To: ROY HARDY - CWRM

From: Tom Nance

Subject: South Korea Water Well Wrap

Fax No.: 6

Date: Jan. 31, 2000

No. of Pages: 9 (including header)

(1) Copy of the signed Memorandum of Understanding (pp. 2-5)

(2) Unsigned copy of Policies and Procedures (pp. 6-9)

680 Ala Moana Boulevard, Suite 405 - Honolulu, Hawaii 96813-5411 - Phone: (808) 537-1141 - Fax: (808) 538-7757

(D) Ryan - Front this. Should put copies in relevant Big Island well folders.
MEMORANDUM OF UNDERSTANDING BETWEEN MAUNA KEA PROPERTIES, INC., MAUNA LANI RESORT, INC., NANSAY HAWAII, INC. AND WAIKOLOA LAND COMPANY ON COOPERATIVE REGIONAL WATER DEVELOPMENT

Mission Statement

To work jointly and cooperatively in developing and implementing a regional water plan which best serves the collective water needs of the parties and others within the region in a manner acceptable to relevant governmental authorities.

Objectives

The parties to this Memorandum of Understanding (collectively referred to as "South Kohala Water Study Group" or "Group") acknowledge and agree that it is in their long-term best interests to achieve the Mission set forth above in the following manner:

* Reach agreement on a regional plan for the development of sources and distribution systems for potable, non-potable water and effluent reuse;

* Form and establish, as equity participants, a private, regional water company or companies for the development, production, distribution and sale of potable, non-potable and effluent reuse resources serving the parties and others within the region;

* Reach bilateral and multilateral agreements achieving the staged implementation of the regional water plan;

* Publicly support and consider the commitment to the conditional, partial funding of the County of Hawaii Department of Water Supply's (DWS) development of its planned North Kohala Pipeline;

* Develop a Water Commitment Policy, which is incorporated herein by reference, containing guidelines and requirements for each Group Member securing a sufficient supply of water for actual use in accordance with a realistic timetable;
Coordinate the activities of the Water Study Group with all relevant State of Hawaii authorities, including but not limited to its Water Commission, in a manner which promotes and preserves the Group's ability to deal with regional water issues on a collective basis;

Communicate, where appropriate, with other interested parties within the region;

Enter into subsequent joint agreements intended to implement the objectives adopted herein.

**Governance**

The activities of the Group shall be governed and coordinated through an Executive Committee comprised of designated representatives of each signatory to this Memorandum of Understanding.

The Group Executive Committee shall:

* Approve all policies, agreements and expenditures made on behalf of the Group; provided, that if the representative of any Group member specifically disapproves of any such expenditure, that Group member shall be excused from its pro rata share of such expenditure;

* Approve the inclusion of additional members to and approve, except member in question, for the exclusion of existing members from the Water Study Group;

* Approve public statements and testimony regarding Water Study Group activities;

* Develop and approve an annual operating budget, project budgets and the individual party's obligations to fund the operations and the development of these planned projects;

* Be kept informed of all agreements entered into between Water Study Group members affecting the Group's Mission and Objectives;

* Coordinate all contact regarding the activities of the Water Study Group with governmental agencies;
Direct and approve the activities of all consultants retained by the Water Study Group relating to its stated Mission and Objectives.

All decisions of the Group shall be by the majority of the members of the Executive Committee except for "key decisions" which require unanimous approval. Key decision include approval of the annual operating budget and individual members obligation to fund operations or make contributions to the development of planned projects, expenditures which are outside of the approved budget in excess of $5,000 in any single case or $25,000 in the aggregate and the addition of any new member to the Executive Committee.

Dispute Resolution

It is acknowledged that from time to time, disputes and disagreements may arise between the parties to this Memorandum of Understanding regarding regional water issues and that it is in their long-term collective best interests that such disputes be resolved without resort to governmental or judicial involvement.

The parties agree that they shall use their individual and collective best efforts to resolve any and all outstanding issues covered by this Memorandum. The parties further agree that in the event negotiations fail to result in acceptable agreement or resolution, they may voluntarily submit outstanding issue(s) to binding or nonbinding arbitration pursuant to terms agreed to by the parties.

North Kohala Pipeline

The parties agree to support the concept of a North Kohala pipeline transporting potable water to South Kohala being pursued by the Department of Water Supply, County of Hawaii.

In the event that the parties are reasonably satisfied that the North Kohala pipeline will be built, but no later than the start of construction, individual signatories to this agreement shall commit, on a fair and equitable basis, to the partial funding of said pipeline under acceptable terms and conditions to be negotiated.

-3-
Termination/Withdrawal

A majority of the members of the Group may terminate the Group and joint obligations contained in this Memorandum of Understanding. Individual Group members may withdraw from the South Kohala Water Study Group upon written notice to other members; provided, that members shall remain liable for their or its pro-rata share of costs of operations per the approved budget or amendments thereto, incurred during their membership or prior to withdrawal, as the case may be.

This Memorandum of Understanding is entered into this 9th day of February, 1993.

MAUNA KEA PROPERTIES, INC. NANSAY HAWAII, INC.

By 

By 

Its 

Its 

MAUNA LANI RESORT, INC. WAIKOLOA LAND COMPANY

By 

By 

Its 

Its 

Vice President

President
DRAFT
Water Commitment Policies and Procedures
of the
South Kohala Water Users' Group
Revised: [February 4, 1993]
March 9, 1993

The South Kohala Water Users Group ("Group") recognizes the need to develop a coherent set of policies and procedures for the development of groundwater to ensure maximum beneficial use of this limited resource, avoid conflicts among users, and facilitate the timely development of water tied to actual use. The parties to this document agree to abide by the policies and procedures it contains and encourage the State Commission on Water Resource Management ("Commission") to evaluate all drilling and pump installation permits received from other water users in the basin by the same criteria.

POLICIES

1. The group recognizes that all parties need assurance of the availability of water for their developments. The group further recognizes that such assurances can occur only if it is agreed to by all parties.

2. All drilling, well modification, and pump installation permits will be formulated to conform to the intent of the then current version of the Group's approved South Kohala Water [Master] Resource Plan.

3. All drilling, well modification, and pump installation permits will be submitted to the Group for its approval prior to submittal to the Commission. The Group's approval shall be based on the applicant's conformance with these policies, and the procedures listed below. The Group's approval shall not be unreasonably withheld if such conformance is demonstrated.

4. To minimize excessive use of groundwater, all effluent from sewage treatment plants shall be reused for irrigation unless it can be conclusively demonstrated to be physically and/or economically impractical for the developer of the irrigation supply or the ultimate user of the water.
4. All new landscaping, including golf course turfgrass, will be designed and implemented to minimize irrigation use. Efforts toward this end shall include choosing appropriate plant materials, use of proper soil types and thickness, and avoiding excessive turfgrass areas. Any new 18-hole golf course shall not use more than 0.75 MGD on year-round average nor more than 1.00 MGD over any seven-day period.

5. All new hotel, residential, commercial, and industrial development shall be designed to minimize water use and shall include appropriate water saving devices.

6. Drilling permits should be supported if consistent with the Water Resource Plan as they provide much needed information about this region's aquifer.

7. (Drilling and) Pump installation permits shall not be sought more than two years in advance of actual need [to avoid creating false shortages of supply and inappropriate positioning for the resource, potentially denying others their fair and equitable use].

8. Members of the Group agree to devise water use standards for consumption of potable and irrigation water use in order to implement these policies.

9. It is recognized that agreements between two or more parties may be necessary to facilitate respective water development. [Such agreements shall be consistent with these policies and procedures.]

PROCEDURES

1. All applications for drilling, well modification, and pump installation permits, including extensions of these permits, will be submitted for review and approval by the Group to ensure conformance with the intent of the Group's policies and [master] water resource plan prior to submittal to the Commission.

2. To initiate the Group's review, application will be submitted with the following supporting information:
   a. Quantity [and timing] of potable and/or non-potable supply requirements, including the basis for these projections (unit counts, acreage, etc.).
b. Measures taken to avoid excessive potable and/or non-potable water use.

c. Exact location of the water uses, including land use plans, TMKs, etc.

d. Approved State land use designation; County General Plan designation; County zoning; use permit for district use; and the prospective land use approvals, including subdivision, needed to achieve the desired land use.

e. The project's site specific water master plan for potable and not potable water shall be submitted.

f. Exact location, dimensions, and pump capacity of the well (or wells) to be developed to meet these supply requirements.

g. A development schedule indicating the date of actual water use.

3. The Group's review and response to the application shall be completed within 45 days. The response shall judge the application's conformance with these policies, and with the South Kohala Water [Master] Resource Plan, [the appropriateness of the timing of the application,] and the County zoning. [Unless there are compelling reasons otherwise, the timing of an application shall be deemed inappropriate unless all land use approvals through and including County zoning have been received and the actual use of water, based on a firm schedule, is to begin within two years.]

Listed below are specific criteria of the Group's review of applications.

a. If conformance with these policies and procedures is demonstrated [and the timing of the application is appropriate,] the Group's approval shall not be unreasonably withheld.

b. If the application fails to meet the standards for acceptability set out herein, no submittal of the application to the Commission shall be made until revisions satisfactory to the Group are made.

c. The Group's approval for a pump installation permit shall be given only after tentative subdivision approval for the project to be served has been given.

d. If a proven water source is a condition of County zoning or use permit approvals, the Group's approval of a well construction permit shall be given only if evidence of the actual water use within two years is provided.]
These Water Commitment Policies and Procedures are entered into this day of _________, 1993.

Mauna Kea Properties, Inc.
By: ____________________________
   Its

Nanseay Hawaii, Inc.
By: ____________________________
   Its

Mauna Lani Resort, Inc.
By: ____________________________
   Its

Waikoloa Land Company
By: ____________________________
   Its
To: DONWID
Attention: Ed Sokala
From: Tom Nance
Subject: Waikdoz Irrigation Wells

If you do not receive all pages, please telephone immediately.

Following are sections of the Anahoomalu and Puu Aiiuii
aquifer maps on which I've located Waikdoz Resort
irrigation wells. I given them I.D. numbers based on
the chronological sequence of their development. If these
don't match yours, please let me know. Some data

<table>
<thead>
<tr>
<th>Well No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>5452-01</td>
<td>An open pit next to the former recent nursery; excavated with bulldozer years ago; outfitted with a 750 GPM pump and run continuously.</td>
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<tr>
<td>5452-02</td>
<td>8' diameter vertical shaft, dug with jackhammers to a depth of 55+ feet; outfitted with a 280 GPM pump and run continuously.</td>
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<tr>
<td>5452-03</td>
<td>Drilled well by Fred Page several years ago; has a 380 GPM pump which runs 90% of the time.</td>
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<tr>
<td>5592-01</td>
<td>Also drilled by Fred Page; 600 GPM pump runs continuously.</td>
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<tr>
<td>5561-01</td>
<td>Recent well by Fred Page; in the process of drill; outfitted with a 475 GPM pump.</td>
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680 Ala Moana Boulevard, Suite 200 • Honolulu, Hawaii 96813 • Phone: (808) 521-3361 • Fax: (808) 538-7819
© Belt Collins & Associates Company
### STATE WELL NO.: 5552-01  
**WELL NAME OR DESIGNATION:** Resort Irrigation Well Number Two  
**ISLAND:** Hawaii  
**SOURCE OR STATION NAME**

#### A. WELL OPERATOR
- **Firm name:** Waikoloa Resort Utilities
- **Contact person:** Stephen Green  
- **Address:** P.O. Box 3028  
- **Zip:** 96743  
- **Phone:** 883-9661

#### B. OWNER OF WELL SITE BY EASEMENT
- **Firm name:** Waikoloa Resort Utilities  
- **Contact person:**  
- **Address:** P.O. Box 3028  
- **Zip:** 96743  
- **Phone:** 883-9661

#### C. WELL LOCATION
- **Tax Map Key:** 6-8-01-005  
- **Town, Place, District:** Waikoloa, Dist. of South Kohala  
- **Attach USGS “Quad” map (scale 1:24,000), tax map, or other map showing the well location.**

#### D. WELL DATA
- **Ground elevation (Mean sea level):** 81 ft.  
- **Reference point (Used to measure depth to water):** 81 ft.  
- **Elevation:** 81 ft.  
- **Description:**  
- **Depth to water (below reference point):** 91 ft.  
- **Maximum recorded chloride:** 720 ppm  
- **Minimum recorded chloride:** 660 ppm  
- **Maximum recorded chloride in 1987:** 720 ppm  
- **Year drilled or constructed:** 1988  
- **Well contractor:** Fred Page  
- **Casing diameter:** 12 in.  
- **Solid casing depth (Below ground):** 81 ft.  
- **Perforated casing depth (Below ground):** 91 ft.  
- **Total depth of well:** 91 ft.  
- **Minimum chloride in 1987:** 660 ppm

#### E. INSTALLED PUMP DATA
- **Pump type:** Vertical shaft  
- **Power:** Diesel, 700 HP  
- **Pump capacity:** 700 gallons per minute  
- **Pump installation contractor:** Roscoe Moss Company

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For Official Use Only:

- **Date received:**  
- **Date accepted:**  
- **Field checked by:**  
- **Comments:**  
- **Hydrologic Unit:**  
- **State Well No.:**

References: Hawaii Revised Statutes, Chapter 174C; Hawaii Administrative Rules, Chapters 13-167 to 13-171.
F. DECLARATION OF WATER USE

NOTE: The purpose of the Declaration of Water Use is to obtain information necessary for the management of the State's water resources. The Declaration does not confer a legal right to water or its use.

Water use data are recorded: □ Daily □ Weekly □ Monthly
□ Other (Describe): ____________

Method of measurement: □ Flow Meter □ Orifice
□ Other (Describe): ____________

Quantity of Use (Report metered or estimated monthly water use from the well described on the reverse side of this form, for the calendar years 1983 through 1987. For a battery of wells which are not individually metered, but which are connected to a single meter or other measuring device, report total use from the battery):

WATER USE, IN GALLONS x 1000

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NOTE: CONSTRUCTED IN 1988
Minimum day's use: 1,008,000 gallons  Maximum day's use: 1,008,000 gallons
Typical times of usage: continuous

Type of Use (Check all category boxes that apply and provide additional information as indicated):

- □ Municipal (including resorts, hotels, businesses)
- □ Domestic (systems serving 25 people or less)
- □ Irrigation
  - Additional Information
  - Number of service connections: ____________
  - Acres Irrigated: 300
  - Crop(s): □ Sugar □ Pineapple
    □ Other (specify): ____________
  - Non-Crop: □ Landscape □ Golf Course
    □ Other (specify): ____________
  - Method: □ Drip □ Furrow □ Sprinkler
    □ Cooling □ Manufacturing □ Mill
    □ Other (specify): ____________
- □ Industrial
- □ Military
- □ Other
  - Specify (livestock, aquaculture, etc.): ____________

I declare that the contents of the above Declaration of Water Use are, to the best of my knowledge and belief, true, correct, and complete.

Water User's Signature: ______________ Date: 4/15/89

Printed Name: ______________
Firm or Title (Well Operator, etc.): Project Engineer