td>
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<tr>
<td>(for pvc only, check for 200' limit)</td>
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<td>Annular Space</td>
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<tr>
<td>Depth of Grouting</td>
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<td>Calculated Depth of Grouting</td>
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<td>Depth of Grouting provided</td>
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</tr>
<tr>
<td>Minimum Annular Space required</td>
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<tr>
<td>Thickness of Annular Space</td>
<td>3.5 okay</td>
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Ok - saltwater well/irrigation

- yes
- no
- steel
- stainless steel
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
APPLICATION FOR A WELL CONSTRUCTION / PUMP INSTALLATION PERMIT

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 10 copies and a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. This Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 808-681-6010. Further information and updates to this application form, visit http://www.hawaii.gov/dlnr/cowm.

WELL LOCATION INFORMATION

1. STATE WEL NO (if already assigned) 19D1-08
2. WELL NAME Gentry 45 Well
3. ISLAND Oahu
4. TMK 9 1 69 005

The following must be attached before this application is accepted as complete:
• Portion of 7.6-Minute Series U.S.G.S. topographic map (scale 1:24,000) with well location labeled and include the name of the quad map
• Property tax map, showing well location referenced to established property boundaries
• Photograph of the proposed well site
• A schematic diagram showing the well site, access road and proposed well infrastructure

For dug wells, attach a grading plan with cross section profiles showing existing and finished grades

5. WELL OPERATOR’S NAME/FIRM: Gentry Homes, Ltd.
Well Operator’s Address: Mike Brant
P.O. Box 295
Honolulu, Hawaii 96809

6. LANDOWNER’S NAME/FIRM: Gentry Investment Properties
Landowner’s Address: Mike Brant
P.O. Box 295
Honolulu, Hawaii 96809

7. Proposed WELL CONSTRUCTION

□ New Well
□ Modify Existing Well
□ Abandon/Seal Well

8. Construction Type
□ Drilled
□ Dug
□ Shaft
□ Tunnel

9. Is this well part of a battery of wells? □ Yes ☐ No

10. Proposed PUMP INSTALLATION

□ Install New Pump
□ Replace Pump
□ Flowmeter
□ Other (explain)

11. Proposed Pumping Rate, gpm (gallons per minute)

□ 100 GPM

12. Proposed Amount of Withdrawal, gpd (gallons per day)

□ 66,085

13. Method of flow measurement
□ Other

14. Proposed Surveyor name and license number (a surveyor is required for all Well Construction Permits and may be required for some Pump Installation Permits)
Wayne Tenyera - License No. LS-6297

PROPOSED USE

□ 15. Municipal (water systems serving greater than 25 individuals or 15 service connections)
□ 16. Domestic
□ 17. Industrial (describe)
□ 18. Irrigation (describe crop and no. of acres) Road and Common Area Irrigation, 10.62 Acres
□ 19. Military (describe)
□ 20. Other (describe)

OTHER LEGAL REQUIREMENTS

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

21. Conservation District Use Permit (CDUP)
□ Well is in Conservation District
□ Required, CDUP # ___________________ date approved ____________
□ Not Required (attach documentation from OCCCL)
□ I have not checked with OCCCL, whether or not a CDUP is required. I understand that checking with OCCCL prior to making this application will expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.

□ Well is not in Conservation District □
□ I have not checked if well is in or out of Conservation District. I understand that checking if the well is in a Conservation District may expedite my review. I further understand that issues raised may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.

22. Special Management Area Permit (SMA)
□ Required, SMA # ___________________ date approved ____________
□ Not Required (attach documentation from applicable County agency)
□ I have not checked with the county about whether or not an SMA Permit is required. I understand that checking with the County prior to making this application may expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.

23. State Historic Preservation Division (SHPD) of the Department of Land and Natural Resources
□ I have consulted with the HPD regarding potential impacts of well construction activities on historic sites. I have attached applicable documentation from the HPD.
□ I have not consulted with the HPD regarding potential impacts of well construction activities on historic sites. I understand that checking with the HPD prior to making this application may expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued. Additionally, the history of past land use is attached.

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

14. Proposed Surveyor name and license number (a surveyor is required for all Well Construction Permits and may be required for some Pump Installation Permits)
Wayne Tenyera - License No. LS-6297

24. WATER USER’S USE (Must be filled out if application is for Well Construction)
New: Mike Gentry 21
□ 25. PUMP INSTALLER (Must be filled out if application is for Pump Installation)
New: Mike Gentry 21

WCPI Application Form 02/26/2007
PROPOSED WELL SECTION

(Please attach schematic if different from diagram provided below)

**Elevation at top of casing:** 27 ft., msf

**Cement Grout:** 20 ft. (min. 70% of distance from ground elevation to top of water surface or 50 ft., whichever is less.)

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

**Total Depth:** 37 ft.

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

**Rock or Gravel Packing:**
- None
- Crushed Basalt
- Rounded Gravel

**Estimated Water Level Elevation:** 1.7 ft., msf

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

**Ground Elevation:** 25 ft., msf

**Solid Casing:** (≥ 90% x (Ground Elev. - Water Level Elev.))
- Total Length: 22 ft.
- Nominal Diameter: 12 in.
- Wall Thickness: 0.406 in.
- Bottom Elevation: -7 ft., msf

**Open Casing:**
- Perforated
- Screen
- Total Length: 10 ft.
- Nominal Diameter: 12 in.
- Wall Thickness: 0.406 in.
- Bottom Elevation: -7 ft., msf

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

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

**Bottom Elevation of Well Limit = (Water Elevation - 4/3 Water Level Elev.)**

Example: Estimated + 2 ft. Water Level Elev. → Bottom Elevation of Well Limit = (2 - 4/3 (2)) = -1.85 ft.

**Solid Casing Material:**
- Carbon Steel: compliant with (check one or more):
  - ASTM A242 or A606
  - Type E
  - Type S
  - Grade B
  - Other
- Stainless Steel: (check one):
  - ASTM A409 (production wells)
  - ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one):
  - Schedule 40
  - Schedule 80
- PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one):
  - Schedule 40
  - Schedule 80
  - Schedule 120
- Thermoset Plastic: (check one):
  - Filament Wound Resin Pipe conforming to ASTM D2996
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing conforming to ASTM D3296
  - FEP Fluorocarbon Tubing conforming to ASTM D3296

**Open Casing Material:**
- Carbon Steel: compliant with (check one or more):
  - ASTM A242 or A606
  - Type E
  - Type S
  - Grade B
  - Other
- Stainless Steel: (check one):
  - ASTM A409 (production wells)
  - ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one):
  - Schedule 40
  - Schedule 80
- PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one):
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  - Schedule 80
  - Schedule 120
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  - FEP Fluorocarbon Tubing conforming to ASTM D3296

**WCP Application Form 02/26/2007**
### Details

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<th>TMK:</th>
<th>9-1-069:005</th>
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### LAND CONTROL CODES

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<td>STREET SETBACK</td>
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<td>ZONING (LUO)</td>
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<td>ZONING (LUO)</td>
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<td>ZONING (LUO)</td>
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### FACILITIES

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### TMK SEPARATIONS

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Address List:

GENTRY AREA 45 WELL
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
HAWAII HISTORIC PRESERVATION DIVISION REVIEW
Log #: 31443
Doc #: 0301EJ03

Applicant/Agency: Tim Hata
Department of Planning and Permitting
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

SUBJECT: Chapter 65-42 Historic Preservation Review EIS/PL for the Gentry Ewa Makai Project

Ahpupa’s: Honolulu
District, Island: ‘Ewa, O’ahu
TMK: (1) 9-1-069-005; 9-1-010-007

1. We believe there are no historic properties present, because:

✓ a) intensive cultivation has altered the land
✓ b) residential development/urbanization has altered the land
✓ c) previous grubbing/grading has altered the land
✓ d) an acceptable archaeological assessment or inventory survey found no historic properties
   e) other:

2. This project has already gone through the historic preservation review process, and mitigation has been completed

✓ Thus, we believe that “no historic properties will be affected” by this undertaking

Staff: [Signature] Date: 11/01/03
Title: Elaine Jordane, Assistant Archaeologist O‘ahu Phone (808) 692-8027

Environmental Communications, Inc.

February 7, 2003

Ms. Elaine Jordane
Assistant Archaeologist
Historic Preservation Division
Department of Land and Natural Resources
Kakuhiheiw Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

Dear Ms. Jordane:

Subject: Gentry Ewa Makai Environmental Impact Statement Preparation Notice

Thank you for your comments regarding the subject project. We understand your review of the project has determined that no historic properties will be affected because the site has been intensively cultivated, previous grubbing and grading has altered the land, and an acceptable archaeological assessment has found no historic properties.

We appreciate your review of this project and will include your letter in the Draft Environmental Impact Statement that is being prepared for the Ewa Makai development.

Sincerely,

Taeyong Kim
Environmental Communications, Inc.