A. CALL TO ORDER

B. ROLL CALL

C. ACCEPTANCE OF AGENDA

D. MEETING MINUTES
   Review and approval of:
   Regular Board Meeting – August 21, 2017
   Audit Committee Meeting – August 15, 2017

   Review and approval of:
   Executive Session – July 28, 2017
   Executive Session – August 21, 2017

E. CORRESPONDENCE/ANNOUNCEMENTS
   1. Correspondence from Mrs. Irene Morgan regarding Facilities Reserve Charge for ADU No. 82706 from November 20, 2006, dated September 13, 2017

F. BOARD COMMITTEE REPORTS

G. OLD BUSINESS
   1. Manager’s Report No. 17 – 40 (Update) – Discussion and Possible Action on the First Amendment to Contract No. 614, Job No. 15-08, WP2020 HW-11 Construct Hā'ena 0.2 MG Storage Tank, Hā'ena with Brown and Caldwell for additional funds in the amount of $27,401.00

   2. Manager’s Report No. 18-66 (Update) - Discussion and Possible Action for Job No. 17-11, WP2020 WKK-02, Drill and Test Kīlauea Well No. 3, Kīlauea, Kaua‘i, Hawai‘i for additional design funding in the amount of $18,339.35
G. **OLD BUSINESS (cont’d)**
   3. *Manager’s Report No. 18-67 (Update)* - Discussion and Possible Action on the 5th Amendment for Contract No. 440, Job No. 02-06 WP2020 #WKK-15, Kilauea, Kaua‘i, Hawai‘i, 1.0 Million Gallon Storage Tank and Connecting Pipeline with Kodani & Associates Engineer, LLC for the additional design funding of $25,260.00

H. **CONSENT CALENDAR**
   1. *Manager’s Report No. 18-69* - Discussion and Possible Action to approve a Grant of Easement for Construction Plans for Makahuena Subdivision, Planning Department Subdivision S-2015-14, Kaua‘i, affecting the following landowner:
      a. CIRI Land Development Company, on TMKs: 2-8-021:041 (por.), 2-8-021:044 (por.) 2-8-021:047 (por.), and 2-8-021:049 (por.) thru 2-8-021:054 (por.) as specified above in Kōloa, Kaua‘i Hawai‘i
   2. *Manager’s Report No. 18-70* - Discussion and Possible Action to approve a Grant of Easement for Service Lateral for a New 1-Inch Water Meter, Kula Aupuni Ni‘ihau A Kahelelani Aloha Public Charter School Remodel, Kauai, Affecting the Following Landowner:
      a. Kanaka Aupuni A Ni‘ihau Aloha Inc., TMK: 1-3-09:001 as specified above in Waimea, Kaua‘i, Hawai‘i

   3. *Manager’s Report No. 18-71* - Discussion and Possible Action to approve a Grant of Easement for Construction Plans For 8” Reduced Pressure Detector Assembly for Lot 1115, Kaua‘i, Affecting the Following Landowner
      a. Jared and Donna Murayama 1997 Trust dated January 8, 1997, TMKs 3-4-13:027, Līhu‘e, Kaua‘i, Hawai‘i

I. **NEW BUSINESS**
   1. *Manager’s Report No. 18-72* – Discussion and Possible Action on the Denial of Mr. Dennis Esaki’s request to Waive the Department of Water’s requirements for Subdivision S-2017-12, Jack Philips, TMK: 2-3-7: 01, 02 & 03, Kalaheo, Kaua‘i Hawai‘i

J. **STAFF REPORTS**
   **MONTHLY**
   1. Discussion and Receipt of the Kaua‘i County Water Department’s Statement of Revenues and Expenditures
      a. August Monthly Summary Budget
   2. Discussion and Receipt of the Report by the Public Relations Specialist on Public Relations Activities
   3. Discussion and Receipt of the Chief of Operation’s Summary Report on Operational Activities
   4. Discussion and Receipt of the Manager and Chief Engineer’s Monthly Update Regarding Activities of Note of the DOW
      a. Report of the BAB pay down as of August 2017

NOTE: If you need an ASL Interpreter, materials in an alternate format, or other auxiliary aid support, please contact Edie at 245-5406 or email meineumiller@kauaiwater.org at least seven (7) calendars days before the meeting.
K. **EXECUTIVE SESSION**

Pursuant to H.R.S. §92-7(a), the Board may, when deemed necessary, hold an executive session on any agenda item without written public notice if the executive session was not anticipated in advance. Any such executive session shall be held pursuant to H.R.S. §92-4 and shall be limited to those items described in H.R.S. §92-5(a).

1. Pursuant to Hawaiʻi Revised Statutes §92-4 and §92-5 (a)(4), the purpose of this Executive Session is for the Board to consult with the Board’s attorney on questions and issues pertaining to the Board’s powers, duties, privileges, immunities, and liabilities as they may relate to this agenda item

   a. **Manager’s Report No. 18-72** – Discussion and Possible Action on the Denial of Mr. Dennis Esaki’s request to Waive the Department of Water’s requirements for Subdivision S-2017-12, Jack Philips, TMK: 2-3-7: 01, 02 & 03, Kalâheo, Kauaʻi Hawaiʻi

L. **TOPICS FOR NEXT WATER BOARD MEETING (October 2017)**

1. Annual Evaluation of the Department of Water’s Manager and Chief Engineer from December 18, 2016 to December 17, 2017
2. Discussion and Receipt of the Department of Water’s Draft Audit by Accuity, Inc. for FY2016-2017
3. **Manager’s Report No. 18-65 (Update)** - Discussion and Possible Action on Part 2 Rules and Regulation for Water Service Connection to address Landlord and/or Property Managers and Tenant issues
   a. Section I – Definitions
   b. Section III – Conservation Measures and Interruption of Water Supply
   c. Section IV – Elevation Agreement, Pressure Controls
   d. Section V – Application for Water Service and Service Connection
4. Discussion and Receipt of the Department of Water’s Capital Improvement Projects for the 2018 Legislative Session
5. Board Meeting Dates for 2018
6. Election of Officers for 2018

M. **TOPICS FOR FUTURE WATER BOARD MEETINGS**

1. Discussion and Possible Action on Proposed Board Policy for Delegating Routine Actions from the Water Board to the Department of Water’s Manager and Chief Engineer regarding Right of Entry
2. Workshop presentation regarding the Long Range Plan of the Department of Water’s former Administration Building
3. Discussion and Possible Action on Utility Agreement No. 2257 between the State of Hawaiʻi Department of Transportation and the Board of Water Supply, County of Kauaʻi for the upcoming Hanapēpē River Bridge, Kaumualiʻi Highway, Route 50, HI STP SR50 (1) Project, Hanapēpē, Kauaʻi Hawaiʻi Water System Improvements
4. Discussion and Possible Action on the Department of Water’s Standard Operations Procedures as it relates to the Board of Water’s Rules and Regulation
N. **UPCOMING EVENTS**
1. Project Wet – Make A Splash *(September 28, 2017)*
2. HWWA & HRWA Conference, Hawai'i, HI *(Kona, Hawai'i, November 1 – 3, 2017)*
3. Annual Meeting *(December 8, 2017)*

O. **NEXT WATER BOARD MEETING**
1. Monday, October 2, 2017, 1:30 p.m. – *Audit Committee Meeting*
2. Friday, October 27, 2017, 10:00 a.m.
3. **Wednesday**, November 22, 2017, 10:00 a.m.
4. Friday, December 22, 2017, 10:00 a.m.

P. **ADJOURNMENT**
MEETING MINUTES
BOARD OF WATER SUPPLY
Monday, August 21, 2017

The Board of Water Supply, County of Kaua‘i, met in regular meeting at the Board Conference Room in Līhu‘e on Monday, August 21, 2017. Chair Sherman Shiraishi called the meeting to order at 10:04 a.m. The following Board members were present:

BOARD: Mr. Sherman Shiraishi, Chair
Ms. Laurie Ho
Mr. Lyle Tabata
Mr. Thomas Canute
Ms. Beth Tokioka
Mr. Michael Dahilig
Mr. Lawrence Dill (entered meeting 10:04 am after roll call)

Quorum was achieved with 6 members present at the time of roll call.

STAFF: Mr. Kirk Saiki
Mr. Valentino Reyna
Mr. Carl Arume
Mr. Keith Aoki
Mr. Dustin Moises
Mr. Bryan Wienand
Ms. Sandi Nadatani-Mendez
Deputy County Attorney, Mahealani Krafft

Ms. Marites Yano
Ms. MJ Akuna
Ms. Jonell Kaohelauiili
Mr. Michael Hinazumi
Mr. Joel Bautista
Mr. Chris Nakamura
Mr. Leopoldo Anguay
Mr. Ryan Smith

GUEST(s) Ms. Melissa Fisher, The Nature Conservancy
Mr. Allan Rietow, The Nature Conservancy
Mr. Pat Porter of DOFAW, DLNR
Mr. Chipper Wichman, NTBG
Ms. Holly Dyre, Ben A. Dyre Family LP
Mr. Hall Parrott, Private Citizen

C. ACCEPTANCE OF AGENDA
Ms. Ho moved to reorder the Agenda to move up New Business Item I. No. 1, Resolution No. 18-01, Review and Approval of Regular Board Minutes & Public Hearing Minutes and Correspondence; seconded by Mr. Canute; with no objections, motion carried with 7 ayes.

I. NEW BUSINESS
1. Resolution No. 18-01 – Farewell to Leopoldo Anguay (Retiree), Waterworks Inspector III, Construction Management Division

Chief of Construction Management Mr. Moises read Mr. Anguay’s Resolution to the Board and staff. A photo op with Board members and the Construction Management staff followed. Mr. Anguay expressed he was glad of a lateral transfer from O‘ahu to the Department of Water (DOW) because he would have been assigned to the rail project. He also enjoyed many friendships and support at the DOW.

Ms. Tokioka moved to approve and adopt Resolution No. 18-01 – Farewell to Leopoldo Anguay (Retiree), Waterworks Inspector III, Construction Management Division; seconded by Ms. Ho; with no objections, motion carried with 7 ayes.
D. MEETING MINUTES
Review and approval of:
Regular Board Meeting – July 28, 2017
Mr. Canute moved to approve the Regular Board Meeting minutes of July 28, 2017; seconded by Mr. Tabata; with no objections, motion carried with 7 ayes.

Public Hearing – July 26, 2017
Mr. Canute moved to approve the Public Hearing minutes of July 26, 2017; seconded by Mr. Tabata; with no objections, motion carried with 7 ayes.

E. CORRESPONDENCE/ANNOUNCEMENTS
1. Correspondence from Mr. Allan Rietow, Field Representative, The Nature Conservancy Coordinator for the Benefit of the Kaua’i Watershed Alliance regarding a Kaua’i Watershed Alliance Progress Report presentation for FY2017 at the August Board meeting, dated July 5, 2017

BACKGROUND: (Refer to the full PowerPoint presentation in the Board packet.)
Mr. Allan Rietow introduced Ms. Melissa Fisher, Director of The Nature Conservancy (TNC) Kaua’i Program who gave a short presentation. Also introduced was Mr. Pat Porter of Division of Forestry and Wildlife (DOFAW), Department of Land and Natural Resources (DLNR), Mr. Chipper Wichman, National Tropical Botanical Garden (NTBG), Ms. Holly Dyre, Ben A. Dyre Family LP who said a few words to thank the Board for their support on the KWA.

The TNC are the coordinators for the KWA. KWA is made up of public and private landowners who safeguard the drinking water for the entire island. TNC is the fiscal agent that raises and spends the money and works in the watershed area (KWA is a non-fiscal agent).

Types of work done by TNC for KWA are: 1) plan projects, 2) provide active management, 3) monitor continuously by checking the areas and to secure boundaries, and 4) maintenance. TNC works with helicopter and fence contractors, weed control efforts, mapping with an electrical engineer who is a former CIA employee who uses a network communication & infra-red camera systems to monitor the pig traps (8-15 pigs). This technology will be used statewide with other agencies. TNC is currently using a drone for pictures of the Kanaele Bog (swamp). The DOW has been a resource in making good progress in the forest.

Ms. Fisher thanked the Board of Water Supply for continued support of their work.

DISCUSSION:
Mr. Dill asked Ms. Fisher about the changes in the swamp she has observed over the past nine years. She said there are significant changes comparing the inside to the outside of the fenced area. Inside the fence the native plants have come back. Outside the fence pigs are still in the area and have torn up the area. Mr. Rietow added without the fence, it would not have supported the improvements that have been made. Everything around the swamp is invasive. At times the team has found invasive plants around the swamp.

Chair Shiraishi asked if there has been push back from hunters. Ms. Fisher said there have been public meetings and environmental assessments have been written for the remote areas. TNC checked with community members and have answered their questions. The State does a good job in connecting with the community and residents have been given maps of the areas where fences are located.
Ms. Holly Dyre, Ben A. Dyre Family LP first read a communication from Mr. Arryl Kaneshiro with Grove Farm Company who could not be at the Board meeting. He thanked the DOW and the Board for their continuous support of KWA. For eight years, Mr. Kaneshiro has been a part of KWA and was fortunate to see many of their projects and priorities materialize with the help of the DOW and the Board’s funding. Ms. Dyre’s family has been a partner from the beginning and thanked the Board for their support. Having a family with small children has made the project even more important to her.

Mr. Pat Porter, Forest Manager DOFAW, DLNR thanked the Board for their support. He added the watershed is protected and a priority. Partners are the main reason for the success, along with managing resources on the conservation side. It is important to bring partners together like the State, non-profits and Alexander & Baldwin, a large landowner.

Mr. Chipper Wichman, NTBG thanked the Board for their financial support. The last two State governors committed to protect the watersheds in the State. He said to be able to manage the watershed without worrying about property lines is critical. Water is critical especially during past hurricanes. 13.1 miles of fence are in place and Drinking Glass will have 5-1/2 more miles added. There are future projects coming up with additional acreage. The weed control work is also critical. DLNR has done a good job in its relationship with the hunters. Ladders have been added for the hunters to get over the fences, and the fences have not been cut or destroyed. Chair Shiraishi said the way the fence is installed was awesome, as observed when he and Mr. Dill took a tour a few years ago. Mr. Tabata also saw the strong fences when he was in the area recently.

Mr. Wichman shared that other islands that use potable water are part of the alliance, which includes schools and partnerships with attorneys. The alliance creates the structure that allows access to partners and to federal funding for TNC. TNC was also hired to write the strategic plan. Mr. Dill said the services receive many benefits from TNC’s involvement. Mr. Wichman acknowledged DOFAW and TNC, who do the heavy lifting on the protection of the water sheds.

Mr. Dill asked if there has been movement to engage the Robinsons on the west side. Mr. Wichman said they are interested in protecting their watershed and dialog will continue with the Robinsons. They have seen the accomplishments, achievements and have looked at the fence that goes along their border property. The Robinsons have been given maps and estimates of costs to protect their upper watershed, and are considering joining the KWA in the future.

Mr. Dill moved to receive the correspondence from Mr. Allan Rietow, Field Representative, The Nature Conservancy Coordinator for the Benefit of the Kaua‘i Watershed Alliance regarding a Kaua‘i Watershed Alliance Progress Report presentation for FY2017 at the August Board meeting, dated July 5, 2017; seconded by Mr. Canute; with no objections, motion carried with 7 ayes.

F. BOARD COMMITTEE REPORTS

Report of the Audit Committee of the Kaua‘i County Board of Water Supply
1. Discussion and Possible Action on the Scope for a Performance Audit

BACKGROUND:
The Audit Committee Report was distributed and “Received for the Record.” The Audit Committee met on August 15, 2017. Mr. Tabata reported on the discussion of how the Audit Committee would move forward by looking at possible scopes for a performance audit in various DOW divisions. He asked the Board members to review the report, give recommendations and to prioritize items. He would like feedback within the next two weeks as to whether the subjects were covered sufficiently. The items can
then be prioritized and this will go out for professional services procurement to select a consultant to do the audit.

**DISCUSSION:**
Chair Shiraishi added that the Audit Committee did not highlight a particular division to be audited. For this fiscal year, the budget for an Auditor is $150,000 which could be an on-going process depending on the next Chair for next year.

Comments from Mr. Dahilig:
1. Have Auditors do a blank query on whether any of these issues are impacted by HR issues, such as inadequate staffing. Make appropriate findings on the study.
   a. Mr. Dahilig further stated: Are any of the concerns a result of HR issues? If so, that would be a finding or determination by the Auditor and at that point the Board could go further into HR.
2. Look at the scope of contract management and the divisional structure in Construction Management (CM) and Design. Mr. Dahilig further stated: project intake should not be limited to CM & Design but should be looked at across all divisions.
3. Look at how projects are assigned and prioritized and brought to the Board for its review.
4. How are projects initiated? Is there a protocol? Is a protocol needed as recommended by the Auditor? Intake process for projects: Is there one? Is one needed?
5. Important to understand that the audit is not meant to be punitive, but to look at how the Department can operate more efficiently for a better product for the rate payers.

Comments from Mr. Dill:
1. Address appropriate staffing for each of the Department’s divisions (includes tools).

Comments from Ms. Tokioka:
1. Suggest as priorities looking at IT and Operations & the split of CM & Engineering, (to see if the split is impacting in a positive or negative way. It would just be the area of items the Auditor is looking at, especially IT.

Comments from Mr. Tabata:
1. Board members to review the Audit Report & Recommendations and to provide feedback due in two weeks to Mr. Tabata.
2. Provide priorities if overlooked in the Audit Report.
3. Professional Services will be procured for $150,000 (ongoing process in the coming year).

The Audit Committee requests authority to conduct the procurement on behalf of the Board.

Mr. Dahilig moved to approve the Audit Committee report with recommendations on the Scope of a Performance Audit for project priority initiation, to formalize the process, and authorize procurement; seconded by Mr. Dill; with no objections, motion carried with 7 ayes.

*At 11:03 a.m., Ms. Tokioka exited the meeting.*

**G. CONSENT CALENDAR**
1. Manager’s Report No. 17-09 (Update) - Discussion and Possible Action for Board Approval with the State of Hawaii’s July 15, 2016 conditional letter and enter into Use and Occupancy Agreement No. 333 with the State of Hawaii for Job No. 12-01, Water Plan 2020 No. H-05, Hanalei Waterline Improvements (Weke, Anae, Mahimahi and He’e Roads Main Replacements), Hanalei, Kaua’i, Hawai’i
Mr. Dahilig moved to approve Manager’s Report No. 17-09 (Update) - Discussion and Possible Action for Board Approval with the State of Hawaii’s July 15, 2016 conditional letter and enter into Use and Occupancy Agreement No. 333 with the State of Hawaii for Job No. 12-01, Water Plan 2020 No. H-05, Hanalei Waterline Improvements (Weke, Anae, Mahimahi and He’e Roads Main Replacements), Hanalei, Kaua‘i, Hawai‘i; seconded by Mr. Tabata; with no objections, motion carried with 6 ayes.

2. Manager’s Report No. 18-60 – Discussion and Possible Action to approve the State of Hawai‘i’s June 12, 2017 conditional letter and to enter into Use and Occupancy Agreement No. 368 between the State of Hawai‘i and the Board of Water Supply, County of Kaua‘i and for Job No. 15-07, Water Plan 2020 No. HE-1, Reorganize Water System – Pipeline Connecting Hanapēpē and ‘Ele‘ele, Kaua‘i, Hawai‘i

Mr. Dahilig moved to approve Manager’s Report No. 18-60 – Discussion and Possible Action to approve the State of Hawai‘i’s June 12, 2017 conditional letter and to enter into Use and Occupancy Agreement No. 368 between the State of Hawai‘i and the Board of Water Supply, County of Kaua‘i and for Job No. 15-07, Water Plan 2020 No. HE-1, Reorganize Water System – Pipeline Connecting Hanapēpē and ‘Ele‘ele, Kaua‘i, Hawai‘i; seconded by Mr. Tabata; with no objections, motion carried with 6 ayes.

3. Manager’s Report No. 18-61 - Discussion and Possible Action for the Board to concur with Right of Entry letter from the Department of Land and Natural Resources for the construction of the Clearwell Tank site as part of the Kalaheo Water Improvements Project, Package B – 0.1 MG Clearwell Reservoir, Kalāheo, Kaua‘i, Hawai‘i

Mr. Dahilig moved to approve Manager’s Report No. 18-61 - Discussion and Possible Action for the Board to concur with Right of Entry letter from the Department of Land and Natural Resources for the construction of the Clearwell Tank site as part of the Kalaheo Water Improvements Project, Package B – 0.1 MG Clearwell Reservoir, Kalāheo, Kaua‘i, Hawai‘i; seconded by Mr. Tabata; with no objections, motion carried with 6 ayes.

4. Manager’s Report No. 18-62 - Discussion and Possible Action to approve the Request for State Lands – Application Form to obtain a temporary Right of Entry and a Grant of Easement for construction, operation, and maintenance of proposed drain line on TMK: (4) 4-6-11:125, Job No. 02-14 WP2020 #WK-08 Kapa‘a Homesteads 325’ Tanks – Two 0.5 Million Gallon Storage Tanks, Kapa‘a, Kaua‘i, Hawai‘i

Commission Support Clerk distributed an attachment and was “Received for the Record.”

Mr. Dahilig moved to approve Manager’s Report No. 18-62 - Discussion and Possible Action to approve the Request for State Lands – Application Form to obtain a temporary Right of Entry and a Grant of Easement for construction, operation, and maintenance of proposed drain line on TMK: (4) 4-6-11:125, Job No. 02-14 WP2020 #WK-08 Kapa‘a Homesteads 325’ Tanks – Two 0.5 Million Gallon Storage Tanks, Kapa‘a, Kaua‘i, Hawai‘i; seconded by Mr. Tabata; with no objections, motion carried with 6 ayes.

5. Manager’s Report No. 18-63 – Discussion and Possible Action to Request Board Approval to enter into a Memorandum of Agreement (Drainage) and Right of Entry that will allow the Department of Water to construct drainage pipe lines, necessary appurtenances and ditches for WP2020 Project No. WK-08 affecting the following:
   a. Godwin M. Esaki, Janet M. Esaki, the Godwin M. Esaki Revocable Living Trust, and the Janet M. Esaki Revocable Living Trust, TMK: (4) 4-6-11:125, Kapa‘a, Kaua‘i, Hawai‘i
Mr. Dahilig moved to approve Manager’s Report No. 18-63 – Discussion and Possible Action to Request Board Approval to enter into a Memorandum of Agreement (Drainage) and Right of Entry that will allow the Department of Water to construct drainage pipe lines, necessary appurtenances and ditches for WP2020 Project No. WK-08 affecting the following: a) Godwin M. Esaki, Janet M. Esaki, the Godwin M. Esaki Revocable Living Trust, and the Janet M. Esaki Revocable Living Trust, TMK: (4) 4-6-11:125, Kapa’a, Kaua‘i, Hawai‘i; seconded by Mr. Tabata; with no objections, motion carried with 6 ayes.

At 11:06 a.m., Mr. Dahilig exited the meeting.

H. OLD BUSINESS

1. Manager’s Report No. 18-57 - Discussion and Possible Action to join in the Petition for Subdivision, Designation of Restriction of Access Rights, and Cancellation of Portions of Easement and Easements; Joinders, Land Court of the State of Hawaii Application No. 1087, Puhi, Kaua‘i, Hawai‘i

Mr. Canute moved Manager’s Report No. 18-57 to Executive Session to the end of the Agenda; seconded by Ms. Ho; with no objections, motion carried with 5 ayes.

At 11:08 a.m., Mr. Dahilig re-entered the meeting.

2. Manager’s Report No. 16-58 – Discussion and Possible Adoption of Part 2, Water Service Connections, Section II General Conditions, subsection 1. Rule amendment relating to the DOW’s Standard Operating Procedure for Providing Water Service Outside of the Water Zone

BACKGROUND:
Manager Saiki recommended the Board adopt the rule amendment for Part 2 Water Service Connections, Section II General Conditions, subsection 1.

Mr. Tabata moved to approve Manager’s Report No. 16-58 – Discussion and Possible Adoption of Part 2, Water Service Connections, Section II General Conditions, subsection 1. Rule amendment relating to the DOW’s Standard Operating Procedure for Providing Water Service Outside of the Water Zone; with no objections, motion carried with 6 ayes.

3. Manager’s Report No. 16-38 – Discussion and Possible Adoption of Part 5, Facility Reserve Charge, Section III – Applicability, relating to Multi-Family Dwelling Units and Affordable Housing Units (Update)

BACKGROUND:
Manager Saiki recommended the Board adopt the rule amendment for Part 5, Facility Reserve Charge, Section III – Applicability.

Mr. Tabata moved to approve and adopt Part 5 rule change on Facility Reserve Charge, Section III – Applicability, relating to Multi-Family Dwelling Units and Affordable Housing Units (Update); seconded by Mr. Dahilig; with no objections, motion carried with 6 ayes.

I. NEW BUSINESS (cont’d)

2. Manager’s Report No. 18-64 - Discussion and Possible Action to approve the Department of Water’s Supplemental Budget for Fiscal Year 2017-2018

The Board approved the transfer on the Year End rollovers.
Mr. Dill moved to approve *Manager’s Report No. 18-64* - Discussion and Possible Action to approve the Department of Water’s Supplemental Budget for Fiscal Year 2017-2018; seconded by Mr. Tabata; with no objections, motion carried with 6 ayes.

3. *Manager’s Report No. 18-65* - Discussion and Possible Action on Part 2 Rules and Regulation for Water Service Connection to address Landlord and/or Property Managers and Tenant issues
   a. Section I – Definitions
   b. Section III – Conservation Measures and Interruption of Water Supply
   c. Section IV – Elevation Agreement, Pressure Controls
   d. Section V – Application for Water Service and Service Connection

**BACKGROUND:**
Manager Saiki recommended the Board discuss the changes to the rule by defining the landlord/tenant relationship and to tie the owner into the water bill. Chair Shiraishi explained when the tenant does not pay their bill, the Board was asked to explore options to impose liability to the landlord or the property manager. Only the Maui BWS ties the water bill to the landlord as the co-signer on the water service application.

**DISCUSSION:**
The $90 deposit is a three month average bill and it depends on the size of the family as indicated by Waterworks Controller Ms. Yano. A 5/8” water meter size for three months water service costs $150.00. Mr. Dill suggested increasing the deposit amount.

There were two methods that Manager Saiki found: 1) to put a lien on the property or 2) require the owner to apply for service also. Mr. Dill asked if it was necessary to sue or could specific language be added to the application for the owner to understand they would have pay overdue bills? Chair Shiraishi said if there is an authority to sue on a lien, then the Department would have to file a lawsuit.

Mr. Dill asked how long has the $90 deposit been in place; inflation has to be considered? Ms. Sandi Nadatani-Mendez said it was 20+ years ago. This was based on an old rule which does not mention the three month deposit. If there is a rule, a cost is implied.

Manager Saiki said the billing system can show the average monthly bill on a customer who has a 5/8” meter.

Ms. Yano commented that the deposit issue is with delinquent consumers but would not eliminate repeat delinquency. She asked if the deposit could be adjustable.

The issue of authority is stated in the rule, Section V, No. 5 which states: “An advance deposit equal to the Department’s estimate of 3 months’ water charges will be required of tenants, lessees, and purchasers of property…” which Mr. Dahilig pointed out.

Comments from Mr. Dahilig:
1. Provide comparisons and hypothetical outcomes on owner/tenant issues at the September Board meeting.
2. Provide draft operational policy implementing this rule and how to calculate a deposit. Is this practical and does it impede people to rent?
Comments from Mr. Dill:
1. Update and increase the deposit to $150.00 for 3 months.
2. Would the deposit increase of $150.00 take care of the 95% of the problem?
3. At budget time, come up with a new estimate on the deposit.

*Mr. Hall Parrott, Private Citizen provided his testimony.*

Mr. Parrott commented if there was somebody running water for three months, it would be the same as if the property owner came and said his water was running for three months. Don’t put the onus on the renter who is living pay check to pay check.

Chair Shiraishi responded to say people in business like to limit their risk and sees Mr. Parrott’s opinion. If there is intentional abuse, it is wrong to put the onus on the landowner. The deposit should be affordable.

Mr. Dill referenced Section XI, No. 6. Discontinuation of Water Service for Non-payment of Sewer Service Charges – “Water service may be discontinued for delinquencies in payment of such sewer charges no earlier than thirty (30) days after the mailing or presentation of such delinquent charges to the consumer.” One way to look at the deposit is to match how long it takes to get the water bill in the customer’s hand before the water is shut off within 60 days. Ms. Yano explained that the consumer’s bill is due 20 days after they receive their bill and delinquent after 30 days. A notice is sent out after 30 days of non-payment with a report to Billing in preparation for collection.

Mr. Dahilig moved to defer Manager’s Report No. 18-65 - Discussion and Possible Action on Part 2 Rules and Regulation for Water Service Connection to address Landlord and/or Property Managers and Tenant issues: a. Section I – Definitions, b. Section III – Conservation Measures and Interruption of Water Supply, c. Section IV – Elevation Agreement, Pressure Controls, d. Section V – Application for Water Service and Service Connection; for the Department to provide hypothetically outcomes on owner/tenant issues at the September Board meeting; seconded by Mr. Dill, with no objections, motion carried with 6 ayes.

4. Manager’s Report No. 18-66 - Discussion and Possible Action for Job No. 17-11, WP2020 WKK-02, Drill and Test Kīlauea Well No. 3, Kīlauea, Kaua‘i, Hawai‘i for additional design funding in the amount of $18,339.35

**BACKGROUND:**
Civil Engineer Mr. Aoki recommended to the Board to approve the expenditure of $18,339.35 in additional design funds which is a 5% contingency. The contingency would save up to a month to complete a contract amendment and the design.

**DISCUSSION:**
This contract has not been negotiated or awarded at this time. Manager Saiki would like to start the project with a zero contingency but Chair Shiraishi commented if the contingency is in, it may be lost. Mr. Aoki mentioned there is the possibility for additional funding and scope changes on a site selection study but did not know details at this time.

The additional well in Kīlauea is for more source in a different service area. Currently there is only one well and a backup. The ultimate construction cost is about $2.5M - $3M and depends on the site. Chief of Construction Management Mr. Moises added the new well and building, Motor Control Center, SCADA, connecting pipeline costs approximately $7M - $8M for construction. Design would be approximately...
$4M – $5M. Mr. Dahilig asked if there was a demand for meters? Is the Department receiving additional demand services for potential development? Civil Engineer Mr. Hinazumi said yes and the source would provide redundancy for the Kīlauea system. The Department is also under a restriction for that area. A lot of the proposed multi-family, infill housing and future developments are right on the hook without water service. There has not been an assessment for infill housing and multi-family development at the present time.

Manager Saiki said there is a five meter water restriction in the Kīlauea service area which limited the number of meters available for the agricultural park. Mr. Dahilig said the Lighthouse development has water and by looking at houses at the current FRC rate, with an $8M construction, his estimate is more than 10% of the capital from a few years ago. He asked if this project down the line makes sense as a construction investment. Manager Saiki said yes because it provides system reliability that provides source. Currently there a two wells at the sites (primary well and a backup well) and if anything happens to the site (not to the well or pumps), the Department uses water to pump to the well. A little bit of water from an offsite third well will provide more reliability.

Mr. Dahilig’s concern is from past Board discussions of being pushed to move forward on a project because design had been completed. The construction cost did not make sense from a priority position and is a large investment for a capital outlay. In terms of an order of committing capital and constructing things, he asked where is this priority for $8M for source and storage compared to the rest of the island? Is this Priority No. 1? Manager Saiki said the Department’s main concern is source when it comes to system reliability for Kīlauea and Kalāheo.

Mr. Dill suggested looking at demand, appropriate capacity and parts of the island on this investment because there is a definite need for this project. He recommended this project get through Engineering and when the project is ready, the Board can consider other priorities. Mr. Dill requested the Department to demonstrate to the Board before a capital investment is made that this is the location and that it should be prioritized.

Chair Shiraishi noted that Manager’s Report 18-66 (for a well) and Manager’s Report 18-67 (for a tank) were related and understood Mr. Dahilig’s concern. He asked what if the tank was built first and the well is not ready? Will there be a use for the 1.0M gallon storage tank? Mr. Aoki and Mr. Hinazumi said there is a shortage for fire protection in Kīlauea. The storage tank is still needed regardless if a well is built.

Mr. Canute asked how long is the design good for on the construction of the well if this is deferred? Would the design have to be redone again? Mr. Aoki said it depends on what permits are required. If a Conservation District Use Application (CDUA) permit is required, the Department may reapply for the permit and recertify for one year if there are no interventions.

Mr. Moises clarified the construction cost for the well is from $.5M to $3.4M to drill and test. If the well is usable, it would come back for a design contract to develop the well, then construction would start building the well. Mr. Dahilig assumed the cost would run close to $9M to 10M for the tank.

Mr. Tabata added this goes back to Mr. Dahilig’s comment about project initiation and prioritization. Water Resources and Planning should be brought to the Board in its totality to say these are the pieces that add together to pull the project off. Presenting the Board in bits and pieces makes it harder to connect the dots and to understand. Mr. Tabata requested the Department to do a presentation (big picture) on how this project will fit in the community. Is anyone asking the Planning Department regarding the infill potential? Will everyone be required to put septic tanks in? He mentioned there is no wastewater system in that area. Some residents cannot afford to put in a septic tank in. There is also a shopping development
being put in Kīlauea. It could be that this project is too late. Chair Shiraishi understood there is a need for
the well and the tank. He agreed the Board is not fully educated on the big picture on projects.

Manager Saiki asked if there would be a procurement problem in terms of timing. Mr. Dahilig said the
Department can award the design contract but without the contingency.

Mr. Dill moved to approve Manager’s Report No. 18-66. He mentioned the burden is on the Department
to get these projects going.

Mr. Dill denied to withdraw his motion to approve; motion failed for a lack of a second.

Board deferred to the September Board meeting (on the contingency).
1. Pending a report back from the Manager pending consultation with CM, Water Resources,
Planning (WR&P) and Design on the long-term/big picture on this project.
2. To Prioritize projects.
3. The Department needs to demonstrate that this project is a priority.
4. WR&P should come to the Board in its totality; present all the bits and pieces of the project.
   The Department needs to present to the Board all elements of this project (versus bits and pieces) and
   how will it fits in the Kīlauea community.
   Work with the Planning Department to look at the infill potential.
   Would the community put a sceptic tank in? They don’t have a waste water treatment system.
5. What will be the anticipated construction cost?

Mr. Dahilig moved to defer Manager’s Report No. 18-66 - Discussion and Possible Action for Job No.
17-11, WP2020 WKK-02, Drill and Test Kīlauea Well No. 3, Kīlauea, Kaua'i, Hawai'i for additional
design funding in the amount of $18,339.35; seconded by Mr. Tabata; pending a report back from the
Manager with consultation with CM, WR&P and Design on the long-term/big picture to justify the
priority on this project; with no objections, motion carried with 6 ayes.

Mr. Dahilig moved to defer Manager’s Report No. 18-67 - Discussion and Possible Action on the 5th Amendment for
Contract No. 440, Job No. 02-06 WP2020 #WKK-15, Kīlauea, Kaua’i, Hawai’i, 1 Million
Gallon Storage Tank and Connecting Pipeline with Kodani & Associates Engineer, LLC for
the additional design funding of $25,260.00

Mr. Dahilig moved to defer Manager’s Report No. 18-68 - Discussion and Possible Action for Job No. 11-07, Water Plan
2020 KP-09, MCC, Chlorination Facilities, Koloa Well “16A” & “16B” Site and Building
Improvements for additional construction funding in the amount of $2,050,000.00

BACKGROUND:
Mr. Moises requested the Board’s approval for additional funds for Job No. 11-07, Water Plan 2020 KP-
09, MCC, Chlorination Facilities, Koloa Well “16A” & “16B” Site and Building Improvements for
additional construction to award and execute a new contract for this project. The budget estimate was
very far from the actual construction cost. The Department procures construction, does the Request for Proposal (RFP) and requests the cost price. In July, the contractor was asked the breakdown for each line item, equipment, overhead profit which he reviewed against the Engineering assessment that was approximately $1.4M. He added 25% to the estimate for construction’s budget for this fiscal year but reviewing the contractor’s line-by-line data, he recommended that the procurement officer award it because it was not in line with the consultant’s engineer’s estimate. If this was not done, Mr. Moises would cancel the procurement. The contractor’s breakdown seemed realistic and a fair estimate to the Department. Kōloa Well 16B has been out of service for several years. Operations should bring this project to completion and a pump would be at the best interest of the division. There were no site improvements behind the mill for another well.

Assistant Chief of Operations Ryan Smith provided data to Mr. Moises to estimate unit price comparisons and quotes from Supervisory Control & Data Acquisition (SCADA), from contractors for electrical and mechanical. The initial cost was $3.7M; Mr. Moises range was $3.3M to $3.6M. The well was 400 ft. to 500 ft. in diameter. The cost of removing the pump and installing the pump is $270,000.

Mr. Canute disclosed that the contractor to be awarded for this project is also working for his employer; he is not the contact officer for the company. The Board did not have a problem with Mr. Canute’s disclosure.

Mr. Dahilig moved to approve Manager’s Report No. 18-68 - Discussion and Possible Action for Job No. 11-07, Water Plan 2020 KP-09, MCC, Chlorination Facilities, Koloa Well “16A” & “16B” Site and Building Improvements for additional construction funding in the amount of $2,050,000.00; seconded by Mr. Tabata; with no objections, motion carried with 6 ayes.

At 12:06 p.m., Chair Shiraishi exited the meeting

J. STAFF REPORTS
MONTHLY
1. Discussion and Receipt of the Kaua‘i County Water Department’s Statement of Revenues and Expenditures
   a. July Monthly Summary Budget

BACKGROUND:
The Power Cost Adjustment chart was distributed to the Board and “Received for the Record.” Waterworks Controller Ms. Yano calculated the Power Cost Adjustment average at ($0.21) which is a one year prior. Mr. Dill said he would review the chart with Ms. Yano later.

At 12:08 p.m., Chair Shiraishi re-entered the meeting.

Mr. Dahilig moved to receive the Kaua‘i County Water Department’s Statement of Revenues and Expenditures, a) July Monthly Summary Budget; seconded by Mr. Canute; with no objections, motion carried with 6 ayes.

2. Discussion and Receipt of the Report by the Public Relations Specialist on Public Relations Activities

Mr. Dahilig received the Report by the Public Relations Specialist on Public Relations Activities; seconded by Mr. Dill; with no objections, motion carried with 6 ayes.
3. Discussion and Receipt of the Chief of Operation’s Summary Report on Operational Activities

**BACKGROUND:**
Chief of Operations Mr. Reyna included in his report the overtime (OT) procedures on overnight work with additional OT expenses. He clarified OT for overnight work is for construction projects or private developments that are charged back to the developer. OT is paid up front by Operations which is shown on OT expenses. Later OT expenses are charged back to the contractor, billed and collected by Fiscal Division. The Operations Division rarely schedule overnight work and most overnight work are emergency responses which are part of the budget. When Operations does work with developers, they follow the United Public Worker’s Collective Bargaining Agreement (CBA), Section 25 regarding a 30 day notice to change a regular schedule. An overnight project may have a short notice less than the 30 days (i.e., during a chlorination test or a schedule deviation). OT can occur for 1) day time work, 2) night time work & 3) day time work/after work, which may result in a shortage of workers the day after the overnight work to respond to emergencies (people calling in sick, vacations or taking comp time off). Mr. Reyna’s recommendation is to keep the OT procedures “as is.”

Mr. Dahilig asked what were the impacts and consequences to the Operations Division of the crew not being able to do their daily work? Is this creating an incentive for people to do OT instead of doing their regular work? In huge projects, Mr. Reyna said, they end up having 3 to 5 people less the next day for their regular work. This arrangement of OT paid by a contractor seems to impact Operations’ ability to maintain day-to-day work said Mr. Dahilig. He suggested Mr. Reyna not create this as an explicit incentive because normal work is not being done.

Mr. Reyna explained that the supervisors monitor the hours of OT, and if people are no longer needed at the site, they are sent home on Operations related projects. For private projects, the crew waits for the contractor to finish their work, then the Operation’s crew takes over.

Mr. Dahilig will send a memo to the Manager for further statistics and incidences of OT costs and will share this information with the Board.

Chair Shiraishi will look into procedures on how reports will be handled.

Mr. Dahilig moved to receive the Chief of Operation’s Summary Report on Operational Activities; seconded by Mr. Tabata; with no objections, motion carried with 6 ayes.

4. Discussion and Receipt of the Manager and Chief Engineer’s Monthly Update Regarding Activities of Note of the DOW

**BACKGROUND:**
Manager Saiki highlighted the following:
1. Personnel Matters – CM Division interviewed Inspector III last week.
2. Manager’s Goals - Updated based on the Board’s comments from the July Board meeting.
   a. Improve Communication and Morale – in development.
   b. How public inquiries are counted – operational inquiries are already noted (i.e., meter requests, government information). Call in questions will be logged within Divisions.
   c. Renamed Outcome Column to Designation Outcome Column – Done
   d. Added Performance Audit to Admin. Goals – Done
e. Update the Timelines – Asset Management and the Preventative Maintenance Assessment program were moved up to April.

f. GIS operational plans and investments – in development.

g. Vision and leadership for Water Plan 2040 – in development.

Private Secretary Ms. Akuna mentioned two corrections:
1. Page 230 – “Anaka” Family Trust should be “Akana” Family Trust.
2. Personnel Update – A Senior Clerk in Admin. was hired but the position is vacant as of today and a new recruitment has started.

The Board received the Manager and Chief Engineer’s Monthly Update Regarding Activities of Note of the DOW; with no objections.

a. Report of the BAB pay down as of July 2017

The Board received the Report of the BAB pay down as of July 2017; with no objections.

L. TOPICS FOR NEXT WATER BOARD MEETING (September 2017)

1. Discussion and Receipt of the Department of Water’s Capital Improvement Projects (CIP) for the 2018 Legislative Session

2. Annual Evaluation of the Department of Water’s Manager and Chief Engineer for Fiscal Year 2016-2017

3. Manager’s Report No. 18-65 - Discussion and Possible Action on Part 2 Rules and Regulation for Water Service Connection to address Landlord and/or Property Managers and Tenant issues
   a. Section I – Definitions
   b. Section III – Conservation Measures and Interruption of Water Supply
   c. Section IV – Elevation Agreement, Pressure Controls
   d. Section V – Application for Water Service and Service Connection

4. Manager’s Report No. 18-66 - Discussion and Possible Action for Job No. 17-11, WP2020 WKK-02, Drill and Test Kilauea Well No. 3, Kilauea, Kaua’i, Hawai’i for additional design funding in the amount of $18,339.35

5. Manager’s Report No. 18-67 - Discussion and Possible Action on the 5th Amendment for Contract No. 440, Job No. 02-06 WP2020 #WKK-15, Kilauea, Kaua’i, Hawai’i, 1.0 Million Gallon Storage Tank and Connecting Pipeline with Kodani & Associates Engineer, LLC for the additional design funding of $25,260.00

M. TOPICS FOR FUTURE WATER BOARD MEETINGS

1. Discussion and Possible Action on Proposed Board Policy for Delegating Routine Actions from the Water Board to the Department of Water’s Manager and Chief Engineer regarding Right of Entry

2. Workshop presentation regarding the Long Range Plan of the Department of Water’s former Administration Building

3. Discussion and Possible Action on Utility Agreement No. 2257 between the State of Hawai‘i Department of Transportation and the Board of Water Supply, County of Kaua‘i for the upcoming Hanapēpē River Bridge, Kaumuali‘i Highway, Route 50, HI STP SR50 (1) Project, Hanapēpē, Kaua‘i Hawai‘i Water System Improvements

4. Discussion and Possible Action on the Department of Water’s Standard Operations Procedures as it relates to the Board of Water’s Rules and Regulations
5. Discussion and Receipt of the Department of Water’s Draft Audit by Accuity for FY2016-2017 (October)

N. **UPCOMING EVENTS**
   1. Project Wet – Make A Splash (*September 28, 2017*) Chair reminded members to participate.
   2. HWWA & HRWA Conference, Hawai‘i, HI (*Kona, Hawai‘i, November 1 – 3, 2017*)

O. **NEXT WATER BOARD MEETING**
   1. Friday, September 22, 2017, 10:00 a.m.
   2. Friday, October 27, 2017, 10:00 a.m.
   3. **Wednesday**, November 22, 2017, 10:00 a.m.
   4. Friday, December 22, 2017, 10:00 a.m.

At 12:28 p.m., Mr. Dahilig moved to go into Executive Session; seconded by Mr. Canute; with no objections, motion carried with 6 ayes.

K. **EXECUTIVE SESSION**

1. Pursuant to H.R.S. §92-7(a), the Board may, when deemed necessary, hold an executive session on any agenda item without written public notice if the executive session was not anticipated in advance. Any such executive session shall be held pursuant to H.R.S. §92-4 and shall be limited to those items described in H.R.S. §92-5(a), the Board did not anticipate, but deems it necessary, pursuant to §92-5(a)(4) to consult with its attorney on issues pertaining to the Board’s rights, privileges, and obligations that the Board may incur or be responsible for as a consequence in agreeing to this agreement.

   a. **Manager’s Report No. 18-57** - Discussion and Possible Action for the Board of Water Supply to join in the Petition for Subdivision, Designation of Restriction of Access Rights, and Cancellation of Portions of Easement and Easements; Joinders, Land Court of the State of Hawaii Application No. 1087, Puhi, Kaua‘i, Hawai‘i

Mr. Dahilig moved to approve **Manager’s Report No. 18-57** - Discussion and Possible Action for the Board of Water Supply to join in the Petition for Subdivision, Designation of Restriction of Access Rights, and Cancellation of Portions of Easement and Easements; Joinders, Land Court of the State of Hawaii Application No. 1087, Puhi, Kaua‘i, Hawai‘i; seconded by Mr. Canute; with no objections, motion carried with 5 Ayes and 1 Abstained (LD).

At 1:00 p.m., Mr. Dahilig moved to recess Executive Session and to return to Regular session; seconded by Mr. Tabata; with no objections; motion carried with 6 ayes.

At 1:00 p.m. Mr. Dahilig moved to reconvene Executive Session and Adjourn the Executive Session; seconded by Mr. Tabata, with no objections, motion carried with 6 ayes (Roll Call: SS, LH, LT, TC, MD, LD)

P. **ADJOURNMENT**

Respectfully submitted,  

Approved,

Edith Ignacio Neumiller  
Commission Support Clerk

Beth Tokioka  
Secretary – Board of Water Supply
The Board of Water, County of Kaua'i, met in a special meeting at Department of Water’s Conference Room in Līhu'e on Tuesday, August 15, 2017. Audit Committee Chair Lyle Tabata called the meeting to order at 3:32 p.m. Roll call, the following Audit Committee members were present:

**BOARD:** Mr. Lyle Tabata, *Chair*
Mr. Beth Tokioka
Mr. Thomas Canute (*entered meeting @ 3:40 p.m.*)
Mr. Sherman Shiraishi, *Board Chair*

Quorum was achieved with 3 Audit Committee members present.

**STAFF:** Mr. Kirk Saiki, Manager and Chief Engineer
Ms. MJ Akuna
Deputy County Attorney Mahealani Krafft

**GUESTS:** Mr. Hall Parrott, Private Citizen

**C. ACCEPTANCE OF THE AGENDA**
The Audit Committee accepted the Agenda as circulate with no objections.

**D. NEW BUSINESS**

1. Discussion and Possible Action on the Scope of a Performance Audit of the Department of Water

**BACKGROUND:**
This was the first Performance Audit Committee meeting that discussed possible action on the scope for a performance audit. Chair Tabata created a draft that was finance based, as he served on other corporate boards and said finances drove the audit committee. Within an audit committee there are operational audit reviews which lead back to the financials. Chair Tabata said he could limit the scope to be a performance audit format and shared the following language: “To ensure, determine whether government services are being efficiently, effectively and economically delivered.” A performance audit could be conducted for all offices, agencies, departments, programs or operation of the department. He asked the committee if there was something driving the need for audit? Was there a specific section within the Department that should be targeted for an audit?

**DISCUSSION:**
Board Chair Shiraishi shared some history when he was Board Chair two years ago. He said Board Member Mr. Dahilig brought up the need for a performance audit. Since Board Chair Shiraishi has been on the Board, he has had ideas and suggestions on a performance audit but not for the whole Department. He believes that certain problem areas should be identified and requested input from the Audit Committee.

The purpose of this meeting would be to define or limit the scope of performance audit and discuss who would be doing the audit. The State of Hawai‘i has a State Auditor but the County of Kaua‘i does not have an Auditor. The Department would have to contract an Auditor with a budget of approximately $150,000.
Chair Tabata envisioned seeking professional services by procurement for a consultant to present a proposal to measure Operations Division against best practice in the industry (in the region or nationally). The consultant should have the ability to research with benchmarks.

Board Chair Shiraishi would like to focus on the following areas:
1) IT - There have been some problems in implementing some of the systems and communications with IT and Engineering in regards to getting systems in place. Is staffing a problem? (The Board has been told staffing is an issue.)
2) Billing system – When Board Chair Shiraishi first started, the Department was implementing a new billing system. They were supposed to replace the old billing system and the Department spent a lot of money on this effort. Money is still being thrown in towards this billing system.
3) Engineering Division – Board Chair Shiraishi is disappointed because projects are not getting done in a timely manner. Before he came on the Board, there was a split up of the Engineering Division and Construction Management (CM) Division. What were the problems or reasons for the split up into two separate divisions? What are the advantages of the split up?

Ms. Tokioka would focus the audit on:
1) Contract management - There is constant amending and adding costs to contracts. She was not sure if scoping is the problem or not managing the contractor well?
2) IT – After implementing a whole new system, the Department has to upgrade it again in a year and spend double the money. The audit could clarify why this happened and help avoid such issues in the future.

Mr. Canute’s focus would be on:
1) Getting contracts out – He mentioned there was $15M budgeted for projects last year and only $2M spent. Another project was extended that started at $200,000 but ended up spending $1M. If the Department budgets to do projects and only spends a fraction of it, then that is what the Facilities Reserve Charge is there for to complete the projects.

Chair Tabata mentioned Engineering projects as another focus:
1) Getting to construction
2) Delivery of projects from cradle to grave
3) Where are the bottlenecks?

Manager Saiki did not think the audit would serve Ms. Tokioka’s IT focus. Manager Saiki was unsure if an audit could be done by buying an IT program and upgrading it. Is the Department asking the right questions on how long this program is going to last before having it upgraded? Ms. Tokioka said writing the Request For Proposals (RFP) and/or the scoping could be looked at. The Manager said to look at IT based on billing issues and how much money is spent because usually the results are tied to money and manpower. Ms. Tokioka recommended focusing on what the Department could do better and differently.

Manager Saiki mentioned that if an audit was done on Engineering and took out $2M every year and spent $1M every year on consultants, it may take 3 – 4 years to get a project done. The numbers could be found and then compared to the industry standard. It could be a department of 10 people who can do $20M worth of work, $5M worth of consulting, plus look at change orders, then a comparison on industry standard could be done. By buying programs and upgrades, he was not sure how an audit could be done or to ask the right the questions (i.e., how long would the upgrade last?).

This was one of the questions Mr. Dill was asking during the Finance Committee meetings on the IT budget. What is the staffing on Maui, the Big Island and O’ahu as compared to Kaua’i’s operations?
Chair Tabata asked the committee what kind of assessment needs to be gathered to prepare the procurement to find an Auditor? Manager Saiki confirmed the Department has the Statement of Qualifications (SOQ) and a list for the consultants and resumes selecting from. The committee would need to define the scope of the audit.

Manager Saiki did a quick research on a performance audit statement that says “performance audit objectives can be thought of as questions about the program that the auditor seeks to answer based on evidence obtained and assessed.” Example: One question is how does the cost of the IT billing system compare to other billing systems? There could be 100 different questions. Mr. Canute mentioned the cost is comparable. Board Chair Shiraishi mentioned it is also the cost of procurement. Mr. Canute added another fair question would be how does DOW compare to other utility operations on the other islands? By looking at the relationship of what they are doing on a scale, then it is almost impossible. The Manager did not agree with Mr. Canute’s comment because Maui shares Kaua’i’s same consultant on the program. The Honolulu Board of Water Supply (BWS) uses the same program and the Big Island is separate and on their own. Board Chair Shiraishi said the scope could be expanded on comparables and could go to the mainland or non-water utilities. Board Chair Shiraishi had a copy of the BWS performance audit that included comparable cities from the mainland based on population and size. Chair Tabata agreed that service size needs to be looked at for the Department.

The BWS audit was for the billing system, operations, public relations, setting of the rates. The audit concluded that the Board couldn’t articulate why they raised their rates. Also, it covered actual meter readings which could have been a problem on O’ahu but not on Kaua’i. Manager Saiki clarified BWS did estimated meter readings. Kauai meters are now read by Automatic Meter Readings (AMR) which is a drive by reading (with electronic devices). The Big Island is testing AMR but 20% keep dying. The Department’s next step is for the meter readers to not have to leave the office and the readings will be remotely read and transmitted back to the office. The meter would have to be changed or a transponder installed.

The Auditor could look at the overtime (OT) issue in Operations but Mr. Dahilig will be addressing this with Chief of Operations Val Reyna. This may be handled in house and should have been addressed some time ago. Chair Tabata agreed the OT issue has been a long standing problem in the Department with employees manipulating OT. In the past before Board Chair Shiraishi started, he understood OT was a big problem but OT has been drastically reduced. Manager Saiki explained the “25/10” meaning; if a field employee worked 16 hours in one day, they got paid for the next day (i.e., Monday, Wednesday, or Friday). This was used to manipulate the system. Ms. Tokioka said scheduling 30 days out would be in line with the union contracts and could avoid some overtime.

The scope would need to be budgeted to determine the total cost of the audit. If the cost is over $150,000, the priority items would be limited. Manager Saiki said Private Secretary Ms. Akuna contacted a former employee who was not aware of any audits being done for the Department in the past.

Mr. Canute asked if the scope of the performance audit included the reliability of the system? Would this be included in a performance audit? He mentioned the reliability of the pumps on the Big Island with 6 pumps failing within 1 year. Board Chair Shiraishi mentioned when the pumps that failed in Kalāheo, the Department had to have public hearings. One problem was redundancy and the back-up pump died which taught the Department a big lesson to avoid in the future.

Chair Tabata and Manager Saiki suggested some items to look for in the performance audit:
1) Operations:
   a. Overtime
   b. Reliability of the system
Mr. Canute asked if the Department could do a spot check to not exceed the budget? The $150,000 would be for three people for 50 days of auditing (approx. 1 month to 2 months). Ms. Tokioka commented there may be areas that are technical. There may be a need to hire a specialized consultant in the mechanics of the system versus the operations or financials.

Discussion on prioritizing separate audits - Manager Saiki said to break the areas down to individual audits and see what it would cost for the billing system and Engineering; IT and billing system are related. The billing system is different from the accounting system, but they should be able to talk to each other.

What frustrated the Board during budget time was that the system was streamlined to limit the number of line items, but the Board wanted to see more detail. However, the new system was designed to reduce the number of line items. Mr. Canute added with more line items detailed, it becomes easier to find what you are looking for instead of picking out things in a single line item. Some of the financial details were not comprehensive and deep enough for the Board to see. Previously the chart of accounts was huge which was reduced to 1/3 the size. Manager Saiki said there were more details in the budget worksheets.

Chair Tabata described Engineering in Public Works which includes: design, project management & construction management. The responsibilities overlap and some engineers do design. There is a regulatory section and everyone overlaps in responsibilities as a well-rounded engineer. If employees are in job specific areas, then there are inefficiencies.

Discussion on the split of Engineering and CM - Ms. Tokioka asked if the split of Engineering and CM is working better? Is it working efficiently? Could it be improved? The Auditor can find the pros and cons but Board Chair Shiraishi said the Department may be stuck with the current organizational chart (dealing with civil service rules, union rules). Manager Saiki commented if an employee is at a certain rating running a division, and if you merge the two divisions together, the person who runs the merged division cannot be at the same rating. You would need to hire somebody or move someone up.

Chair Tabata said the Audit Committee is not proposing to merge the Engineering and CM but to examine what was done to see if it runs better or not. Depending on the findings and if the two divisions are not running better, then the Board has to deal with the situation. The audit should be on what was done in the past, what is done currently and if efficiency is gained.

Ms. Tokioka would like to focus on the things that need to be improved on:
1) The speed in which projects move through the process and are implemented/constructed.
2) Are we spending the money efficiently? Are we wasting money due to process? Are there too many redundancies? How can we get better and move faster through the system?
3) Look at outcomes in managing the dollars with contract management.
4) IT – get an analysis of what is working and what is not working with the billing system, financial system and as it relates to other divisions.

Chair Tabata shared that the designers design, there are project managers, and engineers in house who oversee the consultants on what they are designing. The department is managing the consultant to also create the procurement documents, to hire a contractor, lastly someone manages the contractor. When the
phases of design are completed, the next phase is procurement for the construction phase, bids are then solicited getting a contractor to install what was designed by the consultant. Then CM will go to the field to check what the contractor is building. He is able to see why the Department carved out the CM group because a few years ago, there were a lot of projects. About six years ago in Public Works, Deputy County Engineer Tabata was criticized on why the Department of Water (DOW) was able to get many projects moving; Public Works never had any jobs. The goal is to get projects shovel ready and out the door. The Engineering Division was tasked with getting projects ready for CM, with inspectors to monitor the work. He added Public Works has a revolving fund to hire people but are only temporary hires.

Discussion on purchasing new software - Ms. Tokioka said when purchasing new software, make sure the vendor is including necessary upgrades for a certain period of time. Manager Saiki said the upgrades can’t be controlled. Board Chair Shiraishi said what was promised in the past was not delivered. Money that was spent two years ago was to solve the problem. Manager Saiki clarified it was not to solve the problem, it was because the Department had to get off the Honolulu BWS system and had to buy the Department’s own billing system with Maui DWS. Earlier there was the purchase of a new accounting system to help with budget reports; this system is not being upgraded. The accounting system is still on the Great Plains program. Manager Saiki added the budgeting package system may be purchased to run on Great Plains. Customer Care and Billing (CC&B) is an Oracle program (data based) that can talk to Great Plains.

Chair Tabata would like to see the budget package. Public Works system can be done on Excel and merge with system. The new IT system is CC&B which is the same program that Honolulu BWS has and they are deciding to update or run unsupported. Ms. Tokioka shared it becomes frustrating when a program is purchased and then 12 months later it is obsolete. During scoping, the software purchase should include any necessary upgrades for a specified period, such as three years.

Mr. Hall Parrott, Private Citizen provided his testimony.

Mr. Parrott was confident with the discussion of the Department of Water (DOW) and the Audit Committee during this meeting. Every item discussed had good points. He has researched extensively with other California city governments such as Palo Alto and Los Angeles and provided input on what happened with those cities on the items the Audit Committee discussed.

The billing system will get torn apart with findings by the auditors, as well as the auditors of the Department of Water Supply, County of Maui (DWS) and may upset the DWS with its findings. DWS managed their budgeting cycle with a Government Finance Officers Association certified audit; they will not want to lose their certification as a result of certified audit findings in the future. He mentioned Palo Alto (Silicon Valley) audited their meters, which the DOW is looking at, which he believes is required by the State of Hawaii, and can create big problems on Kaua‘i.

Another point Mr. Parrott mentioned is nobody is looking at how to deal with the customers in an effective way. Accounting and Engineering are looking at the customer on the objective side. But on the subjective side the department needs to look at how people’s lives are affected and what upsets our customers. This caught everyone by surprise within the other departments of water (Palo Alto, Los Angeles and Honolulu). Each board has said “nobody told us” or “we didn’t know.”

Mr. Parrott suggested that the Board outreach to the DOW divisions in a comfortable way and to understand what is happening to avoid being blindsided. This is distilled from three (3) audits (Palo
Alto, Los Angeles and Honolulu) during the last four (4) years. Everybody is going to the Cloud with seven (7) fiber optics running through Kaua‘i. The DOW needs to gear up for it and find people who can do it.

Mr. Parrott shared websites from various Hawai‘i counties and California cities for the Audit Committee as resources listed below:

Maui Budget (Department of Water Supply, County of Maui)
http://www.co.mau.hi.us/1896/Budget-Documents-Ordinances
  ➢ Click on FY-2018 Operating and Capital Budget

Honolulu (Honolulu Board of Water Supply)

Palo Alto, California
https://www.cityofpaloalto.org/civicax/filebank/documents/46104

Los Angeles, California

A SOCIOLOGICAL PERSPECTIVE ON DECISION-SUPPORT SYSTEMS IN ENVIRONMENTAL MANAGEMENT
  ➢ Click on pdf mid-page

Chair Tabata will present an Audit Committee report with recommendations for the full Board at the August Board meeting for their input. If the Board decides to expand the scope, and if there is not enough funds, the Board would have to prioritize items or to do another audit next year. There could be additional funds if needed.

Deputy County Attorney Krafft clarified that the Board could authorize the Audit Committee to procure the Auditor which should be in the recommendation on the Audit Committee report. There would be limitations on the expertise of the individual selected on the evaluation committee which she will review. When an Auditor is procured, based on their resume and being the most qualified, the Audit Committee will then ask for their proposal. The best qualified Auditor would be selected and three bids are not required.

E. ADJOURNMENT
Chair Tabata adjourned the Special Board Meeting of the Audit Committee at 4:31 p.m., with no objections.

Respectfully submitted,                        Approved,
Edith Ignacio Neumiller                        Beth Tokioka
Commission Support Clerk                      Secretary – Board of Water Supply
09/13/17

Attention: Honorable Mr. Kurt Saiki & Members of the Board

Subject: FRC for ADU - Enclosed No. 82706 Form 11/20/2006
$4,600 to water Dept
And the permit that is paid from 2007
Requesting: PLEASE Grand-Father in Price for FRC of $4,600

Dear Mr. Saiki:

I hope this note finds you in good health. I appreciate your valuable time in this issue.

First, I want you & the Board Members to know, YOU have an Excellent staff working at the water Department. Your workers are professional, caring, helpful with An A+ attitude. Lucky, I live on Kauai.

In August 13, 2007, I received the permit from the Building Department to build the ADU in Kalaheo.

The next day, I met the wonderful couple who owns Maka Import of Kalaheo. They desperately needed a warehouse for their commercial wholesale business. I agree to let them rent it. In my thoughts I would build in 2010 or 2011.

In 2014 or 2015? I do not recalled the year. My Son told me the Kauai County came to Kalaheo and told them, my permit is not longer good.

I did not question the Kauai County Building department on it. I run into a situation, where I needed funds to covered unexpected bills. That is why I took the $4,600 back from the water department in 2015?

I did not expect, Maka Import to give up the warehouse. I was given noticed in January 2017. Due to personal reasons Maka imports will no longer need a warehouse by the end of March 2017.

Since, I invested much time and money into this project. Wisdom tells me to continue on & complete what I started 10 years ago.
No words are adequate to share my gratitude and appreciation for your consideration on this request.

I am asking for grace & understanding on this unusual circumstance. I hope, you will allow me to give the water department $4,600 to apply for the ADU in 2017.

With Thanks and gratitude,

Irene Morgan
Permit Type: BUILDING

Permit/Application No: 06-00002047
Permit Type: BUILDING
Valuation: $229,400.00
Permit Fee: 906.00

Date Issued: 8/13/07
Prepared By: GVOLKER
Total Fees Paid: 1280.00
Plan Review Fee: 374.00

Property Address: [Redacted]
Owner Name: MORGAN, IRENE
Tenant Name: [Redacted]

Tax Map Key: 2-3-014-021-
Contractor: SELF BUILDER
Sub Contr:

Structure Information

Construction Type: VN
NUMBER OF STORIES: 2
Description of Work: 2ND STORY ADU
Misc Information:
  a.d.u - 1873 deck-90 entry/stair-260
  revised plan to 1 story- add res-1620 la
  undry/sto-192

Occupancy Type: R3
TOTAL FLOOR AREA: 2225

Permission is hereby given to do work according to conditions hereon and according to approved plans and specifications. This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work suspended or abandoned for a period of 180 days at any time after work is commenced. Separate permits must be obtained for building, sign, electrical, plumbing and gas.
DEPARTMENT OF WATER
County of Kauai
OFFICIAL RECEIPT

$4,660.00

Date 11/20

Received from J. Morgan

Amount of

FOR:
Installation Charges
Specs & Plans
Reopening
Refundable Water Deposit
Others

Water System

Authorized Agent

Kalomoko

Per

01-06-102

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Attention:  
Mr. Kurt Saki

Dept. of Water
County of Kauai
4398 Pua Loke Street
Ahuimanu, Hi. 96766-1600

Now Accepting
Old Business
MANAGER’S REPORT No. 17-40 (Update)

September 29, 2017 (April 28, 2017)

Re: Discussion and Possible Action on the First Amendment to Contract No. 614, Job No. 15-08, WP2020 HW-11 Construct Há'ena 0.2 MG Storage Tank, Há'ena with Brown and Caldwell for additional funds in the amount of $27,401.00

RECOMMENDATION:
It is recommended that the Board re-approve the $27,401.00 in additional funds for the first amendment to Contract No. 614 for Brown and Caldwell for the subject project.

FUNDING:
From: Account No. 10-00-00-330-000 Water Utility Unrestricted Fund
To: FRC Account No. 20-20-00-605-153 FRC-Eng-Ha'ena 0.2 MG tank (EXP)

<table>
<thead>
<tr>
<th>Contract No. 614: Brown and Caldwell (executed 12/28/15*)</th>
<th>$358,881.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingency Funds Available</td>
<td>$26,119.00</td>
</tr>
<tr>
<td>Total Certified Funds for Contract No. 614</td>
<td>$385,000.00</td>
</tr>
<tr>
<td>Amendment No. 1 - Design</td>
<td>$53,520.00</td>
</tr>
<tr>
<td>Contingency Funds Available</td>
<td>$26,119.00</td>
</tr>
<tr>
<td><strong>Additional Funds for Amendment No. 1</strong></td>
<td>$27,401.00</td>
</tr>
<tr>
<td>From: Account No. 10-00-00-330-000 Water Utility Unrestricted Fund</td>
<td>To: FRC Account No. 20-20-00-605-153</td>
</tr>
<tr>
<td>Extension 70 calendar days - Amendment No. 1</td>
<td>0.00</td>
</tr>
<tr>
<td>Contract Total – Amendment No. 1</td>
<td>$412,401.00</td>
</tr>
</tbody>
</table>

*Stop work order issued 2/25/16 for DOW to obtain right of Entry from private landowner. Re-start work issued 1/24/17. Stop work order issued 4/12/17 for 1st Amendment to Contract, which was executed 7/31/17.

BACKGROUND:
The Board approved Manager’s Report 17-40 on April 28, 2017 for $27,401.00 in additional funds to be added to Contract No. 614 with Brown and Caldwell. The intent was to execute and encumber the additional funds with the first amendment to Contract No. 614 before the end of the 2016-2017 Fiscal Year on June 30, 2017. However, due to unanticipated delays in executing the contract amendment, the amendment was not executed until July 31, 2017. Therefore, a purchase order (PO) was not created in Fiscal Year 2016-2017 and the $27,401.00 in additional funds approved at the April 28, 2017 Board meeting were not included in the Supplemental Budget for Fiscal Year 2017-2018. The funds will need to be re-approved by the Board for the current fiscal year.
The background is provided below for the first amendment to Contract No. 614 with Brown and Caldwell, which was previously approved on April 28, 2017 in the amount of $27,401.00 and for an additional 70 calendar days to be added to the contract.

This project will construct a new 0.2-MG storage tank to match the spillway elevation of the existing 0.1-MG Hāʻena Steel Tank (HW-3), which accommodates the existing 144’ service zone of the Hāʻena-Wainiha area water system. This contract consists of construction plans and specifications for a new 316 stainless steel 0.2-MG storage tank, piping and connections to the existing system, a tank site layout with grading, retaining wall, a drainage system, chain link perimeter fence, access road, and various other site improvements.

The proposed 0.2 MG water storage tank will be approximately 37 feet in diameter and 29 feet high. The existing slope has a gradient (ratio) of about 2.2 Horizontal (H) to 1 Vertical (V). Site grading will predominantly consist of cuts, resulting in a relatively high slope uphill of the new tank. In addition to a conventional concrete retaining wall, a finish slope gradient of about 1.5H:1V, or a cut slope with soil nails and/or a tie back system, or a combination of the two, are also being considered. Therefore, maximum cut depths near the toe of the proposed slope and tank will be on the order of 20 feet and the required retaining wall at the site may need to be as high as 25 feet in places. The estimated construction cost of the 25-foot high retaining wall is approximately $1,000,000. However, the height of the retaining wall is determined by the specific soil characteristics at the site.

The consultant for the project, Brown and Caldwell, has submitted a proposal to amend Contract No. 614 for the project’s geotechnical sub-consultant, Hirata and Associates, to conduct three additional site-specific geotechnical borings at the proposed 0.2-MG tank site. It is anticipated that the results of these additional borings will confirm that the existing soil type (or “in-situ substrate”) is closest to “decomposed rock” as defined in the County of Kauaʻi’s Ordinance No. 808 Relating to Grading, Grubbing, and Stockpiling. Per the Ordinance, this soil type is afforded a maximum cut slope of 1H:1V. Therefore, with the additional site-specific borings, it is anticipated that Hirata and Associates can recommend that the retaining wall can be designed for a maximum cut slope of 1H:1V, or at least 1.5H:1V, which would result in a smaller retaining wall and a substantial construction cost savings for the Department. Specifically, a 1.5H:1V cut slope would result in a retaining wall with a maximum height of approximately 15 feet and an approximate cost of $700,000. A 1H:1V maximum cut slope would result in a retaining wall with a maximum height of approximately 4 feet and an approximate cost of $450,000.

The existing contract fee for geotechnical work is based on the geotechnical consultant making recommendations derived from the existing borings at the existing 0.1 MG Hāʻena Steel Tank site. However, because those borings are not site-specific, Hirata and Associates’ recommendations are limited to conservative assumptions, and they are limited to recommending a 2H:1V maximum cut slope.

The DOW has reviewed Brown and Caldwell’s proposal and Hirata’s anticipated recommendations to conduct the additional borings. It is the DOW staff’s opinion that the Board approve the inter-fund transfer for the first amendment to Contract No. 614, as it anticipated that the additional site-specific borings will reduce the construction cost of the retaining wall from approximately $1,000,000 to $700,000, or potentially as low as $450,000. The proposed inter-fund transfer amount also includes the addition of $1,000.00 for an Individual NPDES Permit application fee, and the addition of $2,750.00 for the Conservation District Use Permit.
application fee, which were not included in the original scope of work. Including these fees in the design contract is intended to streamline the permit application and approval processes.

**OPTIONS:**

**Option 1:** Approve the additional funds of $27,401.00 for the first amendment to Contract No. 614  
Pros: This will allow for the full contract amount to be available for payment  
Cons: Not approving the additional funds of 27,401.00 for the first amendment to Contract No. 614 will prevent the DOW from being able to pay the full contract amount with Brown and Caldwell until such time that additional funds are approved.

**Option 2:** Do not approve the additional funds of $27,401.00 for the first amendment to Contract No. 614  
Pros: None.  
Cons: Not approving the additional funds in the amount of 27,401.00 for the first amendment to Contract No. 614 will prevent the DOW from being able to pay the full contract amount with Brown and Caldwell.

Respectfully submitted,  
Keith Aoki, P.E.  
Engineering Division

Funding reviewed:  
Marites Yano  
Water Works Controller

CONCURRED:

Kirk Saiki, P.E.  
Manager and Chief Engineer

KA/BW/ein
MANAGER’S REPORT No. 18-66 (Update)

September 29, 2017 (August 21, 2017)

Re: Discussion and Possible Action for Job No. 17-11, WP2020 WKK-02, Drill and Test Kīlauea Well No. 3, Kīlauea, Kaua‘i, Hawai‘i for additional design funding in the amount of $18,339.35

RECOMMENDATION:
It is recommended that the Board approve the expenditure of $18,339.35 in additional design funds.

FUNDING:

<table>
<thead>
<tr>
<th></th>
<th>Proposed Contract Amount:</th>
<th>$369,847.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Contingency – 5%</td>
<td>$18,492.35</td>
</tr>
<tr>
<td>C</td>
<td>Proposed Funding Total (A + B):</td>
<td>$388,339.35</td>
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Funds Currently Budgeted:

<table>
<thead>
<tr>
<th>Fund Account No.</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>20-20-00-605-154</td>
<td>$300,000.00</td>
</tr>
<tr>
<td>10-20-10-540-010</td>
<td>$70,000.00</td>
</tr>
</tbody>
</table>

Total Funds Budgeted: $370,000.00

| E | Additional Funds Requested for 5% Contingency (FRC Fund Account No. 20-20-00-605-154) (C – D) | $18,339.35 |
|   | Contract Total                           | $369,847.00 |
|   | Proposed Certified Funds for Project     | $388,339.35 |

BACKGROUND:
The Board requested at the August 21, 2017 Board meeting that the Department provide justification for project. The following are the background and justification for the project.

The Kīlauea-Waipake-Kalihiwai water system is considered one of the largest in terms of total service area. The system stretches from Waipake Subdivision in east Kīlauea nearly seven miles to the Kalihiwai River. Beside the residential community of Kīlauea Town, the majority of the service area consists of agricultural subdivisions that consist of a mixture of agricultural and residential uses. Kīlauea includes the highest percentage of agricultural users on the island and
approximately 33% of the water sales in the area qualify for Department of Water (DOW) agricultural rates.

The Kīlauea-Waipake-Kalihiwai Water system is supplied by two well sources; one production well and one standby well, as required by the Water System Standards, on the mauka side Kūhiʻō Highway in Kīlauea. These wells provide supply to two (2) 0.25 MG storage tanks at the same location, three (3) 0.10 MG storage tanks at Waipake, Puu Pane & Kalihiwai, respectively, and consumers. Water distribution from the Kīlauea wells and storage tank site is provided through a single transmission main before splitting off to provide service through a water distribution network to the three 0.10 MG tanks noted above and consumers. A well located at a different site from the existing wells will provide a redundant transmission line from available source locations. If the current single transmission line goes out of service without a redundant line from a new well location, there will be no source available to provide water to Kīlauea.

The Department has utilized and continues to utilize Water Plan 2020 to prioritize and implement its capital infrastructure improvement projects. Due to the source deficiency during the maximum day demand conditions, the ‘Drill & Develop New Kīlauea Well (No. 3 or No. 4)’ project had been slated for execution during the first phase of the capital infrastructure improvement implementation. As no other sources in the area have been developed, the need remains today.

The factors that have been identified within Water Plan 2020 and keep this project high on the priority list are the source deficiency need, the largest percentage of agricultural users on the island (pursuant to Water Plan 2020, 33% of water sales in the area qualify for DOW agricultural rates), additional dwelling unit construction and the need to provide system hardening and redundancy as the current supply to this water system is reliant upon a single transmission main from its only source and major storage area to the water system distribution network and consumers.

The estimated construction cost of the project to:

- Drill and test the well: $750,000 - $1,000,000
- Develop the well site (if well test result is good): $3,000,000 - $5,000,000
- Estimated combined construction cost: $3,750,000 - $6,000,000 *

A new design would be required to develop the well site.
- The estimated additional design cost: $350,000 - $700,000 *

* Depends on site location, length of access road and connecting pipeline (based on assumed construction start of drill and test in 2018 and development of well site in 2022)

The proposed scope of the subject project includes drilling and testing a new drinking water well for the Kīlauea-Waipake-Kalihiwai water system. The system is currently supplied by two 700 gpm wells known as Kīlauea No. 1 & 2. The DOW would like to develop a new well with a target capacity of 700 gpm, which would enable any of the systems wells to provide full standby capacity.
The DOW has completed several rounds of negotiations with the consultant for the project. The consultant has submitted a proposal to complete the design of the project which is narrowly within the DOW’s design budget. The DOW has thoroughly reviewed the consultant’s proposal and finds it acceptable. However, there are not sufficient funds budgeted to provide a 5% contingency for the contract. With the current budget, only $153.00 (< 0.05% of contract amount) would be available for contingency. The additional funds being requested will provide the 5% contingency that is allowed. In the future, if a contract amendment is needed, including the 5% contingency, may potentially save up to one month to execute a contract amendment because a Manager’s Report to the Board is required for additional funding for a contract amendment when the contingency amount is not sufficient. If this Manager’s Report requesting additional funds for a 5% contingency is approved, the certified amount for the project will reflect the new budget amount.

**OPTIONS:**

**Option 1:** Approve the expenditure of the additional design funds.

**Pros:** This will potentially allow the DOW to save up to a month to complete a contract amendment and the design (if Board approval is not required for additional funds for the amendment).

**Cons:** This will allow the DOW to not encumber the requested additional contingency funds of $18,339.35 which could be used for other purposes.

**Option 2:** Do not approve the expenditure of the additional design funds.

**Pros:** This will allow the DOW to not encumber the requested additional contingency funds of $18,339.35 which could be used for other purposes.

**Cons:** Not approving the expenditure of additional design funds may delay a contract amendment and completion of design up to one month, if the contract amendment requires more money than is available. Currently, only $153.00 is available for contingencies without approval of the additional design funds.

Respectfully submitted,

Keith Aoki, P.E.
Engineering Division

Funding reviewed:

Marites Yano
Waterworks Controller

**CONCURRED:**

Kirk Saiki, P.E.
Manager and Chief Engineer

Mgrp/September 2017/18-66/Discussion and Possible Action for Job No. 17-11, WP2020 WKK-02, Drill and Test Kilauea Well No. 3, Kilauea, Kaua‘i, Hawai‘i for additional design funding in the amount of $18,339.35 (Update) (8-21-17, 9-29-17) ein
MANAGER’S REPORT No. 18-67 (Update)

September 29, 2017 (August 21, 2017)

Re: Discussion and Possible Action on the 5th Amendment for Contract No. 440, Job No. 02-06 WP2020 #WKK-15, Kilauea, Kaua‘i, Hawai‘i, 1.0 Million Gallon Storage Tank and Connecting Pipeline with Kodani & Associates Engineer, LLC for the additional design funding of $25,260.00

RECOMMENDATION:
It is recommended that the Board approve a total of $25,260.00 in additional design funds to be expended for the Kilauea 1.0 MG Storage Tank and Connecting Pipeline Project.

FUNDING:
Account (BAB)
Account No. 10-20-00-604-120, No. 20-20-00-604-120, No. 30-20-00-605-120

<table>
<thead>
<tr>
<th>Certified Amount for Contract No. 440</th>
<th>$346,423.80</th>
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<tbody>
<tr>
<td>Contract: Kodani &amp; Associates Engineers, LLC executed 10/12/04; NTP 12/13/04, time extension for 150 days; site selection report and documents to obtain right of entry</td>
<td>$12,700.00</td>
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<tr>
<td>Amendment No. 1; executed 4/7/10; NTP 6/1/10 time extension for 210 days, feasibility report for selected site, prepare EA if site is acceptable</td>
<td>$68,099.80</td>
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<tr>
<td>Amendment No. 2; execution 12/20/11; NTP 1/2/12 time extension for 365 days, provide technical information required for projects design, permitting and construction of tank, and drill and test well at site.</td>
<td>$202,200.00</td>
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<tr>
<td>Amendment No. 3; executed 2/10/14; time extension for additional 120 days, revise grading sheets due to removing drill and testing of well from scope (4/18/14)</td>
<td>$6,200.00</td>
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<tr>
<td>Amendment No. 4 executed 4/28/16; time extension for 270 days, provide additional reinforced concrete tank design</td>
<td>$53,424.00</td>
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<tr>
<td>Total Contract Amount</td>
<td>$342,623.80</td>
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</table>

<table>
<thead>
<tr>
<th>Additional Funds Requested for Amendment No. 5 of contract</th>
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<tbody>
<tr>
<td>Build America Bond (BAB) Fund Account no. 30-20-00-604-120</td>
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<tr>
<td>Total Additional Funds Requested</td>
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<tr>
<td>Contingency available</td>
</tr>
<tr>
<td>New Contract Amount for Kilauea 1.0 MG Storage Tank and Connecting Pipeline Project</td>
</tr>
</tbody>
</table>

BACKGROUND:
The Board requested at the August 21, 2017 Board meeting that the Department provide justification for project. The following are the background and justification for the project.
The Kīlauea-Waipake-Kalihiwai water system is considered one of the largest in terms of total service area. The system stretches from Waipake Subdivision in east Kīlauea nearly seven miles to the Kalihiwai River. Beside the residential community of Kīlauea Town, the majority of the service area consists of agricultural subdivisions that consist of a mixture of agricultural and residential uses. Kīlauea includes the highest percentage of agricultural users on the island and approximately 33% of the water sales in the area qualify for DOW agricultural rates.

The Kīlauea-Waipake-Kalihiwai Water system is supplied by two well sources; one production well and one standby well, as required by the Water System Standards, located on the mauka side of Kūhiʻō Highway in Kīlauea. These wells provide supply to two (2) 0.25 MG storage tanks at the same location, three (3) 0.10 MG storage tanks at Waipake, Puu Pane & Kalihiwai, respectively, and consumers. Water distribution from the Kīlauea wells and storage tank site is provided through a single transmission main before splitting off to provide service through a water distribution network to the three 0.10 MG tanks noted above and consumers. The two (2) Kīlauea 0.25 MG tanks and Puu Pane 0.1 MG tank service share the same overflow elevation of 466 ft. and service the majority of the agricultural and residential units in the Kīlauea-Waipake-Kalihiwai system. The Waipake 0.10 MG tank provides service only to the agricultural/residential lots of the Waipake subdivision, both mauka and makai of Kūhiʻō Highway. The Kalihiwai 0.10 MG tank provides service only to the high elevation agricultural/residential lots (approximately 2/3) within the Kalihiwai Ridge Subdivision.

The Department has utilized and continues to utilize Water Plan 2020 to prioritize and implement its capital infrastructure improvement projects. Due to the storage deficiency during the fire flow and maximum day demand conditions, the ‘Construct Kīlauea 466 Tank’ project had been slated for execution during the first phase of the capital infrastructure improvement implementation. As no other storage in the area have been developed, the need remains today.

The factors that have been identified within Water Plan 2020 and keep this project high on the priority list are the storage deficiency need, the largest percentage of agriculture users on the island (pursuant to Water Plan 2020, 33% of water sales in the area qualify for DOW agricultural rates), additional dwelling unit construction, development of vacant lands and the need to provide system hardening and redundancy as the current supply to this water system is reliant upon a single transmission main from its only source and major storage area to the water system distribution network and consumers.

The storage facilities for the Kīlauea area are not adequate. The Department is currently limiting water service to lots in the area until additional storage facilities (and additional source facilities) are provided. The DOW is proposing to construct a new 1.0 MG storage tank on the same site as an existing 0.1 MG storage tank. The 0.1 MG tank will be demolished and replaced with the new 1.0 MG storage tank. The addition of the proposed 1.0 MG tank will provide adequate storage facilities for the area.

The Environmental Assessment (EA) for the project also required the following permits to be completed; Use, Class IV zoning and Special permits. The design consultant, Kodani & Associates Engineers, LLC did not know or anticipate the need to complete these permits and did not include the cost to complete these permits for the design. The consultant has requested additional funds to complete these permits required from the EA. The Department has reviewed the request and documentation from Kodani & Associates Engineers, LLC and is satisfied that the consultant did not include the cost to complete the Use, Class IV zoning and Special permits in their contract proposal amount for the contract.

The NPDES permit required for the project required a flat $500.00 application fee. The application fee was determined to not be in the contract scope of work. The consultant submitted an invoice for the fee as a reimbursable expense which the Department paid. In oversight by the Department and the consultant,
the contract was not amended at that time to include the NPDES application fee in the contract. The Department realized later that the contract should be amended to include the application fee. The NPDES permit application fee is included in the requested $25,260.00 in additional funds being requested and will be included in the scope of work to make the contract correct.

The Department has found the requested amount to complete the Use, Class IV zoning and Special permits reasonable and recommend approval of the additional funds.

The contract time will also be extended with Contract Amendment No. 5 and will be addressed in a Report to Manager/Manager’s Update.

OPTIONS:
Option 1: Approve the additional funding to complete the Use, Class IV and Special permits.
Pro: Approving the expenditure of additional design funds will allow the DOW to complete the required Use, Class IV and Special permits.
Con: None.

Option 2: Do not approve the additional funding to complete the Use, Class IV and Special permits.
Pro: None.
Con: Not completing the Use, Class IV and Special permits may prevent the project from being constructed.

Respectfully submitted,

Keith Aoki, P.E.
Engineering Division

Funding reviewed:

Marites Yano
Waterworks Controller

CONCURRED:

Kirk Saiki, P.E.
Manager and Chief Engineer
Consent Calendar
MANAGERS REPORT No. 18-69

September 29, 2017

Re: Discussion and Possible Action to approve a Grant of Easement for Construction Plans for Makahuena Subdivision, Planning Department Subdivision S-2015-14, Kaua‘i, affecting the following landowner.

a. CIRI Land Development Company, on TMKs: 2-8-021:041 (por.), 2-8-021:044 (por.) 2-8-021:047 (por.), and 2-8-021:049 (por.) thru 2-8-021:054 (por.) as specified above in Kōloa, Kaua‘i, Hawai‘i

RECOMMENDATION:
It is recommended that the Board approve the Grant of Easement document; whereby, the above landowners, grant to the Board of Water Supply, County of Kaua‘i, easements “AU-4” and “AU-5” on, over and under that certain parcel of land located on TMKs: 2-8-021:041 (por.), 2-8-021:044 (por.) 2-8-021:047 (por.), and 2-8-021:049 (por.) thru 2-8-021:054 (por.) as specified above in Kōloa, Kaua‘i, Hawai‘i, for the following work:

1. Reading of water meters and for the construction, installation, reinstallation, maintenance, repair, and removal of potable water pipelines and related meters, valves, and other associated waterworks facility improvements and appurtenances. For the proper operation of its water system, the GRANTEE is further allowed, with or without vehicles or equipment and as the Grantee deems necessary for the proper operation of its water system, the right of ingress and egress at any time to, from, and through existing driveways and roadways within the Easement Area, as the same may exist from time to time, and to the areas immediately surrounding the waterworks facility improvements and appurtenances which are reasonably necessary in accordance with sound engineering and construction standards for construction, installation, reinstallation, maintenance, repair, and removal of all or any portion of the waterworks facility improvements and appurtenances.

Further, the GRANTEE shall indemnify and save the GRANTOR harmless from and against all damage to the GRANTOR’s property and all liability for injury to or the death of persons when such damage, injury, or death is caused by the negligence of the GRANTEE, its officers, agents and employees while using the easement area;

FUNDING: N/A.

BACKGROUND:
Owner installed ten (10) 5/8” water meters for domestic use and one (1) 1-inch water meter for irrigation use as required for Planning Department Subdivision S-2015-14. The water facilities installed (water main and laterals, water meters, gate valves, fire hydrants, cleanout) are located on a private roadway which requires an easement in favor of Department of Water (DOW).
OPTIONS:

Option 1: Approve as recommended.
Pro: Project can be completed as designed. Water meters can be installed.
Con: None as it was designed and planned this way.

Option 2: Not approving easement.
Pro: None at this point.
Con: Project won’t be completed as designed. Water meters will remain uninstalled.

Respectfully submitted,

Dustin Moises, P.E.
Chief of Construction Management

CONCURRED:

Kirk Saiki, P.E.
Manager and Chief Engineer

Attachment: Grant of Easements for: TMKs: (4) 2-8-021:041 (por.)
TMKs: (4) 2-8-021:044 (por.)
TMKs: (4) 2-8-021:047 (por.)
TMKs: (4) 2-8-021:049 (por.)
thru TMKs: (4) 2-8-021:054 (por.)
LAND COURT SYSTEM

REGULAR SYSTEM

After Recordation Return By: MAIL [XX] Pickup [ ]

TO:

DEPARTMENT OF WATER
4398 PUA LOKE STREET
LIHUE, KAUAI, HAWAII 96766

GRANT OF EASEMENT

for

TMK: (4) 2 - 8 - 0 2 1 : 0 4 1 (por.)
TMK: (4) 2 - 8 - 0 2 1 : 0 4 4 (por.)
TMK: (4) 2 - 8 - 0 2 1 : 0 4 7 (por.)
TMK: (4) 2 - 8 - 0 2 1 : 0 4 9 (por.)
THRU TMK: (4) 2 - 8 - 0 2 1 : 0 5 4 (por.)

T-18882/S-2015-14

THIS INDENTURE is made on this ________ day of ________________, 2017, between:

CIRI Land Development Company, an Alaska corporation,

whose principal place of business is:

725 East Fireweed Lane, Suite 800
Anchorage, Alaska 99503

and whose mailing address is

Post Office Box 93330
Anchorage, Alaska 99509

(hereafter "GRANTOR") and the BOARD OF WATER SUPPLY, COUNTY OF KAUAI, whose mailing address is

4398 Pua Loke Street, Lihue, Kauai, Hawaii 96766 (hereafter "GRANTEE");
WITNESSETH:

THAT IN CONSIDERATION of the sum of one dollar ($1.00) paid by the GRANTEE to the GRANTOR, the receipt of which is acknowledged, and the covenants contained in this grant of easement to be performed by the GRANTEE, the GRANTOR does hereby grant, bargain, sell and convey to the GRANTEE an easement in perpetuity on, over, and under that certain parcel of land located generally at Kōloa District, Kauai, Hawaii, Tax Map Key No. (4) 2 - 8 - 0 2 1 : 0 4 1 (por.); (4) 2 - 8 - 0 2 1 : 0 4 4 (por.); (4) 2 - 8 - 0 2 1 : 0 4 7 (por.); (4) 2 - 8 - 0 2 1 : 0 4 9 (por.) thru (4) 2 - 8 - 0 2 1 : 0 5 4 (por.); Project Name: CONSTRUCTION PLANS FOR MAKAHU’ENA SUBDIVISION Subdivision No.: S-2015-14, and more particularly described in Exhibit "A" (Easements AU-4 and AU-5) and Exhibit "B" (subdivision map, dated June 13, 2017) which are attached and incorporated by reference into this grant of easement (hereafter "easement area").

This Grant of Easement is granted for the reading of water meters and for the construction, installation, re-installation, maintenance, repair, and removal of potable water pipelines and related meters, valves, and other associated waterworks facility improvements and appurtenances (collectively the "Waterworks Facility Improvements and Appurtenances") within the Easement Area. For the proper operation of its water system, the GRANTEE is further allowed, with or without vehicles or equipment and as the Grantee deems necessary for the proper operation of its water system, the right of ingress and egress at any time to, from, and through existing driveways and roadways within the Easement Area, as the same may exist from time to time, and to the areas immediately surrounding the waterworks facility improvements and appurtenances which are reasonably necessary in accordance with sound engineering and construction standards for construction, installation, re-installation, maintenance, repair, and removal of all or any portion of the waterworks facility improvements and appurtenances. In exercising its easement rights, however, GRANTEE shall not unreasonably interfere with GRANTOR’s development, use, and enjoyment of the Easement Area property, including but not limited to, unreasonably interfering with the construction or use of any vertical improvements and structures (including, but not limited to, buildings) within the Easement Area. GRANTOR understands and agrees that GRANTEE’S construction, installation, re-installation, maintenance, repair, and removal at any time of all or any portion of the waterworks facility improvements and appurtenances within the Easement Area, if done pursuant DOW standards, shall not constitute unreasonable interference with GRANTOR’S development, use, and enjoyment of the Easement Area property.

TO HAVE AND TO HOLD the same unto the GRANTEE forever; provided that should the GRANTEE cease to use the Easement Area for the purposes described for a continuous period of two (2) calendar years, this Grant of Easement shall terminate and the interest granted shall immediately and without the GRANTOR’s re-entry revert to the GRANTOR. In such an event, this Grant of Easement shall cease to exist by operation of the GRANTEE’s non-use, without any necessary action on the GRANTOR’s part.

Construction Plans for Makahu’ena Subdivision
S-2015-14 CIRI Land Development Company
AND IN FURTHER CONSIDERATION of the rights granted to the GRANTEE and the benefits accruing to the GRANTOR under this Grant of Easement, the GRANTOR and GRANTEE further covenant, agree, and promise as follows:

1. That should the GRANTEE disturb in any way the ground which is the subject of the Easement Area, the GRANTEE shall at its own expense restore the ground to its original condition to the extent that such restoration is reasonable, except that if GRANTEE is required to make emergency repairs to waterworks facility improvements and appurtenances it owns within the Easement Area, GRANTEE will only backfill soil, reasonably compact such soil to 95% relative compaction, and place temporary cold-mix asphalt pavement and sidewalk patches over such repairs to allow pedestrians and vehicles up to and including semi-trailers to pass over such repaired areas; GRANTOR understands and agrees that GRANTEE’S temporary repairs to sidewalks over which pedestrians may pass may not comply with requirements of the U.S. Americans with Disabilities Act. GRANTOR is responsible for permanent restoration of asphalt or concrete pavement, concrete curbs, sidewalks, landscaping, and other ancillary physical damage relating to such GRANTEE emergency repairs;

2. That the GRANTEE shall indemnify and save the GRANTOR harmless from and against all damage to the GRANTOR’s property and all liability for injury to or the death of persons when such damage, injury, or death is caused by the negligence of the GRANTEE, its officers, agents, and employees while using the Easement Area; except that GRANTEE shall not be liable for any claims, suits, demands, actions, judgments, losses, damages, costs, expenses, and liabilities whatsoever including, but not limited to, flood damage and damage to vertical improvements or their foundations, or both, or damage to parking improvements arising out of or relating to broken or leaking waterworks facility improvements and appurtenances owned by GRANTEE within the Easement Area;

3. That the GRANTEE shall not assign its rights under this Grant of Easement without the prior written consent of the GRANTOR; provided that the GRANTEE may assign its rights to a successor of the GRANTEE duly created by law;

4. That should the GRANTOR’s development plans require that the Easement Area and/or Waterworks Facility Improvements and Appurtenances within, on, or under the Easement Area be re-located, the GRANTOR will, at the GRANTOR’s own expense and pursuant to the GRANTEE’s instructions and specifications, re-locate the affected Easement Area and Waterworks Facility Improvements and Appurtenances without interruption of the GRANTEE’s services;

5. That the GRANTOR shall at no time erect any building foundation of any kind below the surface of the land on, within, or under which Waterworks Facility Improvements and Appurtenances may be located or any building or structure of any kind (other than roads, sidewalks, curbs, or similar appurtenances) on the
surface of the land over which Waterworks Facility Improvements and Appurtenances may be located unless the GRANTOR receives the prior written consent of the GRANTEE. Building foundations, and buildings and structures of any kind, may be constructed if such improvements are at least ten (10) feet away from all sides of any Waterworks Facility Improvements and Appurtenances within the Easement Area. No building foundations and buildings and structures of any kind, may be constructed within ten (10) feet of all sides of any Waterworks Facility Improvements and Appurtenances within the Easement Area unless GRANTOR receives the prior written consent of GRANTEE.

Only lawn grass shall be planted within three (3) feet of all meter boxes, fire hydrants, and other Waterworks Facility Improvements and Appurtenances. No trees with aggressive root systems shall be planted within twenty (20) feet of all meter boxes, fire hydrants, and other Waterworks Facility Improvements and Appurtenances.

This Paragraph No. 5, though, shall not prevent the GRANTOR from crossing over, constructing, and maintaining roadways within the Easement Area or laying, operating, maintaining, repairing, or removing conduits and drains which do not interfere with the exercise of the GRANTEE’s rights under this Grant of Easement; and

6. GRANTOR shall have the right, without consent of GRANTEE, to assign and/or transfer all of GRANTOR’s rights and obligations under this Grant of Easement to a homeowners’ association or other similar association established by GRANTOR and that such association shall thereby assume all of the GRANTOR’s obligations under this Grant of Easement. Further, GRANTOR and its successors and assigns may contract with an independent licensed contractor(s) to perform GRANTOR’s obligations hereunder.

7. That the GRANTOR covenants with the GRANTEE that the GRANTOR is the lawful owner of the land which is the subject of this Grant of Easement and the Easement Area, that the GRANTOR has good right and title to grant this easement, and that the GRANTOR will warrant and defend the same unto the GRANTEE against the claims and demands of all persons.

8. When used within this document the term "GRANTOR" shall mean the singular and plural, masculine and feminine, and natural persons, trustees, corporations, partnerships, limited partnerships, sole proprietorships and other forms of business entities. The term shall also mean the GRANTOR’s or GRANTORS’ estates, heirs, personal representatives, successors, successors-in-trust, successors in interest, and assigns as this Grant of Easement shall run with the land in perpetuity unless extinguished as provided herein.
9. IT IS FURTHER MUTUALLY AGREED that the terms of this Grant of Easement shall be binding upon and inure to the benefit of all the parties to this document and that all covenants and obligations undertaken by two or more persons shall be deemed to be joint and several unless a contrary intention is clearly expressed in this document.

When used within this document the term "GRANTOR" shall mean the singular and plural, masculine and feminine, and natural persons, trustees, corporations, partnerships, limited partnerships, sole proprietorships and other forms of business entities. The term shall also mean the GRANTOR's or GRANTORS' estates, heirs, personal representatives, successors, successors-in-trust and assigns.

OWNER:
CIRI LAND DEVELOPMENT COMPANY,
AN ALASKAN CORPORATION

By: Chad Nugent
Vice President

GRANTOR

STATE OF ALASKA )
) ss.
THIRD JUDICIAL DISTRICT)

On this 31 day of JULY, 2017, in the Third Judicial District, State of Alaska, before me appeared Chad Nugent who is personally known to me or whose identity I proved on the basis of satisfactory evidence, who being by me duly sworn or affirmed, did say that such person is the Vice President for CIRI Land Development Company, an Alaska Corporation did say that such person executed the Grant of Easement for Tax Map Key No. (4) 2 - 8 - 0 2 1 : 0 4 1 (por.); (4) 2 - 8 - 0 2 1 : 0 4 4 (por.); (4) 2 - 8 - 0 2 1 : 0 4 7 (por.); (4) 2 - 8 - 0 2 1 : 0 4 9 (por.) thru (4) 2 - 8 - 0 2 1 : 0 5 4 (por.), dated (undated) and consisting of 11 pages at the time of notarization, as the free act and deed of such person, and if applicable in the capacity shown, having been duly authorized to execute such instrument in such capacity.

RAYNE L. HAMANN

Notary Public, State of
Name of Notary: (Affix Seal)
My Commission expires: 2-8-2017
APPROVED:
DEPARTMENT OF WATER, COUNTY OF KAUAI

Kirk Saito, P.E.
Manager and Chief Engineer

ACCEPTED:
BOARD OF WATER SUPPLY, COUNTY OF KAUAI

Sherman Shiraishi
Chairperson

APPROVED AS TO FORM
AND LEGALITY:

Mahealani M. Krafft
Deputy County Attorney

GRANTEE

STATE OF HAWAI‘I )
) ss.
COUNTY OF KAUA‘I )

On this __________ day of __________________________________, 2017 in the Fifth Circuit, State of Hawai‘i, before me personally appeared Sherman Shiraishi, who is personally known to me or whose identity I proved on the basis of satisfactory evidence, who being by me duly sworn or affirmed, did say that such person is the Chairperson for the Board of Water Supply, County of Kaua‘i executed the Grant of Easement for Tax Map Key No. (4) 2 - 8 - 0 2 1 : 0 4 1 (por.); (4) 2 - 8 - 0 2 1 : 0 4 9 (por.) thru (4) 2 - 8 - 0 2 1 : 0 5 4 (por.), dated ______________ and consisting of _______ pages at the time of notarization, as the free act and deed of such person, and if applicable in the capacity shown, having been duly authorized to execute such instrument in such capacity.

Notary Public, State of Hawaii
Name of Notary: ____________________________ (Affix Seal)
My Commission expires: ________________
EXHIBIT A

EASEMENT AU-4

LAND SITUATED AT WELIWELI, KOLOA, KAUAI, HAWAI'I

Being all of Road Lot A
Being Portion of Grant 1416 to Eke Opunui

Beginning at the northwest corner of this parcel of land, the coordinates of said
point of beginning referred to Government Survey Triangulation "FAA" being 4,982.34
feet South and 1,009.92 feet West, thence running by azimuths measured clockwise
from true South:

1. 243° 59' 72.90 feet along the remainder of Grant 1416;
   thence along the remainder of Grant 1416, on a curve to the left with a radius
   of 20.00 feet, the chord azimuth and distance being:

2. 349° 02' 41" 12.39 feet;

3. 331° 00' 196.11 feet along the remainder Grant 1416;
   thence along the remainder Grant 1416 on a curve to the left with a radius of
   150.00 feet, the chord azimuth and distance being:

4. 288° 31' 47" 202.56 feet;

5. 153° 59' 9.90 feet along Grant 1416;

6. 243° 59' 215.82 feet along the remainder of Grant 1416;

7. 333° 59' 10.00 feet along the remainder of Grant 1416;
   thence along the remainder of Grant 1416, on a curve to the right with a radius
   of 45.00 feet, the chord azimuth and distance being:

8. 3° 00' 02" 78.70 feet;
<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Distance (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Thence along the remainder of Grant 1416, on a curve to the left with a radius of 40.00 feet, the chord azimuth and distance being:</td>
<td>38.81</td>
</tr>
<tr>
<td>10</td>
<td>feet; Thence along the remainder of Grant 1416;</td>
<td>138.28</td>
</tr>
<tr>
<td></td>
<td>Thence along the remainder of Grant 1416, on a curve to the right with a radius of 200.00 feet, the chord azimuth and distance being:</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>feet; Thence along the remainder of Grant 1416;</td>
<td>275.38</td>
</tr>
<tr>
<td>12</td>
<td>Thence along the remainder of Grant 1416, on a curve to the left with a radius of 20.00 feet, the chord azimuth and distance being:</td>
<td>191.71</td>
</tr>
<tr>
<td>13</td>
<td>feet to the point of beginning and containing an area of 0.946 Acre.</td>
<td>27.54</td>
</tr>
</tbody>
</table>

DESCRIPTION PREPARED BY:
ESAKI SURVEYING & MAPPING, INC.

Dennis M. Esaki
Licensed Professional Land Surveyor
Certificate Number 4383

Lihue, Hawaii
April 2017
EXHIBIT A

EASEMENT AU-5

LAND SITUATED AT WELI WELI, KOLOA, KAUAI, HAWAII

Being Portion of Grant 1416 to Eke Opunui

Beginning at the southwest corner of this parcel of land, on the South side of Pee Road, the coordinates of said point of beginning referred to Government Survey Triangulation "PAA" being 5,026.14 feet South and 1,122.46 feet West, thence running by azimuths measured clockwise from true South:

1. 243° 59' 214.35 feet along the south side of Pee Road;
   thence along the remainder of Grant 1416, on a curve to the right with a radius of 282.00 feet, the chord azimuth and distance being:

2. 55° 04' 31" 7.28 feet;
   thence along the remainder of Grant 1416 and Lot 2, on a curve to the left with a radius of 20.00 feet, the chord azimuth and distance being:

3. 31° 27' 07" 16.50 feet;

4. 63° 59' 195.20 feet along the remainder of Grant 1416;

5. 185° 00' 10.19 feet along the remainder of Grant 1416 to the point of beginning and containing an area of 0.046 Acre.

DESCRIPTION PREPARED BY:
ESAKI SURVEYING & MAPPING, INC.

Dennis M. Esaki
Licensed Professional Land Surveyor
Certificate Number 4383

Lihue, Hawaii
April 2017
MANAGERS REPORT No. 18-70

September 29, 2017

Re: Discussion and Possible Action to approve a Grant of Easement for Service Lateral for a New 1-Inch Water Meter, Kula Aupuni Ni'ihau A Kahelelani Aloha Public Charter School Remodel, Kaua'i, affecting the following Landowner:

a. Kanaka Aupuni A Ni'ihau Aloha Inc., TMK: 1-3-09:001 as specified above in Waimea, Kaua'i, Hawai'i

RECOMMENDATION:
It is recommended that the Board approve the Grant of Easement document; whereby, the above landowners, grant to the Board of Water Supply, County of Kaua'i, easement “W-2” on, over and under that certain parcel of land located TMK: 1-3-09:001 as specified above in Kekaha, Kaua'i, Hawai'i, for the following work:

1. Reading of water meters and for the construction, installation, reinstallation, maintenance, repair, and removal of potable water pipelines and related meters, valves, and other associated waterworks facility improvements and appurtenances.

Further, the GRANTEE shall indemnify and save the GRANTOR harmless from and against all damage to the GRANTOR’s property and all liability for injury to or the death of persons when such damage, injury, or death is caused by the negligence of the GRANTEE, its officers, agents and employees while using the easement area.

FUNDING: N/A.

BACKGROUND:
Owner installed a new 1-inch water meter. The water meter facilities are on private property which requires an easement in favor of DOW.

OPTIONS:
Option 1: Approve as recommended:
Pro: Project can be completed as designed. Water meter can be installed.
Con: None as it was designed and planned this way.

Option 2: Not approving easement.
Pro: None at this point.
Con: Project won’t be completed as designed. Water meter will remain uninstalled.
Respectfully submitted,

Dustin Moises, P.E.
Chief of Construction Management

CONCURRED:

Kirk Saiki, P.E.
Manager and Chief Engineer

Attachment: Grant of Easement, TMK (4) 1-3-009--001

Mgrp/September 2017/18-70/Discussion and Possible Action to approve a Grant of Easement for Service Lateral for a New 1-Inch Water Meter, Kula Aupuni Ni'ihau A Kahelelani Aloha Public Charter School Remodel, Kaua'i, affecting the following Landowner: a) Kanaka Aupuni A Ni'ihau Aloha Inc., TMK: 1-3-09-001 as specified above in Waimea, Kaua'i, Hawai'i (9-29-17).
LAND COURT SYSTEM

REGULAR SYSTEM

After Recordation Return By:  MAIL [XX]   Pickup [   ]
TO:

DEPARTMENT OF WATER
4398 PUA LOKE STREET
LīHU'E, KAUA'I, HAWAI'I  96766

GRANT OF EASEMENT
for
TMK: (4) 1 - 3 - 0 0 9 : 0 0 1;

THIS INDENTURE is made on this _______ day of ____________________, 2017,
between:

Kanaka Aupuni A Niihau Aloha

a Non-Profit (Internal Revenue Service designated 501 c3, 509 a1 and 170 b1 Avi) corporation,
whose principal place of business is:

8315 Kekaha Road             Kekaha, Kaua'i, Hawaii 96752

and whose mailing address is

Post Office Box 74            Kekaha, Kaua'i, Hawaii 96752

(hereafter "GRANTOR") and the BOARD OF WATER SUPPLY, COUNTY OF KAUA'I, whose
mailing address is 4398 Pua Loke Street, Līhu'e, Kaua'i, Hawai'i  96766 (hereafter "GRANTEE");

Service Lateral for a New 1-Inch Water Meter, Kula Aupuni Niihau A Kahelelani Aloha (KANAKA)
Kanaka Aupuni A Niihau Aloha

1-3-009:001

Page 58
WITNESSETH:

THAT IN CONSIDERATION of the sum of one dollar ($1.00) paid by the GRANTEE to the GRANTOR, the receipt of which is acknowledged, and the covenants contained in this grant of easement to be performed by the GRANTEE, the GRANTOR does hereby grant, bargain, sell and convey to the GRANTEE an easement in perpetuity on, over, and under that certain parcel of land located generally at WAIMEA District, Kaua‘i, Hawai‘i, Tax Map Key No. (4) 1 - 3 - 0 0 0 9 : 0 0 1 ; Project Name: SERVICE LATERAL FOR A NEW 1-INCH WATER METER, KULA AUPUNI NIHIHUA A KAHELELANI ALOHA (KANAKA) Subdivision No.: Not Applicable, and more particularly described in Exhibit "A" which is attached and incorporated by reference into this grant of easement (hereafter "easement area").

This easement is granted for the reading of water meters and for the construction, installation, re-installation, maintenance, repair, and removal of potable water pipelines and related meters, valves, and other associated waterworks facility improvements and appurtenances. The GRANTEE is further allowed the right of ingress and egress at any time to, from, and through the easement area, with or without vehicles or equipment, as the Grantee deems necessary for the proper operation of its water system.

TO HAVE AND TO HOLD the same unto the GRANTEE forever; provided that should the GRANTEE cease to use the Easement Area for the purposes described for a continuous period of two (2) calendar years, this easement shall terminate and the interest granted shall immediately and without the GRANTOR’s re-entry revert to the GRANTOR. In such an event, this Grant of Easement shall cease to exist by operation of the GRANTEE’s non-use, without any necessary action on the GRANTOR’s part.

AND IN FURTHER CONSIDERATION of the rights granted to the GRANTEE and the benefits accruing to the GRANTOR under this Grant of Easement, the GRANTOR and GRANTEE further covenant, agree, and promise as follows:
1. That should the GRANTEE disturb in any way the ground which is the subject of the easement area, the GRANTEE shall at its own expense restore the ground to its original condition to the extent that such restoration is reasonable.

2. That the GRANTEE shall indemnify and save the GRANTOR harmless from and against all damage to the GRANTOR's property and all liability for injury to or the death of persons when such damage, injury, or death is caused by the negligence of the GRANTEE, its officers, agents, and employees while using the easement area;

3. That the GRANTEE shall not assign its rights under this easement without the prior written consent of the GRANTOR; provided that the GRANTEE may assign its rights to a successor of the GRANTEE duly created by law;

4. That should the GRANTOR's development plans require that the easement area and/or waterworks facility improvements within, on, or under the Easement Area be re-located, the GRANTOR will, at the GRANTOR's own expense and pursuant to the GRANTEE's instructions and specifications, re-locate the affected easement area and waterworks facility improvements and appurtenances without interruption of the GRANTEE's services;

5. That the GRANTOR shall at no time erect any building foundation of any kind below the surface of the land which is the subject of the easement area or any building or structure of any kind (other than roads, sidewalks, curbs or similar appurtenances) on the surface of the land over which is the subject of the easement area unless the GRANTOR receives the prior written consent of the GRANTEE.

Only lawn grass shall be planted within three (3) feet of all meter boxes, fire hydrants, and other waterworks facility improvements and appurtenances. No trees with aggressive root systems shall be planted within twenty (20) feet of all meter boxes, fire hydrants, and other waterworks facility improvements and appurtenances.

This Paragraph No. 5, though, shall not prevent the GRANTOR from crossing over,
constructing, and maintaining roadways within the easement area or laying, operating, maintaining, repairing, or removing conduits and drains which do not interfere with the exercise of the GRANTEE's rights under this easement; and

6. That the GRANTOR covenants with the GRANTEE that the GRANTOR is the lawful owner of the land which is the subject of this easement area, that the GRANTOR has good right and title to grant this easement, and that the GRANTOR will warrant and defend the same unto the GRANTEE against the claims and demands of all persons.

When used within this document the term “GRANTOR” shall mean the singular and plural, masculine and feminine, and natural persons, trustees, corporations, partnerships, limited partnerships, sole proprietorships and other forms of business entities. The term shall also mean the GRANTOR’s or GRANTOR’s estates, heirs, personal representatives, successors, successors-in-trust and assigns.

IT IS FURTHER MUTUALLY AGREED that the terms of this easement shall be binding upon and inure to the benefit of all the parties to this document and that all covenants and obligations undertaken by two or more persons shall be deemed to be joint and several unless a contrary intention is clearly expressed in this document.

This agreement may be executed in counterparts. Each counterpart shall be executed by one or more parties hereinbefore named and the several counterparts shall constitute one instrument to the same effect as though the signatures of all the parties are upon the same document.

[Remainder of this page was intentionally left blank]

OWNER:

Melvin Pahulehua

By: Melvin Pahulehua
STATE OF Hawaii )
COUNTY OF Kauai ) ss.

On this 8th day of August, 2017, in the 5th Circuit, State of Hawaii, before me appeared Melvin Pahulehua who is personally known to me or whose identity I proved on the basis of satisfactory evidence, being by me duly sworn or affirmed, did say that such person is the President of Kanaka Aupuni A Niihau Aloha executed Grant of Easement for TMK: (4) 1 - 3 - 0 0 9 : 0 0 1 dated (undated) and consisting of 8 pages at the time of notarization, as the free act and deed of such person, and if applicable in the capacity shown, have been duly authorized to execute such instrument in such capacity.

Notary Public, State of Hawaii
Name of Notary: Elizabeth Hahn
My Commission expires: 8/6/18

Doc. Date: 8/6/17 # Pages: 6
Elizabeth Hahn 5th Circuit

APPROVED:

APPROVED AS TO FORM AND LEGALITY:

Service Lateral for a New 1-inch Water Meter, Kula Aupuni Niihau A Kahelelani Aloha (KANAKA)
Kanaka Aupuni A Niihau Aloha
Kirk Saiki, P.E.  
Manager & Chief Engineer  
Department of Water, County of Kaua‘i

Mahealani M. Krafft  
Deputy County Attorney

ACCEPTED:  
BOARD OF WATER SUPPLY,  
COUNTY OF KAUA‘I

By: Sherman Shiraishi  
Its: Chairperson

STATE OF HAWA‘I )
    ) ss.
COUNTY OF KAUA‘I )

GRANTEE

On this ___ day of ______________________, 2017 in the Fifth Circuit, State of Hawai‘i, before me personally appeared Sherman Shiraishi, who is personally known to me or whose identity I proved on the basis of satisfactory evidence, who being by me duly sworn or affirmed, did say that such person is the Chairperson for the Board of Water Supply, County of Kaua‘i executed Grant of Easement for TMK: (4) 1 - 3 - 0 0 9 : 0 0 1 dated ______________ and consisting of _____ pages at the time of notarization, as the free act and deed of such person, and if applicable in the capacity shown, having been duly authorized to execute such instrument in such capacity.

Notary Public, State of Hawai‘i
Name of Notary: Mary-jane Akuna
My Commission expires: March 30, 201
DECRIPTION

EASEMENT W-2
(ACCESS AND WATER LINE PURPOSES)

Being a Portion of Lot C-1,
Portion of the Grant 10,329
To Kekaha Sugar Co., Ltd.

Land Situated at Kekaha, Waimea, Kaua`i, Hawai`i

Beginning at the southeast corner of this Easement, the south side of Lot C-1, Portion of the
Grant 10,329 To Kekaha Sugar Co., Ltd. and on the north side of Kekaha Road, the coordinates
referred to the Government Survey Triangulation Station "KANALOA" being 2,788.60 feet South
and 7,967.48 feet East, thence running by azimuths measured clockwise from True South:

1. 125°28' 10.00 feet along the north side of Kekaha Road;
2. 215°28' 18.00 feet along the remainder of Lot C-1 being also a
   portion of Grant 10,329 to Kekaha Sugar Co., Ltd.;
3. 305°28' 10.00 feet along the remainder of Lot C-1 being also a
   portion of Grant 10,329 to Kekaha Sugar Co., Ltd.;
4. 35°28' 18.00 feet along the remainder of Lot C-1 to the point of
   beginning and containing an area of 180 Square Feet.

Tax Map Key: (4) 1-3-009:001

This work was prepared by me or under my
direct supervision.

Thomas H. Oi
Licensed Professional Land Surveyor
Certificate Number 9033-LS
Exp. 4/30/18

Exhibit "A"
LOT D-1-B
1.943 Acres

LOT C-1
1.943 Acres

EASEMENT W-2 LOCATION
SCALE 1" = 10'

DESIGNATION OF EASEMENT W-2
(Access and Water Line Purposes) AND
CANCELLATION OF EASEMENT W-1

This work was prepared by me or under my direct supervision.

THOMAS H. OI
LICENSED PROFESSIONAL LAND SURVEYOR
No. 9033
HAWAII, U.S.A.

Area of Easement
Easement W-2 Affecting Lot C-1 Area: 185 90 R.

INSET
SCALE 1" = 1/10

FILE NAME: 170719 Kanaka School Plan.dwg
KODANI AND ASSOCIATES ENGINEERS, LLC
Lihu'e, Kauai, Hawaii 96765

DATE: 07/19/2017

Owner: Kanaka Aupuni A Nihiu Aloha
P.O. Box 74
Kekaha, HI 96752

Tax Map Key: (4) 1-3-009: 001

Being Portion of Lot C-1
Being also a portion of Grant 10,329 to
Kekaha Sugar Co., Ltd.
Kekaha, Waimea, Kauai, Hawaii

THOMAS H. OI
LICENSED PROFESSIONAL LAND SURVEYOR
CERTIFICATE NUMBER 9033-LS

EXP. 04/30/18
MANAGERS REPORT No. 18-71

September 29, 2017

Re: Discussion and Possible Action to approve a Grant of Easement for Construction Plans For 8” Reduced Pressure Detector Assembly for Lot 1115, Kaua‘i, affecting the following landowner:

a. Jared and Donna Murayama 1997 Trust dated January 8, 1997 affecting (TMK(s): 3-3-13:027, TMKs Līhu‘e, Kaua‘i, Hawai‘i

RECOMMENDATION:
It is recommended that the Board approve the Grant of Easement document; whereby, the above landowners, grant to the Board of Water Supply, County of Kaua‘i, easement “W-1” on, over and under that certain parcel of land located TMK: 3-3-13:027 as specified above in Līhu‘e, Kaua‘i, Hawai‘i, for the following work:

1. Reading of water meters and for the construction, installation, reinstallation, maintenance, repair, and removal of potable water pipelines and related meters, valves, and other associated waterworks facility improvements and appurtenances.

Further, the GRANTEE shall indemnify and save the GRANTOR harmless from and against all damage to the GRANTOR’s property and all liability for injury to or the death of persons when such damage, injury, or death is caused by the negligence of the GRANTEE, its officers, agents and employees while using the easement area;

FUNDING: N/A.

BACKGROUND:
Owner installed a new 8-inch Reduced Pressure Detector Assembly (RPDA). The water meter facilities are on private property which requires an easement in favor of DOW.

OPTIONS:
Option 1: Approve as recommended.
Pro: Project can be completed as designed. Water meter can be installed.
Con: None as it was designed and planned this way.

Option 2: Not approving easement.
Pro: None at this point.
Con: Project won’t be completed as designed. Water meter will remain uninstalled.
Respectfully submitted,

Dustin Moises, P.E.
Chief of Construction Management

CONCURRED:

Kirk Saiki, P.E.
Manager and Chief Engineer

DM/JB/cin

Attachment: Grant of Easement, TMK: 3-3-13:027

Mgrp/September 2017/18-71/Discussion and Possible Action to approve a Grant of Easement for Construction Plans For 8” Reduced Pressure Detector Assembly for Lot 1115, Kaua‘i, affecting the following landowner: a Jared and Donna Murayama 1997 Trust dated January 8, 1997 affecting (TMK(s): 3-3-13:027, Līhu‘e, Kaua‘i, Hawai‘i (9-29-17):cin
LAND COURT SYSTEM

REGULAR SYSTEM

After Recordation Return By: MAIL [XX] Pickup [ ]
TO:

DEPARTMENT OF WATER
4398 PUA LOKE STREET
LīHU'E, KAUA'I, HAWAI'I 96766

GRANT OF EASEMENT

for

TMK: (4) 3 - 3 - 0 1 3 : 0 2 7 ;

THIS INDENTURE is made on this _________ day of __________________, 2017, between:

Jared and Donna Murayama 1997 Trust dated January 8, 1997

whose residence address is:

5320 Arezzo Drive San Jose, California 95138

and whose mailing address is

5320 Arezzo Drive San Jose, California 95138

(hereafter "GRANTOR") and the BOARD OF WATER SUPPLY, COUNTY OF KAUA'I, whose mailing address is 4398 Pua Loke Street, Līhu'e, Kaua'i, Hawai'i 96766 (hereafter "GRANTEE");

Construction Plans for 8-Inch Reduced Pressure Detector Assembly For Lot 1115 Jared and Donna Murayama 1997 Trust dated January 8, 1997 1

3-3-013:027
WITNESSETH:

THAT IN CONSIDERATION of the sum of one dollar ($1.00) paid by the GRANTEE to the GRANTOR, the receipt of which is acknowledged, and the covenants contained in this grant of easement to be performed by the GRANTEE, the GRANTOR does hereby grant, bargain, sell and convey to the GRANTEE an easement in perpetuity on, over, and under that certain parcel of land located generally at Lihue District, Kauai, Hawaii, Tax Map Key No. (4) 3 - 3 - 0 1 3 : 0 2 7 Project Name: CONSTRUCTION PLANS FOR 8-INCH REDUCED PRESSURE DETECTOR ASSEMBLY FOR LOT 1115 Subdivision No.: Not Applicable, and more particularly described in Exhibit "A" which is attached and incorporated by reference into this grant of easement (hereafter "easement area").

This easement is granted for the reading of water meters and for the construction, installation, re-installation, maintenance, repair, and removal of potable water pipelines and related meters, valves, and other associated waterworks facility improvements and appurtenances. The GRANTEE is further allowed the right of ingress and egress at any time to, from, and through the easement area, with or without vehicles or equipment, as the Grantee deems necessary for the proper operation of its water system.

TO HAVE AND TO HOLD the same unto the GRANTEE forever; provided that should the GRANTEE cease to use the Easement Area for the purposes described for a continuous period of two (2) calendar years, this easement shall terminate and the interest granted shall immediately and without the GRANTOR’s re-entry revert to the GRANTOR. In such an event, this Grant of Easement shall cease to exist by operation of the GRANTEE’s non-use, without any necessary action on the GRANTOR’s part.

AND IN FURTHER CONSIDERATION of the rights granted to the GRANTEE and the benefits accruing to the GRANTOR under this Grant of Easement, the GRANTOR and GRANTEE further covenant, agree, and promise as follows:
1. That should the GRANTEE disturb in any way the ground which is the subject of the easement area, the GRANTEE shall at its own expense restore the ground to its original condition to the extent that such restoration is reasonable;

2. That the GRANTEE shall indemnify and save the GRANTOR harmless from and against all damage to the GRANTOR's property and all liability for injury to or the death of persons when such damage, injury, or death is caused by the negligence of the GRANTEE, its officers, agents, and employees while using the easement area;

3. That the GRANTEE shall not assign its rights under this easement without the prior written consent of the GRANTOR; provided that the GRANTEE may assign its rights to a successor of the GRANTEE duly created by law;

4. That should the GRANTOR's development plans require that the easement area and/or waterworks facility improvements within, on, or under the Easement Area be re-located, the GRANTOR will, at the GRANTOR's own expense and pursuant to the GRANTEE's instructions and specifications, re-locate the affected easement area and waterworks facility improvements and appurtenances without interruption of the GRANTEE's services;

5. That the GRANTOR shall at no time erect any building foundation of any kind below the surface of the land which is the subject of the easement area or any building or structure of any kind (other than roads, sidewalks, curbs or similar appurtenances) on the surface of the land over which is the subject of the easement area unless the GRANTOR receives the prior written consent of the GRANTEE.

Only lawn grass shall be planted within three (3) feet of all meter boxes, fire hydrants, and other waterworks facility improvements and appurtenances. No trees with aggressive root systems shall be planted within twenty (20) feet of all meter boxes, fire hydrants, and other waterworks facility improvements and appurtenances.
This Paragraph No. 5, though, shall not prevent the GRANTOR from crossing over, constructing, and maintaining roadways within the easement area or laying, operating, maintaining, repairing, or removing conduits and drains which do not interfere with the exercise of the GRANTEE's rights under this easement; and

6. That the GRANTOR covenants with the GRANTEE that the GRANTOR is the lawful owner of the land which is the subject of this easement area, that the GRANTOR has good right and title to grant this easement, and that the GRANTOR will warrant and defend the same unto the GRANTEE against the claims and demands of all persons.

When used within this document the term "GRANTOR" shall mean the singular and plural, masculine and feminine, and natural persons, trustees, corporations, partnerships, limited partnerships, sole proprietorships and other forms of business entities. The term shall also mean the GRANTOR's or GRANTOR's estates, heirs, personal representatives, successors, successors-in-trust and assigns.

IT IS FURTHER MUTUALLY AGREED that the terms of this easement shall be binding upon and inure to the benefit of all the parties to this document and that all covenants and obligations undertaken by two or more persons shall be deemed to be joint and several unless a contrary intention is clearly expressed in this document.

This agreement may be executed in counterparts. Each counterpart shall be executed by one or more parties hereinbefore named and the several counterparts shall constitute one instrument to the same effect as though the signatures of all the parties are upon the same document.

[Remainder of this page was intentionally left blank]
OWNER:

By: Jared Murayama

Its: Trustee of the Jared and Donna Murayama 1997 Trust dated January 8, 1997

STATE OF California ss
COUNTY OF Los Angeles

On this 11th day of August, 2017, in the Circuit, State of California, before me appeared Jared Murayama who is personally known to me to be known, who, being by me duly sworn, did say that he is the Trustee of the Jared and Donna Murayama 1997 Trust dated January 8, 1997, and that said Grant of Easement for TMK: (4) 3 - 3 - 0 1 3 : 0 2 7 dated (undated) and consisting of 6 pages at the time of notarization, was signed on behalf of said Trust and he acknowledged said instrument to be the free act and deed of said Trust.

---

OWNER:

By: Donna Murayama

Its: Trustee of the Jared and Donna Murayama 1997 Trust dated January 8, 1997

GRANTOR

STATE OF California ss
COUNTY OF Los Angeles

On this 11th day of August, 2017, in the Circuit, State of California, before me appeared Donna Murayama who is personally known to me to be known, who, being by me duly sworn, did say that she is the Trustee of the Jared and Donna Murayama 1997 Trust dated January 8, 1997, and that said Grant of Easement for TMK: (4) 3 - 3 - 0 1 3 : 0 2 7 dated (undated) and consisting of 8 pages at the time of notarization, was signed on behalf of said Trust and she acknowledged said instrument to be the free act and deed of said Trust.

---

Construction Plans for 8-Inch Reduced Pressure Detector Assembly For Lot 1115
Jared and Donna Murayama 1997 Trust dated January 8, 1997 5

3-3-013:027
APPROVED:

Kirk Saiki, P.E.
Manager & Chief Engineer
Department of Water, County of Kaua'i

APPROVED AS TO FORM
AND LEGALITY:

Mahealani M. Krafft
Deputy County Attorney

ACCEPTED:
BOARD OF WATER SUPPLY,
COUNTY OF KAUA'I

By: Sherman Shiraishi
Its: Chairperson

STATE OF HAWAI‘I )
) ss.
COUNTY OF KAUA‘I )

On this __ day of ____________________, 2017 in the Fifth Circuit, State of Hawai‘i, before me personally appeared Sherman Shiraishi, who is personally known to me or whose identity I proved on the basis of satisfactory evidence, who being by me duly sworn or affirmed, did say that such person is the Chairperson for the Board of Water Supply, County of Kaua‘i executed Grant of Easement for TMK: (4) 3 - 3 - 0 1 3 : 0 2 7 dated _______________ and consisting of __8__ pages at the time of notarization, as the true act and deed of such person, and if applicable in the capacity shown, having been duly authorized to execute such instrument in such capacity.

Notary Public, State of Hawai‘i
Name of Notary: Mary-jane Akuna
My Commission expires: March 30, 2018

Construction Plans for 8-Inch Reduced Pressure Detector Assembly For Lot 1115
Jared and Donna Murayama 1997 Trust dated January 8, 1997 6

3-3-013:027
CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Los Angeles

On 8-11-17 before me, Mike Johnson Notary Public, (Here insert name and title of officer)

personally appeared Jared Murayama and Rena Murayama
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Mike Johnson
Notary Public Signature (Notary Public Seal)

INSTRUCTIONS FOR COMPLETING THIS FORM
This form complies with current California statutes regarding notary wording and, if needed, should be completed and attached to the document. Acknowledgments from other states may be completed for documents being sent to that state so long as the wording does not require the California notary to violate California notary law.

- State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. his/her/their, is/are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
- Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
- Indicate title or type of attached document, number of pages and date.
- Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document with a staple.
EASEMENT W-1
(for water purposes)

LAND SITUATED AT LIHUE, PUNA, KAUA'I, HAWAI'I

Being Portion of Lot 1115
Land Court Application 1087
As Shown On Map 103

Beginning at the South corner of this parcel of land, on Northeast side of
Haleukana Street, the coordinates of said point of beginning referred to Government
Survey Triangulation Station "KILOHANA" being 12,992.54 feet South and 13,246.49 feet
East, thence running by azimuths measured clockwise from True South:

1. 145° 10' 10.00 feet along the northeast side of Haleukana
    Street;

2. 235° 10' 10.00 feet along the remainder of Lot 1115;

3. 325° 10' 10.00 feet along the remainder of Lot 1115;

4. 55° 10' 10.00 feet along Lot 1114 to the point of
    beginning and containing an area of 100
    Sq. Ft.

DESCRIPTION PREPARED BY:
ESAKI SURVEYING & MAPPING, INC.

Dennis M. Esaki
Licensed Professional Land Surveyor
Certificate Number 4383

Lihue, Hawaii
August 2017
LAND COURT
STATE OF HAWAI'I

LAND COURT APPLICATION 1087

DESIGNATION OF EASEMENT W-1
AFFECTING LOT 1115
AS SHOWN ON MAP 103

AT LIHUE, PUNA, KAUAI, HAWAI'I

1610 HALEUKANA STREET
Lihue, Kauai, Hawaii
July 24, 2017

ESAKI SURVEYING AND MAPPING, INC.
Licensed Professional Land Surveyor
No. 4383
HAWAI'I, U.S.A.

OWNER: JARED AND DONNA MURAYAMA 1087 TRUST
TRANSFER CERTIFICATE OF TITLE: 1,080,568

AUTHORIZED AND APPROVED BY ORDER OF THE JUDGE
OF THE LAND COURT DATED __________
BY ORDER OF THE COURT.

REGISTRAR OF THE LAND COURT

NOTE:
AREA OF EASEMENT W-1 FOR WATER PURPOSES = 100 Sq. Ft.
New Business
MANAGER’S REPORT No. 18-72

September 29, 2017

Re: Discussion and Possible Action on the Denial of Mr. Dennis Esaki’s request to Waive the Department of Water’s requirements for Subdivision S-2017-12, Jack Philips, TMK: 2-3-7: 01, 02 & 03, Kalāheo, Kaua‘i Hawai‘i

RECOMMENDATION:
It is recommended that the Board deny of Mr. Dennis Esaki’s request to Waive Department of Water’s requirement’s for Subdivision S-2017-12, Jack Philips, TMK: 2-3-7: 01, 02 & 03, Kalāheo, Kaua‘i Hawai‘i.

FUNDING: N/A.

BACKGROUND:
The proposed subdivision is located in Kalāheo at the end of Ihu Road (see attached Exhibit 1).

The Department of Water’s subdivision conditions includes but are not limited to upgrading the existing 3-inch waterline to an 8-inch waterline approximately 1,300 feet in length along Puu Road to provide adequate domestic and fire flow demands for the proposed subdivision (See attached Exhibit 2 for Departments subdivision report for S-2017-12).

Mr. Dennis Esaki is requesting that the Board of Water Supply, County of Kauai waive the 1,300 feet of waterline as shown in the Department of Water’s Subdivision report for S-2017-12.

The Department of Water is unable to waive the 8-inch mainline extension required for Subdivision S-2017-12. These improvements are necessary to provide adequate domestic and fire flow demands of the proposed subdivision.

Regarding the first half of first sentence shown in the last paragraph of Mr. Dennis Esaki’s letter (attached) addressed to Mr. Kirk Saiki, Manager and Chief Engineer and the Board of Water Supply, dated September 20, 2017, it stated “We feel that the DOW requirement to install 1,300 feet waterline in order to build a dwelling is unreasonable.” The DOW’s requirement to install a 1,300 feet 8-inch waterline for subdivision S-2017-12 is required to provide adequate domestic and fire flow demands of the proposed subdivision.

In accordance with the DOW’s Rules and Regulations, the Department of Water reviews subdivision applications submitted by the Planning Director to determine if the Department has sufficient water system developed for domestic and fire flow demands. The Department also reviews the subdivision application to determine if it satisfies other applicable conditions in accordance with but not limited to the Department’s Rules and Regulation and Water System Standards (i.e. Facilities Reserve Charges, minimum pressures, meter location(s), etc.).
The Department will inform the Planning Director in writing of its approval, requirements for approval, or its disapproval of a subdivision application upon completing its review.

Shown below are applicable definitions and conditions from the Department’s Rules and Regulations PART 3, ESTABLISHING STANDARDS FOR SUBDIVISION WATER SYSTEM (see attached Exhibit 3 for Part 3, Establishing Standards for Subdivision Water System):

SECTION 1 - DEFINITIONS
The word “SUBDIVISION” shall mean improved or unimproved land or lands divided or proposed to be divided into two or more lots, parcels, sites, or other divisions of land for the purpose, whether immediate or future, of sale, lease, rental, transfer of title to or interest in, any or all of such parcels, and shall include re-subdivision, and when appropriate to the context shall related to the process of subdividing of the land or territory subdivided.

SECTION II - AVAILABILITY OF WATER AND APPROVAL OF SUBDIVISION MAP
1. Extensions from and connections to the public water system will be approved by the Department where pressure conditions permit, provided the following have been met:

a. The Department has a sufficient water system developed for domestic use and, if required by the Department, a sufficient water system for fire protection.

b. The additional service on the existing system will not be detrimental to people already being served in that area. In order to determine if the additional service will be detrimental to present consumers, the Department may require the subdivider to estimate the amount of water to be consumed by the subdivision water system.

c. The subdivision water system complies with these rules and regulations, and is designed and constructed in compliance with (1) all applicable statutes, ordinances, rules, and regulations of the State of Hawai‘i and the County of Kaua‘i, and (2) the 2002 Water System Standards (“Standards”) developed by Hawai‘i’s four county departments of water, as amended by the Department’s 2005 Amendments (“2005 Amendments”) to the Standards. The Standards and the 2005 Amendments are hereby incorporated by reference into the Department’s rules. The Manager and Chief Engineer may, for good cause shown, permit departure from the Standards or 2005 Amendments, or both.

d. The facilities reserve charge for the subdivision has been paid, or a bond posted in lieu thereof, as provided under Section XIII of this Part.

Shown below are applicable conditions from the 2008 AMENDMENTS to the 2002 Water System Standards (see Exhibit 4 for 2008 AMENDMENTS):

Table 100-19 “FIRE FLOW REQUIREMENTS”: Table 100-19 is hereby deleted for the 2002 Standards and replaced in its entirety with Table 100-19A as shown in the attached 2008 Amendments.

Table 100-19A identifies fire flow quantity, duration and fire hydrant spacing for Agricultural land use as 250 gallons per minute, one hour duration and 500 feet hydrant spacing.
OPTIONS:
Option 1: Approve Department of Water’s Recommendation and Deny Mr. Dennis Esaki’s request to Waive the Department of Water’s requirements for proposed subdivision S-2017-12.

Pros: 1. The subdivider would be required to satisfy the Department of Water’s condition to install approximately 1,300 feet of 8-inch water line.
2. The Rules and Regulations and Water System Standards regarding the provision to provide adequate domestic and fire flow demands for a proposed subdivision would be satisfied.

Cons: 1. None.

Option 2: Deny the Department of Water’s recommendation and Approve Mr. Dennis Esaki’s request to Waive the Department of Water’s requirements for proposed subdivision S-2017-12.

Pros: 1. None.

Cons: 1. Subdivider would NOT need to satisfy Department of Water’s condition to install approximately 1.300 feet of 8-inch water line.

Respectfully submitted,

Edward Doi, P.E.
Chief of Water Resources & Planning

CONCURRED:

Kirk Saiki, P.E.
Manager and Chief Engineer

ED/edin

Attachment(s):
Exhibit 1 Proposed subdivision in Kalāheo at the end of Ihu Road
Exhibit 2 Subdivision Report dated 9-13-17
Exhibit 3 Rules & Regulations, Part 3, Establishing Standards for Subdivision Water System
Exhibit 4 County of Kaua‘i, Department of Water 2008 Amendments
Correspondence from Mr. Dennis Esaki, Esaki Surveying & Mapping, Inc. regarding Subdivision S-2017-12
TMK (4) 2-3-07:1,2,3, Kahaleo, Kaua‘i, Owners: Jack Phillips, et al, dated 9-20-17
TO: PLANNING DEPARTMENT
FROM: DEPARTMENT OF WATER

REVISED REPORT NO. 8-2017-12

NAME: Jack Phillips
SURVEYOR: Esaki

1. Domestic water is adequate. Tentative approval is recommended. ☒
2. All requirements have been fully met and, therefore, Final approval is recommended. ☐
3. Before final approval can be recommended, the subdivider must:
   A. Pay the Department of Water the following charges in effect at the time of receipt. At the present time, these charges include:
      1) The Facilities Reserve Charge (FRC): Lot @ $14,115 per lot = $ See Item 5.a
      2) Payment to install _____ or relocate _____ service connections(s) at the fixed cost of $____. If the subdivider causes a delay in the service connection installation after one year since final map approval, the subdivider shall be charged the increase in the fixed cost, if any. ☐
      3) Deposit the subdivider will either be billed or returned the difference between this deposit and the actual cost of construction of $____ for construction by the Department of Water. ☐
   B. Submit to the Department of Water a copy of the subdivider’s permit to perform work upon a State highway from the State Highways Division. ☐
   C. Prepare and receive Department of Water’s approval of construction drawings for the necessary water system facilities and either construct said facilities or post a performance bond for construction. These facilities shall also include:
      1) An extension of a main 8-inch in diameter, approximately 1300 feet in length, beginning at the 8-inch waterline along Puni Road and running west along Puni Road to Ipu Road and connecting to the existing waterline. ☒
      2) The domestic service connections, if applicable. ☒
      3) The fire service connections. ☒
      4) The interior plumbing with the appropriate backflow prevention device, if applicable. ☒
   D. Prepare and survey to the Department of Water a Right-of-Entry and Temporary Grant of Easement for the purpose of construction, repair, maintenance, and operation of the subdivision water system improvements installed in other than County-owned property. ☐
   E. If a bond is filed, to secure final subdivision approval, the subdivider shall clearly letter the following on the approved construction plans, final subdivision map, and deeds:
      “Domestic water service will not be available until the required construction improvements for this subdivision are completed and accepted by the Department of Water, County of Kauai.”
      This deed restriction shall be recorded with the Bureau of Conveyances within ninety (90) days of final subdivision approval by the Planning Department. ☒
   F. Installation of service connections will not be required until request for water service is made. The applicant for service will be charged the applicable service connection charges at that time. ☐
   G. Other (or remarks):
      A. Locate and show existing water meter(s) (with the appropriate meter number) on the subdivision map for DOW’s review and approval. Also, identify the proposed subdivision lot the existing water meters will be assigned to. DOW comments may change depending on the approved subdivision map. ☒
      B. Receive a “Certification of Completion” from the DOW for the construction of the “8-Inch Waterline along Puni Road (from Lolo Road) Project”. ☒
      C. Receive a Certification of Completion from the DOW for the construction of the necessary water system facilities (see Item 5 above). ☒

Edward Dol
Chief of Water Resources & Planning

Date: 9/3/17

Revised Subdivision Report No.: 8-2017-12
SECTION I - DEFINITIONS

For the purpose of these rules and regulations, unless it is plainly evident from the context that a different meaning is intended, certain words and phrases used herein are defined as follows.

1. The word "DEPARTMENT" shall mean the Department of Water, County of Kauai, consisting of a board of water supply, a manager and chief engineer and the necessary staff.

2. The word "BOARD" shall mean the Board of Water Supply of the Department.

3. The term "MANAGER AND CHIEF ENGINEER" shall mean the person holding the office of Manager and Chief Engineer of the Department.

4. The word "SUBDIVIDER" shall mean a person, firm, corporation, partnership, association, trust or other legal entity, or a combination of any thereof who or which causes land to be divided into a subdivision for himself, itself or for others.

5. The word "SUBDIVISION" shall mean improved or unimproved land or lands divided or proposed to be divided into two or more lots, parcels, sites, or other divisions of land for the purpose, whether immediate or future, of sale, lease, rental, transfer of title to or interest in, any or all of such parcels, and shall include re-subdivision, and when appropriate to the context shall related to the process of subdividing the land or territory subdivided.

6. The word "COMMISSION" shall mean the Planning Commission of the Planning Department, County of Kauai.

7. The words "PUBLIC WATER SYSTEM" shall mean the water system owned and operated by the Board.

8. The words "SUBDIVISION WATER SYSTEM" shall mean the water system, to and within any subdivision, including mains, valves, hydrants, laterals, pumps, tanks, reservoirs and all appurtenances necessary to provide water and fire protection for such subdivision and, where necessary, sources of supply.

9. The word "DIRECTOR" shall mean the person holding the office of the Planning Director of the Planning Department, County of Kauai.

10. The term "FACILITIES RESERVE CHARGE" shall mean the fee to be paid by subdivider or, when applicable, new consumers as their proportionate share in improvements to the Department's Water System.

11. The word "MAIN" or "MAIN PIPE" shall mean the Department's supply or distribution pipe to which service connections are made.

12. The term "SERVICE CONNECTION" shall mean the main tap, pipe fittings, meter and valve from the water main to and including the shut-off valve on the consumer's side of the meter.
SECTION II - AVAILABILITY OF WATER AND APPROVAL OF SUBDIVISION MAP

1. Extensions from and connections to the public water system will be approved by the Department where pressure conditions permit, provided the following have been met:

   a. The Department has a sufficient water system developed for domestic use and, if required by the Department, a sufficient water system for fire protection.

   b. The additional service on the existing system will not be detrimental to people already being served in that area. In order to determine if the additional service will be detrimental to present consumers, the department may require the subdivider to estimate the amount of water to be consumed by the subdivision water system.

   c. The subdivision water system complies with these rules and regulations, and is designed and constructed in compliance with (1) all applicable statutes, ordinances, rules, and regulations of the State of Hawai‘i and the County of Kaua‘i, and (2) the 2002 Water System Standards (“Standards”) developed by Hawai‘i’s four county departments of water, as amended by the Department’s 2005 Amendments (“2005 Amendments”) to the Standards. The Standards and the 2005 Amendments are hereby incorporated by reference into the Department’s rules. The Manager and Chief Engineer may, for good cause shown, permit departure from the Standards or 2005 Amendments, or both.

   d. The facilities reserve charge for the subdivision has been paid, or a bond posted in lieu thereof, as provided under Section XIII of this Part.

2. In areas where there is no public water supply available, or where large quantities of water are required or a large investment is necessary to provide service, the subdivider will be informed as to the conditions under which the subdivision may be approved and, where appropriate, refunds made.

3. After the Director submits the subdivision map to the Department, the Department will inform the Director in writing of its approval, requirements for approval, or its disapproval of a subdivision map after taking the above into consideration.

SECTION III - FACILITIES RESERVE CHARGE

1. The subdivider shall pay to the Department the facilities reserve charge established in Part 5 of the Rules and Regulations of the Department, for each (additional) parcel created by the subdivision, including the first lot, except (as provided below) when facilities reserve charges have already been paid by the developer or subdivider.

2. No facilities reserve charge will be made for lots created by the subdivision which will not be served by the Department’s water system. In the event that the Department determines that the subdivision will not be serviced by the Department’s water system, but later water service is requested, full payment of the then applicable facilities reserve charge must be paid. A statement to this effect shall be clearly lettered on the subdivision map.

3. No facilities reserve charge will be made for any parcel which is already serviced by an existing meter or which was serviced by a meter within 365 days prior to formal submittal of the subdivision request to the Planning Department.

4. The subdivider shall pay the facilities reserve charge to the Department prior to subdivision approval by the Department except that subdivision approval may be given prior to construction.
of required improvements and the payment of the facilities reserve charge by the posting of a bond, as described in Section XIII of this Part.

5. In the event the facilities reserve charge has been paid for a subdivision and subsequently the subdivision is consolidated, the facilities reserve charge will be returned provided the consolidation is completed within 365 days following the prior subdivision approval.

SECTION IV - EXTENSIONS TO SUBDIVISION

1. **General Requirement.** The subdivider shall install and pay for the subdivision water system required from the public water system to the subdivision. All such subdivision water systems shall be designed and located in accordance with the standards of the Department. The subdivider may be required to improve the public water system if the public water system is inadequate to serve the subdivision.

2. **Increase in Size of Water Main Extensions for Service to Other Areas.** Whenever the Department finds it necessary that the water mains proposed to deliver water to a subdivision should be of a greater capacity than is required to provide adequate service and fire protection for such subdivision, in order to supply water and fire protection to property not in the subdivision, the Department shall require the subdivider to install mains of such greater capacity.

3. **Reimbursement to Subdivider for Additional Costs of Mains to Subdivisions.** When the subdivider is required to install a larger sized main for the reasons set forth in the preceding paragraph, the Department will reimburse the subdivider, as soon as practicable after the acceptance by the Department of the completed work, the additional cost of the installation over and above the cost of the mains that would have been required; provided, that reimbursement will not be made to the subdivider where such larger main or mains will serve only areas under the same ownership as the subdivision under consideration.

Before the subdivider enters into a contract where a reimbursement to the subdivider for additional costs of mains to the subdivision will be made, the Department shall review and either approve or disapprove the contract. If the contract is disapproved, the subdivider shall revise the contract until its form and content is acceptable to the Department.

After the installation has been completed and accepted by the Department, the subdivider shall furnish the Department with an affidavit itemizing the costs incurred by him in the installation of the said larger mains. The said additional costs shall be determined by the Department.

SECTION V - INSTALLATIONS WITHIN SUBDIVISION

1. **General Requirement.** The subdivider shall install in accordance with these rules and regulations and the standards of the Department and pay for the subdivision water system required within a subdivision.

2. **Increase in Size of Water Mains with Subdivisions for Benefit of Other Areas.** Whenever, in order to provide for existing or future services beyond the boundaries of a subdivision, the Department finds that the mains to be installed within the subdivision should be of greater capacity than would be required to provide adequate service within such subdivision, the Department will require the subdivider to make installations of such greater capacity.

3. **Reimbursement to Subdivider for Additional Costs of Water Mains within Subdivisions.** When the subdivider is required to install a larger-sized main for the reasons set forth in the preceding paragraph, the Department will reimburse the subdivider, as soon as
practicable after acceptance by the Department of the completed work, the additional cost of the installation over and above the cost of the mains that would have been required; provided, however, that in no case will reimbursement be made of any portion of the cost of a main of less than 6-inch in diameter; provided, further, that reimbursement will not be made to the subdivider where such larger main or mains will serve only areas under the same ownership as the subdivision under consideration.

After the installation has been completed and accepted by the Department, the subdivider shall furnish the Department with an affidavit itemizing the costs incurred by him in the installation of the said larger mains. The said additional costs shall be determined by the Department.

SECTION VI - SIZES OF MAINS, HYDRANT SPACING, FIRE PROTECTION

1. Sizes of Mains. Any subdivision, except where fire protection facilities are not required by the Department, hereafter to be laid out within the County shall provide 6-inch water mains or larger in residential districts and 8-inch water mains or larger in business, industrial and hotel and apartment districts. Sizing of mains within agricultural subdivisions and subdivisions where fire protection facilities are not required shall be determined by the Department.

2. Hydrant Spacing. Fire hydrants shall be spaced not more than 350 feet in business, industrial, hotel and apartment districts, 500 feet in urban residential districts and 600 feet in rural residential district (Urban and rural refer to boundaries established by the State Land Use Commission). Fire hydrants may not be required in agricultural subdivision as determined by the Department. The Department will determine the location of all hydrants. All fire hydrants required for adequate fire protection of a subdivision will normally be located within the subdivision.

If, in the interest of better fire protection, it is determined that one or more of the required hydrants will serve the subdivision to better advantage if located outside the subdivision, they may be so located and the cost shall still be borne by the subdivider, subject to the limitation that the cost to the subdivider shall not exceed the cost to him which would have resulted had all the hydrants been located inside the limits of the subdivision.

3. Fire Protection. In fixing the standards for fire protection insofar as water supply is concerned, the Department will be guided by the standards of the National Board of Fire Underwriters in "Grading Cities and Towns of the United States with Reference to Their Fire Defenses and Physical Conditions" and by any specific recommendations made by the said National Board with respect to the County.

SECTION VIII - SERVICE CONNECTIONS, DEAD-ENDS, ALTERATIONS TO PUBLIC WATER SYSTEMS, CONTOURS

1. Service Connections. Where water main construction is necessary, the subdivider shall provide each lot in a subdivision with a service connection from the water main to the property line adjacent to the lot or as directed by the Department's engineer. As an alternate, one service connection may be installed for each two lots.

Where the lots to be created front along an existing water main, a service connections as required above shall be paid for by the subdivider and installed by the Board, except that the service connection installation may be deferred and paid for by the consumer at the time the request for water service is made for agricultural lots and other subdivisions for which the Department determines that it is impractical to require such installations prior to the request for water service.
2. **Dead-Ends.** Where water mains proposed by a subdivider would result in dead-ends, the subdivider shall correct the condition by the installation of such interconnections as may be required by the Board.

3. **Alterations to Public Water System.** All work and materials in connection with the change in location or grade of any part of the existing public water system made necessary by the subdivision shall be at the expense of the subdivider.

4. **Contours.** When required by the Board, contours or elevations shall be furnished by the subdivider, based upon mean sea level.

SECTION IX - PREPARATION OF PLANS, INFORMATION ON PLANS, ELEVATION AGREEMENT, APPROVAL OF PLANS, DELAYS IN CONSTRUCTION

1. **Preparation of Plans.** All construction plans shall be prepared by a registered engineer to the extent of his professional qualifications under the laws of the State. Preliminary maps and final maps of subdivisions to be reviewed by the Department shall fully conform to the definitions and requirements of the Rules and Regulations of the Commission.

2. **Information to be shown on Construction Plans.** The construction plans, insofar as the water system is concerned, shall show the following on County of Kauai standard size sheet or sheets:
   
a. Name of subdivision, name of subdivider, name of engineer and location of subdivision.

b. Date, north arrow, scale, tax key.

c. The proposed subdivision water system complete, in both plan and profile, and its interrelationship with street lines, lot lines, curb grades, sewers and drains, both existing and proposed, as well as any other features natural or artificial necessary for a complete understanding of the water system design.

d. Plan and profile views drawn to a scale of one inch equals 40 feet and one inch equals 5 feet, respectively, or as approved by the Department. Manhole, fire hydrant, lateral and other details drawn to a scale of one-half equals one foot or larger.

e. The designation, including alignment and width, of all easements for parts of the water system which will not be in street areas to be dedicated to the public.

f. A general layout map showing the locations of lots and streets within the subdivision and its near vicinity together with existing and proposed water system.

g. A small key location inset or vicinity map showing the proposed subdivision in relationship to streets and water mains in the area.

h. In cases in which the owner or subdivider also owns areas contiguous to the proposed subdivision, or separated therefrom by a street, a sketch of the future street and lot pattern and the water system proposed to serve such contiguous areas shall be furnished for study with the construction plans.
3. **Elevation Agreement.** Whenever a lot or lots within a subdivision are at such an elevation that they cannot be assured of a dependable water supply, the approval of the construction drawings will be subject to each owner of such lot or lots signing an "elevation agreement" whereby such lot owner agrees to accept such water service as the Department is able to render, and such owner agrees to construct, if necessary, and maintain at his expense, a tank or a pump with a tank, all in accordance with the standards and requirements of the Department, of sufficient capacity to furnish a supply of water at such times as the pressure in the water mains may be insufficient to supply such lot or lots with water. When required, a statement as to this conditional approval will be clearly lettered on the subdivision map.

4. **Approval of Plans.** No construction of a subdivision water system, or any portions thereof, shall be undertaken prior to approval of the final construction plans by the Manager and Chief Engineer, the Director, the County Engineer of the Department of Public Works, and the State Department of Health. After said approval, the subdivider shall transmit four sets of all final construction plans to the Manager and Chief Engineer.

In areas where there is no public water supply available to serve the subdivision, plans and specifications for the development of water sources, including wells, tunnels, shafts, pumps, buildings, mains and other appurtenances structures and devices, shall be in conformance with the standards of the Department and shall be approved by the Department in their entirety prior to the construction.

5. **Delays in Construction.** If any period exceeding one year or such extension as may be granted passes without substantial progress in the construction of the water facilities, after approval of plans by the Department, the plans thereof shall be resubmitted to the Department for review and for making such changes as it deems proper because of changed conditions or revision of standards.

### SECTION X - MATERIALS AND CONSTRUCTION STANDARDS,
INSTALLATION OF WATER SERVICE, INSPECTION OF WORK

1. **Materials and Construction Standards.** All materials, design and construction procedures, and workmanship, with respect to any subdivision water system, or any portion thereof shall be in accordance with the requirements of the "Standard Specifications for Waterworks Construction" of the Board of Water Supply, County of Kauai, dated 10/1/63 or as later amended and with the requirements of the State Department of Health and all applicable laws. The Manager and Chief Engineer shall determine the capacity and location of any of the component parts of the subdivision water system.

2. **Installation of Water Service.** No water service will be approved until the subdivision water system has been completed and accepted by the Department and the FRC has been paid to the Department. Service for subdivision construction purposes such as site work and roadways (excluding construction work for individual lots) may be approved.

3. **Inspection of Work.** The Manager and Chief Engineer or any employee representing him shall have free access at all times to all installations made for the subdivision and shall be given any assistance required and every facility, information and means of thoroughly inspecting the work to be done and the materials used or to be used.

### SECTION XI - OWNERSHIP OF INSTALLED WATER SYSTEM

Before the Department will provide water service within the subdivision, the subdivider shall convey the subdivision water system to the Department and said subdivision water system thereafter will be maintained and operated as a part of the public water system; provided, however, that the Department
may refuse to operate and maintain facilities installed without the Department's prior approval. Prior to the commencement of water service, and as a prerequisite to such service, the subdivider shall also deliver to the Department perpetual easements for all portions of the subdivision water system installed in other than publicly owned property. The subdivider shall also convey to the Department fee simple title to all sites on which are located tanks, reservoirs, sources of supply, and pumps constructed by the subdivider and connected to the public water system together with easements for ingress and egress. The subdivider shall also convey to the Department a breakdown of costs of the subdivision water system on forms provided by the Department.

SECTION XII - MODIFICATION OF REQUIREMENTS

When conditions pertaining to any subdivision are such that the public may be properly served with water and with fire protection without full and strict compliance with these rules and regulations, or where the subdivision site or layout is such that the public interest will be adequately protected the Manager may waive or modify requirements of this rule when not contrary to the purpose of the rule or the public interest. In cases of exemption from or reduction of the FRC fee, the request must be brought to the Board for approval and the Board must apply the Board Requirements stated below.

Manager Requirements: In waiving or modifying the rules, the Manager must find that:

1. Strict application of the rule would cause an absurd, unfair, or unreasonably harsh result; and
2. The applicant's circumstance or condition is unique or exceptional, and the Manager would grant the same request if made by every similarly situated applicant; and
3. Such modification thereof as is reasonably necessary or expedient, and not contrary to law or the intent and purposes of these rules and regulations

Any waiver or modification made by the Manager and Chief Engineer will not be considered to have final approval until the Board is notified of the action through the Manager and Chief Engineer's monthly report. The Board may overturn or nullify the Manager's waiver or modification by a majority vote.

Board Requirements: Should the applicant request Board action after the Manager and Chief Engineer declined to waive or modify the requirements or should the applicant's request involve the exemption from or reduction of the FRC fee or should the Board decide to take action contrary to the Manager and Chief Engineer's action, the Board may, by a super majority vote, waive or modify requirements of these rules when not contrary to the purpose of the rules or the public interest. The Board, by a super majority vote, must find that:

1. Strict application of the rule would cause an absurd, unfair, or unreasonably harsh result; and
2. The applicant's circumstance or condition is unique or exceptional, and the Board would grant the same request if made by every similarly situated applicant; and
3. Such modification thereof as is reasonably necessary or expedient, and not contrary to law or the intent and purposes of these rules and regulations; and
4. In cases of exemption from or reduction of the FRC fee, the resulting financial impact upon the Department and future consumers is acceptable to the Board.
SECTION XIII - CONSTRUCTION AGREEMENT AND BOND

To secure final approval prior to construction of the required improvements in a subdivision, the subdivider shall enter into a written agreement with the County and the Department to make, install and complete all of the required improvements within a specified time. In addition thereto, a Surety Bond or other security as hereinafter specified shall be filed with and attached to the agreement by the subdivider.

A. Construction Agreement:

(1) The Agreement shall specify that the subdivider will complete the subdivision to the satisfaction of the Manager and Chief Engineer.

(2) The Agreement shall further specify that the Department may complete the work at the expense of the subdivider where the subdivider fails to complete the work to the satisfaction of the Manager and Chief Engineer, or fails to complete the work within the time specified.

B. Surety Bond:

(1) The Surety Bond shall be filed with the agreement and shall be for the following purposes:

(a) The Surety Bond shall assure to the County and the Department that the actual construction and installation of the improvements and utilities specified will be carried out.

(b) The Surety Bond shall further assure to the Department that the facilities reserve charge will be paid, if said charge is not already paid.

(2) The Surety Bond shall be executed by the subdivider as principal and the surety shall be a company authorized to transact a surety business in the State of Hawaii.

(3) The bond or other security shall be one of the following:

(a) A Surety Bond in a sum equal to the cost of the work required to be done as estimated by the Manager and Chief Engineer; payable to the County and the Department, and shall be conditioned upon the faithful performance of all work required to be done by the subdivider, and shall be further conditioned to the effect that should the subdivider fail to complete all work required to be done within a specified reasonable time, the Department may cause all required work which is not finished to be completed, and the parties executing the bond shall be firmly bound for the payment of all necessary costs, therefore; or

(b) Where the subdivider has entered into a contract with a reputable contractor, and has filed with the Director all three of the following: 1) a certified copy of his said contract and specifications; 2) a certified copy of the performance bond of his said contractor; and 3) a surety bond in a sum equal to at least 50 per cent of the cost of all work required to be done by the subdivider as estimated by the Manager and Chief Engineer, and shall be payable and conditioned as above set forth; or

(c) The subdivider shall make a deposit of money with the Director as agent of the County and the Department, in an amount equal to the cost of the construction of said improvements as estimated by the Manager and Chief Engineer. Under this arrangement, the agreement may provide for progress payments to be made to the contractor for materials used and services and labor performed, out of said deposit.
as the work progresses; provided that said progress payments shall at no time exceed the value of the completed portion of said improvements as determined by the Manager and Chief Engineer and the County Engineer of the County; or

(d) In lieu of said surety bond or deposit in escrow mentioned in Paragraphs 3 (a) (b) (c) above, the subdivider may deposit with the Director bonds or other negotiable securities in the amount as provided by Paragraphs 3 (a) (b) (c) respectively of this Section and acceptable to the Manager and Chief Engineer.

(4) Facilities Reserve Charge. All bonds or other securities as provided in Paragraphs 3 (a) (b) (c) (d) above shall include the assurance of payment of the facilities reserve charge except for the following:

(a) This paragraph shall not be applied where the facilities reserve charge has already been paid.

(b) A separate bond primarily for the purpose of paying the facilities reserve charge may be filed by the subdivider.

(5) All bonds or securities posted under this Section shall not be canceled except with approval of the County and the Department.

SECTION XIV – NON-DEVELOPMENT AGREEMENTS

1. **Purpose.** The purpose of this section is to assist families who wish to transfer interests in real property between themselves without immediately complying with Departmental rules and construction standards and specifications imposed when family members request subdivision approval.

2. **Definitions.** As used within this section:

   - "Development" includes, but is not limited to:
     1. the construction, reconstruction, alteration, remodeling, renovation, or repairing of single-family residences, additional dwelling units, or any other dwelling, building, or structure of any kind on or within the property being subdivided, or
     2. the construction of additions or extensions to any dwelling, structure, or building existing as of the date of this agreement, or
     3. the construction, reconstruction, installation, alteration, or repair of piping, wastewater systems, landscaping or irrigation systems.

which result in increased fire protection requirements arising because of the property’s development, increased consumption of water upon the property being subdivided, calculated from the date of the agreement described in this section, or which may, in the Department’s judgment, possibly contaminate existing potable water-well sources located in the vicinity of the property being subdivided.

"Hanai child" means a person for whom an adult once provided food, nourishment, and support for a minimum period of at least one year prior to the time that the applicant applied for subdivision approval and who is generally acknowledged as the adult’s child among friends, relatives, and the community.

"H.R.S" means Hawaii Revised Statutes, as amended.
"Non-development agreement" means the agreement required to be executed under this section.

"Rule" or "Rules" mean the Rules and Regulations of the County of Kauai Department of Water.

"Water System Facilities" means all water infrastructure of the Department determines to be necessary to provide adequate residential water service and fire protection for the property being subdivided and shall include, but not be limited to, any and all necessary wells, pumps, storage tanks, water transmission and distribution lines and related meters, valves, and other water system improvements and equipment.

3. **Authorization to defer subdivision improvements under certain terms and conditions.** The Manager and Chief Engineer may approve requests for subdivision approval and temporarily defer subdivision requirements imposed by the Department's rules and construction standards and specifications for the sole and limited purpose of allowing a subdivision applicant to transfer interests in real property from the applicant to others, provided the applicant satisfies or complies with the following conditions:

   a. Property interests may be transferred only between: natural persons who are related to the applicant by birth, blood, adoption, marriage, or prior marriage. Eligible transferees are limited to:

      - Spouse,
      - Ex-spouse,
      - Parents,
      - Grandparents,
      - Children,
      - Hanai children,
      - Grandchildren,
      - Brothers, and
      - Sisters.

   The preceding list of terms shall be understood according to their most widely-known and usual significance, without attending so much to the literal and strictly grammatical construction as to their general, ordinary, or popular use or meaning.

   b. The Manager and Chief Engineer shall not approve subdivision requests under this section if development will occur as a result of the subdivision.

   c. With respect to the property being subdivided, the Department shall not approve further subdivision requests, requests for water service when apartments within the property have been created pursuant to Chapter 514A, H.R.S., or development of any kind, unless and until adequate water system facilities, as may be determined by the Department when development occurs, are constructed, in place and complete, to provide adequate residential water service and fire protection for the property being subdivided.

   d. The Department shall not approve residential building permits for any property which is subject to a non-development agreement unless adequate water-system facilities are constructed pursuant to subparagraph 3.c. of this section.

   If the Department erroneously or inadvertently approves a building permit before necessary water-system facilities are constructed, the Department shall, upon learning of its action, immediately rescind its approval.

   e. If, before necessary water-system facilities are constructed to service the property being subdivided, the Department erroneously or inadvertently approves the issuance of a building permit for any development within the subdivision and development occurs, the developer
shall either construct the necessary water-system facilities or remove the development at the developer’s own cost and expense.

Should the Department be required to enforce the provisions of this subparagraph through civil court action, the developer shall pay to the Department and be jointly and severally liable for any and all attorneys’ fees, court costs, and other related fees, costs, and expenses necessary to prosecute and defend such an action.

f. The subdivision applicant and all persons to whom an interest in the property may be transferred shall release the Department of any and all liability arising from the Department’s decision to recommend subdivision approval under this section.

The applicant and all persons to whom an interest in the property may be transferred shall also forever indemnify, defend, save, and hold harmless the Department from and against any and all injury to persons and damage to property, deaths, claims, fines, suits, actions, economic and non-economic damages, costs, losses, and liabilities of every nature and kind arising or growing out of the Department’s decision to recommend subdivision approval of the applicant’s property under this section.

g. The provisions of this section shall be implemented through an agreement executed between 1) the Manager and Chief Engineer, and 2) the subdivision applicant and all persons to whom an interest in the property may be transferred. The agreement shall contain terms and conditions determined to be necessary by the Manager and Chief Engineer and the County Attorney. The covenants and servitudes created by the agreement shall constitute covenants which shall run with the land and constitute notice to all who may claim an interest in the property being subdivided.

Any subdivision approval granted under this section shall be null, void, and of no legal effect unless 1) the Department receives a non-development agreement containing original signatures executed by all of the parties to the agreement, and 2) the agreement has been recorded in the State of Hawaii Land Court or Bureau of Conveyances.

h. The documents conveying title or an interest in real property shall specifically incorporate by reference the non-development agreement. Further, the agreement shall be attached to the conveyance documents as an exhibit.

i. The final subdivision map shall contain a brief and concise statement stating that the lots created by the subdivision are subject to a non-development agreement. The statement shall further summarize the major terms and conditions of the agreement.

4. **Applicability.** This section shall apply only to subdivisions served by County water systems, and not to private water systems not served by the County.

5. **Fees, Charges, and costs under this section.** Notwithstanding any other section or provision in the Rules to the contrary including, but not limited to, Paragraph 1, Section III, Part 3 of the Rules, any and all applicable Departmental fees, charges, and costs, including facilities reserve charges, shall be paid at such future time that development occurs at the amount in effect at the time that development occurs, and not at the time that the non-development agreement is entered into by the County.

6. **Changed development conditions.** The applicant or subsequent transferees of the applicant shall be responsible for checking with the Department and determining whether water infrastructure development requirements have so changed such that necessary water-system facilities no longer need to be constructed. The Department shall not be responsible for informing the applicant or subsequent transferees of the applicant of such changed development conditions.
SECTION XV - SEVERABILITY

If any rule, section, sentence, clause, or phrase of these rules and regulations or its application to any person or circumstance or property is held to be unconstitutional or invalid, the remaining portions of these rules and regulations or the application of these rules and regulations to other persons or circumstances or property shall not be affected. The Department hereby declares that it would have adopted these rules and regulations and each and every rule, section, sentence, clause or phrase thereof, irrespective of the fact that any one or more other rules, sections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION XVI - PENALTIES

Any person, firm or corporation which violates any rule or regulation herein shall be fined not more than $500.00, except that in cases where the offense shall be of a continuing nature, each day's continuance of the same, shall constitute a separate offense.
COUNTY OF KAUAI

DEPARTMENT OF WATER

2008 AMENDMENTS

to the 2002 Water System Standards
adopted by the
Hawaii County Department of Water Supply,
City and County of Honolulu Board of Water Supply,
Kauai County Department of Water, and
Maui County Department of Water Supply
THESE AMENDMENTS to the 2002 Water System Standards adopted by the Hawaii County Department of Water Supply, City and County of Honolulu Board of Water Supply, Kauai County Department of Water, and Maui County Department of Water Supply revise and modify various provisions of the 2002 Standards and should therefore be considered part of the these Standards.

If any provision of these amendments or the application thereof to any person or circumstances is held invalid, the invalidity does not affect other provisions or applications of these amendments which can be given effect without the invalid provision, or application, and to this end the provisions of these amendments are severable.

EFFECTIVE DATE: December 5, 2008

WYNNE M. USHIGOME

ACTING MANAGER & CHIEF ENGINEER
Department of Water, County of Kaua‘i, Hawai‘i
AMENDMENTS
to the 2002 Water System Standards

As used in these Amendments:

“2002 Standards” means the 2002 Water System Standards adopted by the Hawaii County Department of Water Supply, City and County of Honolulu Board of Water Supply, Kauai County Department of Water, and Maui County Department of Water Supply.

“2005 Amendments” means the County of Kaua‘i Department of Water’s 2005 amendments and revisions to the 2002 Standards.

“Amendments” means

“Administrative rule” means the administrative rules and regulations of the Department of Water of the County of Kaua‘i, Hawai‘i.

“County” means the County of Kauai, Hawai‘i.

“Department” or “Water Department” means the Water Department of the County of Kaua‘i.


“H.R.S.” means Hawai‘i Revised Statutes, as amended.

“Manager” means the Kaua‘i County Water Department’s Manager and Chief Engineer.

“State” means State of Hawai‘i.

Further, the following rules of construction shall apply to these 2005 Amendments:

Number. Words in the singular or plural number signify both the singular and plural number.

The following section, tables, and other provisions within the 2002 Standards are hereby amended and revised as follows:

1. **Table 100-10 “TYPES AND SIZE OF MAIN VALVES”**: Table 100-10 is hereby revised by adding the following annotation:

   For Kaua‘i only: Butterfly valves shall not be used as a standard type of main valve.
2. **Table 100-19 “FIRE FLOW REQUIREMENTS”**: Table 100-19 is hereby deleted from the 2002 Standards and replaced in its entirety as follows. Any and all references in the 2002 Standards to Table 100-19 shall mean this Table 100-19A:

<table>
<thead>
<tr>
<th>LAND USE</th>
<th>FLOW (GPM) / DURATION (HOURS) / FIRE HYDRANT SPACING (FEET)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>250 / 1 / 500</td>
</tr>
<tr>
<td>Rural</td>
<td></td>
</tr>
<tr>
<td>Single Family</td>
<td><em>See Note (b) below</em></td>
</tr>
<tr>
<td>Duplex</td>
<td><em>See Note (b) below</em></td>
</tr>
<tr>
<td>PUD Townhouses, Apartments</td>
<td><em>See Note (b) below</em></td>
</tr>
<tr>
<td>Schools, Retail Stores or Shops, Shopping Centers, Hotels, and Hospitals</td>
<td>2,000 / 2 / 350</td>
</tr>
<tr>
<td>Industry</td>
<td>3,000 / 3 / 350</td>
</tr>
</tbody>
</table>

**ANNOTATIONS TO TABLE 100-19A:**

(a) “GPM” means gallons per minute.

(b) Fire Flow, Duration, and Fire Hydrant Spacing shall be dictated by the following zoning district designations described in the Kaua‘i County Code.

- R-2: 500/1/500
- R-4: 750/2/500
- R-6: 1000/2/500
- R-10: 1250/2/350
- R-20: 1500/2/350
- RR-10: 1500/2/350
- RR-20: 2000/2/350

(c) On dead end streets, the last fire hydrant shall be located at one-half (1/2) the spacing distance for fire hydrants from the last house/unit (frontage property line or to the driveway or access for the property).

(d) Spacing of fire hydrants shall be measured along the roadway.

(e) The Department may utilize State and County statutes, codes, administrative rules and other authoritative sources of law in interpreting the land use classifications described in Table 100-19A. These legal authorities include, but are not limited to, chapters 8 (Comprehensive Zoning Ordinance) and 9 (Subdivision Ordinance) of the Kaua‘i County Code, and H.R.S. chapter 205.
(f) **General applicability of Table 100-19A; exceptions thereeto:** Unless otherwise specifically adverted to in this annotation (f), the 2002 Standards, or the Department’s administrative rules, the requirements of Table 100-19A shall apply to all County subdivision applications and actions, all County zoning and use permit applications, all requests for variances, all requests for building permit approval from the Department, all requests for water service from the Department, and all other actions which may fall under the jurisdiction of the Department.

As used in this annotation (f), the terms "dwelling unit" and "lot" shall have the meanings ascribed to them in K.C.C. Sec. 8-1.5.

The requirements of Table 100-19A are minimum standards; the Department may, in consultation with the Kaua‘i County Fire Department, determine that additional or more stringent fire flow, flow duration, and hydrant spacing requirements are appropriate and necessary in certain cases because of heightened fire safety concerns.

(i) **Building permit approval for first and second dwelling units; Applications for first and second ½” water meters:** When County building permit approval is sought from the Department for the first and second dwelling units only on an existing lot of record, the requirements of Table 100-19A shall not apply. However, the requirements of Table 100-19A shall apply when County building permit approval is sought from the Department for any dwelling unit in excess of the second dwelling unit on an existing lot of record.

When application is made for a first or second five-eighth inch (½”) water meter only to serve an existing lot of record, the requirements of Table 100-19A shall not apply. However, the requirements of Table 100-19A shall apply when application is made for any five-eighth inch (½”) water meter to serve an existing lot of record in excess of the second ½” water meter. The foregoing exception for ½” water meters shall not apply to applications for any other size water meters.

(ii) **Alternative methodology for satisfying fire protection requirements for non-residential structures:** Where County building permit approval is sought from the Department for any structure other than a home, house, or dwelling unit, an applicant may utilize the alternative methodology described in this Paragraph (ii) of Annotation (f) in lieu of satisfying the requirements of Table 100-19A.

As used in this Paragraph (ii) of Annotation (f), “Fire Chief” or “Chief” means the Fire Chief of the County of Kaua‘i. “On-site” means on the lot to which the building permit appertains. “Off-site” means off and away from the lot to which the building permit appertains.

Under this Paragraph (ii) of Annotation (f), an applicant need not satisfy the requirements of Table 100-19A if:

(A) The applicant submits a written analysis signed by a professional engineer licensed under H.R.S. Chapter 464, in which the engineer certifies that the existing off-site water system, together with the addition of on-site fire mitigation measures, satisfy the fire protection...
requirements of the National Fire Protection Association (hereafter “NFPA”);

(B) The professional engineer submitting the required certification possesses, at the time the certification is provided, a minimum of three years engineering experience as a licensed professional engineer in responsible charge of fire protection engineering work or has experience, in the Department’s judgment, equivalent to such engineering work; and

(C) The applicant submits the written analysis described in Subparagraph (A) of this Paragraph (ii) to both the Water Department and the County Fire Chief, and the Fire Chief approves [does not reject] the sufficiency of the applicant’s fire mitigation measures.

The Chief may approve [reject] the sufficiency of the applicant’s fire mitigation measures if the Chief determines that:

- The measures are sufficient [insufficient] relative to the structures to be built on the lot, or the uses which will occur in conjunction with the proposed structures, or both; or
- The measures are sufficient [insufficient] to prevent the spread of any potential on-site fire to off-site structures or uses, or both, surrounding or adjacent to the lot.

In evaluating the sufficiency of any mitigation measures, the Fire Chief may consider the Fire Code of the County of Kaua‘i, the codes and standards of the NFPA, the International Code Council’s Uniform Fire Code (as may be amended from time to time), and other nationally-recognized fire protection codes or standards, or both.

The Fire Chief may approve [reject] the sufficiency of the applicant’s measures no later than one-hundred twenty (120) calendar days after the Chief has determined in writing that the applicant has submitted a complete written analysis to the Chief. The burden shall be on the Applicant to provide the Chief with a complete written analysis.

If the Chief approves [rejects] the sufficiency of the applicant’s measures, the Chief shall also inform the Water Department, who shall in turn inform the applicant of the approval [rejection].

The Applicant shall have the burden of proving to the Water Department that the professional engineer submitting the certification described in this Paragraph (ii) of Annotation (f) has the necessary qualifications described in Subparagraph (B) of this Paragraph (ii).
(iii) Minor interior additions and alterations; changes in ownership or commercial use. The requirements of Table 100-19A shall not apply when an application is made under Chapter 8 of the Kaua‘i County Code for a County use or zoning permit, or a variance, if:

(A) The application is to permit a change from an existing, legal commercial use to another legal, commercial use;

(B) The application is to allow a change in the ownership of a permittee; or

(C) The application is to permit the minor repair, reconstruction, redesign, renovation, or renewal of any part of the interior of an existing building, which does not affect the structural integrity of the building, and which also does not add any square footage to the building or its footprint, or both.

3. **Sec. 105.04 “ACCESS ROAD.”**: Item No. 2 only is hereby deleted and replaced in its entirety as follows:

2. Maximum grade of 15%. (for Kaua‘i only).

4. **Sec. 202.01 “GENERAL.”**: Paragraph F “Bolts and Nuts.” of Sec. 202.01 is hereby deleted and replaced in its entirety as follows:

F. Bolts and Nuts. All bolts and nuts shall be either silicon bronze (ASTM F467 and F468) or “Cor-Ten”, U.S.S. alloy, “Mayari”, Bethlehem Steel, or approved equal, ASTM 325, Type 3. All bolts and nuts shall be silicon bronze only if submerged in water. Bolts and nuts installed shall be compatible in strength and material characteristics. Bolts shall protrude beyond the nuts and protrusion shall be a minimum of 1/8 inch but shall not exceed ½ inch.

5. **Sec. 202.02 “MECHANICAL JOINT.”**: The fourth paragraph only of Paragraph A “General.” of Sec. 202.02 is hereby deleted and replaced in its entirety as follows:

Silicon bronze (ASTM F467 and F468) or “Cor-Ten”, U.S.S. alloy, “Mayari”, Bethlehem Steel, or approved equal, ASTM 325, Type 3 bolts and nuts shall be used for all mechanical joints. All bolts and nuts shall be silicon bronze only if submerged in water.

6. **Sec. 202.04 “FLANGED JOINT.”**: The fourth paragraph only of Paragraph A “General.” of Sec. 202.04 is hereby deleted and replaced in its entirety as follows:

The bolts used for all flanged joints shall protrude beyond the nuts by a minimum of 1/8-inch but shall not exceed ½ inch. Should the bolts protrude more than ½ inch, the bolts shall be machine cut before installation. Bolts shall be with cut threads and American Standard heavy hexagon heads. Nuts shall be compatible with the bolts in strength and material characteristics. Nuts shall be hexagon. Bolts and nuts for flanges shall conform to one of the following:
1. Silicon bronze bolts and nuts shall conform to ASTM F467 and F468.

2. Hot-dipped galvanized nuts and bolts shall be “Cor-ten”, U.S.S. alloy, “Mayari”, Bethlehem Steel, or approved equal, ASTM 325, Type 3.

7. **Sec. 206.01 “GENERAL.”** The sixth and thirteenth(last) paragraphs only of Sec. 206.01 are hereby deleted and replaced in their entirety as follows:

   (sixth paragraph)

   Each hydrant body shall be furnished with a set of break-off bolts, and full face gasket. Bolts shall be hot-dipped galvanized steel \( \frac{3}{4}'' \times 3'' \) machine bolts with hexagon heads American Standard heavy. Bolts shall be break-off type drilled \( 11/32'' \times 1'' \). Nuts shall be hot-dipped galvanized steel American Standard heavy cold punched, hexagon nuts. Gaskets shall be \( \frac{3}{4} \) inch cloth inserted rubber. Hydrant flange shall have six (6) \( \frac{3}{4} \) inch bolt holes on 9.375 inch diameter.

   (thirteenth paragraph)

   Fire hydrants shall be provided with bonnets, stuffing boxes and other appurtenant features all made of silicon bronze conforming to ASTM B98 and as specified in the approved material list. Fire hydrants shall be provided with bolts and nuts made of silicon bronze (ASTM F467 and F468).

8. **Sec. 206.02 “WET-BARREL HYDRANTS.”** The first paragraph only of Sec. 206.02 is hereby deleted and replaced in its entirety as follows:

   All hydrants shall comply with AWWA C503 “Wet-Barrel Fire Hydrants for Ordinary Water Works Service”. All hydrants shall have one (1) 4\( \frac{1}{2} \) inch and one (1) 2\( \frac{1}{4} \) inch outlet with Type B valves. All hydrants shall have brass caps with stainless steel chains.

9. **DIVISION 400, Sec. 402 “APPROVED MATERIAL LIST”, Subsection I, **“PIPES AND APPURTEINANCES”, Subdivision K. “Gland”**: The following Item No. 7 is added to Division 400, Sec. 402, Subsection I, Subdivision K:

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>Applicable to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>Catalogue or Model No.</td>
</tr>
<tr>
<td>K. Gland</td>
<td>M J Field Lok</td>
</tr>
<tr>
<td>7. U.S. Pipe</td>
<td>M J Field Lok</td>
</tr>
</tbody>
</table>
10. **DIVISION 400, Sec. 402 “APPROVED MATERIAL LIST”, subsection I. “PIPES AND APPURTENANCES”, Subdivision M, “Flanged Adapters”:** The following item no. 10 is added to Division 400, Sec. 402, Subsection I, Subdivision M:

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>Applicable to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>Catalogue or Model No.</td>
</tr>
<tr>
<td>I. PIPES AND APPURTENANCES</td>
<td></td>
</tr>
<tr>
<td>M. Flanged Adapters</td>
<td></td>
</tr>
<tr>
<td>10. Romac Industries, Inc.</td>
<td>Style DJ 400 Ductile Iron Dismantling Joints (sizes 16-inch and larger)</td>
</tr>
</tbody>
</table>

11. **DIVISION 400, Sec. 402 “APPROVED MATERIAL LIST”, Subsection II. “VALVES AND APPURTENANCES”, Subdivision A. “Air Relief Valves/Combination Air Valves (ARV), further Subdivision 2. “High Pressure (Higher than 150 pse). Item g. “Val-Matic Valve & Manufacturing Corp.”:** The following item is added to Division 400, Sec. 402, Subsection II, Subdivision A, further Subdivision 2, Item g:

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>Applicable to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>Catalogue or Model No.</td>
</tr>
<tr>
<td>II. VALVES AND APPURTENANCES</td>
<td></td>
</tr>
<tr>
<td>A. Air Relief Valves/ Combination Air Valves (ARV)</td>
<td></td>
</tr>
<tr>
<td>2. High Pressure (Higher than 150 psi)</td>
<td></td>
</tr>
<tr>
<td>g. Valve-Matic Valve &amp; Manufacturing Corp.</td>
<td>Combination Air Valve 201C 2</td>
</tr>
</tbody>
</table>

12. **DIVISION 400, Sec. 402 “APPROVED MATERIAL LIST”, subsection III. “SERVICE LATERALS, FITTINGS, AND APPURTENANCES”, Subdivision D. “Service Lateral Fittings”, Item 2. “Elkhart Products Corp.”:** The following item is approved for use for Kaua‘i:

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>Applicable to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>Catalogue or Model No.</td>
</tr>
<tr>
<td>III. SERVICE LATERALS, FITTINGS, AND APPURTENANCES</td>
<td></td>
</tr>
<tr>
<td>H. Service Lateral Fittings</td>
<td></td>
</tr>
<tr>
<td>2. Elkhart Products Corp.</td>
<td>Cast bronze threaded fittings, Cast copper alloy fittings for flared copper tube, bronze pipe flanges and flanged fittings</td>
</tr>
</tbody>
</table>
13. **DIVISION 400, Sec. 402 “APPROVED MATERIAL LIST”, subsection III. “SERVICE LATERALS, FITTINGS, AND APPURTEINANCES”, Subdivision H. “Copper Pipe”, Item 2. “Kembla”:** The following item is approved for use for Kaua‘i:

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>Applicable to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>Catalogue or Model No.</td>
</tr>
<tr>
<td>III. SERVICE LATERALS, FITTINGS, AND APPURTEINANCES</td>
<td></td>
</tr>
<tr>
<td>H. Copper Pipe</td>
<td></td>
</tr>
<tr>
<td>2. Kembla</td>
<td>Type K, seamless water tube</td>
</tr>
</tbody>
</table>

14. **DIVISION 400, Sec. 402 “APPROVED MATERIAL LIST”, subsection V. “PAINTS AND COATINGS”:** The following paint products, as further described in attached Exhibit “A”, are added to the various subdivisions within Subsection V of Sec. 402 of Division 400. Only approved paint products described in Exhibit “A” are added to the respective subdivisions:

- **Pratt and Lambert Products** (see attached January 27, 2004 Honolulu Board of Water Supply letter);

- **PPG Industries High Performance Products** (see attached July 11, 2002 Honolulu Board of Water Supply letter); and

- **Sherwin Williams Coatings** (see attached May 23, 2003 Honolulu Board of Water Supply letter).

Exhibit “A” is incorporated by reference into these 2005 Amendments.

15. **DIVISION 400, Sec. 403 “STANDARD DETAILS”, Subsection II. “Chain Link Fence and Gate (F), Subdivision A. “Chain Link Fence”, Detail No. F2:** Division 400, Sec. 403, Subsection II, Subdivision A, Detail No. F2 is hereby deleted and replaced in its entirety with attached Exhibit “B”, which is incorporated by reference into these 2005 Amendments.

16. **DIVISION 400, Sec. 403 “STANDARD DETAILS”, Subsection III. “Fire Hydrants and Appurtenances (FH), Subdivision B. “Connection Layouts”, Detail NO. FF4:** Division 400, Sec. 403, Subsection III, Subdivision B, Detail No. FF4 is hereby deleted and replaced in its entirety with attached Exhibit “C”, which is incorporated by reference into these 2005 Amendments.

17. **DIVISION 400, Sec. 403 “STANDARD DETAILS”, Subsection IV. “Service Laterals (L), Subdivision A. “Kaua‘i”, Detail No. L1:** Division 400, Sec. 403, Subsection IV, Subdivision A, Detail No. L1 is hereby deleted and replaced in its entirety with attached Exhibit “D”, which is incorporated by reference into these 2005 Amendments.
18. DIVISION 400, Sec. 403 “STANDARD DETAILS”, Subsection IV, “Service Laterals (L)”, Subdivision A. “Kaua’i”, Detail No. L2: Division 400, Sec. 403, Subsection IV, Subdivision A, Detail No. L2 is hereby deleted and replaced in its entirety with attached Exhibit “E”, which is incorporated by reference into these 2005 Amendments.

19. DIVISION 400, Sec. 403 “STANDARD DETAILS”, Subsection IV, “Service Laterals (L)”, Subdivision A. “Kaua’i”, Detail No. L4: Division 400, Sec. 403, Subsection IV, Subdivision A, Detail No. L4 is hereby deleted and replaced in its entirety with attached Exhibit “F”, which is incorporated by reference into these 2005 Amendments.

20. DIVISION 400, Sec. 403 “STANDARD DETAILS”, Subsection IV, “Service Laterals (L)”, Subdivision A. “Kaua’i”, Detail No. L5: Division 400, Sec. 403, Subsection IV, Subdivision A, Detail No. L5 is hereby deleted and replaced in its entirety with attached Exhibit “G”, which is incorporated by reference into these 2005 Amendments.

21. DIVISION 400, Sec. 403 “STANDARD DETAILS”, Subsection IV, “Service Laterals (L)”, Subdivision A. “Kaua’i”, Detail No. L6: Division 400, Sec. 403, Subsection IV, Subdivision A, Detail No. L6 is hereby deleted and replaced in its entirety with attached Exhibit “H”, which is incorporated by reference into these 2005 Amendments.

22. DIVISION 400, Sec. 403 “STANDARD DETAILS”, Subsection VII, “Trench Details, and Concrete Cylinder Pipe and Appurtenances (P)”, subdivision C. “Trench Details”, detail no. P11: Division 400, Sec. 403, Subsection VII, Subdivision C, Detail No. P11 is hereby deleted and replaced in its entirety with attached Exhibit “I”, which is incorporated by reference into these 2005 Amendments.

23. DIVISION 400, Sec. 403 “STANDARD DETAILS”, subsection VIII, “Valves and Appurtenances (V)”, subdivision D. “Valve Box Installation and Miscellaneous Details”, Detail No. V11: Division 400, Sec. 403, Subsection VIII, Subdivision D, Detail No. V11 is hereby deleted and replaced in its entirety with attached Exhibit “J”, which is incorporated by reference into these 2005 Amendments.

24. DIVISION 400, Sec. 403 “STANDARD DETAILS”, Subsection VIII, “Valves and Appurtenances (V)”, Subdivision D. “Valve Box Installation and Miscellaneous Details”, Detail No. V13: Division 400, Sec. 403, Subsection VIII, Subdivision D, Detail No. V13 is hereby deleted in its entirety as to Kaua‘i only.

25. DIVISION 400, Sec. 403 “STANDARD DETAILS”, subsection VIII, “Valves and Appurtenances (V)”, Subdivision D. “Valve Box Installation and Miscellaneous Details”, Detail No. V14: Division 400, Sec. 403, Subsection VIII, Subdivision D, Detail No. V14 is hereby deleted and replaced in its entirety with attached Exhibit “K”, which is incorporated by reference into these 2005 Amendments.
26. **DIVISION 400, Sec. 403 “STANDARD DETAILS”, Subsection VIII,** 
"Valves and Appurtenances (V)", Subdivision D, "Valve Box Installation and 
Miscellaneous Details", Detail No. V15: Division 400, Sec. 403, Subsection VIII, 
Subdivision D, Detail No. V15 is hereby deleted and replaced in its entirety with attached 
Exhibit “L.”, which is incorporated by reference into these 2005 Amendments.

27. **DIVISION 400, Sec. 403 “STANDARD DETAILS”, Subsection VIII,** 
"Valves and Appurtenances (V)", Subdivision D, "Valve Box Installation and 
Miscellaneous Details", Detail No. V16: Division 400, Sec. 403, Subsection VIII, 
Subdivision D, Detail No. V16 is hereby deleted and replaced in its entirety with attached 
Exhibit “M”, which is incorporated by reference into these 2005 Amendments.

28. **DIVISION 400, Sec. 403 “STANDARD DETAILS”, Subsection VIII,** 
"Valves and Appurtenances (V)", Subdivision E, "Valve Marker and Nut 
Extension”, Detail No. V18: Division 400, Sec. 403, Subsection VIII, Subdivision E, 
Detail No. V18 is hereby deleted in its entirety as to Kaua‘i only.

29. **NEW OR ALTERNATIVE MATERIALS:** Although the 2002 Standards and 
2005 Amendments specify the products and materials to be used in the construction of 
waterworks facilities under the Department’s jurisdiction, the Department recognizes that, 
over time, alternative or new products and materials may be developed, or that there may be 
advances in existing materials or products already approved for use in the 2002 Standards or 
2005 Amendments. The Department recognizes that, as a matter of engineering practice, it 
may be advantageous to utilize such products or materials.

In recognition of these facts, the Department hereby establishes the following process for 
determining the use of such new or alternate products and materials.

(i) A person requesting the use of a product or material not approved for use in the 
2002 Standards or 2005 Amendments shall submit a written request addressed to 
the Department’s Manager asking for approval to use the product or material. The 
request shall be submitted on a form provided by the Department, and shall 
provide product information as may be required by the Department.

(ii) The requesting party shall specify if the proposed product or material has been 
approved for use by the City & County of Honolulu Board of Water Supply, 
County of Hawai‘i Department of Water Supply, County of Maui Department of 
Water Supply and whether the proposed product or material satisfies the latest 
applicable standard specifications of the American Society of Testing Materials 
("ASTM"), the American National Standards Institute ("ANSI"), the American 
Water Works Association ("AWWA"), or the U.S. General Services 
Administration Federal Specifications.

(iii) The request shall be evaluated by the Department’s staff. The staff may, as deemed 
necessary, require the requesting party to submit additional information or 
documentation regarding the proposed product or material.

The Department’s staff shall then recommend to the Manager the appropriate 
action to take with respect to any such request. Such action may include, but shall
not be limited to, approval or disapproval of the request, approval or disapproval in part, or a recommendation that the request be modified.

(iv) Products and materials approved for use by the Manager shall be published as further amendments to the 2002 Standards. All such amendments shall be posted in a designated area accessible to the public and shall be distributed by any means the Manager deems appropriate.

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September 20, 2017

Mr. Kirk Saiki, Manager & Chief Engineer
Board of Water Supply
4398 Pua Loke Street
Lihue, Kauai, HI. 96766

RE: SUBDIVISION S-2017-12
TMK (4) 2-3-07: 1, 2, 3
KALAEHO, KAUAII
OWNERS: JACK PHILLIPS, et al

Dear Mr. Kirk Saiki,
Manager & Chief Engineer

This subdivision is a de facto subdivision established by the Fujimoto vs. Allen case, which says that the ditches, owned by others, running through the parcel created the lots. The ownership and usage of the lots were based on this decision and the County Planning Department agreed. This was prior to the R3BST vs. The County of Kauai case in which the court said the ditches owned by someone else that run through the lot do not create a de facto subdivision.

Attached for your reference is a copy of the Tentative Approval Letter from the Planning Commission and a copy of the memorandum regarding the request of the Department of Water (DOW) for an 8-inch waterline approximately 1,300 feet long.

The owners are seeking to ratify the previously subdivided lots through the County Planning Commission subdivision process. The owners of the lots should enjoy the rights of any previously subdivided lot with regards to density and usage.

We feel that the DOW requirement to install a 1,300 feet waterline in order to build a dwelling is unreasonable and should not be imposed on a previously approved subdivision. Therefore we humbly request that the Kauai County Board of Water Supply revise and waive the 1,300 feet waterline requirement at the next Water Board meeting on September 29, 2017.
Thank you very much.

Respectfully,

Dennis M. Esaki  
President, Agent for Owners  
Esaki Surveying & Mapping, Inc

cc: Mr. Sherman Shiraishi, Chairman  
Mr. Thomas Canute  
Ms. Beth Tokioka  
Ms. Laurie Ho  
Mr. Michael Dahilig  
Mr. Lyle Tabata  
Mr. Lawrence Dill  
Mr. Jack Phillips

Attachments
Dennis Esaki
Esaki Surveying and Mapping
1610 Haleukana st,
Lihue, HI 96766

Subject: Subdivision of Lot 151 Being Portions of Grant 7313 Kalaheo Homesteads, Second Series into Lot 1, 2, and 3 and Designation of Easements AU-10, D-1, and D-2 (S-2017-12, Jack Philips)

Subject subdivision was granted TENTATIVE APPROVAL by the Planning Commission at their meeting held on June 27, 2017. Final approval will be granted subject to the following conditions:

1. As recommended by the Planning Department:

   1. Requirements of the Planning Department:

      a. The subdivider shall comply with all requirements of the Planning Department, if any, prior to final subdivision approval.

   2. Requirements of the Department of Water (DOW):

      a. The subdivider shall comply with all requirements of the Department of Water, if any, prior to final subdivision approval.

   3. Requirements for Department of Public Works:

      a. The subdivider shall comply with all requirements of the Department of Public Works, if any, prior to final subdivision approval.

   4. Requirements for State Department of Health:

An Equal Opportunity Employer
V:\2017 Master Files\Regulatory\Subdivisions\S-2017-12\Tent Appr letter S-2017-12_CB_6.21.17.docx
a. The subdivider shall comply with all requirements of the State Department of Health, if any, prior to final subdivision approval.

5. The Applicant is advised that should any archaeological or historical resources be discovered during ground disturbing/construction work, all work in the area of the archaeological/historical findings shall immediately cease and the applicant shall contact the State Department of Land and Natural Resources, Historic Preservation Division and the Planning Department to determine mitigation measures.

6. The Applicant is advised that prior to and/or during construction and use additional conditions may be imposed by government agencies. Should this occur, the applicant shall resolve these conditions with the respective agency(ies).

You are hereby informed that the final subdivision map must be filed within one (1) year after the tentative approval date in order to obtain final approval. If not filed, the preliminary subdivision map and construction plan, if any, shall become null and void unless an extension of time, not to exceed six (6) months, is granted by the Planning Commission.

Sincerely Yours,

Michael A. Dahilig
Clerk of the Commission

xc: COK Public Works Dept.
COK Water Dept.
State Dept. Health
State Dept. Highways
COK Housing
MEMORANDUM

DATE: August 14, 2017

TO: Dennis Esaki
Esaki Surveying & Mapping, Inc.

FROM: Michael A. Dahilig
Director of Planning

SUBJECT: REVISION OF SUBDIVISION CONDITION
Subdivision No. S-2017-12
Applicant(s): Jack Phillips
Tax Map Key: (4) 2-3-007:001

Attached, please find a copy of the requirements for final subdivision approval. The following shall supersede Conditions 2 of the August 9, 2017 revision of subdivision conditions and it shall read as follows:

2. Requirements of the Department of Water (DOW):
   a. Prepare and receive Department of Water's approval of construction drawings for the necessary water system facilities and either construct said facilities or post a performance bond for construction. The Facilities shall also include:
      1) An extension of a main 8 inch in diameter, approximately 1300 feet in length, beginning at the 8-inch waterline along Pu'u Road and running west along Pu'u Road to Ihu Road and connecting to the existing waterline.
   b. If a bond is filed, to secure final subdivision approval, the subdivider shall clearly letter the following on the approved construction plans, final subdivision map, and deeds:

      "Domestic water service will not be available until the required construction improvements for this subdivision are completed and accepted by the Department of Water, County of Kauai."
This deed restriction shall be recorded with the Bureau of Conveyances within ninety (90) days of final subdivision approval by the Planning Department.

c. Locate and show existing water meter(s) (with appropriate meter number) on Subdivision Map for the DOW’s review and approval. Also, identify the proposed Subdivision Lot of the existing meters will be assigned to. DOW comments may change depending on the approved Subdivision Map.

d. Receive a “Certification of Completion” from the DOW for the construction of the “8-inch Waterline along Puu Road (from Lolo Road) project.”

e. Receive a “Certification of Completion” from the DOW for the construction of the necessary water system facilities relative to condition 2a.

Should you have any questions regarding this matter, please contact Chance Bukoski of my staff at 808.241.4050.

Enclosure

cc: Dept. of Water (w/out encl.)
Dept. of Public Works (w/out encl.)
Dept. of Health (w/out encl.)
Staff Reports
I. BUDGET SUMMARY VS. ACTUAL (see attached report for details)

<table>
<thead>
<tr>
<th></th>
<th>BUDGET</th>
<th>VS</th>
<th>ACTUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Expenses</td>
<td>$ 6,653,544.21</td>
<td></td>
<td>$4,115,774.66</td>
</tr>
<tr>
<td>Debt Principal Payment</td>
<td>3,483,086.08</td>
<td></td>
<td>3,483,086.08</td>
</tr>
<tr>
<td>Capital Projects</td>
<td>7,888,917.50</td>
<td></td>
<td>197,752.29</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$18,025,547.79</strong></td>
<td></td>
<td><strong>$7,796,613.03</strong></td>
</tr>
</tbody>
</table>

**REVENUES:** VARIANCE = “ACTUAL” LESS “BUDGET”; POSITIVE INDICATES HIGHER PERFORMANCE THAN EXPECTED.

- Total Revenue as of August, 2017 was 2% below projection.
  - Water sales of $5.4 million (M) was $618.9 thousand (“K”) or 13% above projection.
  - Other Water Revenue- Receipts of $66K exceeded projection by $24.4K or 59%.
  - Capital Contributions: Cash contributions including Federal & State Grants - $199.3K.
  - Investment Income & Net Increase in FV of Investments - $30.1K.

**OPERATING EXPENSES:** VARIANCE = BUDGET LESS ACTUAL EXPENDITURES; POSITIVE INDICATES LESS SPENDING THAN PLANNED.

- YTD Operating Expenses before depreciation and amortization was $4.1M. Total spending was $2.5M less than planned or budgeted; a positive variance of 38%.
  - Employee Related Expenses – $1.5M; a 16% positive variance.
  - Contracts & Services – $1.12M with a 65% positive variance.
    - Professional & Other Services, Insurance, Repairs and Maintenance for both water and non-water systems are the main items contributing to the 65% positive variance.
  - Exceptional Expenses – None
  - Fuel & Utilities – $499K; 4% negative variance.
  - Bulk Water Purchase – $294K; 2% positive variance.
  - Office & Operating Supplies – $115.9K, 45% positive variance.
  - Training, Travel & Meeting Expenses – $2.9K.
  - Debt Service – Interest Expense - $588K.
  - Depreciation & Amortization (non-cash expenses) is $1.27M.

**NET OPERATING INCOME:**

- Net Operating Income before depreciation and amortization - $2M.
- Net Operating Income after depreciation & amortization was $751.3K.
NON-OPERATING PROCEEDS & DISBURSEMENTS

- SRF Loan Proceeds – None
- FRC – Facility Reserve Charge - Receipts of $211,415.00
- YTD Debt Principal Payment is $3,483,086.08

CAPITAL PROJECTS BUDGET: YTD DISBURSEMENTS = $197,752.29

- Capital Projects: Water Utility Fund - $157.2K
- Capital Projects: FRC Fund – $40.5K
- Capital Projects: BAB Fund - $0.00
- Capital Projects: SRF Loan Fund - None.

II. FY 2017 – 2018 ENCUMBERED FUNDS (SEE ATTACHED)

- FY 2017 – 2018 Certification of Funds – $5,605,644.91

III. COMPARATIVE CHARTS:

METERED CONSUMPTION:

- August, 2017 metered consumption – 380.4 million gallons (mg); higher by 45mg as compared from the same month of FY 2017.
- YTD metered consumption as of 08/31/17 – 764.2mg; an increase of 65mg as compared from the same month of FY 2017.

IV. COMPARATIVE BALANCE SHEET:

* See attached.

V. OTHER FISCAL ONGOING ACTIVITIES/INITIATIVES:

- Five (5) years Water Rate Study – Ongoing, it is currently referred to the Finance Committee for deliberation.
- CC&B – Field Service Management – in process.
  - Billing Insight is on hold until oracle software upgrade is completed.
- Fiscal Yearend Audit – draft Audit Report of Financial Statements will be submitted in October board meeting.
- Budget Program Solution – procurement is in process.

Respectfully submitted,

Marites Yano
Waterworks Controller
## I. OPERATING BUDGET

### Revenue

<table>
<thead>
<tr>
<th>Description</th>
<th>Original Budget</th>
<th>Revised Budget</th>
<th>Actual</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Sales</td>
<td>$2,399,372.00</td>
<td>$2,399,372.00</td>
<td>$2,701,482.56</td>
<td>$302,110.96</td>
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<tr>
<td>Revenue from Public Fire Protection</td>
<td>178,836.50</td>
<td>178,836.50</td>
<td>178,511.50</td>
<td>1,675.00</td>
</tr>
<tr>
<td>Other Water Revenue</td>
<td>20,833.33</td>
<td>20,833.33</td>
<td>20,761.04</td>
<td>(72.29)</td>
</tr>
<tr>
<td>Federal Grants</td>
<td>370,833.33</td>
<td>370,833.33</td>
<td>(370,833.33)</td>
<td>741,666.70</td>
</tr>
<tr>
<td>State Grants</td>
<td>77,948.25</td>
<td>77,948.25</td>
<td>138,999.28</td>
<td>60,750.73</td>
</tr>
<tr>
<td>Capital Contributions</td>
<td>5,000.00</td>
<td>5,000.00</td>
<td>7,241.32</td>
<td>2,241.32</td>
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<tr>
<td>Net Increase in Fair Value of Investments</td>
<td>14,500.00</td>
<td>14,500.00</td>
<td>37,347.55</td>
<td>22,847.55</td>
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<tr>
<td>Investment Income</td>
<td>416.67</td>
<td>416.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain or Loss on Disposal of Capital Assets</td>
<td>833.34</td>
<td>833.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain or Loss from the Refinement of Debt</td>
<td>41,567.75</td>
<td>41,567.75</td>
<td>118.33</td>
<td>(41,449.42)</td>
</tr>
<tr>
<td>Miscellaneous Revenues</td>
<td>41,567.75</td>
<td>41,567.75</td>
<td>118.33</td>
<td>(41,449.42)</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>$3,106,307.83</td>
<td>$3,106,307.83</td>
<td>$3,069,570.54</td>
<td>(36,287.49)</td>
</tr>
</tbody>
</table>

### Employee-Related Expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>Original Budget</th>
<th>Revised Budget</th>
<th>Actual</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Wages (Includes Leaves &amp; CTO)</td>
<td>$509,709.58</td>
<td>$509,709.58</td>
<td>$599,101.41</td>
<td>60,391.83</td>
</tr>
<tr>
<td>Temporary Assignment</td>
<td>4,782.17</td>
<td>4,782.17</td>
<td>4,525.35</td>
<td>256.82</td>
</tr>
<tr>
<td>Overtime</td>
<td>40,916.67</td>
<td>40,916.67</td>
<td>42,216.93</td>
<td>(1,300.26)</td>
</tr>
<tr>
<td>Standby</td>
<td>15,132.84</td>
<td>15,132.84</td>
<td>18,476.72</td>
<td>(3,343.88)</td>
</tr>
<tr>
<td>FICA</td>
<td>44,284.00</td>
<td>44,284.00</td>
<td>36,027.47</td>
<td>8,256.53</td>
</tr>
<tr>
<td>Retirement Contribution</td>
<td>142,343.41</td>
<td>142,343.41</td>
<td>84,873.74</td>
<td>57,469.67</td>
</tr>
<tr>
<td>Life &amp; Health Insurance</td>
<td>43,010.92</td>
<td>43,010.92</td>
<td>39,441.89</td>
<td>3,569.03</td>
</tr>
<tr>
<td>Workers Compensation</td>
<td>2,307.08</td>
<td>2,307.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Compensation</td>
<td>1,250.00</td>
<td>1,250.00</td>
<td>1,250.00</td>
<td></td>
</tr>
<tr>
<td>Post Employment Benefits (OPEB)</td>
<td>83,499.91</td>
<td>83,499.91</td>
<td>96,288.53</td>
<td>(12,788.62)</td>
</tr>
<tr>
<td><strong>Total Employee-Related Expenses</strong></td>
<td>$884,929.50</td>
<td>$884,929.50</td>
<td>$753,449.12</td>
<td>131,480.38</td>
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</tbody>
</table>

### Contracts & Services

<table>
<thead>
<tr>
<th>Description</th>
<th>Original Budget</th>
<th>Revised Budget</th>
<th>Actual</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Services-General</td>
<td>312,650.01</td>
<td>312,650.01</td>
<td>292,077.47</td>
<td>20,572.54</td>
</tr>
<tr>
<td>Professional Services-Accounting &amp; Auditing</td>
<td>10,000.00</td>
<td>10,000.00</td>
<td>11,666.62</td>
<td>(1,666.62)</td>
</tr>
<tr>
<td>Other Services-General</td>
<td>5,932.17</td>
<td>5,932.17</td>
<td>5,220.20</td>
<td>711.97</td>
</tr>
<tr>
<td>Other Services-Billing Costs</td>
<td>17,221.50</td>
<td>17,221.50</td>
<td>23,399.73</td>
<td>(6,178.23)</td>
</tr>
<tr>
<td>Public Relations-General</td>
<td>7,737.50</td>
<td>7,737.50</td>
<td>9,080.00</td>
<td>(1,342.50)</td>
</tr>
<tr>
<td>Procurement/Advertising</td>
<td>833.33</td>
<td>833.33</td>
<td>833.33</td>
<td></td>
</tr>
<tr>
<td>Communication Services</td>
<td>9,973.33</td>
<td>9,973.33</td>
<td>9,199.25</td>
<td>774.08</td>
</tr>
<tr>
<td>Freight and Fostage</td>
<td>1,250.00</td>
<td>1,250.00</td>
<td>31.40</td>
<td>1,218.60</td>
</tr>
<tr>
<td>Rentals and Leases</td>
<td>11,108.33</td>
<td>11,108.33</td>
<td>10,501.09</td>
<td>607.24</td>
</tr>
<tr>
<td>Insurance</td>
<td>100,000.00</td>
<td>100,000.00</td>
<td>80,762.32</td>
<td>19,237.68</td>
</tr>
<tr>
<td>County Service Charge</td>
<td>176,836.50</td>
<td>176,836.50</td>
<td>178,511.50</td>
<td>(1,675.00)</td>
</tr>
<tr>
<td>Repairs and Maintenance-Water System</td>
<td>10,083.35</td>
<td>10,083.35</td>
<td>10,859.84</td>
<td>(876.49)</td>
</tr>
<tr>
<td>Repairs and Maint-Non Water System</td>
<td>56,433.33</td>
<td>56,433.33</td>
<td>52,425.94</td>
<td>4,007.39</td>
</tr>
<tr>
<td><strong>Total Contracts &amp; Services</strong></td>
<td>$720,069.33</td>
<td>$721,736.00</td>
<td>$633,477.37</td>
<td>178,258.63</td>
</tr>
</tbody>
</table>

**FY 2018**

**Variances**: 13%

**Variances %**: 59%
### Exceptional Expenses

**FY 2014 & FY 2015 Kalaheo Emergency**  
**FY 2015 Kilauea**

#### Total Exceptional Expenses

<table>
<thead>
<tr>
<th></th>
<th>Original Budget</th>
<th>Revised Budget</th>
<th>Actual</th>
<th>Variance</th>
<th>FY 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fuel &amp; Utilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utility Services</td>
<td>231,128.33</td>
<td>231,128.33</td>
<td>237,977.53</td>
<td>(6,849.20)</td>
<td>482,256.70</td>
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<tr>
<td>Fuel</td>
<td>9,626.00</td>
<td>9,626.00</td>
<td>8,398.44</td>
<td>1,227.66</td>
<td>19,250.00</td>
</tr>
<tr>
<td>Total Fuel &amp; Utilities</td>
<td>240,753.33</td>
<td>240,753.33</td>
<td>246,375.97</td>
<td>(5,822.64)</td>
<td>481,506.70</td>
</tr>
<tr>
<td><strong>Bulk Water Purchase</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk Water Purchase</td>
<td>150,048.00</td>
<td>150,048.00</td>
<td>141,100.80</td>
<td>8,947.20</td>
<td>300,096.00</td>
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<tr>
<td>Total Bulk Water Purchase</td>
<td>150,048.00</td>
<td>150,048.00</td>
<td>141,100.80</td>
<td>8,947.20</td>
<td>300,096.00</td>
</tr>
<tr>
<td><strong>Office &amp; Operating Supplies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Supplies</td>
<td>1,833.33</td>
<td>1,833.33</td>
<td>1,941.53</td>
<td>(108.20)</td>
<td>7,002.21</td>
</tr>
<tr>
<td>Operating Supplies</td>
<td>70,670.62</td>
<td>70,670.62</td>
<td>75,983.28</td>
<td>(5,312.46)</td>
<td>198,336.24</td>
</tr>
<tr>
<td>Books, Subscriptions &amp; Dues</td>
<td>2,543.34</td>
<td>2,543.34</td>
<td>2,543.34</td>
<td></td>
<td>5,086.60</td>
</tr>
<tr>
<td>Books, Subscriptions &amp; Dues - Board</td>
<td>85.42</td>
<td>85.42</td>
<td>75.00</td>
<td>(10.42)</td>
<td>170.80</td>
</tr>
<tr>
<td>Total Office &amp; Operating Supplies</td>
<td>75,132.91</td>
<td>75,132.91</td>
<td>77,999.81</td>
<td>(2,866.90)</td>
<td>210,595.85</td>
</tr>
<tr>
<td><strong>Training, Travel &amp; Meeting Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training and Development</td>
<td>9,046.34</td>
<td>9,046.34</td>
<td>624.73</td>
<td>8,421.61</td>
<td>18,357.02</td>
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<tr>
<td>Travel and Per Diem</td>
<td>8,445.00</td>
<td>8,445.00</td>
<td>140.90</td>
<td>8,304.10</td>
<td>16,890.00</td>
</tr>
<tr>
<td>Travel and Per Diem - Board</td>
<td>1,877.50</td>
<td>1,877.50</td>
<td>1,877.50</td>
<td></td>
<td>3,755.00</td>
</tr>
<tr>
<td>Meeting Expense</td>
<td>650.00</td>
<td>650.00</td>
<td>650.00</td>
<td></td>
<td>1,300.00</td>
</tr>
<tr>
<td>Meeting Expense - Board</td>
<td>828.33</td>
<td>828.33</td>
<td>110.65</td>
<td>717.68</td>
<td>1,656.70</td>
</tr>
<tr>
<td>Total Training, Travel &amp; Meeting Expenses</td>
<td>20,849.17</td>
<td>20,849.17</td>
<td>876.37</td>
<td>19,972.60</td>
<td>41,956.72</td>
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<tr>
<td><strong>Debt Service</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest Expense</td>
<td>98,020.32</td>
<td>303,258.33</td>
<td>294,039.04</td>
<td>0,219.20</td>
<td>606,516.70</td>
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<tr>
<td>Total Interest Expense</td>
<td>98,020.32</td>
<td>303,258.33</td>
<td>294,039.04</td>
<td>0,219.20</td>
<td>606,516.70</td>
</tr>
<tr>
<td><strong>Total Operating Expenses</strong></td>
<td>2,169,802.50</td>
<td>2,386,707.24</td>
<td>2,147,316.48</td>
<td>239,396.76</td>
<td>6,053,044.21</td>
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</tbody>
</table>

### Net Operating Income (Loss) Before Depreciation & Amortization

#### Depreciation & Amortization

<table>
<thead>
<tr>
<th></th>
<th>Revised YTD Budget</th>
<th>YTD Actual</th>
<th>Variance</th>
<th>Variance %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Depreciation</strong></td>
<td>488,516.99</td>
<td>485,316.09</td>
<td>(3,200.90)</td>
<td>(0.64%)</td>
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<tr>
<td>Amortization</td>
<td>19,250.00</td>
<td>13,630.02</td>
<td>5,619.98</td>
<td>(29%)</td>
</tr>
<tr>
<td>Total Depreciation &amp; Amortization</td>
<td>483,166.99</td>
<td>498,946.11</td>
<td>(5,779.12)</td>
<td>(1%)</td>
</tr>
<tr>
<td><strong>Net Operating Income (Loss)</strong></td>
<td>246,776.10</td>
<td>275,144.11</td>
<td>28,368.01</td>
<td>(11.68%)</td>
</tr>
<tr>
<td></td>
<td>August</td>
<td>FY 2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Original Budget</td>
<td>Revised Budget</td>
<td>Actual</td>
<td>Variance</td>
</tr>
<tr>
<td>Non Operating Proceeds</td>
<td>33,333.33</td>
<td>33,333.33</td>
<td>119,670.00</td>
<td>86,336.67</td>
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<tr>
<td>Total Non Operating Proceeds</td>
<td>33,333.33</td>
<td>33,333.33</td>
<td>119,670.00</td>
<td>86,336.67</td>
</tr>
<tr>
<td>Transfers Out(In) to Other Funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt Principal Payment</td>
<td>151,387.54</td>
<td>151,387.54</td>
<td>212,157.16</td>
<td>(60,769.62)</td>
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<td><strong>Net Proceeds (Expenditures)</strong></td>
<td><strong>128,721.99</strong></td>
<td><strong>(68,182.79)</strong></td>
<td><strong>182,656.95</strong></td>
<td><strong>250,839.74</strong></td>
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<td><strong>II. CAPITAL BUDGET</strong></td>
<td><strong>1,289,887.47</strong></td>
<td><strong>3,497,020.81</strong></td>
<td><strong>102,756.50</strong></td>
<td><strong>3,394,264.31</strong></td>
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### Capital Projects (See Attached for Details):

<table>
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<tr>
<th></th>
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<th>Actual</th>
<th>Variance</th>
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<td>62,215.51</td>
<td>978,416.72</td>
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<td>70,786.67</td>
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<td>30,235.68</td>
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<td>2,385,621.91</td>
<td>2,385,621.91</td>
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<td>SRF Loan Fund - Capital Projects</td>
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<td></td>
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</table>

Total Capital Projects (See Attached for Details) | 1,289,887.47 | 3,497,020.81 | 102,756.50 | 3,394,264.31 |

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<tr>
<th></th>
<th>Revised YTD Budget</th>
<th>YTD Actual</th>
<th>Variances</th>
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<td>SRF Loan Fund - Capital Projects</td>
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Total Capital Projects (See Attached for Details) | 7,888,917.50 | 167,752.29 | 7,891,165.21 | 97%       |
Department of Water, County of Kauai
Monthly Budget Summary vs. Actual
10
8/31/2017

Capital Projects (See Attached for Details):

<table>
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<th>Original Budget</th>
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<th>Variance</th>
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<td>56,316.67</td>
<td>56,316.67</td>
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<td>1,666.67</td>
<td>157,762.39</td>
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<td>10-20-00-604-033 WU-Job 13-07- Koloa D Repairs</td>
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<td>1.00</td>
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<tr>
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<td>20-20-00-605-120 FRC-Eng-80% Kilauea 1.0MG Tank Job 02-00</td>
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### FY 2018

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<td><strong>565,242.77</strong></td>
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<td><strong>93%</strong></td>
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<td>Capital Projects (See Attached for Details):</td>
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<td><strong>Variance</strong></td>
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<tr>
<td>Total Capital Projects (See Attached for Details)</td>
<td>220,472.91</td>
<td>2,385,621.91</td>
<td>2,385,621.91</td>
<td>100%</td>
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**Report Format Created By: S. Morikami**

8/31/2017 12:35 PM

Page 124
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<thead>
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<th>Date</th>
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<th>Vendor/Description</th>
<th>Account #</th>
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</tr>
<tr>
<td>8/3/2017</td>
<td>427</td>
<td>Belt Collins Hawaii, Ltd.</td>
<td>30-20-00-605-116</td>
<td>CO</td>
<td>160,149.00</td>
<td></td>
<td>160,149.00</td>
</tr>
<tr>
<td>8/3/2017</td>
<td>643</td>
<td>Valley Isle Motors, Ltd. Solicitation GS 2017-2, Furnishing and Delivery of 3 vehicles</td>
<td>10-40-00-604-999</td>
<td>CO</td>
<td>275,065.80</td>
<td></td>
<td>275,065.80</td>
</tr>
<tr>
<td>8/3/2017</td>
<td>643</td>
<td>Valley Isle Motors, Ltd. Solicitation GS 2017-2, Furnishing and Delivery of 2 vehicles</td>
<td>10-40-00-605-999</td>
<td>CO</td>
<td>120,090.78</td>
<td></td>
<td>120,090.78</td>
</tr>
<tr>
<td>8/11/2017</td>
<td>644</td>
<td>Unlimited Construction Services, Inc. Job. 11-07, WP 2020, MCC Chlorination Facilities, Koloa Well 16A &amp; 16B site building improvements</td>
<td>30-21-00-604-107</td>
<td>CO</td>
<td>1,750,000.00</td>
<td></td>
<td>1,750,000.00</td>
</tr>
<tr>
<td>8/11/2017</td>
<td>644</td>
<td>Unlimited Construction Services, Inc. Job. 11-07, WP 2020, MCC Chlorination Facilities, Koloa Well 16A &amp; 16B site building improvements</td>
<td>30-21-00-604-107</td>
<td>CO</td>
<td>2,005,000.00</td>
<td></td>
<td>2,005,000.00</td>
</tr>
<tr>
<td>9/18/2017</td>
<td>630</td>
<td>Derricks Well Drilling &amp; Pump Services, LLC CO #1, Job. # 17-05, Pahi Well 5A Repairs</td>
<td>10-40-50-560-000</td>
<td>OE</td>
<td>49,849.56</td>
<td></td>
<td>49,849.56</td>
</tr>
<tr>
<td>9/18/2017</td>
<td>645</td>
<td>R.M. Towill Corporation Job. No. 17-11, WP 2020, No. WKK-2, Drill and Develop New Kilauea Well No. 3, Kilauea, Kauai, HI</td>
<td>20-20-00-605-154</td>
<td>CO</td>
<td>300,000.00</td>
<td></td>
<td>300,000.00</td>
</tr>
</tbody>
</table>
## III.

### BILLED REVENUES COMPARATIVE REPORT

**For Fiscal Years 2016, 2017 & 2018**

<table>
<thead>
<tr>
<th>Month</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Cum. Inc (Dec)</th>
<th>% Inc. (Dec.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>$2,389,827</td>
<td>$2,626,380</td>
<td>$2,760,278</td>
<td>$133,898</td>
<td>5.10%</td>
</tr>
<tr>
<td>August</td>
<td>$5,285,956</td>
<td>$5,097,118</td>
<td>$5,480,992</td>
<td>$383,873</td>
<td>7.53%</td>
</tr>
<tr>
<td>September</td>
<td>$7,743,790</td>
<td>$7,767,863</td>
<td>(7,767,863)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>October</td>
<td>$10,076,762</td>
<td>$10,231,048</td>
<td>(10,231,048)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>November</td>
<td>$12,649,063</td>
<td>$12,718,113</td>
<td>(12,718,113)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>$14,656,392</td>
<td>$14,905,179</td>
<td>(14,905,179)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>$16,981,290</td>
<td>$17,167,603</td>
<td>(17,167,603)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>February</td>
<td>$19,297,429</td>
<td>$19,387,481</td>
<td>(19,387,481)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>$21,676,963</td>
<td>$21,562,033</td>
<td>(21,562,033)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>$24,320,174</td>
<td>$23,993,720</td>
<td>(23,993,720)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>$26,663,804</td>
<td>$26,225,406</td>
<td>(26,225,406)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>$29,092,060</td>
<td>$28,767,205</td>
<td>(28,767,205)</td>
<td>(100.00%)</td>
<td></td>
</tr>
</tbody>
</table>

**AFS error in billing AJE 288,133**

### BILLED REVENUES COMPARATIVE CHART

**As of August: FY 2016, 2017 & 2018**

![Billed Revenues Comparative Chart](chart.png)
<table>
<thead>
<tr>
<th>Month</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>Cum. Inc (Dec)</th>
<th>% of Inc (Dec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>$2,877,122</td>
<td>$2,036,499</td>
<td>$2,385,872</td>
<td>$349,373</td>
<td>17%</td>
</tr>
<tr>
<td>August</td>
<td>$5,578,998</td>
<td>$4,881,715</td>
<td>$5,504,876</td>
<td>$623,161</td>
<td>13%</td>
</tr>
<tr>
<td>September</td>
<td>$8,342,249</td>
<td>$7,182,779</td>
<td>$7,182,779</td>
<td>$(7,182,779)</td>
<td>-100%</td>
</tr>
<tr>
<td>October</td>
<td>$10,566,640</td>
<td>$9,806,314</td>
<td>$9,806,314</td>
<td>$(9,806,314)</td>
<td>-100%</td>
</tr>
<tr>
<td>November</td>
<td>$12,935,656</td>
<td>$12,190,276</td>
<td>$12,190,276</td>
<td>$(12,190,276)</td>
<td>-100%</td>
</tr>
<tr>
<td>December</td>
<td>$15,243,144</td>
<td>$14,510,720</td>
<td>$14,510,720</td>
<td>$(14,510,720)</td>
<td>-100%</td>
</tr>
<tr>
<td>January</td>
<td>$17,306,718</td>
<td>$16,654,692</td>
<td>$16,654,692</td>
<td>$(16,654,692)</td>
<td>-100%</td>
</tr>
<tr>
<td>February</td>
<td>$19,659,624</td>
<td>$18,823,674</td>
<td>$18,823,674</td>
<td>$(18,823,674)</td>
<td>-100%</td>
</tr>
<tr>
<td>March</td>
<td>$22,198,390</td>
<td>$21,192,407</td>
<td>$21,192,407</td>
<td>$(21,192,407)</td>
<td>-100%</td>
</tr>
<tr>
<td>April</td>
<td>$24,345,414</td>
<td>$23,243,462</td>
<td>$23,243,462</td>
<td>$(23,243,462)</td>
<td>-100%</td>
</tr>
<tr>
<td>May</td>
<td>$26,778,010</td>
<td>$25,924,897</td>
<td>$25,924,897</td>
<td>$(25,924,897)</td>
<td>-100%</td>
</tr>
<tr>
<td>June</td>
<td>$29,203,668</td>
<td>$28,436,387</td>
<td>$28,436,387</td>
<td>$(28,436,387)</td>
<td>-100%</td>
</tr>
</tbody>
</table>
# METERED CONSUMPTION (000 GALLONS) MONTHLY COMPARATIVE CHART

For Fiscal Years 2016, 2017 & 2018  
(expresssed in thousands)

<table>
<thead>
<tr>
<th></th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>INC (DEC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>436,238</td>
<td>363,695</td>
<td>383,831</td>
<td>20,136</td>
</tr>
<tr>
<td>August</td>
<td>361,599</td>
<td>335,456</td>
<td>380,414</td>
<td>44,958</td>
</tr>
</tbody>
</table>

### MONTHLY CONSUMPTION COMPARATIVE CHART

As of August, FY 2016, 2017 & 2018

* * refer to monthly summary highlights

3. 12 mo. consumption comp
### YTD METERED CONSUMPTION (000 GALLONS) COMPARATIVE REPORT

For Fiscal Years 2016, 2017 & 2018
(expressed in thousands)

<table>
<thead>
<tr>
<th></th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>CUM. INC (DEC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>400,235</td>
<td>363,695</td>
<td>383,831</td>
<td>20,136</td>
</tr>
<tr>
<td>August</td>
<td>792,065</td>
<td>699,151</td>
<td>764,245</td>
<td>65,094</td>
</tr>
</tbody>
</table>

### YTD WATER CONSUMPTION COMPARATIVE CHART

As of August: FY 2016, 2017 & 2018

<table>
<thead>
<tr>
<th>Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2016</td>
</tr>
<tr>
<td>FY 2017</td>
</tr>
<tr>
<td>FY 2018</td>
</tr>
</tbody>
</table>

4. consumption (000 gallons)
### Assets and Deferred Outflows

**Current Assets**

<table>
<thead>
<tr>
<th>August 31, 2017</th>
<th>August 31, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>3,859,629.57</td>
</tr>
<tr>
<td>Equity interest in pooled investments</td>
<td>7,149,143.53</td>
</tr>
</tbody>
</table>

**Receivables:**
- Accounts, net of allowance for doubtful accounts* 1,774,787.72 1,767,175.49
- Due from other funds
  - Unbilled accounts 1,525,416.36 1,428,698.79
  - Grants and subsidies 84,846.54 2,277.50
  - Accrued interest 80,748.87 72,778.40

**Total receivables** 3,465,799.49 3,270,930.18

<table>
<thead>
<tr>
<th>August 31, 2017</th>
<th>August 31, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials and supplies</td>
<td>1,097,060.10</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>93,346.69</td>
</tr>
</tbody>
</table>

**Total current asset** 15,664,979.38 31,132,133.03

**Restricted Assets:**
- Facility reserve charge funds:
  - Cash 666,561.06 1,877,822.25
  - Accounts receivable and other 50,162.80 -

**Total facility reserve charge funds** 716,723.86 1,877,822.25

**Bond funds:**
- Cash 1,810,167.87 104,581.67
- Investments 12,922,280.15 15,859,557.91
- Accrued interest 57,536.45 62,192.65

**Total bond funds** 14,789,984.47 16,026,332.23

**Total restricted assets** 15,506,708.33 17,904,154.48

**Equity Interest in Pooled Investment - Noncurrent** 39,344,320.55 18,015,347.00

**Utility Plant:**
- In service 333,479,621.36 317,317,531.18
- Accumulated depreciation (121,625,365.33) (114,603,714.33)

**Total utility plant** 211,854,256.03 202,713,816.85

**Construction work in progress** 4,145,338.34 17,065,641.44

**Total property, plant and equipment** 215,999,594.37 219,779,458.29

**Total assets** 286,599,594.37 289,654,379.63

**Deferred Outflow of Resources** 2,951,777.00 2,968,058.84

**Total assets and deferred outflows of resources** $289,467,379.63 $289,799,151.64

*Allowance for doubtful accounts  (276,828.22)  (267,397.49)
## Liabilities, Deferred Inflows and Net Position

### Current Liabilities:

<table>
<thead>
<tr>
<th>Description</th>
<th>August 31, 2017</th>
<th>August 31, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable and accrued liabilities</td>
<td>1,628,995.41</td>
<td>$ 1,193,357.10</td>
</tr>
<tr>
<td>Contracts payable, including retainages</td>
<td>11,607.10</td>
<td>559,314.55</td>
</tr>
<tr>
<td>Due to/Due From Other Funds</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Customer overpayment</td>
<td>121,661.96</td>
<td>114,441.56</td>
</tr>
<tr>
<td>Customer deposits and advances</td>
<td>413,716.74</td>
<td>448,910.56</td>
</tr>
<tr>
<td>Current portion of long term debt</td>
<td>4,835,459.24</td>
<td>4,717,296.00</td>
</tr>
<tr>
<td>Current portion of capital lease obligation</td>
<td>742,464.86</td>
<td>699,064.33</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td><strong>7,753,905.31</strong></td>
<td><strong>7,732,384.10</strong></td>
</tr>
</tbody>
</table>

### Long-Term Debt

- 73,903,574.79
- 78,909,777.01

### Capital Lease Obligation

- 526,618.76
- 1,269,083.41

### OPEB & Retirement Benefits

- 11,505,417.46
- 11,498,149.79

### Accrued Vacation and Compensatory Pay

- 1,331,655.43
- 1,246,850.46

### Deferred Inflow of Assets

- 1,286,710.00
- 1,286,710.00

**Total liabilities and deferred inflows:**

- **96,307,881.75**
- **101,942,954.77**

### Net Position:

<table>
<thead>
<tr>
<th>Description</th>
<th>August 31, 2017</th>
<th>August 31, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Utility Reserves</td>
<td>10,200,000.00</td>
<td>10,200,000.00</td>
</tr>
<tr>
<td>Restricted FRC</td>
<td>712,928.70</td>
<td>1,877,822.25</td>
</tr>
<tr>
<td>Restricted Build American Bonds</td>
<td>14,785,859.47</td>
<td>15,469,599.35</td>
</tr>
<tr>
<td>Invested in Capital Assets Net of Related Debt</td>
<td>136,549,011.48</td>
<td>135,500,518.79</td>
</tr>
<tr>
<td>Unrestricted</td>
<td>30,911,698.23</td>
<td>24,808,256.48</td>
</tr>
<tr>
<td><strong>Total net position</strong></td>
<td><strong>193,159,497.88</strong></td>
<td><strong>187,856,196.87</strong></td>
</tr>
</tbody>
</table>

**Total liabilities, deferred inflows and net position:**

- **$ 289,467,379.63**
- **$ 289,799,151.64**
DEPARTMENT OF WATER
County of Kaua‘i
“Water has no Substitute – Conserve it!”

INFORMATION & EDUCATION SPECIALIST REPORT
September 29, 2017

Public Notices and Announcements
All news releases were also published on the Department’s Facebook and Twitter social media pages.

- Wainiha water conservation request – August 15, 2017
  o A news release was issued to notify customers on Powerhouse Road in Wainiha of an immediate water conservation request due to an electrical power outage scheduled by Kauai Island Utility Cooperative on August 15th, from 10 a.m. to 2 p.m. Residents and businesses located on Powerhouse Road in Wainiha were advised to limit water use to essential uses only, in order to avoid a water outage.
    ▪ The news release was published online via www.staradvertiser.com and on www.worldnews.com (Attached).
  o A final news release was issued on August 15th to notify customers that the water conservation request has been lifted for all Wainiha residents located on Powerhouse Road.

- Kilauea scheduled water shutdown – September 13-14, 2017
  o A news release was issued on September 7, 2017 to notify customers of a water shutdown scheduled for the Kilauea area to allow private contractor, Kaiwa Construction, Inc. to tie in new water lines to the existing system. The affected area includes Kilauea customers located on Kauapea Road, Mihic Road, Makana Ano Place, Pali Momi Place, Iwalani Lane, Kahili Quarry Road, Titcomb Street, and Kanikele Street, including customers located on private connecting roads and on a portion of Kilauea Road, from Kenek Street to the Kilauea Lighthouse. Water will be turned off on Wednesday, September 13, 2017 from 9 p.m. to 5 a.m., September 14, 2017, weather permitting.
  o A news release was issued on September 12, 2017 to remind Kilauea customers of the scheduled water shutdown on September 13, 2017 from 9 p.m. to 5 a.m., September 14, 2017, weather permitting.

Public Relations Program

- Conservation & Community Outreach
  o PR met with Kathleen Kikuchi-Samonte, Direct Service Specialist for the Liliuokalani Trust to discuss an educational water conservation presentation and a financial assistance program for their clients. Kathleen expressed interest in DOW’s water conservation program and has requested PR provide a presentation to clients at their quarterly meeting. Clients include families with children of Hawaiian ancestry. PR will continue to work with the Liliuokalani Trust, Kauai office to develop this community outreach opportunity and promote water conservation and DOW services to its clients.

- Kauai Festivals’ Events and Projects Workshop
  o Jonell Kaohelaulii attended the Kauai Festivals’ Events and Projects Workshop on August 11, 2017 at the Kauai Beach Resort. The workshop provided valuable information on event planning, volunteer management and sponsorships and was presented by Certified Festival and Event Executives (CFEE). Jonell established networking opportunities at the workshop to benefit DOW’s PR program and...
acquired strategic guidelines applicable towards Make a Splash festival and various community outreach and educational programs for the DOW.

Upcoming Community Outreach & Educational Events
- September 13, 2017 – DOW at the Science, Technology, Engineering and Math (STEM) Night event at Kekaha Elementary School.
- September 28, 2017 - DOW’s 14th Annual Make a Splash with Project WET Festival.
- November 1-3, 2017 – Project WET Workshop at the annual HRWA/HWWA conference.

Project WET
- Make a Splash Festival
  - Logistics are being confirmed for the DOW’s 14th Annual Make a Splash with Project WET Festival scheduled for Thursday, September 28, 2017. As of this report, a total of 12 schools have registered and 9 sponsors have been confirmed. DOW is expecting approximately 790 students this year, making it the largest festival registration to date.
  - Volunteer and sponsorship assignments for the festival have been confirmed and distributed. A road closure permit has been acquired to close the Pua Loke Street access during the festival for the safety of students, teachers and all participants attending the festival. Kapaa High’s JROTC student cadets have been confirmed.
- Project WET Educator Workshop
  - PR is coordinating a Project WET educator’s workshop with Hawaii Rural Water Association and Department of Health’s Safe drinking water branch, at the Annual HWWA/HWRA conference. The conference is scheduled for Nov. 1-3, 2017 in Kona.

Miscellaneous
- The County’s Employee Council meeting was rescheduled and held on August 25, 2017.
- Jonell is on the Employee Council’s, events committee.
- The DOW employee newsletter, “As the water flows”, Aug.-Sept. edition was completed with the assistance of intern, Trestin Alfiler.
- Jonell will be attending the Project WET USA national conference on Oct. 2-6th in Traverse City, Michigan.

Respectfully submitted,

Jonell S.T. Kaohelaulii
For Information & Education Specialist
Scheduled Kauai power outage prompts calls for water conservation

By Star-Advertiser staff
August 15, 2017
Updated August 15, 2017 9:17pm

Residents and businesses along Kauai’s Powerhouse Road in Wainiha have been asked to conserve water from 10 a.m. to 2 p.m. today because of a scheduled power outage.

Kauai’s Department of Water is asking people to restrict themselves to using water only for cooking, bathing and toilet flushing — and to refrain from washing cars or turning on sprinklers or irrigation to reduce the risk of a water outage.

The Department of Water said it will provide updates on the work at www.facebook.com/KauaiDOW.
Residents and businesses along Kauai’s Powerhouse Road in Wainiha have been asked to conserve water from 10 a.m. to 2 p.m. today because of a scheduled power outage. Kauai’s Department of Water is asking people to restrict themselves to using water only for cooking, bathing and toilet flushing — and to refrain from using water for cooking, bathing and toilet flushing — and to refrain from washing cars or turning on sprinklers or irrigation to reduce the risk of a water outage. The Department of Water said it will provide updates on the work at www.facebook.com/KauaiDOW. ...
Source and Storage

- Maintenance Workers continued cleaning various remote facilities island-wide. Works included clearing of vegetation and drainage as well as repair and construction of structures and facilities.

- Water Plant Operators performed routine inspection and maintenance at all sites including valve maintenance, piping repair and replacement, chlorination equipment maintenance, and mixing of sodium hypochlorite.

- Electrical workers performed routine electrical maintenance at all sites including SCADA radio troubleshooting, electrical wiring for motor controls, lighting repair and replacement.

- Operations personnel worked with Department of Hawaiian Homelands (DHHL) and Aqua Engineers personnel in testing the DOW and DHHL interconnection in Anahola.

Distribution

- Operations Division Field Section crews continue to perform live taps and routine leak repair of service laterals and mainlines. Field Section personnel responded to and completed thirty three (33) leak repair work orders.

- Field Section personnel installed four (4) service laterals.

- In the month of August, field crew replaced 200 feet of 3” PVC distribution line on Lokokai Road under work order C141516. As of August 2017 a total of 1,946 of old pipe has been replaced.

- We received a total of 53 calls from customers reporting leaks on the mainline, service laterals, meters, meter boxes and fire hydrants including complaints of no water, complaints of low pressure, high pressure, calls requesting remote site/facility grounds and vegetation maintenance, calls for assistance in shutting off the water meter, calls reporting damaged meter box and cover, reports of leaking or damaged fire hydrants and report of white milky water. Work orders were generated and all calls resolved. Leak after the meter needs to be addressed by the customer.

Fleet, Inventory, Warehouse and Baseyard Area

- For the month of August, a total of two hundred (200) work orders were issued for Operations Division. Works included: electrical repairs and maintenance; automotive repairs and maintenance including power generator maintenance; water meter installation and replacement; service lateral installations; leak repairs; well, tank site and PRV maintenance; replace damaged meter boxes; repair defective meters; replace damaged or leaking hydrant; door-to-door customer notifications for tie-ins of new lines to existing
lines as well as notifications regarding scheduled repairs; callouts due to customer complaints/reports; meter replacement requests; contractor’s requests for markings.

- For the month of August 2017, twenty nine (29) Hawaii One Call requests for markings were received. Also, twenty two (22) meters were installed, replaced and repaired.

Respectfully submitted,

[Signature]

Valentino P. Reyna
Chief, Operations Division

VPR/ein

Attachments: Overtime Chart
Leak Report Chart
Produced/Billed Chart

Mgrp/September 2017/Operations Division Report for the Month of August 2017 (9-29-17):ein
County Of Kauai - DEPARTMENT OF WATER
Operations Division: Plant & Field
Total Hours for the Month
For the Period: January, 2015 to August, 2017
Work Orders by Job Reason Code for Selected Date Range

08/01/2016 to 08/31/2017

<table>
<thead>
<tr>
<th># of W/O’s</th>
<th>Job Reason Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>LEAK-BOX</td>
<td>Meter Box Leak Repair</td>
</tr>
<tr>
<td>3</td>
<td>LEAK-CUST</td>
<td>Customer-Side Leak Repair</td>
</tr>
<tr>
<td>119</td>
<td>LEAK-MAIN</td>
<td>Mainline Leak Repair</td>
</tr>
<tr>
<td>151</td>
<td>LEAK-S/L</td>
<td>Service Lateral Leak Repair</td>
</tr>
</tbody>
</table>

Work Orders by Job Reason Code

![Pie chart showing the distribution of leak repairs by job reason code.](chart.png)

- LEAK-BOX: 28 (9.3%)
- LEAK-CUST: 3 (1.0%)
- LEAK-MAIN: 119 (39.5%)
- LEAK-S/L: 151 (50.2%)

Total: 100.0%

Number of Leak Repairs per Month

![Graph showing the number of leak repairs per month.](graph.png)
<table>
<thead>
<tr>
<th></th>
<th>Jan-17</th>
<th>Feb-17</th>
<th>Mar-17</th>
<th>Apr-17</th>
<th>May-17</th>
<th>Jun-17</th>
<th>Jul-17</th>
<th>Aug-17</th>
<th>Sep-16</th>
<th>Oct-16</th>
<th>Nov-16</th>
<th>Dec-16</th>
<th>Total Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Produced (Kgals.)</strong></td>
<td>354,808</td>
<td>356,223</td>
<td>360,851</td>
<td>387,512</td>
<td>354,554</td>
<td>380,135</td>
<td>427,658</td>
<td>448,372</td>
<td>419,009</td>
<td>380,520</td>
<td>406,209</td>
<td>349,978</td>
<td>4,625,829</td>
</tr>
<tr>
<td><strong>Waterloss (kials.)</strong></td>
<td>38,384</td>
<td>41,766</td>
<td>54,232</td>
<td>38,731</td>
<td>39,853</td>
<td>25,080</td>
<td>43,692</td>
<td>67,958</td>
<td>47,572</td>
<td>34,276</td>
<td>47,572</td>
<td>56,300</td>
<td>533,533</td>
</tr>
<tr>
<td><strong>Waterloss (%)</strong></td>
<td>10.8</td>
<td>11.7</td>
<td>15.0</td>
<td>10.0</td>
<td>11.2</td>
<td>6.6</td>
<td>10.2</td>
<td>15.2</td>
<td>11.4</td>
<td>9.0</td>
<td>13.9</td>
<td>13.1</td>
<td>11.5</td>
</tr>
<tr>
<td><strong>Waterloss ($)</strong></td>
<td>49,016</td>
<td>53,335</td>
<td>69,254</td>
<td>49,459</td>
<td>50,892</td>
<td>55,795</td>
<td>60,749</td>
<td>43,770</td>
<td>71,896</td>
<td>58,345</td>
<td>681,321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Diagram

The diagram visualizes the monthly water produced, customer meter read, and waterloss comparison for the calendar year 2017. The bars represent the volume of water (in kilo-gallons) for each month, with different colors indicating the categories: produced, customer meter read, waterloss, and unbilled percentage. The monthly data is color-coded to facilitate comparison and analysis.
MANAGER’S UPDATE

September 29, 2017

Pursuant to Board Policy No. 3

CONTRACTS AWARDED/EXTENSION/AMENDMENTS:

(1)  **UPDATE** CONTRACT NO. 644, JOB NO. 11-07, WP2020 KP-09, MCC, CHLORINATION FACILITIES, KŌLOA WELL 16A & 16B SITE AND BUILDING IMPROVEMENTS, KŌLOA WATER SYSTEM, KŌLOA, HAWAI'I, AWARDED TO UNLIMITED CONSTRUCTION SERVICES, INC. IN THE AMOUNT OF $3,576,241.00

FUNDING:

<table>
<thead>
<tr>
<th>Account No. 30-21-00-604-107</th>
<th>$1,750,000.00</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Account No. 30-21-00-604-107</th>
<th>2,005,000.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAB/Capital Outlay/KP-09 MCC, Chlorination Facilities, Koloa Well 16A and E and 16-B Site and Bldg. Improvements (Additional Funding Approved on 8/21/17, Reference Manager’s Report No. 18-68)</td>
<td></td>
</tr>
</tbody>
</table>

| Total Funds Available | $3,755,000.00 |

| Contract644: Unlimited Construction Services, Inc. | $3,576,241.00 |
| Contingency, approximately 5% | $178,759.00 |

| Total Funds Required | $3,755,000.00 ($3,755,000.00) |

BACKGROUND:

Revising RTM originally reported on 08/21/17 Regular Board Meeting to $2,005,000.00 from $2,050,000.00. Kōloa Well 16B works in conjunction with Kōloa Well 16E. Kōloa Well 16B has been out of service for over a decade. The normally closed valves within the piping system can be positioned so that Kōloa 16E/16B can pump to Paanau Tanks and Kōloa 16A can pump to 366’ system. This contract consists of furnishing all materials, labor, tools, equipment, and appurtenances required to provide and install a well pump at 16B, discharge piping, disinfection system, control building, Motor Control Center, Supervisory Control and Data Acquisition for Wells 16A & 16B, drainage and site improvements, and appurtenant items as specified on the plans and specifications. The work is located at the existing Kōloa Wells 16A, 16B and 16E site, off Knudson Road. All work shall be in place complete and in accordance with the plans and specifications.

Proposals were received and opened for the subject project on July 3, 2017, with Best and Final Offer (BAFO) requested after price data review and received on August 9, 2017 with the following results:

Unlimited Construction Services, Inc. ........................................................................................................... 270.00 points
The original single construction proposal received on July 3, 2017 for the well, site and building improvements came in nearly 2 ½ times the engineers estimate ($1.4M) at $3.7M. The DOW has not done repairs like this to an existing site recently and the proposal came in above the budget of $1.75M. Pursuant to HRS, cost price data was requested from the contractor to review the proposal for fairness and determination of best interest of the DOW and our rate payers. Taking that into account, and the belief that the qualified proposer had a more realistic cost (although much higher than engineers estimate) to adhere to all DOW requirements satisfactorily, the DOW determined it was worth a “Best and Final Offer” (BAFO) request. The BAFO proposal cost received on August 9, 2017 for this project reduced the project cost from initial proposal by $131,697.00 and after further cost price data review was determined to be reasonable given the DOW’s review of all information submitted.

The design consultant provided a mixed recommendation based on the BAFO. They stated the cost is high but move forward if the project is critical to DOW, or to not move forward with the construction and ask for contractor to do the work for a price near $2M. The consultant mentioned factors such as how critical the need of the project is by DOW. They stated contractors are very busy right now and contractors are not as hungry as before so there could be possible savings if the DOW were to wait until construction slowed down and re-procure construction as an option if the project is not critical to DOW. The consultant also mentioned one contractor they contacted does not bid on Kauai projects, which is something we encounter as an isolated island, even from Oahu. Finally, another contractor who the consultant contacted said our proposal technical requirements are a lot of paperwork. This is valid given government unique requirements for procurement as well as the DOW RFP process. The consultant indicated that this contractor gave them an estimate of $2 million to construct the project, but did not know if this estimate was from a detailed cost estimate or ball park estimate/guess. These are all factors that go into the pricing evaluation, however, DOW did not receive actual engineers estimate for what those costs would be estimated to be line by line to equate a total lump sum to justify what they believed would be far more reasonable at $1.4M, $1.7M or $2.0M rather than the $3.5M BAFO. The consultant has indicated that they determined their estimate by various methods that they are confident in. The design consultant was unable to provide definitive information to the DOW design team to support their assertion that their engineer’s estimate lump sum total was more realistic than the contractor’s proposal that included subsequent cost-price data information breakdowns for material, labor, equipment, overhead and profit, and general requirements for the various proposal line items to support either of their recommendations. The DOW spent a lot of time evaluating the cost-price data provided by contractor against the design consultant’s estimate. The DOW disagrees with the design consultant engineer’s estimate for the project as the contractor was very open with the information DOW requested compared to what was provided by the design team and on that basis and the other factors, the costs have been determined, fair and reasonable to DOW as stated in the price cost data review memo dated 8/11/17.

This particular project scope consists of mostly majority specialty electrical, mechanical and pump work that are very specific to the water industry, given our island isolation; this further reduces the extent of competition while increasing pricing for materials, labor and equipment operations. After the initial price analysis and supplemental cost analysis per HRS 103D-312, in my judgment, I do believe that after factoring in market conditions, our alternatives for meeting the requirement, price-related factors, and the non-price evaluation factors that relate to each procurement, my determination is that the single qualified BAFO proposal as submitted seems to be fair and reasonable to DOW customers for the majority of total pricing. There are items that may have seen further price reduction had there been more competition but the BAFO still fell within my allowable range of approximately $3.3M - $3.6M after initial cost price data review completed on July 28, 2017. As Procurement Officer responsible for exercising the requisite judgment needed to reach a negotiated settlement with the offeror and is solely responsible for the final price agreement, I recommended the Department move forward with awarding
of the contract to Unlimited Construction Services, Inc. as selected by the proposal evaluation team based on the BAFO.

The associated costs for material, labor, equipment, overhead and fee looked reasonable with further cost reduction of $131,697.00 realized with the BAFO.

(2) CHANGE ORDER NO. 1 TO DERRICK’S WELL DRILLING & PUMP SERVICES, LLC FOR CONTRACT NO. 630, JOB NO. 17-05 PUHI WELL 5A REPAIR IN THE AMOUNT OF $54,099.56

FUNDING:
Account No. 10-40-50-560-000 WU/Ops/PandP/Repairs and Maintenance-Water System

<table>
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<tr>
<th>Description</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Contract No. 630: Executed 1/16/17, NTP 4/4/17</td>
<td>$85,000.00</td>
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<tr>
<td>5% Contingency</td>
<td>$4,250.00</td>
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<tr>
<td>Total Funds Certified</td>
<td>$89,250.00</td>
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<tr>
<td>Funds Available, Acct No. 10-40-50-560-000</td>
<td>$100,000.00</td>
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<tr>
<td>Change Order No. 1: Additional Materials</td>
<td>$54,099.56</td>
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<tr>
<td>5% Contingency</td>
<td>($4,250.00)</td>
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<tr>
<td><strong>Funds Requested</strong></td>
<td><strong>$49,849.56</strong></td>
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<tr>
<td>Fund Balance for Account No. 10-40-50-560-000</td>
<td>$50,150.44</td>
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<tr>
<td>New Contract Total</td>
<td>$139,099.56</td>
</tr>
</tbody>
</table>

BACKGROUND:
Upon removal of the pump assembly and column pipes, it was determined that some parts and materials i.e. 10 ft length 6” diameter schedule 40 column pipes with couplings, were in good condition and reusable. Further, current configuration has no shaft sleeves and no neoprene bearings thus resulting in a total contract deductive amount of $3,699.30.

Also, it was determined that some pipe couplings, fresh water flush tube pipe with combination couplings, brass bushings for flush pipe, stainless steel line shaft and stainless steel shaft couplings and neoprene spiders are damaged and corroded thus need to be replaced. Total change order cost after deductions and additional costs is in the amount of $54,099.56.


FUNDING: NO ADDITIONAL FUNDS REQUESTED

Account No. 20-20-00-605-118 (FRC-Engineering-WK-39 Drill Kapa‘a Homesteads Well No. 4)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Funds Certified</td>
<td>$387,424.00</td>
</tr>
<tr>
<td>Contract No. 488: HDR Engineering, Inc.</td>
<td>$352,424.00</td>
</tr>
</tbody>
</table>
NTP: 3/17/08. Original Contract duration 355 calendar days.

First Amendment
NTP: 3/24/10. Additional 630 calendar days, and additional work $10,000.00

Total Contract Amount $362,424.00

Second Amendment:
Additional 90 calendar days
DOW Credit and Additional Design Services $10,021.00

Total for Second Amendment $10,021.00

New Contract Amount $372,445.00

BACKGROUND:
The DOW previously completed the design for the *Drill and Test Kapa’a Homesteads Well No. 4 Project* and solicited proposals to construct the project in 2012. However, the Department chose to not award a construction contract because the construction proposals were much higher than the DOW’s budgeted amount. It is believed one of the major reasons for the high construction costs in the proposals was due to the fact that a suitable discharge location for the new well had not been identified. The project was subsequently put on hold until a suitable discharge location could be identified.

The DOW is also proposing to construct two new 0.5 MG concrete storage tanks on the same site with the *Kapa’a Homesteads 325’ Tanks – Two 0.5 MG Tanks Project*. This project also requires a suitable discharge location for drainage and design has been delayed due to the lack of a suitable location being identified. Recently, on August 21, 2017, the DOW reached an agreement with private owners along Ka’apuni Road to discharge water from both the *Drill and Test Kapa’a Homesteads Well No. 4 Project* and the *Kapa’a Homesteads 325’ Tanks – Two 0.5 MG Tanks Project* via a new 18-inch drain line that will be installed from the project site to the private property on Ka’apuni Road. The scope of the *Kapa’a Homesteads 325’ Tanks – Two 0.5 MG Tanks Project* has been revised to include the new 18-inch drain line and the DOW intends to construct the *Drill and Test Kapa’a Homesteads Well No. 4 Project* with the new 18-inch drain line.

The proposed amendment and additional funding for the *Drill and Test Kapa’a Homesteads Well No. 4 Project* are necessary to provide additional design services to complete the project, including: recertification of the construction plans, updating the project’s and Request for Proposal (RFP) documents to the Department’s current format, and printing new bid document sets.

HDR Engineering’s proposed fee to complete this work is $15,021.00 and includes inflation costs from the time the original contract and first amendment were executed, as the DOW chose to delay construction of the project. Additionally, the fee for the proposed amendment provides a $5,000.00 credit back to the Department of Water to remove scope that is no longer anticipated for the project. Specifically, the contract’s first amendment added $10,000.00 in anticipation of two public meetings that would be needed for the project, at a fee of $5,000.00 per meeting. One public meeting was held, but a second meeting was not held, and is no longer anticipated to be needed. Therefore, $5,000.00 is being credited back to the Department in the proposed second amendment. Therefore, the total additional amount for the second amendment is $15,021.00 less the aforementioned $5,000.00 credit, for a total of $10,021. The Engineering division has reviewed the proposed fee from HDR Engineering Inc. and finds it acceptable.
State funding in the amount of $750,000.00 has been appropriated for the *Drill and Test Kapa’a Homesteads Well No. 4 Project*, and will lapse if a construction contract is not executed prior to the June 30, 2018 deadline. Therefore, to utilize the state funding for the well project, the Department must complete the design of the new drainage improvements, complete the design of *Drill and Test Kapa’a Homesteads Well No. 4 Project*, and execute a construction contract prior to June 30, 2018. To meet this deadline, the Department is proposing to phase the design and construction of the *Drill and Test Kapa’a Well No. 4* project and the *Kapa’a Homesteads 325’ Tanks* project as follows: Phase one will construct the drainage improvements and the *Drill and Test Kapa’a Well No. 4* project together. Phase two will then consist of constructing the *Kapa’a Homesteads 325’ Tanks* project at a later time.

### (4) **UPDATE** FIRST AMENDMENT TO BROWN AND CALDWELL FOR CONTRACT NO. 614, JOB NO. 15-08, WP2020 HW-11 CONSTRUCT HAENA 0.2 MG STORAGE TANK, HAENA, KAU’I HAWAI’I FOR ADDITIONAL FUNDING IN THE AMOUNT OF $27,401.00

**FUNDING:**

<table>
<thead>
<tr>
<th>From: Account No. 10-00-00-330-000 Water Utility Unrestricted Fund</th>
<th>To: FRC Account No. 20-20-00-605-153 FRC-Eng-Ha’ena 0.2 MG tank (EXP)</th>
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</thead>
<tbody>
<tr>
<td>Contract No. 614: Brown and Caldwell (executed 12/28/15*)</td>
<td>$358,881.00</td>
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<tr>
<td>Contingency Funds Available</td>
<td>$26,119.00</td>
</tr>
<tr>
<td><strong>Total Certified Funds for Contract No. 614</strong></td>
<td><strong>$385,000.00</strong></td>
</tr>
<tr>
<td><strong>First Amendment:</strong></td>
<td></td>
</tr>
<tr>
<td>Additional Work, Fees, and Contract Time Extension (70 Calendar days)</td>
<td>$53,520.00</td>
</tr>
<tr>
<td>Contingency Funds Available</td>
<td>($26,119.00)</td>
</tr>
<tr>
<td><strong>Total Funds Requested (per Approved MR 17-40 on 4/28/17)</strong></td>
<td><strong>$27,401.00</strong></td>
</tr>
<tr>
<td><strong>Total Contract Amount</strong></td>
<td><strong>$412,401.00</strong></td>
</tr>
</tbody>
</table>

*Stop work order issued 2/25/16 for DOW to obtain Right of Entry from private landowner. Re-start work issued 1/24/17. Stop work order issued 4/12/17 for 1st Amendment to Contract, which was executed 7/31/17.*

**BACKGROUND:**
The Board approved Manager’s Report 17-40 on April 28, 2017 for $27,401.00 in additional funds to be added to Contract No. 614 with Brown and Caldwell. The intent was to execute and encumber the additional funds with the First Amendment to Contract No. 614 before the end of the 2016-2017 Fiscal Year on June 30, 2017. However, due to unanticipated delays in executing the contract amendment, the amendment was not executed until July 31, 2017. Therefore, a purchase order (PO) was not created in Fiscal Year 2016-2017 and the $27,401.00 in additional funds approved at the April 28, 2017 Board meeting were not included in the Supplemental Budget for Fiscal Year 2017-2018. The funds will need to be re-approved by the Board for the current fiscal year.

The background is provided below for the First Amendment to Contract No. 614 with Brown and Caldwell, which was previously approved on April 28, 2017 in the amount of $27,401.00 and for an additional 70 calendar days to be added to the contract.
This project will construct a new 0.2-MG storage tank to match the spillway elevation of the existing 0.1-MG Hā‘ena Steel Tank (HW-3), which accommodates the existing 144′ service zone of the Hā‘ena-Wainiha area water system. This contract consists of construction plans and specifications for a new 316 stainless steel 0.2-MG storage tank, piping and connections to the existing system, a tank site layout with grading, retaining wall, a drainage system, chain link perimeter fence, access road, and various other site improvements.

The proposed 0.2 MG water storage tank will be approximately 37 feet in diameter and 29 feet high. The existing slope has a gradient (ratio) of about 2.2 Horizontal (H) to 1 Vertical (V). Site grading will predominantly consist of cuts, resulting in a relatively high slope uphill of the new tank. In addition to a conventional concrete retaining wall, a finish slope gradient of about 1.5H:1V, or a cut slope with soil nails and/or a tie back system, or a combination of the two, are also being considered. Therefore, maximum cut depths near the toe of the proposed slope and tank will be on the order of 20 feet and the required retaining wall at the site may need to be as high as 25 feet in places. The estimated construction cost of the 25-foot high retaining wall is approximately $1,000,000. However, the height of the retaining wall is determined by the specific soil characteristics at the site.

The consultant for the project, Brown and Caldwell, has submitted a proposal to amend Contract No. 614 for the project’s geotechnical sub-consultant, Hirata and Associates, to conduct three additional site-specific geotechnical borings at the proposed 0.2-MG tank site. It is anticipated that the results of these additional borings will confirm that the existing soil type (or “in-situ substrate”) is closest to “decomposed rock” as defined in the County of Kaua‘i’s Ordinance No. 808 Relating to Grading, Grubbing, and Stockpiling. Per the Ordinance, this soil type is afforded a maximum cut slope of 1H:1V. Therefore, with the additional site-specific borings, it is anticipated that Hirata and Associates can recommend that the retaining wall can be designed for a maximum cut slope of 1H:1V, or at least 1.5H:1V, which would result in a smaller retaining wall and a substantial construction cost savings for the Department. Specifically, a 1.5H:1V cut slope would result in a retaining wall with a maximum height of approximately 15 feet and an approximate cost of $700,000. A 1H:1V maximum cut slope would result in a retaining wall with a maximum height of approximately 4 feet and an approximate cost of $450,000.

The existing Contract fee for geotechnical work is based on the geotechnical consultant making recommendations derived from the existing borings at the existing 0.1 MG Hā‘ena Steel Tank site. However, because those borings are not site-specific, Hirata and Associates’ recommendations are limited to conservative assumptions, and they are limited to recommending a 2H:1V maximum cut slope.

Because the three proposed site-specific geotechnical borings are anticipated to affect the design parameters for the project, the contract length would need to be extended by approximately 70 calendar days to accommodate the change. The DOW has reviewed Brown and Caldwell’s proposal and Hirata’s anticipated recommendations to conduct the additional borings and the request to extend the contract length by 70 calendar days. With additional funding needed to the DOW’s budget for the subject contract, it’s DOW’s recommendation that the Board approve the additional funds for the first amendment to Contract No. 614, as it anticipated that the additional site-specific borings will reduce the construction cost of the retaining wall from approximately $1,000,000 to $700,000, or potentially as low as $450,000. The proposed inter-fund transfer amount also includes the addition of $1,000.00 for an Individual NPDES Permit application fee, and the addition of $2,750.00 for the Conservation District Use Permit application fee, which were not included in the original scope of work. Including these fees in the design contract is intended to streamline the permit application and approval processes.
(5) CONTRACT NO. 645 AWARDED TO R.M. TOWILL CORPORATION FOR JOB NO. 17-11, WP 2020, WKK-2, DRILL AND DEVELOP NEW KILAUEA WELL NO. 3, KILAUEA, KAUA'I, HAWAI'I, IN THE AMOUNT OF $369,847.00

FUNDING:

| Account No. 20-20-00-605-154 Capital Outlay – FRC Expansion | $300,000.00 |
| Account No. 10-20-10-540-010 Professional Services Fund | $70,000.00 |
| Contract No.645: R.M.Towill Corporation | $369,847.00 |
| Contingency (Remaining balance in FY17-18 budget) | $153.00 |
| **Total** | $370,000.00 |
| **Total Funds Requested** | **$370,000.00** |

BACKGROUND:

The proposed scope of the subject project includes drilling and testing a new drinking water well for the Kīlauea-Waipake-Kalihiwai water system. The system is currently supplied by two 700 gpm wells known as Kīlauea Wells No. 1 & 2. The DOW would like to develop a new well with a target capacity of 700 gpm, which would enable any of the systems wells to provide full standby capacity.

The DOW has completed several rounds of negotiations with the consultant for the project, and the consultant has submitted a proposal to complete the design of the project which is narrowly within the DOW’s design budget. The DOW has thoroughly reviewed the consultant’s proposal and finds it acceptable. Sufficient funding for this contract is approved in the current fiscal year budget.

WAIVER RELEASE & INDEMNITY APPLICATIONS:

<table>
<thead>
<tr>
<th>Applicant</th>
<th>TMK Location &amp; Building permit</th>
<th>Performance Bond Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

STAFF REPORTS - FY 16-17:

PERSONNEL MATTERS

September 5, 2017

RECRUITMENT AND POSITION ACTIONS

Administration
1. Computer Systems Support Technician I #2492. Interviews were completed on 9/5/2017. Working with DHR on finalizing the selection.
2. Information and Education Specialist #2478. As of 9/5/2017, position description is being reviewed.
3. Procurement Specialist IV #2497. As of 9/5/2017, position description is being reviewed.
Fiscal
1. Accountant II #2448. As of 9/5/2017, pending eligibles list from DHR.

Construction Management Division
1. Civil Engineer III #2351. As of 9/5/2017, DHR working on providing additional names of qualified candidates.

Engineering Division
1. Civil Engineer V #2358. As of 9/5/2017, pending determination on eligibles list selection.

Operations Division
1. Pipefitter Helper #2410. As of 9/5/2017, DHR provided eligibles list.
2. Water Field Superintendent #2491. As of 9/5/2017, pending eligibles list.
3. Water Plants Superintendent #2490. As of 9/5/2017, pending eligibles list.

Pursuant to Board Policy No. 24
CONVEYANCE OF WATER FACILITIES $329,837.81

<table>
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<th>TMK (s)</th>
<th>Location</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/22/2017</td>
<td>Kanaka Aupuni A Niihau Aloha (KAANA)</td>
<td>1-3-009:001</td>
<td>Kekaha</td>
<td>$ 27,300.00</td>
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<tr>
<td>9/22/2017</td>
<td>CIRI Land Development Company (CLDC)</td>
<td>2-8-021:041-049 (POR.)</td>
<td>Po‘ipū</td>
<td>$ 244,937.81</td>
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<td>9/22/2017</td>
<td>County of Kaua‘i</td>
<td>5-2-004:099</td>
<td>Kilauea</td>
<td>$ 17,500.00</td>
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<td>9/22/2017</td>
<td>Jared and Donna Murayama 1997 Trust dated January 8, 1997</td>
<td>3-3-013:027</td>
<td>Lihu‘e</td>
<td>$ 40,100.00</td>
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</table>

CUSTOMER CARE AND BILLING (CC&B) SYSTEM UPDATE:
No update

I.T. STRATEGIC PLAN UPDATE:
September 18, 2017

IT Plan Task 3: Project Management and Document Imaging:
Project Management:
We executed a contract for a Project Management System with PMWeb and vendor came down to do a Discovery Session with staff.

With Engineering being allowed to remove itself from this project and only CM remaining, the discovery process went very quickly.

We are in the beginning stages of implementation and having weekly meetings with PMWeb.
Document Imaging:
In the area of document imaging, IT completed exporting all the images from the Stellent Document Imaging System and is converting all the images so that they may be uploaded into the SharePoint system. IT completed the SharePoint upload and is working on a sort/filter feature.

On-going:
We are upgrading our SharePoint system to the latest version. We currently are using SharePoint 2010 and will be upgrading to SharePoint 2016.

In order to upgrade to the latest version, we have to do a step upgrade to SharePoint 2013. This has been completed and I am now working on the 2016 version.

We have completed the upgrade to SharePoint 2013 and currently working on the SharePoint 2016 upgrade.

Note: Upgrading SharePoint is not the same as upgrading Microsoft Word that takes a matter of minutes.

This requires setting up new servers for SharePoint and SQL Server, migrating all data and permissions and testing.

Unfortunately, to do it right, it takes several months to upgrade.

IT Task 4: Develop Web based GIS Viewer and Map Layers:
Mapping for the following water systems are completed and have been released to the GIS users.

Anahola / ‘Anini / Hā’ena-Wainiha / Hanalei / Hanapēpē/Eelele / Kalāheo-Kōloa / Kīlauea / Kalāheo-Kōloa (partial) / Līhu'e-Kapa'a (partial)

IT is currently working on the Kōloa-Po’ipū area (Kalāheo-Kōloa water system) and it is near completion of getting all gps points.

The GIS Model is about 60% completed.

IT is waiting for the as-built drawings for the Puhi-Līhu'e-Hanamā'ulu area (Līhu'e to Kapa‘a water system) to finalize the system.

IT Task 10: Upgrade IT Infrastructure:
We will be upgrading our Phone System at the end of September or sometime in October.

AFFORDABLE HOUSING UPDATE:
No significant activities.

MANAGER’S GOALS UPDATE established July 28, 2017 for FY17-18

<table>
<thead>
<tr>
<th>Goals/Objectives</th>
<th>Success Measurements</th>
<th>Desired Outcome</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Implement systems that will serve to reduce customer complaints.</td>
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</tr>
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<tr>
<td>1. Public inquiries requiring response.</td>
<td>Provide a response within 2 working days, if more detailed study is required supply an estimated timeline.</td>
<td>Meet expectations throughout the year. Division Heads will keep a record of public inquires and response time and submit it monthly to the Manager.</td>
<td></td>
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</tbody>
</table>

**Goal 2** Ensure the health, safety and welfare of the Department employees and public.

1. Support the needs of Department Divisions delivery of programs for health and safety for employees.
   - Insure adherence of the County wide safety program.
   - Actively participate on the County wide safety committee.
   - No adverse activities throughout the year.
   - Active DOW participation throughout the year.

**Goal 3** Improve Communications and Morale within the Department

**Goal 4** Performance Audit

1. Assist the Board with the selection and procurement of an auditor and complete the audit.
   - Select and procure an Auditor by the end of the calendar year. Complete the performance audit by the end of the fiscal year.
   - The Board will have a performance audit that will allow the Department to make operational improvements.
   - One SOQ submitted for performance audits. Will be working with Audit Committee to develop scope and RFP.

**Operations**

**Goal 1** Improve existing asset management program.

1. Assess existing asset management program.
   - Contract a consultant to assist the Department with the identification, acquisition and implementation of an asset management computer program that is compatible with DOW’s GIS application by the end of April 2018.
   - Asset management program will be in the progress of implementation.

**Goal 2** Improve water system reliability and resiliency.

1. Improve hurricane survivability of standby power generators.
   - Complete Preliminary Engineering Report and possibly complete design and begin construction by the end of June 2018.
   - Portable generators will be protected during hurricanes.

2. Improve pump motor control center reliability.
   - Continue and possibly complete design on replacing old MCCs by
   - Reliability of MCCs will be improved.
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<tr>
<td>3. Assess existing preventative maintenance program.</td>
<td>Contract a consultant to evaluate and improve the current preventative maintenance program for the plant and distribution systems by the end of April 2018.</td>
<td>Development of an improved preventative maintenance plan.</td>
<td></td>
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<tr>
<td></td>
<td>the end of June 2018.</td>
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</tbody>
</table>

**Fiscal**

**Goal 1** Ensure fiscal control and sustainability.

1. Use accounting program to develop annual budget.

   - Acquire and implement add-on program to Great Plains accounting software to assist with the budgeting process by the end of January 2018.
   - Development of a more streamlined budgeting process.

2. Develop fair and reasonable water rates.

   - Complete current water rate study within the contracted time.
   - Department will have updated water service rates.

**Engineering**

**Goal 1** Oversee all engineering design work required for the Department.

1. Support the Engineering design needs of the other divisions.

   - Engineering Division shall lead and be responsible for all Department engineering design work.
   - Ensures quality control and standardization of projects.

**Goal 2** Continue rehabilitation, replacement and expansion of water system

1. Timely completion of projects.

   - Complete four (4) design projects before the end of June 2018.
   - Projects will be completed.

**Construction Management**

**Goal 1** Continue to improve construction management methods and expertise.

1. Upgrade project document management system.

   - Successfully implement construction document management program by the end of June 2018.
   - All construction projects will be using the electronic construction document management system.

**Water Resources and Planning**

**Goal 1** Implement a fair and reasonable method of determining system capacity and accounting for existing use.

1. Evaluate existing design flow standards.

   - Evaluate the need to modify the existing design flow standards. If modification is justified, Department will determine the validity of existing design flow standards.
<table>
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<tr>
<td>begin the process of revising the Design Standards. Evaluation of design flow standards shall be completed by the end of February 2018.</td>
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</tbody>
</table>

Respectfully submitted,

Kirk Saiki, P.E.
Manager and Chief Engineer

Attachments: 2010 BAB Spend Down Report as of August 2017
KS/MJA
Mgrrp/Manager’s Update (09-29-17):mja
2010 Bond Encumbrance and Spend Down Status (Dollars)