## MINUTES

# DEPARTMENT OF WATER SUPPLY <br> COUNTY OF HAWAI‘I <br> WATER BOARD MEETING 

August 25, 2015

West Hawai‘i Civic Center, Community Center, Bldg. G, 74-5044 Ane Keohokalole Hwy, Kailua-Kona<br>MEMBERS PRESENT: Mr. Rick Robinson, Chairperson<br>Mr. Craig Takamine, Vice-Chairperson<br>Mr. Russell Arikawa<br>Mr. Bryant Balog<br>Mr. Leningrad Elarionoff<br>Ms. Susan Lee Loy<br>Mr. Jay Uyeda<br>Ms. Kanoe Wilson<br>ABSENT:<br>Ms. Brenda Iokepa-Moses, Water Board Member<br>Mr. Duane Kanuha, Director, Planning Department (ex-officio member)<br>Mr. Warren Lee, Director, Department of Public Works (ex-officio<br>member)<br>OTHERS PRESENT: Ms. Amy Self, Deputy Corporation Counsel<br>M. Steve Bolles, Process Energy Services, LLC<br>Nr. Dave Thomas<br>Mr. Sterling Chow, State Highways Division<br>Mr. Sal Panem, State Highways Division<br>Ms. Lisa Reddinger<br>Mr. Blaine Banks<br>Mr. John Makoff<br>Mr. Simon Poole<br>Mr. Jeff Zimpfer, National Park Service<br>Department of Water Supply Staff<br>Mr. Keith Okamoto, Manager-Chief Engineer<br>Mr. Kawika Uyehara, Deputy<br>Mr. Kurt Inaba, Engineering Division Head<br>Mr. Richard Sumada, Waterworks Controller<br>Mr. Clyde Young, Operations<br>Mr. Eric Takamoto, Operations<br>Ms. Judy Hayducsko, Operations<br>Ms. Kanani Aton, Public Information and Education Specialist

1) CALL TO ORDER - Chairperson Robinson called the meeting to order at 10:00 a.m.
2) STATEMENTS FROM THE PUBLIC

None.

## 3) APPROVAL OF MINUTES

The Chairperson entertained a Motion to approve the Minutes of the July 28, 2015, Water Board meeting.

ACTION: Mr. Uyeda moved to approve; seconded by Mr. Arikawa; and carried unanimously by voice vote.
4) APPROVAL OF ADDENDUM AND/OR SUPPLEMENTAL AGENDA

None.
5) HĀMĀKUA:

## A. USE AND OCCUPANCY AGREEMENT - ĀHUALOA - HONOKA'A:

The Department has received the subject Use and Occupancy Agreement (UOA) 126 from the State Department of Transportation, Highways Division's Right-of-Way Branch, and finds it acceptable as submitted. The UOA is for the 12" waterline installation crossing Hawai‘i Belt Road between Āhualoa and Honoka'a town. Acceptance of the UOA will allow the contractor for the subject project to obtain the necessary permits to perform the installation of the waterline within the State right-of-way.

The Manager-Chief Engineer recommended that the Water Board accept Use and Occupancy Agreement 126, and that either the Manager-Chief Engineer or the Deputy be authorized to sign the document subject to the approval of the Corporation Counsel.

MOTION: Mr. Arikawa moved to approve; seconded by Ms. Wilson.
The Manager-Chief Engineer noted that this Use and Occupancy Agreement has posed a challenge for DWS, for any work involving State Highways’ right-of-way. Hope dawned in the course of working with Mr. Ed Sniffen, Deputy Director of State Highways Division; Mr. Sniffen understood DWS's problem with a small section of the Agreement that entailed DWS forgoing its rights per HRS 264-33. During a conference call with Mr. Sniffen and District staff from Highways Division, including the Right-of-Way Branch manager, DWS was able to resolve that issue. The result is a Use and Occupancy Agreement that is acceptable to DWS; the Department no longer forgoes its rights, and now things can move forward. The Manager-Chief Engineer said that DWS wants to take advantage of this understanding, and move forward with all pending State Highway right-of-way matters, including service laterals. Somewhere down the road, the Department would want to draft a Resolution that would involve all of the service laterals, etc., at one time - without having to come before the Board one by one.

Ms. Lee Loy asked if this understanding will fit in with the Pauka‘a Waterline Relocation Project as well.

The Manager-Chief Engineer confirmed this.
Ms. Lee Loy asked if this Use and Occupancy Agreement becomes a template.
Mr. Inaba said that it is a template; there is project-specific information that still needs to be folded in.

Ms. Lee Loy said this was really good.

The Manager-Chief Engineer said that this was specifically good for the Āhualoa-Honoka'a project at this point; DWS will be using this as a model for future Use and Occupancy Agreements.

Chairperson Robinson asked whether this Agreement could be used in the case of other laterals that would be in the State Highway right-of-way.

The Manager-Chief Engineer said that was correct. He thanked everyone who assisted with the process of achieving this Use and Occupancy Agreement, and commended Mr. Sniffen in particular for his help.

ACTION: Motion carried unanimously by voice vote.
6) SOUTH HILO:

## A. JOB NO. 2015-1023, EMERGENCY GENERATOR SET REPAIR AND MAINTENANCE FOR THE DEPARTMENT OF WATER SUPPLY:

This project generally consists of an in-frame repair of a Caterpillar CAT C27 ATAAC diesel engine in-frame, which is part of a 750 kW Caterpillar generator set; inspecting and repairing engine exhaust system; performing preventative maintenance service; performing miscellaneous repairs and improvements to container; resurfacing container, trailer and fuel tank; and transporting the generator set to shop and to the Department of Water Supply’s Pana'ewa Well site after completion.

Bids for this project were opened on August 13, at 2:00 p.m., and the following are the bid results:

| Bidder | Bid Amount |  |
| :--- | :---: | :---: |
| Hawthorne Pacific Corp | Non-Responsive |  |

The Manager-Chief Engineer recommended that the Board not award the contract for JOB NO. 2015-1023, EMERGENCY GENERATOR SET REPAIR AND MAINTENANCE FOR THE DEPARTMENT OF WATER SUPPLY, due to no qualified bids received. Staff will seek alternate methods of procurement, in accordance to procurement rules.

MOTION: Ms. Lee Loy moved to approve the Recommendation not to award; seconded by Ms. Wilson.

Mr. Elarionoff asked about the Department's intention to now seek alternative methods of procurement; he asked what that meant.

The Manager-Chief Engineer said there were several options available under procurement law, in the event that DWS does not have any responsive bidders. One option is to do direct negotiations, and the other option is to solicit quotes, etc. For the most part, DWS in the past has sought quotes so as to have some element of competition. In this particular instance, the one bidder failed to submit some required documentation, and therefore that bid could not be considered. When DWS enters into direct negotiations with a sole bidder, the Department tries to make sure that the price is still within reason; DWS staff had an estimated amount for this particular repair job, the Manager-Chief Engineer said. Summing up, he said that DWS will either do direct negotiations or solicit quotes.

Ms. Lee Loy asked for clarification that this is an emergency generator, i.e., a back-up generator - not an emergency repair job.

The Manager-Chief Engineer said that was a good catch; it is not an emergency project. It is a repair of the emergency generator.

Mr. Balog asked what the estimated amount for this repair was.
Mr. Young said the estimate was $\$ 75,000.00$.
Mr. Uyeda asked if it made sense for DWS to sell this generator and buy a new one, instead of continuing to repair an old piece of equipment.

The Manager-Chief Engineer said that DWS actually obtained this generator as part of a grant administered by Civil Defense, so it was obtained at no cost to DWS. He asked Mr. Young whether this generator had undergone prior repairs.

Mr. Young said no, this would be the first repair.
The Manager-Chief Engineer asked how much a generator of this capacity would typically cost new.

Mr. Young said it would cost about $\$ 200,000.00$
Mr. Uyeda said that he would recommend that the Department look at a replacement, as the equipment ages; at some point, it will reach the point of no return.

The Manager-Chief Engineer agreed, and said that he would analyze whether it would be worthwhile. At this point, in the absence of any responsive bids, DWS could do that evaluation prior to awarding a repair job.

Mr. Balog suggested that DWS do a tear-down assessment; this would be pretty cheap to do, and it would give an indication of whether it would cost more than anticipated to do the repair.

Mr. Young said that DWS had done a tear-down assessment, for $\$ 7,000.00$; that led to the recommendation to do a complete overhaul.

Mr. Balog said it was good that the tear-down assessment had been done.
The Manager-Chief Engineer said that the Department believed that the repair job would fix the generator.

Ms. Wilson asked how old the generator was.
Mr. Young said that the generator, which was at the Hāwī depot site, was only six years old. Tree leaves and debris got into one of the wells where the muffler is located. The debris plugged the drain hole, and heavy rains flooded the engine. DWS is working on modifications of the generator, and has already modified some of its other generators. This problem of heavy rain and debris basically ruins the whole engine, he said.

ACTION: Motion carried unanimously by voice vote.

## B. EQUIPMENT BID NO. 2015-06, FURNISHING AND DELIVERING EQUIPMENT TO THE DEPARTMENT OF WATER SUPPLY:

Bids for this project were opened at 2:30 p.m. on August 13, 2015, and the following are the bid results.

|  | Allied <br> Machinery <br> Corp. | American <br> Machinery | Hawthorne <br> Pacific Corp. |
| :--- | :---: | :---: | :---: |
| Part "A" |  |  |  |
| Two(2) only 2015 or later Mini-Excavator |  |  |  |
| Total Delivery Price | $\mathbf{\$ 1 1 6 , 3 5 3 . 4 2}$ | $\$ 117,236.75$ | $\$ 124,978.36$ |
|  |  |  |  |
| Part "B" |  |  |  |
| Two (2) only 2015 or later Dual Purpose <br> Dump Trailer |  |  |  |
| Total Delivery Price | $\mathbf{\$ 2 7 , 0 8 3 . 1 6}$ | No Bid | $\$ 41,249.74$ |

The Manager-Chief Engineer recommended that the Board award EQUIPMENT BID NO. 201506, FURNISHING AND DELIVERING EQUIPMENT TO THE DEPARTMENT OF WATER SUPPLY, to Allied Machinery Corporation for Parts "A" and "B" at a total cost of \$143,436.58, and that either the Chairperson or the Vice-Chairperson be authorized to sign the contract subject to approval of the contract as to form and legality by Corporation Counsel.

MOTION: Mr. Arikawa moved to approve; seconded by Ms. Wilson.
The Manager-Chief Engineer said that this bid was for much-needed equipment that will boost efficiency for DWS field personnel. The equipment includes two small excavators and two trailers to transport them.

Mr. Balog asked if the bids matched the specifications for the equipment, and asked if all of the specifications dovetailed with manufacturer warranties, etc.

The Manager-Chief Engineer asked Ms. Hayducsko, the project engineer who prepared the specifications and reviewed the bids, to give the details.

Ms. Hayducsko explained that the Department looked at mini-excavators of the same classification, taking the minimum standards for all of them so that DWS could get competitive bids from all of the different contractors.

Mr. Balog returned to his question about warranties, saying that DWS would want to be sure to obtain a good amount of warranty, so that the Department does not have to pay for problems.

Ms. Hayducsko said that the standard warranty for one of the equipment manufacturers was one year, while the one manufacturer's warranty was for one year. DWS had specified one year, but the low bidder has a two-year warranty.

Mr. Balog said that was good. He asked out of curiosity why DWS went with the minimum warranty, noting that manufacturers do have options for extended warranties.

Ms. Hayducsko said that is one thing that DWS can consider when the Department does the final contract; DWS could do an Addendum to have an extended warranty. She said that DWS wanted to make sure that the bid opening drew some qualified bidders, who were able to bid on the minimum standards.

ACTION: Motion carried unanimously by voice vote.
A. AMENDMENT TO MEMORANDUM OF UNDERSTANDING NO. 2088 - QUEEN KA‘AHUMANU HIGHWAY WIDENING - KEALAKEHE TO KEĀHOLE 16" WATERLINE INSTALLATION - STATE HIGHWAY PROJECT (QUEEN KA‘AHUMANU HIGHWAY WIDENING, PHASE 2):

Memorandum of Understanding No. 2088 (MOU 2088) was entered into between the Water Board and the State Department of Transportation on October 28, 2010. The Department of Water Supply subsequently submitted a check for $\$ 3,444,000.00$, to the State, to cover the design and construction of the subject project, of which, $\$ 164,000.00$ was intended for contingencies.

The project has since been delayed due to permitting issues beyond the control of the contractor. Therefore, the contractor has submitted proposals for price escalation costs for materials, labor and equipment in the amount of $\$ 244,240.00$.

The State has agreed to give the Department a credit of $\$ 50,242.23$ for the interest earned on the funds that were deposited with the State. This would result in a net increase of $\mathbf{\$ 1 9 3 , 9 9 7 . 7 7}$ in cost to the Department. Therefore, it is proposed that an Amendment to MOU 2088 be executed, to increase the Department's overall cost on the project from $\$ 3,444,000.00$ to $\$ 3,637,997.77$.

Staff has reviewed the cost proposals, and the Amendment to MOU 2088 and finds it acceptable.
The Manager-Chief Engineer recommended that the Water Board accept the increase in cost of $\$ 193,997.77$, and that either the Chairperson or Vice-Chairperson be authorized to execute the AMENDMENT TO MEMORANDUM OF UNDERSTANDING NO. 2088 - QUEEN KA‘AHUMANU HIGHWAY WIDENING - KEALAKEHE TO KEĀHOLE 16" WATERLINE INSTALLATION - STATE HIGHWAY PROJECT (QUEEN KA‘AHUMANU HIGHWAY WIDENING, PHASE 2), subject to approval of our Corporation Counsel.

MOTION: Mr. Balog moved to approve; seconded by Mr. Takamine.
The Manager-Chief Engineer noted that the Additional Cost Summary for this project was distributed today. The original amount for the additional costs had been close to $\$ 500,000.00$, but that has since been pared down considerably, to $\$ 193,997.77$. This was due in part to State Highways' administration having removed the costs for gasket replacement, testing and recertifying valves, replacement of the brass fittings, as well as applying the interest earned on the money that DWS had provided State Highways up front in 2010. DWS believes that the new amount for additional costs is a fair amount that the Department can move forward with.

Chairperson Robinson asked about the blessing for the project that is supposed to take place soon.
The Manager-Chief Engineer said yes, the blessing will be next Thursday, September 3, at 3:15 p.m., and DWS plans to attend. There is also a community meeting regarding the project tonight at 6:00 p.m. at Kealakehe High School, which DWS will also attend.

Chairperson Robinson asked about the red construction fence on the makai side of the road.
Mr. Sterling Chow, Assistant District Engineer for State Highways, said that the orange fencing has been installed for two purposes: to delineate the archaeological sites from the project boundaries, and to separate the work from the National Park. There is a long linear fence in front of the National Park, to separate the work from the park. The other fence is around the archaeological sites, he said.

Chairperson Robinson said that he noticed recently that the contractor was doing either a reconnaissance survey or a recovery survey.

Mr. Chow said yes, they were doing field data collection, to get more information from the archaeological sites. At the same time, they installed the construction fence, he added.

Chairperson Robinson asked if the State Historical Preservation Division had signed off on everything.

Mr. Chow said yes, the contractor had followed through with getting the grading permits, etc., so construction is ready to go.

Chairperson Robinson asked whether the gaskets within the pipes would all need to be replaced. He asked whether that would be a laborious process, or simple to do.

Mr. Chow said he is not a water guy, but his understanding is that the gaskets are separate, and are installed as the pipes are fitted together.

The Manager-Chief Engineer said this was correct.
Mr. Chow said that the contractor is disposing of the old gaskets, and a new shipment is being brought in.

Chairperson Robinson acknowledged that the gaskets are not in the pipes already, and instead, the gaskets were stored somewhere separately.

Mr. Chow said the only ones that the contractor is checking on are the gaskets and other parts in the valves. That task is coming up next month; at that time, the contractor will see if they need to be retro-fitted or replaced.

Chairperson Robinson, noting that he rides his bicycle up and down the highway four times a week, asked whether allowances would be made for cyclists during the construction.

Mr. Chow said yes, the contractor is required to keep the shoulders clear for cyclists, and during the Iron Man competition, construction work will stop, so as not to interfere with the race and its practice period.
(An unidentified State Highways official spoke up to note that tonight's community meeting would provide more details.)

Ms. Lee Loy credited Mr. Sniffen, who attended last month's Board meeting, for having listened to the Board and staff on moving this project forward. She wished that the additional costs were a little lower, because DWS had floated a lot of money up front, but she was happy nonetheless that things were moving forward.

Mr. Arikawa asked whether there was a warranty for the valves, and if so, how long the warranty was.

Mr. Inaba said that DWS has been working with the contractor to ensure that DWS gets the manufacturer's standard warranty; this will come through the contractor.

Chairperson Robinson asked what size of pipe would be used.
Mr. Inaba said it was mostly 16 -inch pipe, although there was some 12 -inch and 8 -inch pipe as well.

Chairperson Robinson noted that last month there was talk of DWS diving under the sewer pipe; he asked if the different sizes of pipe would create a Venturi effect (i.e., whereby a reduction in fluid pressure occurs when a fluid flows through a constricted section of pipe.)

Mr. Inaba said no, the portion in question is all 16 -inch pipe. This could just be a drainage structure where the top of it is too close to the surface of the road for DWS to go over it; therefore, DWS will dive under it.

The Manager-Chief Engineer noted that DWS as a water utility typically has pressure in its pipes, so that DWS can accommodate changes in pressure such as this. With drainage, it mainly involves gravity.

ACTION: Motion carried unanimously by voice vote.

## 8) $\mathrm{KA} \cdot \mathrm{U}$ :

## JOB NO. 2015-1024, HAWAIIAN OCEAN VIEW ESTATES DEEPWELL REPAIR:

This project generally consists of the replacement of the existing deep well submersible motor, pump, power cable, column pipe, discharge head and all appurtenant equipment, such as strapping, chlorination of the well and pumping assembly, and the removal and replacement of the existing soft starter and VFD equipment with a new VFD and filter system, in accordance with the plans and specifications.

Bids for this project were opened on August 13, 2015, at 1:00 p.m., and the following are the bid results:

| Bidder | Bid Amount |  |
| :--- | :---: | :--- |
| Beylik Drilling and Pump Service, Inc. | Non-Responsive |  |
| Derrick's Well Drilling and Pump Services, LLC. | Non-Responsive |  |

The Manager-Chief Engineer recommended that the Board not award the contract for JOB NO. 2015-1024, HAWAIIAN OCEAN VIEW ESTATES DEEPWELL REPAIR, due to no qualified bids received. Staff will seek alternate methods of procurement, in accordance with procurement rules.

MOTION: Mr. Balog moved to approve; seconded by Mr. Arikawa.
The Manager-Chief Engineer said because both of the bids were non-responsive, the Department will seek alternative methods of procurement, either by seeking quotations or through direct negotiations.

Mr. Balog asked whether this case was the same as the previous one, where the prospective bidder simply did not have the right paperwork.

The Manager-Chief Engineer said he believed that the two companies had varying degrees of being non-responsive. One company was non-responsive due to not having the proper paperwork, while with the other company, there was a discrepancy in the bid regarding equipment that was not specified. DWS will evaluate whether the Department can consider different equipment; if so, DWS may be able to get more competitive quotations. If not, DWS still has the option of direct negotiations with either of the two companies, he said.

Mr. Arikawa asked if the reason to replace this is because it is showing signs of wear.

The Manager-Chief Engineer, recalling last month’s discussion, said that the GPMs (gallons per minute) pumped have dropped off. Before getting to the point where this becomes an emergency repair job, DWS wants to stay ahead of the game, and get the repair going before the pump and motor actually break down.

Mr. Arikawa asked whether the GPMs are still dropping, or have stabilized.
The Manager-Chief Engineer said the GPMs are still dropping.
Mr. Takamine asked about the time sensitivity of this project, asking whether this will affect the community's water source any time soon.

The Manager-Chief Engineer explained that this Ocean View system is unique because it does not serve a distribution system, and does not go directly to people's homes. This system serves an emergency spigot and standpipe facility. In the past, when the well broke down, DWS had to re-direct people to its existing facilities at Ho‘okena on the Kona side, and Wai‘ōhinu on the Volcano side. There is still that option available if things get to that point. However, the Department felt that there is time now to try to get a competitive bid out, and avoid going the emergency route to get the repairs done. He told Mr. Takamine that it was hard to say whether it would affect the community's water source any time soon.

Mr. Uyeda asked whether having non-responsive bids like this was a cause for concern; he asked if the Department's specifications were too restrictive. He asked if these companies are having a hard time competing with other jobs, as DWS has experienced.

The Manager-Chief Engineer said that he is starting to attend pre-bid meetings for these well repair jobs now. His aim is to reinforce and re-emphasize to the potential bidders that they need to get all their paperwork done, they need to review the specifications, they need to review the bid documents accordingly, etc. Staff is on hand to advise the potential bidders regarding any requirements that are out-of-the norm; that information is also included in the Reminders to Bidders, he said. The paperwork that was missing involved Data Sheets for transformer replacement. The Manager-Chief Engineer said that while some of the required paperwork may seem trivial, if the required bid documentation is not submitted, DWS must consider the bidder to be non-responsive. It is not fair to the other party who may have submitted everything that they were required to submit, he said.

Mr. Elarionoff noted that last month the Department had said that the motor failed because it had to run slower than it was designed for. He asked if DWS had corrected the problem, or taken the problem into consideration.

Mr. Young said that for the future repair, DWS is definitely sizing it; this time around, DWS has the time to make sure that the equipment is sized properly, which will ensure that DWS gets a better life out of the equipment.

Mr. Elarionoff asked about Mr. Young saying: "Now that we have the time."
Mr. Young said that this time, DWS is not in an emergency situation, unlike the previous repair. He said that it is not an emergency so long as the pump still runs, but it can fail at any time.

The Manager-Chief Engineer noted as a refresher that the previous repair at the Ocean View well was an emergency repair; the well went down, so DWS had to fix it. Ocean View is faced with both a power issue and a water resource issue; DWS cannot pump too much, for fear of increasing the chlorides in the aquifer. When the emergency bid was put out, somebody had a large-capacity pump and motor available in the State, so DWS decided to go with that option.

DWS beefed up the controls, and harbored hopes that the larger-capacity equipment would be more robust and more capable of handling the fluctuations in power. DWS tried to bump the GPMs up to the 300-GPM range, but the chlorides started showing up, and DWS had to drop it back down to 100 GPMs, he said. As mentioned last month, the pump was not designed to operate at only 100 GPMs, so DWS ultimately did not benefit from the larger pump and motor. Summing up the factors that went into DWS’s decision last time, the Manager-Chief Engineer said that it was an emergency situation; the pump and motor were available in-State; and after installing the pump and motor, the chloride issue arose. Therefore, on this go-round, DWS decided to size the pump and motor more appropriately; it will be more in the 100-GPM range.

Mr. Elarionoff asked what will happen to the over-sized motor, once it is removed.
Mr. Young said it will be disposed of.
Mr. Elarionoff expressed surprise.
Mr. Young said that depending on the type of motor, some motors are disposable; this motor might be rebuildable, but DWS would have to match it up with an existing system. In most cases, motors, and especially pumps, are disposed of. Pumps slated for disposal are damaged; it is just cheaper to get a new one, Mr. Young said. When a pump or motor is rebuilt, a certain degree of efficiency is lost, and the Department will pay a bit more in electrical costs as a result.

Mr. Elarionoff said he imagined that DWS would evaluate the repair, etc., before disposing of the motor.

Mr. Young confirmed this.
The Manager-Chief Engineer said that in other cases, the motor would be rebuilt.
Mr. Young said that in other cases, DWS would rebuild; it depends on the cost of the motor, among other factors.

The Manager-Chief Engineer said that DWS has that option in Kona, where the Department has wells of similar elevation, pumping up similar heights.

Chairperson Robinson asked if the kerfuffle among the water haulers over the water spigot permits in Ocean View had blown over.

The Manager-Chief Engineer confirmed this.
Chairperson Robinson asked if the well would be shut down for a certain period of time, during repairs.

The Manager-Chief Engineer confirmed this.
Chairperson Robinson asked if the water haulers would have to haul from a greater distance.
The Manager-Chief Engineer confirmed this. He said that DWS in the past has accommodated the water haulers by re-directing them to either Ho‘okena or Wai‘ōhinu.

Mr. Elarionoff asked whether the customers pay for the water or just for the hauling.
The Manager-Chief Engineer said he believed that they just pay for the hauling.
ACTION: Motion carried unanimously by voice vote.

## 9) MISCELLANEOUS:

## A. DEDICATIONS:

The Department has received the following documents for action by the Water Board. The water system has been constructed in accordance with the Department's standards and is in acceptable condition for dedication.

## 1. AMENDED AND RESTATED GRANT OF EASEMENT

Grantors: Trustees of the Queen Lili'uokalani Trust.
Tax Map Key: (3) 7-4-010: 001 (portion)

## 2. RELEASE AND CANCELLATION OF GRANT OF EASEMENT

Grantors: Kohanaiki Shores, LLC
Tax Map Keys: (3) 7-3-068: 003, 037 and 038
(formerly a portion of TMK: 7-3-068: 003 and 004)
The Manager-Chief Engineer recommended that the Water Board accepts these documents subject to the approval of the Corporation Counsel, and that either the Chairperson or the ViceChairperson be authorized to sign the documents.

MOTION: Ms. Lee Loy moved to approve; seconded by Mr. Elarionoff.
Mr. Inaba explained that the first item, the Amended and Restated Grant of Easement, had originally had a term limit on the originally easement. Ms. Self had worked with Queen Lili ‘uokalani Trust (QLT) to make it a standard, i.e., perpetual, easement. DWS discovered that the easement had expired today, amid negotiations by QLT to make improvements on their land.

The second item, regarding the Release and Cancellation of Grant of Easement, involves three slivers of land with nothing on them, which DWS wants to get rid of because DWS does not need them. The easement is now being developed upon, and the three slivers are part of a large easement that went through the entire development for Kohanaiki's Phase 1. The slivers are portions of frontage of parcels that became part of a new subdivision attached to the main road, where the original Grant of Easement was. With the main infrastructure now in, Kohanaiki is developing pods along that main road, with the main water line surrounding a loop road. Now that the parcels are attaching to the roads, DWS is left with those slivers of land that it does not need.

Mr. Uyeda said that it sounds like the waterlines are already in the roadway right-of-way; the easement that DWS is cancelling would give the pods a clear title, because the easement would no longer encumber those lands that are adjacent to the roadway.

Mr. Inaba confirmed this, noting that the easement actually extended a little beyond the road, for ease of description on the original loop road easement. He noted that the property had a few hydrants that extend beyond the roadway itself.

Mr. Uyeda asked whether there are conditions like this where DWS might cancel larger areas, now that the waterlines are already in.

Mr. Inaba said that may happen, as the pods are developed.
Mr. Elarionoff took issue with the use of the term "acceptable" when describing water systems slated for Dedication; he thought the term was too lukewarm.

Mr. Arikawa said it was just a matter of semantics.

Mr. Inaba explained that the intent is that the system in question meets DWS standards, and that DWS can accept the system. He also explained that the use of the word "minimum," as in "minimum standards," is the benchmark that developers must design for.

Mr. Elarionoff said that the threshold is "acceptable;" anything above that is still "acceptable."
Mr. Inaba confirmed that.
Ms. Wilson asked for an explanation of a "perpetual" easement.
Mr. Inaba said that there is no timeline associated with a perpetual easement; DWS holds the easement until DWS no longer needs the easement, or DWS is willing to give it up.

Ms. Self said that before this, the Grant of Easement had a termination date whenever there was a new QLT lessee. DWS has to have an easement which continues, notwithstanding a new lessee coming in, she said. Therefore, Ms. Self revised the agreement so that it matches what DWS normally gets in its Grants of Easement; the DWS easement will continue until such time as DWS decides otherwise.

ACTION: Motion carried unanimously by voice vote.

## B. POWER COST CHARGE:

The Department proposes reducing the Power Cost Charge from $\$ 2.32$ to $\$ 1.85$ per thousand gallons to reflect a decline in power costs for the Department's wells and pumps. A Public Hearing will have been prior to this Board meeting to accept public testimony on this change.

The Manager-Chief Engineer recommended that the Board approve the reduction of the Power Cost Charge from \$2.32 to \$1.85, effective September 1, 2015.

ACTION: Mr. Arikawa moved to approve; seconded by Mr. Balog, and carried unanimously by voice vote.

## C. ENERGY STUDY UPDATE REPORT:

Mr. Young introduced Mr. Steve Bolles, energy consultant from Process Energy Services, who provided a report on his energy evaluation study for all districts. Hawai'i Energy provided $\$ 65,000.00$ for this study.

Mr. Bolles noted that in 2014, DWS used 50 million kilowatt-hours (kWh) of energy, at a cost of $\$ 22$ million, pumping approximately 17 billion gallons of water. He summarized some past energy initiatives by DWS including:

- Creation of the Energy Analyst position;
- Use of premium efficiency motors;
- Investment in an aggressive leak detection program, which has been very successful;
- Application of Hawaiian Electric Light Company (HELCO) Rider M discount rate schedules;
- Investment in the Waimea Treatment Plan Improvements, a recent project;
- Initiation of the Lālāmilo Wind Farm project.

Mr. Bolles said that these are great initiatives that have improved energy efficiency, and optimized system operations. These initiatives also reduced HELCO power plant emissions.

Turning to DWS's energy use and pumpage for the past five years, Mr. Bolles said that energy use increased by 3.5 percent, and pumpage decreased by 10 percent. The drop in pumpage is partly due to simple demand, and to some degree it is based on the leak detection program, which has worked out well. Meanwhile, energy costs over the past five years have skyrocketed by 28 percent, he said.

Mr. Bolles explained that DWS's energy costs have increased due to the HELCO cost per kWh. Other factors include the following:

- DWS has more deepwells on line. Mr. Bolles explained that this improves system reliability, and allows greater flexibility in system operations. However, when the additional high-horsepower large wells are taken offline and another deepwell is used, DWS incurs demand costs that stick with that account. The upshot is that monthly, DWS is charged for that demand charge even though DWS is not using the well anymore. That demand cost has a significant impact, and is one major cause for the energy costs to jump. He noted that operating deep wells continuously with variable frequency drives (VFDs) improve well reliability, but if the GPMs are too low, it affects the efficiency of the pump.
- Operator Priorities. DWS staff focuses on water quality and system reliability; these take priority over efficiency, Mr. Bolles said. He said that energy costs should also be emphasized to operators, so that they understand the actions that they take, and how the actions affect energy use and costs.

Mr. Bolles explained that the energy evaluation study involved a review of DWS's major pump systems, first focusing on the large-horsepower pump systems with higher energy costs, and then collecting field data on all of the pumps. By analyzing all of the data, the study was able to discover some opportunities for DWS to expand existing efforts to achieve greater energy savings, Mr. Bolles said. He cited DWS's existing Rider M program, which has reduced energy costs over the years. The study also looked at capturing potential energy savings by using more springs and surface water sources to reduce pumping energy.

Mr. Young asked Mr. Bolles to explain the Rider M program.
Mr. Bolles said that Rider M is an agreement that DWS has with HELCO, whereby DWS curtails pump operation over a two- to four-hour window in exchange for a credit on DWS's electricity bill. DWS has been on this program for a number of years, and the energy credits average of approximately $\$ 300,000.00$ per year. It is a matter of determining which wells can be taken offline during that four-hour window, he said. DWS operators noted to Mr. Bolles that there are some limitations in the system that make taking some wells offline infeasible.

The study included various types of measures, or projects as follows:

- Operational Measures. These are cost-saving projects that pay for themselves in less than a year, and do not require significant capital or construction costs;
- Energy Management Practices. These are projects that are considered "good efficiency practices," but may not have measurable cost savings;
- Energy Conservation Measures. These are traditional energy projects that require a capital investment, and have a simple payback of one to eight years.
- Energy Supply Measures. These include projects that reduce energy costs, but not energy use. These measures include Rider M agreements and power factor correction capacitors. These are any measures that save on demand, which do not affect DWS's consumption.
- Future Energy Measures. These are energy-related projects that can be considered as design upgrades in the future. These do not have a payback that can be identified at this time.

Mr. Bolles said the study identified total energy cost savings of $\$ 2.2$ million, with an estimated total project investment of $\$ 5.2$ million, which provides a simple payback of 2.3 years. This is a return on investment of 330 percent, using a 10 -year equipment life. The projects, taken all together, would result in reduced power plant emissions, based on a savings of 5.6 million kWh . Mr. Bolles said he believed it was well worth it to pursue these projects.

Mr. Bolles noted earlier that DWS already has in place a couple of recommended energy management practices, including:

- Assignment of an Energy Management Analyst. Ms. Hayducsko has taken on this position, Mr. Bolles said.
- Hiring an additional water service investigator. This has already taken place.

Mr. Bolles recommended a surface water savings study, to explore the optimized use of the remaining surface water sources that are available, and a study into water treatment versus pumping from deepwells.

The formalization of an Energy Management Program would be a no-cost item, which could be implemented quickly. It is a matter of establishing an Energy Policy, and formalizing the process of how energy projects are pursued, Mr. Bolles said.

The surface water savings study would require some funding, but it would be well worth it, considering the potential savings, Mr. Bolles said.

Turning to Energy Supply Measures, Mr. Bolles said that these would have a direct impact on DWS's energy cost savings. The measures include:

- Power Factor Correction.
- Reduction of Two-Pump Operation. Some of the set points for the tank levels are set so that two pumps come on at the same time. By having only one pump come on, and by filling the tank a little bit slower, DWS can reduce its demand charge.
- Optimization the Ride M agreements.
- Adding new Rider M Agreements.
- Installation of VFDs for Back-up Wells. VFDs are used to reduce friction losses; by slowing down the flow, overall energy use is reduced. Using VFDs for back-up wells will reduce DWS's demand charges. When DWS needs to exercise its deepwells, it can do so at a lower flow rate, and can avoid incurring the high demand charge, Mr. Bolles said.
Some of the above measures can be pursued by in-house staff, and can be done fairly quickly. Mr. Bolles said that some of the other measures can be pursued as part of a Performance Contract, which Mr. Bolles promised to elaborate upon later in the presentation.

Mr. Bolles listed Operational Measures that have a payback of less than one year, including:

- Optimizing the use of existing springs;
- Using as much of the Waimea Water Treatment Plant flow as possible;
- Reduction of energy use from deepwells;
- Using the most efficient pumps available.

The above measures are easy to investigate, with a quick payback, Mr. Bolles said.
Regarding Energy Conservation Measures, Mr. Bolles cited the following:

- Purchase of leak detection loggers. This has already begun, and was supported with $\$ 130,000.00$ in funding from Hawai‘i Energy.
- Pump Efficiency Improvements. Mr. Bolles said that this was just a matter of improving efficiency of some of the pumps which have degraded efficiency levels, which were found during the study's field testing.
- Replacement of Cla Valves with Butterfly Valves. This reduces the overall frictional head of the system. This has already been pursued, and it is just a matter of continuing and expanding this program.
- Replacing Flow Meter Strainers. This has already been pursued, and it is just a matter of continuing and expanding this program.
- Downsizing the Haleki'i Well Pump.
- Replacement of the VFD for the Haleki‘i Well Pump.

Mr. Bolles identified Future Energy Measures as follows:

- Considering Larger Storage Tanks for New Sites.
- Investigation of Additional Hydro Generation Project.
- Evaluation of Cost Savings for Combining the Pi‘ihonua \#3 Accounts.

Funding energy projects has always been a challenge for DWS, especially with the Power Cost Charge (PCC) set up the way it is, Mr. Bolles said. The study recommends that DWS redefine the PCC, to allow DWS to set up a dedicated energy fund from the savings generated, to pursue new energy projects. This would allow DWS to continually invest in energy projects; it would require additional research to see how a redefinition of the PCC could be done.

The other recommended avenue for funding is to use Performance Contracts, Mr. Bolles said. Performance contracting is a project-delivery method that DWS should consider; performance contracting is basically packaging the projects and working with a performance contractor to guarantee the project costs on a fast-track, design-build basis. The savings would be guaranteed, and the savings will pay for the project. The performance contractor arranges for the financing, which is typically in the form of a municipal lease, Mr. Bolles said. He described performance contracting as a nicely packaged way of pursuing energy-related projects. This is a very fast method that compiles the projects together, and projects can be done fairly quickly, he said. DWS would be realizing savings very quickly using the performance contract method.

Mr. Bolles recommended the following initiatives:

- Pursue both funding options, to provide DWS with the option to choose the most advantageous approach for each project;
- Formalize the Energy Management Program by developing an Energy Policy, to emphasize the importance of the program to DWS staff;
- Have the Energy Analyst provide updates to the Board on a regular basis;
- Consider funding for the proposed surface water use evaluation, to provide detailed data to evaluate long-term savings and costs.
- Encourage accountability and request measured "real" savings," instead of using the original estimates. This needs to be done, to ensure that the projects provide the savings originally intended.

Mr. Elarionoff asked how Mr. Bolles in one word would evaluate DWS's current measures.
Mr. Bolles said that DWS has pursued a lot of different ways of reducing energy costs and improving efficiency; the challenge now is to raise the bar, to see if DWS can reach an even higher level of efficiency. The study identified a few projects that could be proposed to achieve that level of efficiency, which would put DWS in the top 10 percent of municipalities that Mr. Bolles has encountered in his travels.

Mr. Uyeda said that he thought that HELCO no longer offered Rider M programs for commercial uses, such as wells; instead, HELCO forces commercial projects onto Schedule J or Schedule P.

Mr. Bolles said that Schedules J and P are rate schedules, but Rider M is a separate agreement.
Mr. Uyeda said yes, but HELCO does not allow customers to go into Rider M anymore, and instead forces them on to Schedule P.

Mr. Bolles said that even if a customer is on Schedule P, the customer can still have a Rider M agreement as part of that.

Mr. Uyeda said that his company had tried that, but they could not get a Rider M agreement.
Mr. Bolles said that he had talked with Mr. Jon Arizumi at HELCO, and Mr. Arizumi indicated that future projects could be brought under the Rider M program.

Mr. Young agreed, saying that DWS is looking at future projects under Rider M; he did not know why HELCO would say it was not available anymore.

Mr. Uyeda said that he would be interested in hearing more about that.
Mr. Bolles said that Mr. Arizumi had reviewed the study and did not raise any issues regarding the study's recommendations on future Rider M agreements.

Mr. Uyeda said that his company runs wells, just like DWS. HELCO would not let his company do a Rider M agreement, he said. He noted that his company has seven wells, and an eighth well is being drilled.

Mr. Inaba noted that this was not in the Keauhou Aquifer.
Ms. Lee Loy asked about the recommendation on Page 7 of the presentation, that DWS consider larger storage tanks for new sites. She asked how large those sites are, and asked if there were a formula for upsizing the tanks (for example, to go to a two million-gallon tank, from a one million-gallon tank.)

Mr. Bolles said that it varies, and the study could not quantify. It is really a matter of the capacity of the wells, and the usage of the system, while getting that two- or four-hour window of being able to shut the pump off, and use the capacity of the tank during that time period.

Ms. Lee Loy said she just wanted to understand the formula. She said that she is involved in planning matters, and asked if the study took into consideration the type of future growth in the surrounding area.

Mr. Bolles said no, he did not get into that.
Ms. Lee Loy asked about the suggestion to redefine the Power Cost Charge (PCC), to allow DWS to set up a dedicated energy fund. Directing her question to the Manager-Chief Engineer or Corporation Counsel, Ms. Lee Loy asked how DWS would change its current PCC formula; she said she thought it was codified in Hawai'i Revised Statutes (HRS). She asked what kind of amendments would be made; she asked whether it would be a DWS administrative policy revision or a revision of HRS.

The Manager-Chief Engineer said that the Department could look at what legal requirements it is bound by. He said that in any case, the Board and the Department would look into how it would be done; he expected that any revision of the rate component would have to go to Public Hearing.

He said that the suggestion is that DWS needs to capture some sort of dedicated funding for energy projects.

Ms. Lee Loy said yes, that would enable DWS to become more self-sufficient.
The Manager-Chief Engineer said that the way the PCC is now, there is really no incentive for DWS to fund energy efficiency projects; all that DWS has is CIP funds and Operations and Maintenance (O\&M) funds. He noted that the PCC is linked to the fluctuation from the utility's side, and is just passed on to the customer. If DWS were to put an energy efficiency project on the CIP list, it would take funds away from some other project such as a pipeline replacement, etc. Therefore, DWS needs to look at options that can be pursued to fund energy projects.

Ms. Lee Loy noted that later on today's Agenda, the Board will discuss the Rule Amendment. There may be an opportunity there for the Board to open the door to the possibility of other Rule changes that need to occur.

Chairperson Robinson said he was really impressed by the fact that DWS spent $\$ 22$ million to pump 17 billion gallons of water. He recalled seeing a chart that showed that the average water use per customer in terms of gallons per day was actually decreasing. He asked if that was correct.

Mr. Takamine said that came out of Ms. Ann Hajnosz's presentation of the water rate study earlier this year.

Chairperson Robinson asked if that decrease in water use could be considered an energy-saving cost, because with less usage, there is less pumpage. Consequently, DWS's costs of delivery would be reduced. He noted that the population, meanwhile, continues to grow. He seemed to recall that the average use was around 480 gallons per day.

The Manager-Chief Engineer said he did not recall the exact figure, but Ms. Hajnosz did report that overall consumption had either remained flat or declined slightly. With the population increasing, the consumption per household or per person is decreasing. He noted that the cost of the study was $\$ 65,000.00$, and there is still quite a bit more that could be done. He noted that Mr. Bolles had proposed performance contracting. This would be something a bit new for DWS, but it is something that DWS could pursue. The Manager-Chief Engineer said he would like to pick the brains of his counterparts on Oahu, who are doing some performance contracting. He said his understanding was that the process for performance contracting resembles the RFP (Request for Proposals) process. The process is not cut-and-dried regarding specifications, unlike some other projects. DWS would get some teams to put together their proposals, and the challenge is on the teams to provide cost-saving measures. The teams would benefit by providing cost savings to DWS, as the end user, he said. The performance contractor performs the contract at virtually no out-of-pocket cost to DWS; they make their money by taking some of those savings. This is basically a win-win scenario, with DWS currently having no such funding mechanisms earmarked for energy projects. As Mr. Bolles said earlier, the performance contracting projects could be bundled as site-specific projects; this would make it viable for a contractor to pitch it to DWS as a cost-saving enterprise.

Chairperson Robinson asked if the Manager-Chief Engineer could envision this kind of arrangement, whereby a contractor would perform all of these functions together.

The Manager-Chief Engineer said yes, he could.
Chairperson Robinson said this could be put out for bid, and there would be multiple bids.

The Manager-Chief Engineer said yes, it would be like an RFP-type of procurement.
Mr. Bolles said that performance contractors are unique in that they are able to do a whole project by fronting it as a design-build; they are actually the contractor, and they bring in the subcontractors. The performance contractor arranges the financing, and guarantees the savings; this allows them to do a turn-key project. This has worked well in the past for a lot of municipalities, Mr. Bolles said, citing a project done by the County of Kaua'i on some municipal buildings.

Chairperson Robinson asked how the financing for these improvements would work in DWS's case.

Mr. Bolles said that typically a tax-exempt municipal lease is done; the performance contractors can provide more details on the options available, but a tax-exempt municipal lease is usually the way it is done. He said a performance contract is very easy to justify, because on one hand, there are the savings that are guaranteed, and on the other hand, the project cost is guaranteed and is turn-key. The financing company sees such a project as fairly straightforward, in terms of being able to support the project with the savings.

The Manager-Chief Engineer clarified that the funding does not come from DWS.
Mr. Bolles confirmed that the funding is arranged separately.
Chairperson Robinson said that the returns on investment are incredible.
Mr. Bolles said yes, absolutely.
Chairperson Robinson, turning to Page 6 of the report, said that the first-year annual savings from the recommended Operational Measures were a whopping 18 percent return. He asked what a VFD was.

Mr. Bolles said that it is a Variable Frequency Drive, which helps to slow the pump down.
Chairperson Robinson said that doing all four of the recommended Operational Measures listed in the report bring very big savings (i.e., $\$ 940,241.00$ in first-year annual savings, versus an initial cost of \$156,667.00.)

Mr. Bolles said yes, it is a very good project.
Chairperson Robinson asked if Mr. Bolles had seen this done in other localities, where this degree of savings was realized.

Mr. Bolles said he absolutely did. The nice part about the report is that a performance contractor, even a contractor who was new to the area, could look at the report and see the opportunities right there in the numbers. The performance contractor can see that it is worthwhile for them to invest the time and energy to package the project; this is basically a gift-wrapped project, with all of the numbers in place, Mr. Bolles said. The performance contractor would just need to go through and finalize the numbers; the contractor could also expand the scope and do projects on some of DWS's other buildings that the report did not cover. (He noted that he focused on the pump systems for this report.) DWS could really capture a lot of savings that might be out there, he said. The simplicity of doing all of these things in one contract is pretty nice, Mr. Bolles said.

The Manager-Chief Engineer said that there are advantages that come from being a small utility and a County department. This kind of performance contracting has been done in the State, and there already is an approved list of performance contractors with the State Procurement Office. The beauty of that is that DWS does not need to screen the contractors, he said. The Honolulu

Board of Water Supply is apparently doing a performance contract right now, so DWS will not be a guinea pig. Performance contracting has been done, and there is a track record of success, he said. It is just a matter of DWS taking the first steps, and going forward, the Manager-Chief Engineer said.

Chairperson Robinson expressed surprise that there was a list of already-approved performance contractors.

The Manager-Chief Engineer said he did not know exactly who they were, but there is such a list.
Chairperson Robinson noted that some of the recommended Energy Conservation Measures did not have a noteworthy return. However, the recommendation to downsize the Haleki‘i Well Pump promised substantial savings, just by replacing a pump.

Mr. Bolles said that there is a million-dollar energy cost to operate some of DWS’s wells, and there can be significant savings in making adjustments to how a well is operated. The Haleki‘i Well Pump presents real possibilities for significant savings, by adjusting the size of the pump and adjusting how the VFD is operated.

Chairperson Robinson said that the hard numbers on the Energy Conservation Measures and Energy Supply Measures show that doing these projects makes all the sense in the world.

Ms. Wilson asked Mr. Bolles how he prioritized his Action Items.
Mr. Bolles said that the numbering of the Action Items do not really represent a prioritization of the projects; it was more of a progression of how the projects were identified in the report. It would be tempting to just pick the really fast payback projects, but the comprehensive approach would be to combine the fast-payback projects with the long-payback projects. In that way, DWS would get a better package of improvements for overall efficiency. He reiterated that he did not prioritize the projects.

Chairperson Robinson asked the Manager-Chief Engineer whether DWS would want to contract out for the actual, hard improvements that are recommended here.

The Manager-Chief Engineer said definitely so. He said he had just been signaling to Mr. Young that the Haleki‘i project is something that DWS should take a look at. Among the recommendations was to hire an Energy Management Analyst, he said, and Ms. Hayducsko was hired to do both civil engineering duties and the energy management portfolio. DWS intends to do quarterly energy updates, he said. DWS will definitely pursue some of these recommended projects, the Manager-Chief Engineer said.

Chairperson Robinson asked whether DWS would look at them project by project by project, or wrap them all up in one contract.

The Manager-Chief Engineer said DWS would do both. Some of the short-payback projects like Haleki‘i can be looked at on an individual basis. Longer-term payback projects, along with smaller-scope projects, can perhaps be bundled in a performance contract. He noted that Mr. Bolles’s scope was admittedly limited, with a budget of only \$65,000.00 to look at DWS’s entire operations. The Manager-Chief Engineer said he understood that a performance contractor does a more in-depth audit for their RFP, looking deeply into equipment, savings, etc. The performance contractor can throw in sweeteners like LED fixtures for the utility's buildings, or photovoltaic panels for the parking lot. The performance contractors seeking DWS's business will come up with a more enhanced, robust audit, and offer a proposal with guaranteed savings to the Department and the Board. This would not be like a competitive sealed bid, where DWS
would be forced to take the lowest bid, he said. With an RFP, there are other criteria that can be used, besides just cost alone; there can be things like guaranteed savings, warranty offers, training, etc. Performance contracting will be a new thing for DWS, and it was time that the Department took a look at it, the Manager-Chief Engineer said.

Mr. Elarionoff asked where Mr. Bolles's company was based.
Mr. Bolles said he was based in New Hampshire.
Mr. Elarionoff asked Mr. Bolles why Mr. Elarionoff should believe what Mr. Bolles put in his report. He said he was serious in asking this, because he was trying to find out what qualified Mr. Bolles to fly all the way over to tell the Board what can be done better.

Mr. Bolles explained that all he does is do energy evaluation work, looking at water and wastewater facilities, municipalities, etc. He said he has been doing this for 20 years throughout the United States and overseas, as one of 12 Department of Energy-certified pump system analysts. He said that he also worked with the United Nations on a regular basis, doing projects in other countries as far as helping them establish energy management projects. This is basically what Mr. Bolles focuses on. Performance contractors also hire Mr. Bolles to do more detailed evaluation and packaging of performance contract projects. Mr. Bolles said that he tried to bring the DWS evaluation to a certain level, within the budget constraints; it will provide a framework that performance contractors can add to, providing more detailed information. He said that he believed that DWS was set up here for that next step.

The Manager-Chief Engineer noted that Mr. Bolles had communicated with HELCO, and had included their rate schedules in the DWS evaluation.

Mr. Bolles confirmed that he had done this, to make sure that all of the recommendations were based on real numbers, based on HELCO's rates. He noted that he had worked with DWS since 1998 or 1999 on previous evaluations, so he is familiar with DWS's system and staff.

Chairperson Robinson asked Mr. Bolles if he was an engineer.
Mr. Bolles confirmed this.
Chairperson Robinson thanked Hawai‘i Energy for funding the DWS evaluation.
D. MATERIAL BID NO. 2015-05, FURNISHING AND DELIVERING SPARE DEEPWELL PUMP AND MOTOR SETS FOR WAIMEA DEEPWELL, KEAHUOLŪ \#1 DEEPWELL, AND PI‘IHONUA \#1 DEEPWELL C FOR THE DEPARTMENT OF WATER SUPPLY:

Bids were received and opened on August 13, 2015, at 1:30 p.m., and the following are the bid results. All Sections are established price agreements for materials.

| SECTION | DESCRIPTION | Beylik Drilling and <br> Pump Service, Inc. | Derrick's Well Drilling <br> and Pump Services, LLC |
| :---: | :--- | :---: | :---: |
| $\mathbf{1}$ | WAIMEA DEEPWELL | $\$ 647,000$ | No Bid |
| $\mathbf{2}$ | KEAHUOLÜ \#1 DEEPWELL | $\$ 542,000$ | $\$ 161,239$ |
| $\mathbf{3}$ | PI‘IHONUA \#1 DEEPWELL C | $\$ 155,000$ | $\$ 165,279$ |

The estimated cost for the various pump and motor sets were as follows:

- Waimea Deepwell: \$380,000
- Keahuolū \#1 Deepwell: \$160,000
- Pi‘ihonua \#1 Deepwell C: $\$ 160,000$

The Manager-Chief Engineer recommended that the Board award the contract to the following bidders for MATERIAL BID NO. 2015-05, FURNISHING AND DELIVERING SPARE DEEPWEEL PUMP AND MOTOR SETS FOR WAIMEA DEEPWELL, KEAHUOLŪ \#1 DEEPWELL, AND PI‘IHONUA \#1 DEEPWELL C FOR THE DEPARTMENT OF WATER SUPPLY, by Sections to the following for the amounts shown above, and that either the Chairperson of the Vice-Chairperson be authorized to sign the contract(s), subject to review as to form and legality of the contract(s) by Corporation Counsel.

## Section 2 - Keahuolū \#1 Deepwell to Derrick's Well Drilling and Pump Services, LLC.

## Section 3 - Pi‘ihonua \#1 Deepwell C to Beylik Drilling and Pump Service, Inc.

The Manager-Chief Engineer recommended that the Board not award Section 1 - Waimea Deepwell, due to the high cost of the bid. Staff will seek alternate methods of procurement, in accordance with procurement rules.

MOTION: Ms. Lee Loy moved to approve; seconded by Mr. Takamine.
The Manager-Chief Engineer noted that the low bids for Sections 2 and 3 fell within the estimated cost, and DWS recommends award to the lowest responsible bidder for those Sections. However, the sole bid for Section 1 did not fall within the estimated cost, so DWS has the option to either enter into direct negotiations, or to solicit alternative methods of procurement, he said.

Mr. Uyeda asked if the cost for Sections 2 and 3 included the push-pull.
The Manager-Chief Engineer said no, this is just a spare pump and motor.
Mr. Uyeda asked how many working days it would take to have the equipment delivered.
The Manager-Chief Engineer said it would be 420 days for delivery on the Waimea equipment.
Mr. Takamoto said it was 240 days for Keahuolū, and 150 days for $\mathrm{Pi}^{\prime}$ ihonua.
Mr. Elarionoff said he was really bothered by the fact that only one person bid on Section 1, and by the fact that the price was so much higher than the estimated cost. He was also bothered the bids on Section 2, which had such a wide difference in price. He asked if anyone knew why; he also asked if this was the one bidder's way of passing up the bid.

Mr. Young said that in Sections 1 and 2, Beylik was bidding on a Byron-Jackson pump and motor, the Cadillac of its class. Beylik had the opportunity to bid on the alternative brand of motor, SME, he noted.

Mr. Takamoto said that the alternative pump brand was National Pump.
Mr. Elarionoff asked whether DWS would have been pleased if Beylik had come within the estimated cost while using the Cadillac brand for its bid.

Mr. Young said that it really comes down to pricing. The bid would have to meet the specifications, and if it was the SME that was the low bid, DWS would have awarded that. It would be very unlikely that the much pricier Byron-Jackson pump and motor would have been the low bid.

Mr. Elarionoff asked why Beylik used the Byron-Jackson.
Mr. Young said he said it was unusual; he did not know the reason.

Mr. Balog asked how long the life span of the Byron-Jackson was, versus the SME. He said that if the lifespan was three times more, DWS should probably buy that pump.

Mr. Young said that DWS has a few SMEs in use, and they are doing fine. He did not have any long-term data to compare the life spans of the two brands. Ideally, DWS would love to have the Byron-Jackson, but its price was really high: about $\$ 500,000.00$ for a pump and motor. The SMEs have had a life span so far of two to three years, whereas the typical Byron-Jackson might have seven to 10 years. Right now, DWS is getting at least two or three years' of service life from the SMEs, but the long-term data is not yet available.

Mr. Balog asked if the manufacturer provides that kind of data.
Mr. Young said no, nobody is going to provide that kind of data.
The Manager-Chief Engineer agreed, and said that every down-hole situation is different, and the alignment of the hole is going to be different, and the head that it is pumping will also vary, etc. Each hole has had different characteristics. To answer Mr. Balog's question, he said that he did not anticipate one piece of equipment to have three times the life span of another piece of equipment - not on that order of magnitude, in any case.

Mr. Uyeda asked what determines which wells get a spare pump and motor, while other wells do not get spare pumps and motors. He asked if it is DWS policy to get spare pumps for the majority of the well sites.

The Manager-Chief Engineer said no, DWS does not have the luxury of having an unlimited source of funds. He asked Operations staff to prioritize which well sites should have spares. One of the factors was facilities that a certain pump and motor could fit. One criteria was wells where there was no redundancy in the system, i.e., where that well was the only well serving the area, or a well whose pump and motor had not been replaced in a while. He cited Haleki'i Well, saying that if that well went down, Kona Hospital would not have water. The downside of having spares stored on hand is that typically, the warranty runs out, so DWS does not want to have spares for everything. That is the balance that the Department is trying to find, the Manager-Chief Engineer said.

Mr. Young said that DWS looks at the size of the service area that the well serves, and the Department also looks at whether a motor could be used elsewhere. He noted that DWS has quite a few 600 -horsepower motors, citing Haleki ${ }^{〔} i$ and Hualālai wells. DWS is not keen to have a lot of inventory, for fear that the warranty will run out and cost DWS money to service the equipment. The Department is trying to avoid any potential emergency by having a pump and motor on hand. Medical facilities like Kona Hospital, Hilo Hospital, etc., are where DWS makes sure that it has back-ups. There are a lot of criteria, but the Department is trying to prioritize, he said.

Mr. Balog asked why DWS is not buying equipment directly from the manufacturer, and is instead buying it from drilling companies.

Mr. Young said that DWS would like to buy directly from the manufacturers, but they always tell DWS to go through their dealer. The dealer, it turns out, is the drilling company. It is a lot easier for the manufacturers to go through the local dealers, who are the drilling companies. He said he wished that DWS could buy directly from the manufacturers, which would save DWS money on the middle man.

Mr. Balog said that was why he asked the question.

Mr. Young said that he is always trying to do things more cheaply, whenever he can.
Mr. Elarionoff asked why there was such a difference between the two prices on the Section 2 bid.

Mr. Young said he was pretty sure that was because one bidder was using the Byron-Jackson, and other bidder was using the SME.

Mr. Elarionoff asked what happened on Section 1.
Mr. Young said he did not know why Derrick's did not bid on that one.
Mr. Elarionoff asked why Beylik’s bid was so much higher than the estimated cost.
Mr. Young said that the Department initially thought that Beylik would bid using the SME, but they apparently bid the Cadillac, the Byron-Jackson.

Mr. Takamine asked if Beylik would be a factory-authorized dealer for Byron-Jackson, meaning that nobody else can supply that product.

Mr. Young said that was correct; Beylik is the sole dealer here.
Mr. Takamine said that was why DWS cannot specify the equipment brand.
Mr. Young said that once DWS gets the motor, the Department can rebuild it and then anybody can do it; it is just a matter of getting that core.

Mr. Takamine said that if DWS were to specify Byron-Jackson, then DWS would basically have only one bidder.

Chairperson Robinson said he was bothered by how DWS appears to be held hostage by two bidders. It seems that Beylik and Derrick's are the only two bidders that DWS has. If they do not want a job, such as at Ocean View, they simply do not bid, he said. He asked how DWS could get a bigger pool of bidders, and asked if DWS could strong-arm the drilling companies to take jobs like Ocean View. He said that the contractors had to take the good with bad; he likened it to buying a pool of mortgages, whereby one gets the good ones and the bad ones, but one gets them all together.

Mr. Balog asked if DWS could wrap the bids into one package.
The Manager-Chief Engineer said yes, the Department could get a bit more creative in its thinking, by putting together several jobs. DWS's challenge is that it is hand-cuffed by Procurement Law requirements. He speculated that the shortage of bidders could be a matter of economics; DWS heard of a potential start-up, but that has not happened yet. The third major driller, Water Resources International, has chosen not to bid on these repair jobs, and it is only bidding on drilling holes. In the absence of responsive bidders, DWS's only option is to resort to direct negotiations. He expressed hope that DWS can communicate with one or two of the parties, and encourage them to provide quotes. However, DWS cannot force them, he said.

Chairperson Robinson said that DWS will be looking for alternative methods of procurement for the Waimea and Ocean View jobs. He asked whether DWS could explore if there are other contractors besides Beylik and Derrick's.

The Manager-Chief Engineer said yes, DWS can see if there are others.

Mr. Young said there are other drilling companies, but the business calls for a big investment in equipment. The drilling rigs are very expensive, and moving the rigs from one island to another costs $\$ 10,000.00$ one-way. With a $\$ 20,000.00$ round-trip involved, contractors from Oahu would have a hard time competing; they would also have to have personnel here. That narrows the pool of drillers out there, he said.

The Manager-Chief Engineer said that the Department will see if it can do direct negotiations to see if somebody will decide to make the investment in doing business here.

ACTION: Motion carried unanimously by voice vote.
E. UPDATE RE: NATIONAL PARKS SERVICE'S PETITION TO DESIGNATE KEAUHOU AQUIFER AS A GROUND WATER MANAGEMENT AREA:

The Manager-Chief Engineer said that the Commission on Water Resource Management (CWRM) came to Kona for their August 17, 2015, meeting. DWS staff shared the County's Water Use and Development Plan (WUDP) update. Among the other Action Items was a request by the Department of Hawaiian Home Lands (DHHL) for a reservation of 3.398 million gallons per day (GPD) of water from the Keauhou Aquifer System Area.

Chairperson Robinson said that the Manager-Chief Engineer performed excellently.
The Manager-Chief Engineer said that CWRM decided to deny the National Parks Service’s Petition for Declaratory Order asking if CWRM could designate an area smaller than the entire Keauhou Aquifer. CWRM approved DWS’s WUDP update, preliminarily, and wants to see Phase 2 of the update before the Commission gives its unconditional approval. The bottom line is that DWS has now gotten approval to proceed with the time extension in order to provide CWRM with a scope of work for Phase 2. Phase 2 will include some source development strategies, i.e., to indicate where DWS plans to put new wells; Phase 2 will also include a non-consumptive use component. That effort will be a bit difficult to quantify, because of the lack of quantifiable information available on Traditional and Customary Practices using ground water, where and what amount of ground water is used in such practices, etc. There really is no such information available, the Manager-Chief Engineer said. DWS is anticipating some kind of outreach effort on that. There was no decision on the overall petition to designate the entire Keauhou Aquifer, the Manager-Chief Engineer said.

Ms. Lee Loy praised the Manager-Chief Engineer and the DWS staff for their masterful presentation at the CWRM meeting; everybody brought their "A" game. She cited the astute explanation of DWS's long-range plans for water, relating the plans to build-out scenarios, but unfortunately, the explanation was over the heads of some of those present. She noted the collegial relationship between DWS and CWRM staff. She asked the Manager-Chief Engineer for clarification regarding the denial of the Petition for Declaratory Order to designate a smaller portion of the Keauhou area. She said that her understanding was that this process arose through mediation; she asked if DWS had gotten any indication on whether mediation would continue. She wondered if the parties are holding their respective positions until DWS completes its Phase 2 of the WUDP update.

The Manager-Chief Engineer said that he had not heard anything specific about mediation talks. He noted that in December 2014, CWRM issued a Preliminary Order directing the National Parks Service (NPS) and the County to meet to discuss alternative paths to designation. There were two such meetings in March, and a clean-up event in April in which the County participated at the Kaloko-Honokōhau Historical National Park. However, since then, no formal mediation meetings have taken place. The Board's special attorney, Mr. Ben Kudo, offered to CWRM
another alternative, citing a provision in the HRS for CWRM to resolve disputes. Mr. Kudo's recommendation to CWRM was to utilize that option available to them, to have their staff come up with a reduced area for consideration. He also recommended that all of the parties, including anyone with a vested interest in that area, such as land owners, etc., be part of this dispute resolution. Commissioner Milton Pavao liked that idea, and Commissioner Kamana Beamer seconded, but the recommendation did not pan out in formal discussion or action. However, the CWRM Board as a result voted to deny the NPS Petition for Declaratory Order. Therefore, it remains to be seen whether CWRM will pursue the dispute resolution option down the road, the Manager-Chief Engineer said. While there is no indication of mediation right now, DWS does plan to huddle with the Mayor's Office and the Planning Department to see what the County wants to do, going forward. He thanked Ms. Lee Loy and the Board for their support.

Chairperson Robinson asked what amount of water that DHHL had sought for its reservation in the Keauhou Aquifer.

The Manager-Chief Engineer said they were asking for 3.398 million GPD.
Chairperson Robinson asked if that was approved.
The Manager-Chief Engineer confirmed this.
Chairperson Robinson said the discussion at the CWRM took so many twists and turns, that it was difficult to follow; it was not clear to him whether the DHHL request ever got approved.

Ms. Lee Loy, who attended the meeting, said that the reservation was folded into DWS's WUDP update; those numbers are all there as far as full build-out scenarios. The numbers were not 20year horizon projections.

The Manager-Chief Engineer said yes, that was everything that DWS knows of, including some level of approval on State Land use, County zoning, water commitments, developer agreements, empty service laterals, DHHL reservations, etc. There was no time frame or time horizon assigned to the graph that showed 28 million GPD for full build-out, he said.

Chairperson Robinson agreed that the development community understands that while a development may be permitted, it may never be built, or the development may be reduced considerably. That concept seemed to be a difficult concept for some of the CWRM Board to grasp, he said.

The Manager-Chief Engineer said DWS's approach was to present three methods of projection:

- Full build-out, based on what DWS calls "anticipated water demand," which dovetails with CWRM's definition of "authorized planned use;"
- Full build-out of County zoning;
- Projections based on population growth.

He noted that people do not just do unlimited development, to full capacity, all at once. For this reason, DWS gave the CWRM Board those three projection methods to consider.

## F. EXECUTIVE SESSION RE: NATIONAL PARKS SERVICE'S PETITION TO DESIGNATE KEAUHOU AQUIFER AS A GROUND WATER MANAGEMENT AREA:

No Executive Session was held.

## G. DISCUSSION OF AMENDING RULES AND REGULATIONS REGARDING PLACING RESPONSIBILITY WITH PROPERTY OWNERS FOR TENANTS’ DELINQUENT BILLS:

Ms. Lee Loy provided some background for the Board on the work on the Rule Amendments thus far. Ms. Lee Loy, Chairperson Robinson and then-Deputy Corporation Counsel Kathy Garson met months ago to address the Rule Amendments, whose impetus was the large glut of unpaid water bills. Their sub-committee looked at refining the definition of "applicant" in the Rules, feeling strongly that a re-definition would help close the gap on who was responsible for paying the water bill. Ms. Lee Loy noted that the Board had only just gotten the draft Rule Amendments last week, and asked the Board to review them and provide comments. Ms. Self is also reviewing the draft Rule Amendments, and would like to use them as a conversation starter with the Department of Environmental Management (DEM), as DEM moves through their own Rule Amendments for their Waste Water Division. The two departments are looking to dovetail each other's Rules regarding water/sewer bills.

Ms. Self noted that the County Council had passed an Ordinance to allow the Director of DEM to request that DWS shut off the water for delinquent sewer bills. DWS needs to see what Rule Amendments that DEM is going to do, but DWS's Rule Amendments in this regard will be less of a change than DEM's Rule Amendments, she said. That is because DEM will be responsible for pretty much everything; DWS will have to have something in its Rules that indicates that DWS's Manager-Chief Engineer gets the request from the DEM Director to shut off the water. It should not be that much of a Rule change for DWS, Ms. Self said.

Ms. Lee Loy said that she is wide open to any suggestions or comments; she believes that there is still a lot more input to take in. At some point, the two Departments will need to collaborate with each other.

Chairperson Robinson agreed, saying that in his experience, in many locales, the Water Department and the Environmental Management Department are one and the same department. Because DWS and DEM are two separate Departments, DWS has to cross over, which brings the County Council into play.

Ms. Self said that it is helpful for the County as a whole to have DWS's help, because DWS has a lot of power. If DWS gives a customer notice that their water is going to be shut off, the customer in all likelihood will come in and pay the water bill to prevent shut-off. DEM does not have that kind of authority as it stands now - DEM cannot shut off the sewer service for lack of payment. Therefore, the threat of a water shut-off is a big hammer, Ms. Self said.

The Manager-Chief Engineer said that his understanding was that this was not an overnight process. DEM did approach the Board for assistance, and the Board decided to assist with water shut-off, to provide DEM with a tool to assist their financial situation. However, DWS was concerned about situations where a good DWS customer, i.e., someone who paid their water bills on time, would get the water shut-off due to a sewer bill delinquency. He gave the scenario of an irate customer confronting DWS staff for a sewer bill-related delinquency that led to shut-off. There are a number of challenges like these that were discussed among DWS management, the DEM Director, and staff, he said. The Manager-Chief Engineer said his understanding was that all of the administration of a sewer-related shut-off, even up to the point of being contested, would be handled by DEM and its Environmental Management Commission. Only once that process has been gone through and the shut-off is deemed to be warranted, would DWS provide that shut-off. It would be DEM's collections clerk who would deal with the customer, including on the day of shut-off, he said. His understanding was that DWS staff would only be there to turn
the valve on DWS's water meter. He agreed with Ms. Self that DWS would assist by shutting off the water, but the Amendment to DWS's Rules would be somewhat minimal. It would basically include language to the effect that if DEM deemed a shut-off to be warranted, DWS would shut off the water.

Ms. Self said that DEM will have to do all of the footwork in the run-up to the shut-off because it is their sewer bill delinquency that is involved. That is why DWS has to see what DEM does with their Rule Amendments first, to make sure that DEM takes care of all of the run-up, and to ensure that the amount of work that DWS does will be very limited.

Chairperson Robinson said that the two departments would be concurrent.
Mr. Balog asked if anybody had thought of a process for how DWS would have somebody actually go shut off the water.
The Manager-Chief Engineer said that there would be some kind of Memorandum or other documentation, whereby DEM would cover the costs for DWS's personnel expenses involved in shutting off the water. He said that was his understanding.

Ms. Lee Loy agreed that all of those arrangements regarding billing, who was responsible, who would actually do the shut-off, etc., were discussed in conversations with DEM. She noted that in this Amendment, there is an opportunity provided for a larger fee. The Board increased the deposit for establishing service to $\$ 150.00$, but she said she was not clear on how those monies would be held to help pay for bills. The intention of the increase in the deposit was to allow DWS to cover unforeseen or potential costs, Ms. Lee Loy said. That is what is before the Board in this proposed Rule Amendment.

Chairperson Robinson asked whether anybody ever considered having DWS take over the Waste Water Division.

The Manager-Chief Engineer said that DEM did.
Ms. Lee Loy said the hardest part of that is that DWS is semi-autonomous, and DEM is a function of the County.

Ms. Self agreed.
Ms. Lee Loy said that she would not even know where to begin to dovetail County services with a semi-autonomous body; she said she was not interested.

Ms. Self said she was not interested, either.

## H. MONTHLY PROGRESS REPORT:

Mr. Uyeda asked for an update on the Waimea Treatment Plant project, noting that the Board had approved a substantial amount of money for it.

The Manager-Chief Engineer noted that the Deputy is still the project engineer for that project.
The Deputy said that the Notice to Proceed was issued on July 31, 2015. The contractor has already indicated that he would probably not move until the first week of October, while he is trying to finish up some other tasks. DWS has reminded the contractor on the construction schedule; the contractor is working on the preparation of submittals for their long-lead items. DWS has held at least one teleconference with the contractor, to make sure that they get their
ducks in a row for the submittal process, i.e., the membrane elements. The contractor is still working on pulling their building permits for the project, the Deputy said.

The Manager-Chief Engineer acknowledged that this project is a sizeable investment, but it is utilizing Drinking Water State Revolving Fund loans. Those are low-interest loans, carrying one percent interest plus administrative fees, with a term of 20 years. This project is in line with Mr. Bolles's presentation, he noted. DWS first put this project on the CIP list about 10 years ago, at an estimated cost of $\$ 10$ million. Electrical costs had been climbing, and DWS was reluctant to invest the hefty sum of $\$ 10$ million. Meanwhile, DWS was not comfortable with microfiltration as a treatment alternative; it was still quite pricey. However, DWS has hit that crossover point, where utility costs have gone up so high, that DWS decided that an investment in treatment is a more cost-effective means of providing water for the area. This project will allow DWS to double the capacity of the existing plant, and will allow the plant to serve not only Waimea, but all the way to Āhualoa, and if need be, to Honoka‘a as well. It is therefore more cost-effective to go this route, rather than pump the Waimea or Āhualoa Wells.

Mr. Takamine asked how the Laupāhoehoe Reservoir project is going. He said it appeared to be close to completion, but the completion percentage on the CIP report is only about 50 percent. He asked if there were any issues with the project.

Mr. Inaba said that the contractor is pretty close to the existing completion date, but there have been a number of rain-out days that will probably take the completion into November. Therefore, the contractor is likely to submit a time extension request at next month's Board meeting, he said.

The Manager-Chief Engineer said that DWS is watching that closely, and the contractor, GW Construction, is aware of that. He said that he himself had attended both the pre-bid and preconstruction meetings; DWS emphasized to them that just because a task takes two weeks longer than expected, it does not necessarily translate into a time extension of an additional two weeks.

Chairperson Robinson asked about what happened with the situation involving Mr. Christian Twigg-Smith and his firm CTS Earthmoving.

Mr. Inaba said that he had discussed this with Ms. Self this morning; DWS has a claim filed by the bonding company, which is being resolved.

Chairperson Robinson said Hallelujah.
Mr. Inaba said that DWS will be directed by the State Attorney-General on everything that DWS does on this matter.

Chairperson Robinson expressed surprise at this.
Mr. Inaba said that he is working on Ms. Self, who expects that the matter will be taken care of.
Chairperson Robinson asked about the item on the CIP list regarding Ola‘a No. 2 0.5-MG Reservoir Replacement, noting that DWS has to go through Land Court on the subdivision of that property.

Mr. Inaba said yes, DWS had not included the surveying of the subdivision in its consulting contract. He had spoken about this with DWS's Land Section surveyor, who is not a Land Courtcertified surveyor. The surveyor, who had done all of the in-house surveying, etc., recommended to Mr. Inaba that DWS work with its consultant on submitting that subdivision to the Land Court. Mr. Inaba said that he is in the process of negotiating that work with the consultant. He noted that there are also issues to negotiate with the land owners.

Chairperson Robinson noted that he and Ms. Lee Loy had been beaten up by the Land Court on numerous occasions.

Ms. Lee Loy described the tortuous process of dealing with the Land Court, and stressed that everything on the Metes and Bounds Description, etc., must be accurate. Failure to have everything precisely accurate will send one back to Square One, she warned. She urged DWS to have several people check everything before submitting to the Land Court; doing so will save DWS months. She noted that she herself has been working on one subdivision for the past 18 months.

Chairperson Robinson said that the beauty of the Land Court is that title is absolute, while the problem with doing anything with the Land Court is like swimming in mud.

Ms. Lee Loy agreed; any little change to the submittal is kicked back, and the process starts all over again.

Mr. Inaba noted that DWS had started the process, working with someone at Corporation Counsel who handled the Land Court, but that person has since left.

Ms. Lee Loy offered to point out for DWS any potential "land mines" to avoid with the Land Court.

## I. REVIEW OF MONTHLY FINANCIAL STATEMENTS:

Mr. Elarionoff noted that the Balance Sheet shows that Construction Work in Progress increased by $\$ 4,885,407.00$, or 66 percent. He asked if that big increase could make everything else unstable; he asked if it really matters.

Mr. Sumada said yes, it does matter, because it is an indication that more work is going on today, at this point in time, compared to last year. He said that he provided a breakdown of much of the work, but it did not indicate that the system was unstable.

Mr. Elarionoff said that DWS has staff inspecting all of these projects. He asked if it ever gets to the point where there are not enough inspectors to keep up on what is going on, due to too much construction.

The Manager-Chief Engineer said that this is not typical, run-of-the-mill, planned construction. He noted that Mr. Sumada had done a good job of itemizing the projects that account for the bulk of this construction work in progress; aside from the first two projects on the list, the rest are all repair jobs. These repair jobs are not ones that DWS programmed for construction; they are repairs of the wells that have gone down. Messrs. Young and Takamoto, along with another mechanical engineer, Mr. Warren Ching, are managing these projects. There is concern for DWS's personnel resources, but it has not become overwhelming yet, he said.

Mr. Inaba said there is a supervising inspector who assigns the Department's inspectors to these projects. When there are projects that are out of the ordinary, DWS has done construction management contracts, as in the case of the Waikoloa Reservoir No. 2 repairs. DWS tries to keep construction management in-house, but when the expertise required is beyond in-house capabilities, DWS does contract out.

The Manager-Chief Engineer said that DWS also contracts out when federal funding requires dedicated construction management.

Ms. Wilson said that a 66 percent increase seems like a lot. She said she noticed, however, that these are multi-year contracts. She asked if none of these were included in budget projections.

Mr. Sumada said that typically, construction projects do take more than a year, and will show up on the CIP budgets because of this. Such projects might be in the CIP account for two or three years, depending on how the project goes. Repair projects, for the most part, get finished within a year. However, at this point in time, there are a lot of repair projects because of all the wells going down.

Ms. Wilson asked if the delays were due to the bid process.
Mr. Inaba said that a lot of the projects do not start at the beginning of the fiscal year, so they tend to cross over into the next year or so. It depends on when the projects start, he said. This applies just to the regular contracts. He said that DWS is experiencing quite a lot of delays with regular CIP projects and with a few of the repair projects.

Chairperson Robinson said that he and Ms. Lee Loy had attended a class for public officials at one of the recent water conferences. One lecturer told the group that if a utility's accumulated depreciation gets over one-third of its fixed asset value (i.e., utility plant value), it is a danger sign that means that the utility is not putting enough money back into the plant equipment itself. He said that DWS's accumulated depreciation is about two-fifths over fixed asset value. He asked Mr. Sumada if he had any thoughts on that rule of thumb indicating the need to replace DWS's aging infrastructure.

Mr. Sumada said he did not really have any insight on that. He asked if the lecturer was an accountant or an engineer.

Chairperson Robinson said the lecturer was a university professor, who evidentally had headed a utility, and was somebody that the AWWA valued enough to allow him to conduct the public officials workshop all the way through. That was all he knew about the man, he said.

Mr. Sumada said that he would imagine that someone who made that kind of analysis would want to get to see the assets in question, and would follow the aging and the condition of the assets which Mr. Sumada said he does not get to do. DWS's Operations staff would have a better handle on the system, seeing it on a daily basis. Only looking at accumulated depreciation of property would indicate the age but not condition of DWS's assets, since Mr. Sumada does not get to see all of the infrastructure.

The Manager-Chief Engineer asked what the rule of thumb trigger was again.
Chairperson Robinson said it was just a rule of thumb that the lecturer threw out there as part of his presentation, whereby if the utility's accumulated depreciation reaches more than one-third of its plant assets, it indicates that the utility has an aging infrastructure that is not being replaced quickly enough.

The Manager-Chief Engineer said that DWS would look into that.
Chairperson Robinson said that the presentation was really good; the lecturer gave some very good indicators.

Mr. Arikawa asked if the lecturer was an equipment supplier.

Chairperson Robinson said that he should have been; the Chairperson said he was certainly convinced by the presentation. The lecturer was a university professor who had served as the head of utilities in several different counties.

Ms. Lee Loy said that there is data that can be used to extrapolate certain indicators, and this rule of thumb was just one example. This rule of thumb regarding depreciation versus fixed asset value provides a snapshot, which can be looked at to see if it warrants more investigation, she said.

The Manager-Chief Engineer said that DWS had passed that one-thirds on accumulated depreciation; he said that it is worth looking into.

## J. MANAGER-CHIEF ENGINEER'S REPORT:

The Manager-Chief Engineer will provide an update or status on the following:

1) Public Information and Education Specialist Update -- Ms. Aton noted that DWS issued press releases regarding the Akolea main break, the Kaiwiki water emergency and the announcement of the new Deputy. DWS is currently producing an educational video regarding source water protection. Chairperson Robinson asked Ms. Aton to do a press release about Mr. Bolles's energy report, showing how the Board is taking proactive action to save energy and reduce costs; he also suggested that Ms. Aton do a press release regarding the Board's action today to reduce the Power Cost Charge.
2) Pauka'a Waterline Relocation Project -- The Manager-Chief Engineer said that DWS will use the template regarding Use and Occupancy Agreements to re-start this project; DWS will be able to accommodate Mr. Neal Herbert's concerns, and get the project done.

## K. CHAIRPERSON'S REPORT:

Chairperson Robinson, alluding to his letter of complaint to the CWRM Chairperson distributed earlier, said that the Board was not going to sit idly by when DWS staff are being abused. That letter, which complained about uncivil behavior by CWRM Commissioner Jonathan Starr, was corrective action, he said.

## (Several Board members commended the Chairperson for taking a stand.)

Ms. Lee Loy said she found it offensive that someone would cast aspersions at the information that DWS provided to CWRM regarding the Water Use and Development Plan update. She said she wanted to see some individuals write letters of apology, which should be posted on the CWRM website. There is no place for rudeness towards the DWS staff, she said. She said she was glad that the Chairperson was standing up against such behavior.

Chairperson Robinson said he was glad that CWRM Board member and DOH Director Virginia Pressler had stood up; Dr. Pressler was the only person who protested Commissioner Starr’s behavior during the August 17, 2015, CWRM meeting, he said.

Ms. Wilson asked if this letter could be submitted by the Board as a unified front.
Chairperson Robinson said he would entertain a Motion and Action by the Board to support the letter; this would be very helpful.

Ms. Self agreed, saying that she was going to suggest that a letter like this should be approved by the Board.

MOTION: Ms. Lee Loy moved that the Board, as a body, support the Chairperson's letter dated tomorrow, August 26, 2015, regarding Commissioner Starr’s action at the August 17, 2015, CWRM meeting; seconded by Ms. Wilson.

Mr. Arikawa asked if the letter should ask that the Commissioner be removed from the Board, instead of removed from the meeting.

Chairperson Robinson said, no, that reference in the letter to having Commissioner Starr be removed from the room was a quote from Dr. Pressler.

ACTION: Motion carried unanimously by voice vote.
Mr. Elarionoff asked to move that the letter be forwarded to the Governor, as the person who appointed Commissioner Starr.

Chairperson Robinson said that the letter was already being forwarded to the Governor; he noted that this Governor's predecessor had appointed Commissioner Starr, before being voted out of office.
L. EXECUTIVE SESSION RE: LIBERTY MUTUAL INSURANCE COMPANY V. WATER BOARD OF THE COUNTY OF HAWAI‘I, ET AL:

The Water Board anticipates convening an executive meeting, closed to the public, pursuant to Hawai'i Revised Statutes, Sections 92-4, 92-5(a)(2), for the purpose of consulting with the Water Board's attorney regarding the Plaintiff's First Amended Complaint For Declaratory Judgment filed in the above-referenced case.

ACTION: Ms. Lee Loy moved to go into Executive Session; seconded by Mr. Uyeda and carried unanimously by voice vote.
(Executive Session began at 12:29 p.m., and ended at 12:52 p.m.)
ACTION: Ms. Lee Loy moved to approve Corporation Counsel's Recommendation and allow the Chairperson to sign the agreement with Liberty Mutual Insurance Company; seconded by Ms. Wilson, and carried unanimously by voice vote.

The Manager-Chief Engineer asked to return to Item 7(A), regarding the Amended Memorandum of Understanding (MOU) on the Queen Ka‘ahumanu Highway Widening project. He asked to make a correction within the MOU itself, in the third paragraph starting with "Whereas." For the record, the amount should be revised to $\mathbf{\$ 2 4 4 , 2 4 0 . 0 0}$, instead of $\$ 259,240.00$.

Chairperson Robinson said that no action was needed on that; it was just a notation.
Ms. Self said that the Board was being notified of this correction, because the Board had received the original handout.

## 10) ANNOUNCEMENTS:

## 1. Next Regular Meeting:

The next meeting of the Water Board is scheduled for 10:00 a.m. on September 22, 2015, at the Department of Water Supply, Operations Center Conference Room, 889 Leilani Street, Hilo, HI. Chairperson Robinson said that he would be out of town for this meeting, and therefore, Vice-Chairperson Takamine will preside.

## 2. Following Meeting:

The following meeting of the Water Board will be held at 10:00 a.m. on October 27, 2015, at the Department of Water Supply, Operations Center Conference Room, 889 Leilani Street, Hilo, HI.

## 11) ADJOURNMENT

ACTION: Mr. Arikawa moved to adjourn; seconded by Ms. Wilson, and carried unanimously by voice vote.

The meeting adjourned at 12:55 p.m.

## Secretary

The Department of Water Supply is an Equal Opportunity provider and employer.
Notice to Lobbyists: If you are a lobbyist, you must register with the Hawai‘i County Clerk within five days of becoming a lobbyist. \{Article 15, Section 2-91.3(b), Hawai‘i County Code\} A lobbyist means "any individual engaged for pay or other consideration who spends more than five hours in any month or $\$ 275$ in any six-month period for the purpose of attempting to influence legislative or administrative action by communicating or urging others to communicate with public officials." \{Article 15, Section 2-91.3(a)(6), Hawai'i County Code\} Registration forms and expenditure report documents are available at the Office of the County Clerk-Council, Hilo, Hawai ‘i.

