

WATER PLAN 2020

A Progress Report

from

County of Kaua'i Department of Water

For Fiscal Year 2010 – 2011

This document represents the latest report on Water Plan 2020. In comparing this to the [Fiscal Year 2009 – 2010 report](#) you will see that there is an increase in the value of the projects that are completed, in construction or in design from \$37,367,611 last fiscal year to \$43,288,259 this fiscal year---an increase of \$5, 920,648 in the value of the work moving through the Department.

Also, of the 27 goals for moving projects forward set in Fiscal Year 2009 – 2010, 22 were met, a success ratio of nearly 80%.

The goals achieved were as follows:

Complete construction of the following projects:

Job No. 02-03, KW-14

12-inch Waterline along Kaumualii Highway and Waimea Canyon Drive

Waimea Water System

Cost \$2,100,000

Job No. 05-01 KW-16

Waimea Main Replacement

Cost \$3,311,389

Job No. 05-03, KW-25

Kapilimao 0.5 Million Gallon Storage Tank

Kekaha Water System

Cost \$3,987,000

Job No. 03-03, KW-24

Hardening of Generator Shelter Kapilimao Valley Well

Kekaha Water System

Cost included with above project

Complete design of the following projects:

Job No. 02-08, HE-08

Rehabilitate Eleele Twin 0.4 MG Steel Tanks

Eleele Water System

Cost: \$307,002

Job No. 02-16, WK-36

**Pipeline Replacement Along Wailua, Ohana, Anolani and Kuamoo Roads
and Lehia Lane**

Wailua Water System

Cost: \$65,101

Job No. 02-19, WK-12

Waipouli Main Replacement (County Roads)

Wailua-Kapa'a Water System

Cost: \$292,300

Job No. 04-06, KW-20

Waimea Well "A" Renovations

Waimea Water System

Cost: \$417,000

Job No. 05-06, PLH-25

Eiwa, Umi, Akahi, Elua and Hardy Streets,

Alohi Place, Uiki Place and Lalei Place

8-inch Main Replacement

Lihue Water System

Cost: \$227,000

Job No. 05-05, PLH-30, Nawiliwili, Niumalu, and Kupolo Pipeline Replacements.

Lihue Water System

Cost: \$331,580

Job No. 02-17, H-01, 02, 03, Maka Ridge Renovations

Hanalei Water System

Cost: \$151,000

Begin construction of the following projects:

Job No. 02-02, LO-04

Piwai 677' 0.5 Million gallon Storage Tank and Connecting Pipeline

Lawai-Omao Water System

Cost \$2,540,000

Job No. 02-18, WK-32 (Phase II)

Kapaa Homesteads Pipeline Replacement

Kapa'a Water System

Cost \$2,942,000

Job No. 03-02, Phase 2, HW-02, HW-03

Wainiha Booster Pump Stations and Haena Steel Tank and Renovations

Wainiha Water System

Cost \$2,070,000

Job No. 04-02, WK-14 (Phase II)

Pipeline Replacement for Vivian Heights and Kanaele Road

Kapa'a Water System

Cost \$2,686,000

Job No. 02-08, HE-08

Rehabilitate Eleele Twin 0.4 MG Steel Tanks

Eleele Water System

Cost \$1,843,000

Job No. 02-16, WK-36

Pipeline Replacement Along Wailua, Ohana, Anolani and Kuamoo Roads and Lehia Lane

Wailua Water System

Cost \$1,045,800

Job No. 02-19, WK-12

Waipouli Main Replacement (County Roads)

Wailua-Kapa'a Water System

Cost \$2,045,000

Job No. 04-06, KW-20

Waimea Well "A" Renovations

Waimea Water System

Cost \$560,163

Job No. 05-06, PLH-25

Eiwa, Umi, Akahi, Elua and Hardy Streets,

Alohi Place, Uiki Place and Lalei Place

8-inch Main Replacement

Lihue Water System

Cost \$2,694,000

Job No. 05-05, PLH-30, Nawiliwili, Niumalu, and Kupolo Pipeline Replacements,

Lihue Water System

Cost: \$3,202,500

We present below a list of the projects we have been working on. This report is current as of the end of fiscal year 2010-2011 (June 30, 2011) and provides a snapshot of many of the projects in planning or underway.

These projects fall into three categories:

- Capital Improvements Projects (CIP) to correct current deficiencies in our system and meet future needs
- Capital Rehabilitation Program (CRP) covers in-kind replacements or repair of deteriorating or aging equipment without changing their capacity
- Capital Replacement Program (CRPL) covers repair or replacement of existing deteriorated infrastructure while also increasing capacity.

The chart below includes the work done in FY 2010 – 2011.

Design/Construction Totals for CIP, CRP and CRPL Projects

	DESIGN	CONSTRUCTION	TOTAL
CIP	\$3,449,269.80	\$11,127,000.00	\$14,576,269.80
CRP	\$1,154,821.10	\$ 7,851,865.94	\$9,006,687.04
CRPL	\$2,364,713.00	\$17,340,589.48	\$19,705,302.48
TOTAL	\$6,968,803.90	\$36,319,455.42	\$43,288,259.32

[Click Here](#) to view detailed Improvement Chart FY 2010-2011 organized by district

CONSTRUCTION PROJECTS RECEIVING FINAL INSPECTION APPROVAL DURING THE FISCAL YEAR (JULY 1, 2010 – JUNE 30, 2011) Total Certified Amount = \$ 9,398,289.48

1. Job No. 05-01 KW-16

Waimea Main Replacement

(Contractor: Goodfellow Bros. Inc)

Waimea Water System

Project Cost: **\$3,311,289.48 (CRPL)**

Scope of Work:

Furnishing and installing of materials for 540 linear feet of 12-inch water main, 5,475 linear feet of 6-inch water main, 295 linear feet of 4-inch water main and 22 linear feet of 3-inch water main including installation of fire hydrants, connection of new service laterals, other waterlines and accessories, and all other necessary works. Majority of new waterline smaller than 12” in diameter were installed using C-900 PVC to accommodate the geologic conditions encountered in the area.

Waterline installation approved by DOW but awaiting DOT and DPW signoff.

2. Job No. 05-03 KW-25

Kapilimao 0.5 Million Gallon Storage Tank

(Contractor: Kauai Builders Ltd)

Kekaha Water System

Project Cost: **\$3,987,000.00 (CIP)**

Scope of Work:(Section A)

Furnishing and paying for all labor, tools, equipment and materials necessary for the construction of a 0.5 million gallon reinforced concrete storage tank facility with overflow elevation of 196’ MSL, including but not limited to clearing, grading, pavement, perimeter chain link fencing and security system, connecting pipelines, drainage system, electrical and control systems, and all appurtenances in place complete, in accordance with the plans and specifications, ready for operations at the Kapilimao storage tank site, Kekaha, Kauai, Hawaii.

Job No. 03-03 KW-24

Hardening of Generator Shelter for Kapilimao Valley Well

(Contractor: Kauai Builders Ltd)

Kekaha Water System

Project Cost: ***Same contract with Job No. 05-03, KW-25 (CRP)***

Scope of Work: (Section B)

Furnishing and installing materials for the installation of hardened shelter structure, electrical conduits and hardware and other equipment necessary to safety house emergency generators at the Department of Water’s well station at Kekaha. Also, furnishing and installing materials for the installation of asphalt concrete driveways, electrical facilities, chain link fences and security gates.

3. Job No. 02-03 KW-14

12-inch Waterline along Kaumualii Highway and Waimea Canyon Drive

(Contractor: Koga Engineering and Construction, Inc.)

Waimea Water System

Project Cost: **\$2,100,000.00 (CRPL)**

Scope of Work:

Furnishing and installing materials for the installation of approximately 4,107 linear feet of 12-inch, 197 linear feet of 8-inch, 460 linear feet of 6-inch and 95 linear feet of 4-inch water pipes and appurtenances including connections to existing waterlines, removal and disposal of existing Asbestos-Cement, PVC and Ductile Iron waterlines within the State Right-of-Way, new valves, new fire hydrants, reconnection of existing service laterals, installation of air valves and permanent clean-outs with meter boxes, salvaging fire hydrants, valves and valve boxes and restoration and repaving works all accordance with the plans and specifications.

Waterline installation approved by DOW but awaiting DOT and DPW signoff.

CONSTRUCTION PROJECTS IN PROGRESS DURING THE FISCAL YEAR (JULY 1, 2010 – JUNE 30, 2011) Total Certified Amount = \$26,921,165.94

1. Job No. 04-06, KW-05

Kekaha Well “B” Renovations

(Contractor: Goodfellow Bros. Inc.)

Kekaha Water System

Project Cost: **\$692,702.94 (CRP)**

Scope of Work:

Furnishing and installing a hydropneumatic system inclusive of a 1,000 gallon hydropneumatic (bladder-type) tank, two (2) booster pumps (20 gpm @ 140' TDH), control panel, concrete equipment pad and appurtenant equipment and piping; replacement of the existing deep well pump assembly, modifications to the existing well pump discharge pipe line, including removal and replacement of selected portions of existing discharge pipe sections and appurtenant equipment and piping; installation and modifications to the existing chlorination system including appurtenant equipment and piping; modifications to the existing pump building for the booster pump room including installation of an interior divider wall, installation of exterior doorway and concrete landing pad, modifications to the existing concrete floor; additional modifications to the existing building including but not limited to relocation of existing compressor, appurtenant piping and control box, repairs to existing control building roofing, doors, footing, and windows, miscellaneous modifications to interior building lighting , relocation of equipment, and appurtenances; installation or appurtenant yard piping; installation of 12' gate valve on the existing line between the well pump and the reservoir including removal and proper disposal of sections of existing asbestos cement and ductile iron pipe and fittings, installation of valve box and cover, concrete slab around valve box and replacement ductile iron pipe and appurtenant fittings; modifications to existing motor control system and SCADA system; equipment start up and testing; repair of eroded areas exterior to the building including furnishing and installation of erosion control mats, filling of low spots, geotextile fabric, anchors, concrete curbs and low wall, clearing and grubbing, and appurtenant materials, replacement of gravel; and modifying existing perimeter fencing and gates to add barbed wire; replacement repair and replacement of AC pavement; removal and disposal of existing desk unit and provision of a replacement desk; and a temporary erosion control. All facilities and equipment specified and modifications shall be installed, in-place complete and ready for operation.

2. **Job No. 02-02, LO-04**
Piwai 677' 0.5 Million Gallon Storage Tank and Connecting Pipeline
(Contractor: Unlimited Builders, LLC.)
Lawai-Omao Water System
Project Cost: \$2,540,000.00 (CIP)

Scope of Work:

Furnish the required labor, tools, materials and equipment to install a 0.5 million gallon reinforced tank with overflow elevation of 677' MSL, 16" influent and effluent piping, tank drain and overflow pipelines, asphaltic concrete pavement, fencing, concrete work, electrical work and all other work necessary to provide a complete operational system at the existing Piwai tank Site as shown on the project construction drawings. The 0.5 million gallon tank shall be constructed adjacent to the existing Piwai tank 0.1 million gallon tank, and work will expand the existing tank site.

3. **Job No. 02-18, WK-32 (Phase II)**
Kapaa Homesteads Pipeline Replacement
(Contractor: Jennings Pacific, LLC.)
Kapa'a Water System
Project Cost: \$2,942,000.00 (CRPL)

Scope of Work:

Furnishing and installing of approximately 120 linear feet of 12-inch, 30 linear feet of 8-inch, 11,650 of 6-inch, and 570 linear feet of 4-inch waterlines in the Kapaa Homesteads, together with copper pipes, valves, valve boxes, fire hydrants, connections, copper service laterals, and other waterline accessories.

4. **Job No. 03-02, Phase 2, HW-02, HW-03**
Wainiha Booster Pump Stations and Haena Steel Tank Renovations
(Contractor: Unlimited Builders, LLC.)
Wainiha Water System
Project Cost: \$2,070,000.00 (CRP)

Scope of Work:

Furnishing and paying for all labor, tools, equipment and materials necessary for the renovation of two Department of Water facilities: (1) Wainiha Booster Pump Station, and (2) Haena Steel Tank. The scope of work at the Wainiha Booster Pump Station includes but is not limited to: construction of a new Wainiha Booster Pump Station; chain link fencing; pavement; site clearing; grubbing and grading; construction of an access road from the Wainiha Booster Pump to the Haena Steel Tank and cement rubble masonry (CRM) retaining wall; relocation of electrical and control system and all appurtenances in place complete, all in accordance with the plans and specifications, ready for operation, at the Wainiha Booster Pump facility. The scope of work at the Haena Steel Tank facility include but is not limited to; site clearing, grubbing and grading; removal of numerous trees, construction of a perimeter road and concrete swale around the tank, reinforced concrete wall; relocation of the RTU enclosure and all appurtenances in place complete, all in accordance with the plans and specifications, ready for operation at the Haena Steel Tank facility.

5. **Job No. 04-02, WK-14 (Phase II)**

Pipeline Replacement for Vivian Heights and Kanaele Road

(Contractor: Earthworks Pacific, Inc.)

Kapa'a Water System

Project Cost: **\$2,686,000.00 (CRP)**

Scope of Work:

Furnishing and installing approximately 7470 linear feet of 8-inch, 3780 linear feet of 6-inch, and 50 linear feet of 4-inch waterlines in Vivian Heights area and Kanaele Road, together with copper pipes, valves, fire hydrants, connections, copper service laterals, meter boxes and other waterline accessories.

6. Job No. 02-08, HE-08

Rehabilitate Eleele Twin 0.4 MG Steel Tanks

(Contractor: Oceanic Companies, Inc.)

Eleele Water System

Project Cost: **\$1,843,000.00 (CRP)**

Scope of work

Furnishing and installing materials, equipment and labor for the rehabilitation including cathodic protection of the existing Eleele Twin 0.4 MG Steel Tanks along Kaumualii Highway in Eleele, Kauai, Hawaii; building painting, roof painting and replace door for the existing booster pump building; site improvements including new PVC-coated chain-link fencing, gate, asphalt pavement, retaining wall and landscaping; replace existing 12-inch gate valves; relocate reservoir overflow/washout line to connect to the existing 24-inch irrigation culvert; install 12-inch check valve on tank influent lines and other waterline accessories; and access driveway improvements.

7. Job No. 02-16, WK-36

Pipeline Replacement Along Wailua, Ohana, Anolani and Kuamoo Roads and Lehia Lane

(Contractor: Koga Engineering and Construction, Inc.)

Wailua Water System

Project Cost: **\$1,045,800.00 (CRPL)**

Scope of Work:

Furnishing and installing approximately 2,250 linear feet of 6-inch waterline along Wailua, Ohana, Anolani, Kuamoo Roads and Lehia Lane. Together with valves, fire hydrants, service laterals, connections and other waterline accessories.

8. Job No. 02-19, WK-12

Waipouli Main Replacement (County Roads)

(Contractor: Earthworks Pacific, Inc.)

Wailua-Kapa'a Water System

Project Cost: **\$2,045,000.00 (CRPL)**

Scope of Work:

Furnishing and installing materials for the installation of approximately 210 linear feet of 12-inch, 6,875 linear feet of 8-inch and 1,000 linear feet of 6-inch ductile iron water mains and appurtenances. Further, furnishing and installing materials for the installation of connections to

existing water mains, installation of new water valves, installation of new fire hydrants, installation of new service laterals with meter boxes, installation of new air relief valves and clean outs with meter boxes, installation of new miscellaneous waterline accessories, cutting and plugging and removal of existing waterlines and service laterals, salvaging of existing fire hydrants, standpipes, valves and valve boxes, and restoration and repaving works. All work shall be in place complete and in accordance with the plans and specifications.

9. **Job No. 04-06, KW-20**
Waimea Well “A” Renovations
(Contractor: R. Eletric, Inc.)
Waimea Water System
Project Cost: **\$560,163.00 (CRP)**

Scope of Work:

Furnishing and installing a replacement submersible turbine pump in an existing well replacement of an existing gaseous chlorine disinfection system with a sodium hypochlorite disinfection system , including appurtenant controls, piping and equipment; construction of an extension to the existing control building, including specified hardware and finishes; installation of appurtenant yard piping; furnishing and installation of a motor control center (MCC); modifications to the existing SCADA system; temporary erosion control; equipment start-up and testing; repairs to the existing building roofing, doors and windows; and modifying existing perimeter fencing and gates to add barbed wire, and all other work necessary to provide a complete operational system at the Waimea Well “A” ssite.

10. **Job No. 05-06, PLH-25**
Eiwa, Umi, Akahi, Elua and Hardy Streets,
Alohi Place, Uiki Place and Lalei Place
8-inch Main Replacement
(Contractor: BCP Construction of Hawaii, Inc.)
Lihue Water System
Project Cost: **\$2,694,000.00 (CRPL)**

Scope of Work:

Furnishing and installing of approximately 5,920 linear feet of 8-inch and 950 linear feet of 6-inch waterlines in the Lihue area along Eiwa, Umi, Akahi, Elua and Hardy Streets, Alohi Place, Uiki Place and Lalei place, as shown in the constructions plans together with copper pipes, valves, valve boxes, fire hydrants, connections, copper service laterals and other waterline accessories.

11. **Job No. 05-05 , PLH-30, Nawiliwili, Niumalu, and Kupolo Pipeline Replacements,**
(Contractor – Goodfellow Bros. Inc.)
Lihu’e Water System
Project Cost: **\$3,202,500.00 (CRPL)**

Scope of Work:

Project includes design and preparation of final construction plans and specifications for various pipelines in the Nāwiliwili road, Niumalu road. Kupolo road, Mokoi Street and Kapena Street areas, together with valves, fire hydrants, service laterals, connections and other waterline

accessories. Including NPDES permit NOI submittal. Consultant to provide all necessary services during bidding and construction.

12. Job No. 10-02, PLH-44

Kaunualii Highway Widening Vicinity of Anonui Street to Vicinity of Lihue Mill Bridge

(State DOT's Contractor: Kiewit Infrastructure West Co.)

Puhi-Lihue-Hanamaulu Water System

Project Cost: **\$4,600,000.00 (CIP)**

Scope of Work:

Furnishing and installing materials for 7,162 linear feet of 24-inch Ductile Iron pipe, 995 linear feet of 16-inch Ductile Iron pipe, 1,054 linear feet of 12-inch Ductile Iron pipe, 275 linear feet of 8-inch Ductile Iron pipe water main including all appurtenances along Kaunualii Highway, Anonui Street, Puhi Road, Nuhou Street, Kalepa Street, and Nawiliwili Road. Further, 6-inch reduced pressure detector assembly, hydrants, connection of service laterals, and other necessary work. The waterline design by Park Engineering is also included in the Project Cost.

DESIGN PROJECTS COMPLETED DURING THE FISCAL YEAR (JULY 1, 2010 – JUNE 30, 2011) Total Certified Amount = \$1,891,083.10

1. Job No. 02-17, H-01, 02, 03, Maka Ridge Renovations

(Consultant – Wagner Engineering)

Hanalei Water System

Project Cost: **\$151,100.00 (CRP)**

Scope of Work:

Project includes preparation of detailed construction plans and specifications to improve the access road and replace pertinent culverts/bridges; replace existing 8" with a new 12" pipeline and appurtenances from Kuhio Hwy to the Maka Ridge well site, including well site to existing Maka Ridge tank site; also includes well site improvements; rehabilitation of the existing tank and needed tank site improvements; provide interconnect with Princeville Utilities water system. Consultant is to obtain all required permits. Consultant is also to provide all necessary services during bidding and construction as needed.

2. Job No. 02-08, HE-08

Rehabilitate Eleele Twin 0.4 MG Steel Tanks

(Consultant: Hawaii Pacific Engineers)

Eleele Water System

Project Cost: **\$307,002.10 (CRP)**

Scope of work

Furnishing and installing materials, equipment and labor for the rehabilitation including cathodic protection of the existing Eleele Twin 0.4 MG Steel Tanks along Kaumualii Highway in Eleele, Kauai, Hawaii; building painting, roof painting and replace door for the existing booster pump building; site improvements including new PVC-coated chain-link fencing, gate, asphalt pavement, retaining wall and landscaping; replace existing 12-inch gate valves; relocate reservoir overflow/washout line to connect to the existing 24-inch irrigation culvert; install 12-inch check valve on tank influent lines and other waterline accessories; and access driveway improvements.

3. **Job No. 02-16, WK-36**

Pipeline Replacement Along Wailua, Ohana, Anolani and Kuamoo Roads and Lehia Lane

(Consultant: Esaki Surveying and Mapping, Inc.)

Wailua Water System

Project Cost: **\$165,101.00 (CRPL)**

Scope of Work:

Furnishing and installing approximately 2,250 linear feet of 6-inch waterline along Wailua, Ohana, Anolani, Kuamoo Roads and Lehia Lane. Together with valves, fire hydrants, service laterals, connections and other waterline accessories.

4. **Job No. 02-19, WK-12**

Waipouli Main Replacement (County Roads) *Same contract with Waipouli Main Replacement-Kuhio Highway*

(Consultant: Kodani and Associates, Inc.)

Wailua-Kapa'a Water System

Project Cost: **\$292,300.00 (CRPL)**

Scope of Work:

Furnishing and installing materials for the installation of approximately 210 linear feet of 12-inch, 6,875 linear feet of 8-inch and 1,000 linear feet of 6-inch ductile iron water mains and appurtenances. Further, furnishing and installing materials for the installation of connections to existing water mains, installation of new water valves, installation of new fire hydrants, installation of new service laterals with meter boxes, installation of new air relief valves and clean outs with meter boxes, installation of new miscellaneous waterline accessories, cutting and plugging and removal of existing waterlines and service laterals, salvaging of existing fire hydrants, standpipes, valves and valve boxes, and restoration and repaving works. All work shall be in place complete and in accordance with the plans and specifications.

5. **Job No. 04-06, KW-20**

Waimea Well "A" Renovations

(Consultant: Kennedy Jenks formerly Engineering Solutions, Inc.)

Waimea Water System

Project Cost: **\$417,000.00 (CRP)** *Same contract with Waimea "B" Renovations*

Scope of Work:

Furnishing and installing a replacement submersible turbine pump in an existing well replacement of an existing gaseous chlorine disinfection system with a sodium hypochlorite disinfection system, including appurtenant controls, piping and equipment; construction of an extension to the existing control building, including specified hardware and finishes; installation of

appurtenant yard piping; furnishing and installation of a motor control center (MCC); modifications to the existing SCADA system; temporary erosion control; equipment start-up and testing; repairs to the existing building roofing, doors and windows; and modifying existing perimeter fencing and gates to add barbed wire, and all other work necessary to provide a complete operational system at the Waimea Well "A" ssite.

6. **Job No. 05-06, PLH-25**
Eiwa, Umi, Akahi, Elua and Hardy Streets,
Alohi Place, Uiki Place and Lalei Place
8-inch Main Replacement
(Consultant: BOW Engineering, Inc.)
Lihue Water System
Project Cost: \$227,000.00 (CRPL)

Scope of Work:

Furnishing and installing of approximately 5,920 linear feet of 8-inch and 950 linear feet of 6-inch waterlines in the Lihue area along Eiwa, Umi, Akahi, Elua and Hardy Streets, Alohi Place, Uiki Place and Lalei place, as shown in the constructions plans together with copper pipes, valves, valve boxes, fire hydrants, connections, copper service laterals and other waterline accessories.

7. **Job No. 05-05 , PLH-30, Nawiliwili, Niumalu, and Kupolo Pipeline Replacements,**
(Consultant - Belt Collins)
Lihue Water System
Project Cost: \$331,580.00 (CRPL)

Scope of Work:

Project includes design and preparation of final construction plans and specifications for various pipelines in the Nāwiliwili road, Niumalu road, Kupolo road, Mokoi Street and Kapena Street areas, together with valves, fire hydrants, service laterals, connections and other waterline accessories. Including NPDES permit NOI submittal. Consultant to provide all necessary services during bidding and construction.

DESIGN PROJECTS IN PROGRESS DURING THE FISCAL YEAR (JULY 1, 2010 – JUNE 30, 2011) Total Certified Amount = \$5,077,720.80

1. **Job No. PLH-39A, Lihue Baseyard Improvements, Phase I (Master Plan)**
(Consultant: Architects Hawaii, Inc.)
Project Cost: \$279,719.00 (CRP)

Scope of Work:

Evaluate and provide a master plan for the Department of Water's office and operations space requirements for the next 20 – 30 years, including the feasibility to replace the Department's office building with a multi-story structure. The recommendations will be complete with cost evaluations of the various options to provide the Department's core functions and support the table of organization. The report will also address all improvements or modifications required to upgrade the Department's office and baseyard facilities. Upon receiving the Board's approval of the Consultant's recommendation, the preparation and publication of an environmental assessment for the required improvements will proceed. All necessary construction drawings of the required modifications will be developed for construction.

2. **Job 06-01, KW-28 Amfac Shaft 11 Renovations**
(Consultant: Brown and Caldwell, Inc./In-House)
Kekaha Water System
Project Cost: \$736,268.00 (CIP)

Scope of Work:

Evaluate and provide a plan to rehabilitate the existing Amfact Shaft 11 in Kekaha. Project includes researching available records with DLNR, Gay and Robinson and other stake holders. Includes preparation of documents to remove existing pump and shed. Installation of test pump and water quality testing to be done by DOW before design of permanent pump facilities begin.

3. **Job 02-06, WKK-15 (East) Kilauea 1.0 MG Tank**
(Consultant: Kodani & Associates)
Kilauea Water System
Project Cost: \$91,499.80 (CIP)

Scope of Work:

Project includes locating a 1.0 Million Gallon Kīlauea Tank with a spillway elevation of approximately 466.0 MSL. Prepare and obtain right-of-entry permit, drawings, maps and other pertinent information for the Board's use in acquiring the right-of-entry permit. Provide the technical information required for the project's feasibility study to construct the tank at the site. To make that determination, a land survey, soils testing and evaluation are required. If the feasibility report concludes that the site is acceptable, an environmental assessment will be prepared and subsequent tank design will commence.

4. **Job 05-02, H-8, Drill and Test Hanalei Well #2**
(Consultant: Kodani & Associates)
Hanalei Water System
Project Cost: \$425,000.00 (CIP)

Scope of Work:

Project includes performing hydro geologic field surveys to locate a well site for Hanalei Well. The Consultant to provide a well site selection report together with all pertinent hydro-geologic information, alternatives and recommendations for review and approval by the Board. Prepare and obtain right-of-entry permit drawings, maps and other pertinent information for the Board's use in acquiring the right-of-entry permit. Topographic survey of the required project area, approximately one and a half (1½) acres, including the access road centerline. Soil testing and evaluation of the project site. Prepare a feasibility report for the proposed project at the site.

The Consultant shall prepare detailed construction plans and specifications of the project under the direction of the DOW, including the responsibility for verifying available topographic and hydro-geologic maps for locating a well site, preparation and completion of hydraulic designs, environmental assessment reports, well drilling permits, use permits, Conservation District Use Applications, estimate of quantities and costs, bid proposal, consultation during the well drilling, preliminary Engineering Report, attend public and community meetings and shall furnish all personnel, materials, transportation and equipment needed in connection therewith.

5. **Job 05-02, HW-12 Drill and Test Wainiha Well #4**
(Consultant: Kodani & Associates)

Wainiha Water System

Project Cost: *Same contract with Job No. 05-02, H-8 (CIP)*

Scope of Work:

Project includes performing hydro geologic field surveys to locate a well site for Hanalei Well. The Consultant to provide a well site selection report together with all pertinent hydro-geologic information, alternatives and recommendations for review and approval by the Board. Prepare and obtain right-of-entry permit drawings, maps and other pertinent information for the Board's use in acquiring the right-of-entry permit. Topographic survey of the required project area, approximately one and a half (1½) acres, including the access road centerline. Soil testing and evaluation of the project site. Prepare a feasibility report for the proposed project at the site.

The Consultant shall prepare detailed construction plans and specifications of the project under the direction of the DOW, including the responsibility for verifying available topographic and hydro geologic maps for locating a well site, preparation and completion of hydraulic designs, environmental assessment reports, well drilling permits, use permits, Conservation District Use Applications, estimate of quantities and costs, bid proposal, consultation during the well drilling, preliminary Engineering Report, attend public and community meetings and shall furnish all personnel, materials, transportation and equipment needed in connection therewith.

**6. Job 02-14, WK-08, Kapahi (Ornellas) Tank
(Consultant: Belt Collins)**

Kapa'a Water System

Project Cost: **\$681,128.00 (CIP)** *same contract with Kapaa Homesteads Tank & Makaleha Generator*

Scope of Work:

Project includes design development analysis, environmental services and permitting, pertinent subdivision maps, detailed construction plans and specifications, construction and bidding services for the Kapahi 1MG tank and improvements. Consultant is providing geotechnical work as new tank design will require piles. Upon review of the geotechnical information, design will commence for the new 1 MG tank.

**7. Job WK-39 Kapaa Homesteads Well #4
(Consultant: Hawaii Pacific Engineers)**

Kapa'a Water System

Project Cost: **\$387,424.00 (CIP)**

Scope of Work:

Project includes the Consultant to perform preliminary hydro-geologic field surveys for up to three potential well sites for Kapa'a Homesteads Well No. 4. Confirm with DOW staff that the locations are suitable for incorporation into the existing distribution system. Document findings and conclusions and recommend a preferred alternative in a memorandum to DOW Project Manager. DOW to confirm the preferred location of the new well site and potential connection alignment to the existing DOW Water System.

Provide a Well Site Selection Report and Schedule for the preferred alternative identified in Phase 1 together with all pertinent hydro-geologic information, alternatives and recommendations for review and approval by the Board.

Under the direction of DOW, consultant to design and prepare final construction plans and specifications for exploratory drilling, testing, and construction of Kapa'a Homesteads Well No. 4, resulting in a complete well. Including all required environmental services (EA, CDUA, etc) and

other required permitting (NPDES, well construction, etc). Provide all required engineering services during bid and construction of exploratory well to provide a turn-key functioning well upon completion of project.

8. **Job No. 02-11, M-02, Moloaa 0.1MG Tank**
(Consultant – Esaki Surveying and Mapping, Inc.)
Moloa'a Water System
Project Cost: \$125,200.00 (CIP)

Scope of Work:

Project includes topographic survey, preliminary site design, EA, and design of a 0.1MG tank, potentially 2 wells, connecting pipeline and appurtenances including SCADA improvements, new control building and perimeter/access road.

9. **Job No. 02-24, WK-02, Akulikuli Tunnel Revisions**
(Consultant – In-House)
Kapa'a Water System
Fund Type: CRP

Scope of Work:

Project consists of researching existing tunnel construction and assessing any improvements required to bring the source back into service. The source is currently being tested before final recommendations are made for facility improvements.

10. **Job No. 02-15, WK-28, Wailua Houselots Main Replacement.**
(Consultant – RM Towill)
Wailua Water System
Project Cost: \$348,672.00 (CRPL)

Scope of Work:

Project includes construction plans and specifications for the waterline replacements along Wailana Road, Kula Road, Pua Road, Kamokila Road, Lanakila Road, Oo Road, Eggerking Road, Makani Road, Hookipa Road and Haleilio Road together with valves, fire hydrants, service laterals, connections and other waterline accessories, and all necessary permits including NPDES permit NOI submittal. Consultant is also to provide all necessary services during bidding and construction as needed.

11. **Job NO. K-01 (North) Kalaheo Water System Improvements**
(Consultant - Belt Collins)
Kalaheo Water System
Project Cost: \$1,002,750.00 (CIP)

Scope of Work:

Project includes locating a 0.5 MG Tank with a spillway elevation of approximately 1111' MSL and improvements to the 1222' Clearwell storage system. Provide the technical information required for the project's feasibility study to construct the tank at the site. To make that determination, a land survey, soils testing and evaluation is required. If the feasibility report concludes that the site is acceptable, an environmental assessment will be prepared and subsequent tank design will commence.

The work also includes the preparation and processing of all applicable permits required to proceed with the construction including the conservation district use permits (CDUA), National Pollutant Elimination Discharge System permits, all required permits from the County of Kauai, Planning Department (Use, Variance, Zoning, etc.).

12. Job No. 11-12, HE-11, 6” Main from Lele Road to Salt Pond

(Consultant:TBD)

Hanapepe Water System

Fund Type: (CRPL)

Scope of Work:

Design and prepare final construction plans and specifications for a new 6” pipeline along Lele and Lolokai Roads, together with valves, fire hydrants, service laterals, connections and other waterline accessories. Consultant to provide all necessary services during bidding and construction. *Currently procuring a consultant for the design.*

13. Kokolau Tunnel

(Consultant: In-House)

Puhi Water System

Scope of Work:

Tunnel source has been deemed to be under the influence of surface water. SSFM is currently working on a scope to isolate and drain the “left” leg to its natural course. Upon further evaluation of the system, including rehabilitation of the existing 16” concrete pipeline from the tunnel source to Puhi Road, recommendations will be made with regards to final improvements required to bring the source back into service.

14. Job No. 04-03, WK-30, Waipouli Hauiki Road Main Replacement

(Consultant: Paren, Inc.) Wailua

– Kapa Water System Project

Cost: **\$249,300.00 (CRPL)**

Scope of Work:

Design and prepare final construction plans and specifications for various pipelines along Waipouli and Olohena Roads, together with valves, fire hydrants, service laterals, connections and other waterline accessories. Consultant to provide all necessary services during bidding and construction.

15. Job No. 02-19, WK-12, Waipouli Main Replacement (Kuhio Highway)

Same contract with Waipouli Main Replacement-County Roads

(Consultant: Kodani and Associates, Inc.)

Wailua-Kapa’a Water System

Project Cost: **\$292,300.00 (CRPL)**

Scope of Work:

Furnishing and installing materials for the installation of approximately 2,600 linear feet of 12-inch C-900 PVC water mains and appurtenances. Further, furnishing and installing materials for the installation of connections to existing water mains, installation of new water valves, installation of new fire hydrants, installation of new service laterals with meter boxes, installation

of new air relief valves and clean outs with meter boxes, installation of new miscellaneous waterline accessories, cutting and plugging and removal of existing waterlines and service laterals, salvaging of existing fire hydrants, standpipes, valves and valve boxes, and restoration and repaving works. All work shall be in place complete and in accordance with the plans and specifications.

16. Job No. 10-01, ANI-01, Anini and Kalihiwai Road 6” Main Replacement
(Consultant: Fukunaga and Associates, Inc.)

Wailua-Kapa’ a Water System

Project Cost: \$750,760.00 (CRPL)

Scope of Work:

Furnishing and installing materials for the installation of water mains and appurtenances. Further, furnishing and installing materials for the installation of connections to existing water mains, installation of new water valves, installation of new fire hydrants, installation of new service laterals with meter boxes, installation of new air relief valves and clean outs with meter boxes, installation of new miscellaneous waterline accessories, cutting and plugging and removal of existing waterlines and service laterals, salvaging of existing fire hydrants, standpipes, valves and valve boxes, and restoration and repaving works.

Phase I: Beginning at Kilauea Town at the existing 12-inch main along Kuhio Highway, near Pukalani Place, running west along Kuhio Highway then along Kalihiwai Road then crossing Kalihiwai Steam by horizontal directional drilling, continuing to Anini Road and connecting to the existing 4-inch PVC waterline along Anini Road and **Phase II:** Replacement of the 4-inch PVC waterline along Anini Road.

GOALS FOR SPECIAL PROJECTS DIVISION FISCAL YEAR (JULY 1, 2011 - JUNE 30, 2012)

1. Complete construction of the following projects:

Job No. 04-06, KW-05, Kekaha Well “B” Renovations

Job No. 02-02, LO-04, Piwai 677’ 0.5 Million Gallon Storage Tank and Connecting Pipeline

Job No. 02-18, WK-32 (Phase II), Kapaa Homesteads Pipeline Replacement

Job No. 04-02, WK-14 (Phase II), Pipeline Replacement for Vivian Heights and Kanaele Road

Job No. 02-08, HE-08, Rehabilitate Eleele Twin 0.4 MG Steel Tanks

Job No. 04-06, KW-20, Waimea Well “A” Renovations

Job No. 05-06, PLH-25, Eiwa, Umi, Akahi, Elua and Hardy Streets, Alohi Place, Uiki Place and Lalei Place 8-inch Main Replacement

Job No. 05-05, PLH-30, Nawiliwili, Niunalu, and Kupolo Pipeline Replacements.

Job No. 10-02, PLH-44, Kaumuali'i Highway Widening Vicinity of Anonui Street to Vicinity of Lihue Mill Bridge

2. Complete design of the following projects.

Job No. 02-15, WK-28, Wailua Houselots Main Replacement.

Job No. PLH-39A, Lihue Baseyard Improvements, Phase I (Master Plan)

Job No. 02-19, Waipouli Main Replacement – Kubio Highway

Job 05-02, H-8, Drill and Test Hanalei Well #2

Job 05-02, HW-12 Drill and Test Wainiha Well #4

Job 02-14, WK-08, Kapahi (Ornellas) Tank

Job WK-39 Kapaa Homesteads Well #4

Job No. 04-03, WK-30, Waipouli Hauiki Road Main Replacement

Job No. 10-01, ANI-01, Anini and Kalihiwai Road 6' Main Replacement

3. Begin construction of the following projects.

Job No. 02-17, H-01, 02, 03, Maka Ridge Renovations

Job No. 02-15, WK-28, Wailua Houselots Main Replacement.

Job 02-14, WK-08, Kapahi (Ornellas) Tank

Job WK-39 Kapaa Homesteads Well #4

Job No. 04-03, WK-30, Waipouli Hauiki Road Main Replacement

Job No. 10-01, ANI-01, Anini and Kalihiwai Road 6' Main Replacement

Job No. 02-19, WK-12, Waipouli Main Replacement (Kubio Highway)