

**BOARD OF WATER SUPPLY of the COUNTY OF KAUA'I**

**SPECIAL BOARD MEETING**

**Second Floor, Microbiology Lab Bldg  
Kaua'i County Department of Water  
4398 Pua Loke Street, Lihu'e, Kaua'i, Hawai'i 96766**

**THURSDAY, FEBRUARY 9, 2012**

**9:00 a.m.**

**Or soon thereafter**

- A. CALL TO ORDER
- B. ROLL CALL
- C. ACCEPTANCE OF AGENDA
- D. NEW BUSINESS
  - 1. Manager's Report No. 12-57 - Seventh, Eighth and Ninth change orders for Job No. 02-19, Waipouli Main Replacement – County Roads (Water Plan 2020 Project No. WK-12), Kapaa, Kauai
- E. ADJOURNMENT

MANAGERS REPORT 12-57

January 31, 2012

Re: Seventh, Eighth and Ninth change orders for Job No. 02-19, Waipouli Main Replacement  
– County Roads (Water Plan 2020 Project No. WK-12), Kapaa, Kauai

**RECOMMENDATION:**

It is recommended that the Board approve additional funding for the seventh, eighth and ninth change orders and additional project contingency for Contract No. 530 with Earthworks Pacific, Inc., for the subject project.

**FUNDING:**

Job No. 02-19, Waipouli Main Replacement

Original Funds Certified (BAB):		\$2,045,000.00
Contract No. 530, Earthworks Pacific, Inc.	\$1,947,620.00	
Change Order #1 (Replace DI with C-900)	\$-33,987.50	
Change Order #2 (Time Extension)	\$0.00	
Change Order #3 (GET Tax Notice)	\$0.00	
Change Order #4 (AIS)	\$52,420.49	
Change Order #5 (AMP)	\$42,749.00	
Change Order #6 (CM)	\$31,989.00	
Proposed Change Order #7 (Re-internment Site)	\$25,587.00	
Proposed Change Order #8 (Sifting)	\$100,000.00	
Proposed Change Order #9 (Labor escalation)	\$14,289.98	
Proposed additional contingency	\$120,000.00	
Total Funding Required:		<u>\$2,300,667.97</u>
Additional Funds Required (BAB)		\$255,667.97
Funds Available from BAB		<u>\$20,121,301.42</u>
Available Balance: Account # 201-01 BAB Bond		<u><u>\$19,865,633.45</u></u>

**BACKGROUND:**

This project was originally bid in January 2011 with a notice to proceed of April 4, 2011. It included furnishing and installing materials for the installation of approximately 215 linear feet of 12-inch, 60875 linear feet of 8-inch, 1,000 linear feet of 6-inch water pipes, 10 linear feet of 4-inch and 10 linear feet of 2 ½” waterlines and appurtenances including connections to existing waterlines, removal and disposal of existing waterlines within the County of Kauai and State of

Hawaii Right-of-Way, new valves, new fire hydrants, installation of new service laterals and meter boxes, transfer of service, reconnection of existing service laterals, installation of air valves and permanent cleanouts with meter boxes, salvaging fire hydrants, valves, and valve boxes, and restoration and repaving work, all in accordance with the plans and specifications.

Prior to construction beginning, the State Historic Preservation Division (SHPD) provided comments during the NPDES permit phase which stated the project location may have historic and cultural significance. Based on their recommendation, the DOW conducted an Archaeological Inventory Survey (AIS) and from that, an Archaeological Monitoring Plan (AMP). During the AIS, approximately 27 areas along the proposed waterline were excavated with only three finds occurring, none of which were *iwi*. A subsequent AMP was developed for intermittent monitoring on the project when the contractor was disturbing any soil. The DOW also requested, in addition to having an archaeologist on-site, that the contractor have a cultural monitor as well. Once SHPD's minimum comments period passed and all monitors were added to the team, the contractor was allowed to begin the project in late November 2011.

Since beginning actual installation in early December, our contractor has encountered approximately 7 locations where *iwi* has been in the new waterline trench. Through various discussions with SHPD, our archaeologists, cultural monitor, and County Parks and Recreation staff, several items are now required.

Change order #7. (\$25,587.00)

All parties referenced above agree that the most respectful location for re-internment of *iwi* finds would be in a location near Fuji Beach. The County of Kauai –Parks Division has use of Lihi Park via Executive Order. After several meetings, they are agreeable to allowing the re-internment site at Lihi Park and are assisting the DOW with going through the proper channels to do so. With time being of the essence to properly relocate the *iwi* found and to be found in the future, change order #7 will compensate the contractor and it's subcontractors to construct a permanent re-internment site at Lihi Park. The cost includes utilizing a concrete vault from the DOW; cleaning, wrapping and placing all *iwi* finds in baskets, filling and mounded the vault area with sand, and planting Naupaka around the top of the re-internment area as required. The re-internment site will then be utilized for the upcoming DOW Waipouli Main – Kuhio Highway Project and adjacent County of Kauai Bike Path project as well.

Change Order #8. (\$100,000.00) based on \$250/CY + tax

When *iwi* is found in sand, such as this project, physical sifting of the material excavated must be done to recover all fragments. To date, roughly 56 cubic yards of sand has been stock piled on-site and must be sifted. The waterline installation is approximately 15% complete and based on the recent finds, more *iwi* are expected. The process is time-consuming but required so change order #8 will compensate the contractor for all sifting known and will be utilized for future sifting required for the remainder of the project.

Change Order #9. (\$14,289.98)

The original notice to proceed was given on April 4, 2011 but was delayed due to the environmental and archaeological issues that arose after bidding. Construction began on

December 15, 2011 and there were labor escalations during the delay. Change Order #9 will provide compensation for the labor escalation costs associated with the delays that were beyond the contractor's control.

Additional Contingency. (\$100,000.00)

The *iwi* finds have also affected pipeline installation since various locations have to be retrenched in order to install new waterline at those locations. This extra work requires items such as solid sleeves to splice in the pipe required and has slowed down production. Further, although it hasn't happened yet, it is likely that other items may arise during construction that require redesign, additional compensation, etc. With the project in the early stage of construction, additional contingency of approximately 5% is requested for the remainder of the project for items such as these.

The contractor, Earthworks Pacific, Inc., proposes \$25,587.00 for the permanent re-internment site in change order no. 7 and \$250/CY + tax for sifting of sand based on the new scope of work related to historical and cultural finds within the project area. The DOW anticipates nearly 400 CY total being sifted over the duration of the project, thus requests \$100,000.00 for change order no. 8. Due to labor escalation costs, an additional \$14,289.98 is requested by the contractor due to delays beyond their control that extended the time of completion.

In addition to the \$139,876.98 for change orders #7, #8, and #9 we also request additional project contingency in the amount \$120,000.00. There is a remainder of original contingency in the amount of \$4,209.01, thus, the total additional funding request at this time is \$255,667.97.

Respectfully submitted,

Dustin Moises  
Waterworks Project Manager

Concurred:

David R. Craddick  
Manager and Chief Engineer

DM:cab