

ADDENDUM NO. 2

COUNTY OF KAUA'I
DEPARTMENT OF WATER

PLANS, PROPOSAL, SPECIFICATIONS
CONTRACT AND BOND
FOR

JOB NO. 09-01, K-01, K-12
KALĀHEO WATER SYSTEM IMPROVEMENTS
PACKAGE A – 0.5 MG YAMADA RESERVOIR
PACKAGE B – 0.1 MG CLEARWELL RESERVOIR
PACKAGE C – WATER MAIN INSTALLATION
KALĀHEO, KAUA'I, HAWAI'I

NOTICE TO PROSPECTIVE PROPOSERS

This addendum is hereby made a part of the PLANS, PROPOSAL, SPECIFICATIONS, CONTRACT AND BOND for the subject project and it shall amend the said contract documents in the following respects:

Item 1

Receipt of Questions/Comments/Material Substitutions.

Item 2

Pre-bid Conference Agenda and Attendance Sheet.

Item 3

Appendix I-Boilerplate and Cross-Cutter Agency Consultation, Federal Requirements For Consultants and Contractors (REVISED Wage Determination General Decision No. and Modification No.)

End of Addendum No. 2

If there are any questions, please contact Michael K. Hinazumi by email at mhinazumi@kauaiwater.org .



Joseph E. "Joe" Tait
Manager and Chief Engineer
April 13, 2022

ACKNOWLEDGEMENT OF RECEIPT OF ADDENDUM NO. 2

Receipt Acknowledged:

Organization

Received by

Date

Title

(Please sign and return this acknowledgement.)

ADDENDUM NO. 2

Item 1

QUESTION: Is the Standard Qualification Questionnaire for Prospective Offerors on Department of Water Contracts required for this project? If yes, please provide the Questionnaire.

ANSWER: At this time, the Manager and Chief Engineer is not requiring prospective bidders to file a Standard Qualification Questionnaire for Prospective Offerors for this project.

Job No. 09-02, Addendum 2, Item 2

PRE-BID CONFERENCE AGENDA April 13, 2022

KALĀHEO WATER SYSTEM IMPROVEMENTS, PACKAGE A, B, C Job No. 09-01 (K-01, K-12)

- Introduction
 - KDOW Project Manager – Scott Suga
- Optional site visit after pre-bid meeting
- Deadline for Questions/Comments/Material Substitutions – April 20, 2022
- Notice of Intent to Bid – April 27, 2022
- KDOW's Responses to Questions/Comments/Material Sub – April 27, 2022
- Bid Opening – May 4, 2022
- Bid Offer:
 - Base Bid – Package A
 - Additive No. 1 – Package B
 - Additive No. 2 – Package C
- Information to Bidders
 - Scope of Work (IFB Section 1.1):
 - Bid Bond – 5% of the bid to be submitted with bid
 - Performance and Payment Bond – Amount equal to amount of contract price
 - Responsibility of Bidders to Study Site (IFB Section 1.3.9)
 - Bidder shall have inspected project site, read the Plans, Specifications and other Contract Documents, including all Addenda and has become thoroughly familiar with them. Failure or omission of a Bidder to receive or examine any form, instrument, or document shall in no way relieve that Bidder from any obligation under the Bid or the Contract.
 - Insurance Requirements – IFB Appendix D
 - Time of Completion – 900 calendar days from Notice to Proceed
 - Permits – Contractor shall obtain all permits required for the project, Contractor required to pay for all charges and fees associated with these permits, including but not limited to any overtime inspection fees associated with these permits.
 - Permits include, but are not limited to:
 - County grading permit, grubbing permit, stockpiling permit, building permit, road permit, driveway approach permit
 - DOH community noise permit and/or variance
 - NPDES Individual Permit (HI 0021916), covers discharges of hydrotesting waters from the project to State waters for Packages A and B and stormwater discharges associated with construction activities for Packages A, B, and C.
 - Liquidated Damages – IFB Appendix C
 - \$1,000/calendar day in excess of contract completion date
 - Special Provisions – IFB Appendix O
 - Includes technical specifications
- Questions?

DAVID Y. IGE
GOVERNOR OF HAWAII



BRUCE S. ANDERSON, Ph.D.
DIRECTOR OF HEALTH

**STATE OF HAWAII
DEPARTMENT OF HEALTH
SAFE DRINKING WATER BRANCH**
ULUAKUPU BLDG. 4
2385 WAIMANO HOME ROAD, SUITE 110
PEARL CITY, HI 96782

In reply, please refer to:
File: SDWB
PacificIslandsFishandWildlifeService1.docx

April 17, 2020

Attn: Field Supervisor
Pacific Islands Fish and Wildlife Office
U.S. Fish and Wildlife Service
300 Ala Moana Blvd, Rm 3-122
Honolulu, HI 96850
[via pifwo_admin@fws.gov only]

To Whom It May Concern:

SUBJECT: USFWS Concurrence with NLAA Determination
Kalāheo Water System Improvements, Project No: K-01, K-12
Kalaheo, Kaua'i, Hawai'i
Package A—0.5 MG Yamada Reservoir
Package B—0.1 MG Clearwell Reservoir (1238.5' Overflow)
Package C—Water Main Installation
Kalāheo, Kaua'i, Hawai'i, Tax Map Keys
(TMKs): (4) 2-4-003:007, 2-4-009:003, and various rights-of-way (plat maps
[4] 2-4-003, 2-4-004, and 2-4-005)

The Hawaii Department of Health (DOH), through the United States Environmental Protection Agency's (USEPA) delegated authority, is requesting concurrence from the U.S. Fish and Wildlife Service (USFWS) that the Kalāheo Water System Improvements, Project No: K-01, K-12, Packages A, B, and C are *not likely to adversely affect* any federally listed threatened or endangered species, migratory birds and their habitats. The proposed project is in Kalāheo, Kaua'i, Hawai'i. The project will utilize federal funding through the Drinking Water State Revolving Fund Program and will be considered a federal action.

Proposed Project

The Kaua'i County Department of Water (DOW) is proposing to build one new 0.5-million gallon (MG) water storage tank, one new 0.1-MG water storage tank, and approximately 11,600 linear feet (LF) of water lines and install other water system appurtenances in Kalāheo, Kaua'i, to improve the water system serving the community. These improvements will help the system meet maximum daily demand storage capacity and fire flow requirements, as well as improve water pressure. The above referenced construction bid packages are described below. **See Figure 1 and Figure 2** for maps of the project area.

Package A includes a 0.5-MG reinforced concrete reservoir, approximately 260 LF of 12-inch diameter ductile iron pipe, approximately 120 LF of 8-inch diameter ductile iron pipe, and appurtenances; demolition; site clearing and grubbing; earthwork; concrete retaining walls; chain-link fencing; a gate; asphaltic concrete pavement; a drainage system; and grassing. The project is located at the intersection of Pu'ulima Road and Pu'uwai Road in Kalāheo, Kaua'i, Hawai'i (TMK [4] 2-4-03:007). This package includes 13,800 cubic yards of excavation over an area of 0.78 acres. The trenching for this package has a width of 2-3 feet and a depth of 3–13 feet below finished grade.

Package B includes a 0.1-MG reinforced concrete reservoir, approximately 1,315 LF of 8-inch diameter ductile iron pipe, and appurtenances; demolition; site clearing and grubbing; earthwork; a concrete retaining wall; a control building; a hydropneumatic booster pump system; a 1½-inch diameter water service lateral; chain-link fencing; a gate; a concrete access road; a cellular confinement construction access road; asphaltic concrete pavement; a drainage system; and grassing. The project is located along Pu'uwai Road in Kalāheo, Kaua'i, Hawai'i (TMK [4] 2-4-09:003). This package includes 2,254 cubic yards of excavation over an area of 1.15 acres. The trenching for this package has a width of 2–3 feet and a depth of 3.8–6.75 feet below finished grade.

Package C includes 3-, 6-, 8-, and 12-inch diameter ductile iron pipe and appurtenances; trench excavation; connections to existing waterlines; temporary waterline and temporary service connections; demolition and removal of existing waterlines and appurtenances; replacement of existing service laterals, including water meters and meter boxes; and pavement restoration. The trenching for this package is contained within the public roadway, has a width of 2–3 feet and a depth of 4.25–9 feet below finished grade. The project is located in TMKs (4) 2-4-003, 2-4-004, and 2-4-005 on the following streets:

Street	12"	8"	6"	3"
Kīkala Road	—	1,150 LF	14 LF	—
Pu'uwai Road	830 LF	2,775 LF	24 LF	—
Po'ohiwi Road	—	3,151 LF	3,288 LF	34 LF
Access Road to TMK: 2-4-04-49	—	121 LF	174 LF	—
Total	830 LF	7,197 LF	3,500 LF	34 LF

Species that May Be Present within Project Area

Critical Habitat

We carefully reviewed your agency's Section 7 Consultation website for a list of species and critical habitat that may be present within the project area.

Attn: Field Supervisor
April 17, 2020
Page 3

According to USFWS' Information for Planning Consultation (IPaC) website and USFWS ArcGIS Critical Habitat database and mapping tool, there is no designated critical habitat that may be present in the vicinity of the project area. See **Figure 3**.

Fauna

Philip L. Bruner, Environmental Consultant, prepared an avifaunal and feral mammal survey report (July 2011) of the project area. See **Exhibit A**. During this survey, no federally-listed endangered or threatened species were observed.

However, two bird species protected by the Migratory Bird Treaty Act were observed in the project area: The Northern Cardinal (*Cardinalis cardinalis*) and the House Finch (*Carpodacus mexicanus*). In addition, the report noted that the Pacific Golden-Plover (*Pluvialis fulva*), or Kōlea, could potentially occur in the project area. Because the proposed project does not involve the killing, taking, collecting, selling, or purchasing of native or migratory bird species or their parts, eggs, or nests, the project is not likely to have significant adverse impacts on these migratory avifaunal species.

The survey report also indicated that the endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*), or 'Ōpe'ape'a, may potentially forage in the area, primarily in the early evening hours. However, construction activities would primarily occur during daytime hours. In addition, the proposed improvements would be primarily limited to areas that have already been developed. Barbed wire is included at the top of the perimeter fencing at the two reservoir sites for security purposes and in accordance with DOW standards. To minimize adverse impacts to the Hawaiian hoary bat, woody plants greater than 15 feet tall will not be removed or trimmed during the bat breeding season (June 1 through September 15). Consequently, the proposed improvements are not expected to have significant adverse impacts to the Hawaiian hoary bat.

Flora

Art Whistler, Ph.D. of Isle Botanica prepared a botanical survey report (May 2011) of the project area. See **Exhibit B**. The botanical survey found no threatened or endangered plant species. The report findings noted that encountering any threatened or endangered plant species in the future would be unlikely due to the extensive and pervasive nature of disturbance in the project area. The report concluded that mitigation measures would not be necessary because no endemic plant species or native plants are present in the project area. Consequently, the proposed improvements are not expected to have significant adverse impacts to threatened or endangered plant species.

With implementation of the proposed mitigation measure for the Hawaiian hoary bat, the proposed project is **not likely to adversely affect** any federally listed threatened or endangered species, migratory birds, and their habitats. We respectfully request your concurrence with our determination.

Attn: Field Supervisor
April 17, 2020
Page 4

Should you have any questions or require further information, please contact Ms. Joan Corrigan of the Safe Drinking Water Branch, Engineering Section at (808) 586-4258 or via joan.corrigan@doh.hawaii.gov.

Sincerely,



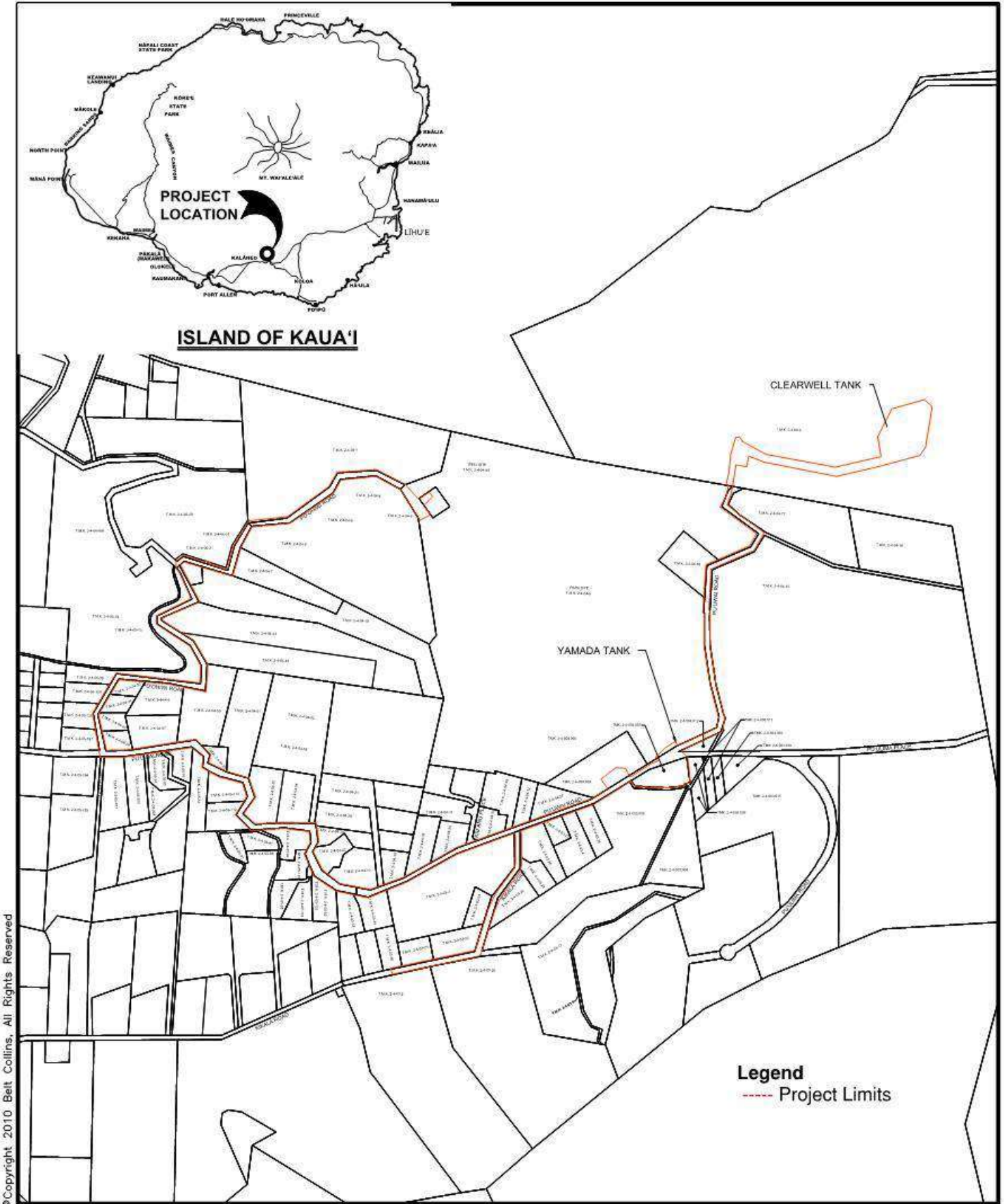
JOANNA L. SETO, P.E., CHIEF
Safe Drinking Water Branch

JC:cw

Enclosures

1. Figure 1: Project Area Map
2. Figure 2: Aerial Project Area Map
3. Figure 3: USFWS ArcGIS Critical Habitat Map
4. Exhibit A: Avifaunal and Feral Mammal Survey
5. Exhibit B: Botanical Survey

- c: Mr. Keith Aoki, Kaua'i DOW (w/o encls.) [via KAoki@kauaiwater.org only]
Mr. Bryan Wienand, Kaua'i DOW (w/o encls.)
[via bwienand@kauaiwater.org only]
Mr. Jay M. K. Stone, Belt Collins Hawaii LLC (w/o encls.)
[via jstone@bchdesign.com only]

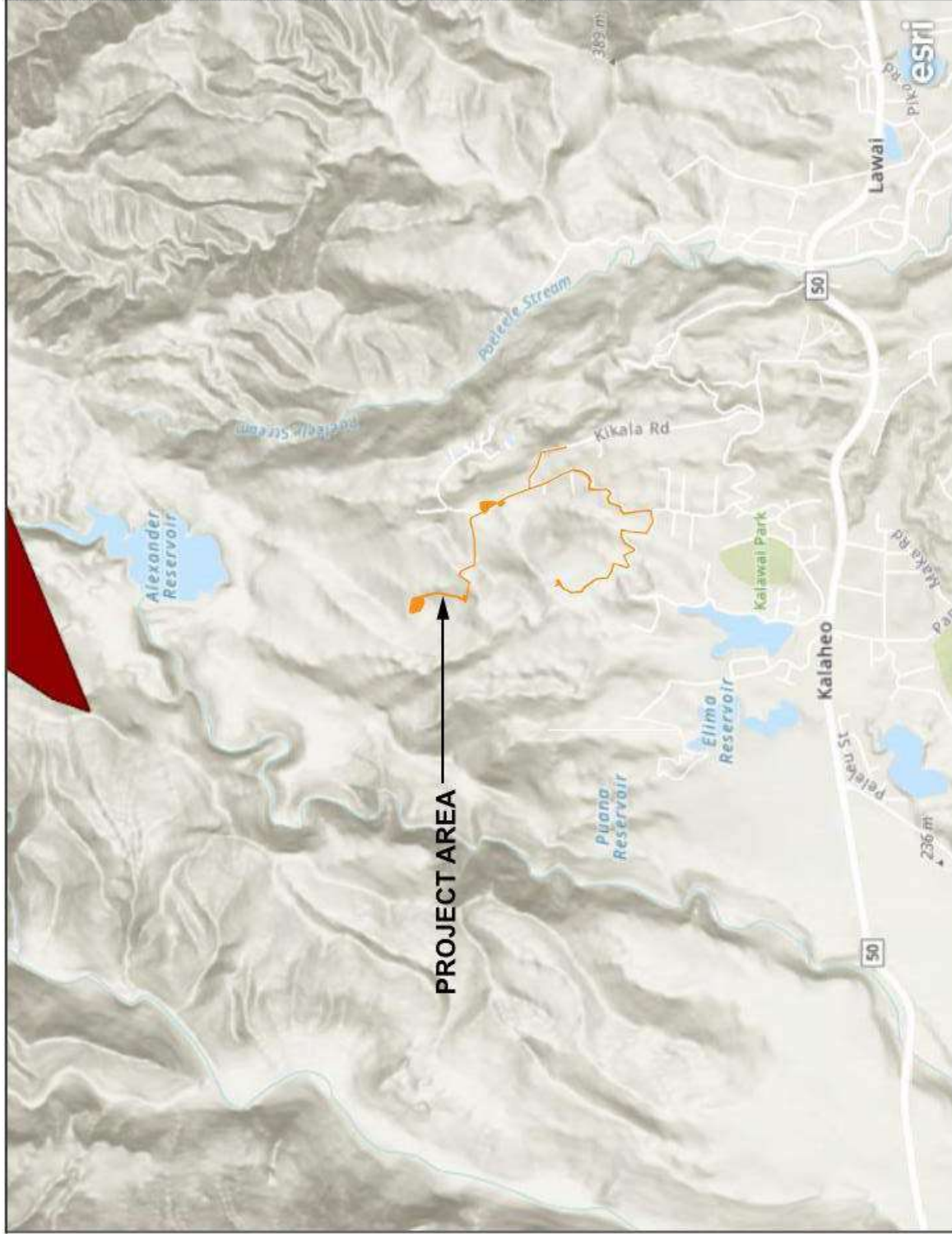


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FIGURE 1
PROJECT AREA MAP



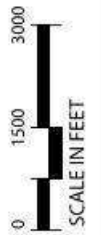
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SCALE IN FEET



USFWS_Critical_Habitat -
Critical Habitat - Polygon
Features - Final



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SCALE IN FEET

Figure 3
USFWS ARCGIS CRITICAL HABITAT MAP

**AVIFAUNAL AND FERAL MAMMAL SURVEY FOR JOB No
K-01, K-12 (NORTH) KALAHEO 1111' AND 1222'
WATER SYSTEM IMPROVEMENTS KAUA'I
DEPARTMENT OF WATER KALAHEO WATER
SYSTEM KALAHEO, KAUA'I, HAWAII**

Report prepared for:

Belt Collins Hawaii Ltd.

Survey and Report by:

**Phillip L. Bruner
Environmental Consultant
Faunal (bird & mammal) Surveys
#1775 BYUH
55-220 Kulanui Street
Laie, HI 96762**

18 July 2011

INTRODUCTION

The purposes of this report is to provide the findings of a two day (14, 15 July 2011) field survey of property proposed for the County of Kauai Department of Water Project at Kalaheo, Kauai. In addition to the data obtained from the field survey, relevant published sources are also noted in the report. These resources add insights regarding the wildlife that might be expected in this region of the island. The goals of the survey were:

- 1- Document the species of birds and mammals observed on or near the proposed project.
- 2- Devote special attention to documenting the presence and/or possible use of this area by native and migratory species particularly those that are listed as threatened or endangered.

SITE DESCRIPTION

The property involved in or near this proposed project includes: roads, second growth alien forest, open pasture, grass/weed covered lands and some existing buildings and man-made structures. Residential property occurs along portions of the roads associated with the project.

SURVEY PROTOCOL

The field survey was conducted over two consecutive days (14, 15 July 2011). Data were collected in the early morning and late in the day when birds and mammals are most active and more easily detected. Visual and auditory observations form the basis of the data. The entire property involved in this proposed project was examined along with adjoining lands. The broader coverage included in this faunal survey permitted a more complete inventory of the potential birds and mammals that could occur in the project area. Observations of mammals were primarily limited to visual sightings and tracks. The evening of 14 July 2011 was devoted to a search for the presence of the endangered Hawaiian Hoary Bat (*Lasiurus cinereus semotus*). A Petterson electronic AB Ultrasound Detector D 100 was used to listen for echolocating bats at several sites throughout the property and along the roads.

Weather during the survey was generally clear with some light passing showers in the early morning and evening. Winds were moderate 10-15 mph. Scientific and common vernacular names used in this report follow Honacki et al. (1982) and Pyle (2001).

RESULTS AND DISCUSSION

Native Land Birds:

No native land birds were observed on the survey. The only species that might occur in this area is the Hawaiian Short-eared Owl or Pueo (*Asio flammeus sandwichensis*) (Pratt et al. 1987, Hawaii Audubon Society 2005). The Pueo is listed by the State of Hawaii as endangered on Oahu but not on Kauai. They forage over an array of habitats including: forests, grasslands, agricultural fields. They nest on the ground in high, dense grass (Hawaii Audubon Society 2005).

Native Waterbirds:

No native waterbirds were observed nor were any expected in this area of the proposed project. Reservoirs and other water features in the greater Kalaheo area provide habitat for native waterbirds.

Migratory Shorebirds:

At this time of year migratory shorebirds are on their breeding grounds in the arctic and subarctic. They winter in Hawaii between August and April. The only species that would potentially occur in the area would be the Pacific Golden-Plover or Kolea (*Pluvialis fulva*). Kolea forage for insects on lawns and other open habitats in Hawaii. They can also be seen in agricultural fields and pastures (Pratt et al. 1987, Hawaii Audubon Society 2005). They are not a threatened or endangered species. No other migratory shorebirds would be expected.

Seabirds:

No seabirds would be expected in the area of this proposed project.

Alien (Introduced) Birds:

The property covered by this faunal survey contained the usual array of introduced birds typical of similar habitats elsewhere on Kauai (Pratt et al. 1987, Hawaii Audubon Society 2005). Table One notes the species recorded on this survey. None of these are listed as endangered or threatened.

Mammals:

The only feral mammals recorded on the survey were Rats (*Rattus spp.*), Mice (*Mus musculus*), feral cats (*Felis catus*) and Pig (*Sus scrofa*). No endangered Hawaiian Hoary Bats were detected by the ultrasound device during an evening search of the area conducted on 14 July 2011. The Hawaiian Hoary Bat roosts solitarily in trees. They forage for flying insects in a wide variety of habitats including forests, agricultural lands, urban areas, as well as over bays and ponds (Tomich 1986, Kepler and Scott 1990, Jacobs 1991, 1993, Reynolds et al. 1998, and Bonaccorso 2008 pers. comm.) They are most abundant on Kauai and the Big Island (Tomich 1986). Although they were not recorded on this survey it does not mean they can't on occasion occur in this area.

EXECUTIVE SUMMARY AND RECOMMENDATIONS

This survey found the typical assemblage of non-native (alien) birds and mammals on and near the proposed project lands. No endangered or threatened avian species were observed nor expected given the elevation and disturbed habitats in this area. I know of no published Hawaiian Hoary Bat sightings for the immediate area involved in this project. However, because they forage over a wide variety of habitats it is possible they could on occasion occur at this location. Bonaccorso (2008 pers. comm.) has conducted extensive research on the Hawaiian Hoary Bat on the island of Hawaii. He recommends that trees in a project area not be cut or disturbed between the months of April and August if there is any current evidence bats occur in the area. At this time of year young flightless bats are left in the tree while their mother forages.

TABLE ONE

Alien (Introduced Birds) found on a 14,15 July 2011 field survey of property and nearby lands involved in the proposed County of Kauai Department of Water Project at Kalaheo, Kauai.

Common Name	Scientific Name
Red Jungle Fowl	<i>Gallus gallus</i>
Spotted Dove	<i>Streptopelia chinensis</i>
Zebra Dove	<i>Geopelia striata</i>
White-rumped Shama	<i>Copsychus malabaricus</i>
Hwamei	<i>Garrulax canorus</i>
Japanese White-eye	<i>Zosterops japonicus</i>
Common Myna	<i>Acridotheres tristis</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>
House Finch	<i>Carpodacus mexicanus</i>
Nutmeg Mannikin	<i>Lonchura punctulata</i>

SOURCES CITED

- Bonaccorso, F.J.** USGS, Pacific Island Ecosystems Research Center, Kilauea Field Station Hawaii Volcanoes National Park, Hawaii.
- Hawaii Audubon Society.** 2005. Hawaii's Birds, sixth edition. Hawaii Audubon Society, Honolulu. 141pp.
- Honacki, J.K., K.E. Kinmann and Koepl.** Ed. 1982. Mammal species of the world: A taxonomic and geographic reference. Allen Press, Inc. and the Association of Systematic Collections. Lawrence, Kansas 694pp.
- Jacobs, D.S.** 1991. The distribution and abundance of the endangered Hawaiian Hoary Bat (*Lasiurus cinereus semotus*) on the island of Hawaii. Unpubl ms. for University of Hawaii, Department of Zoology.
- _____ 1993. Foraging behavior of the endangered Hawaiian Bat (*Lasiurus cinereus semotus*). Final report U.S. Fish Wildlife Service. Grant No 14-48-0001-91580.
- Kepler, C.B. and J.M. Scott.** 1990. Notes on the distribution and behavior of the endangered Hawaiian Hoary Bat (*Lasiurus cinereus semotus*), 'Elepaio 50(7):59-64.
- Pratt, H.D., P.L. Bruner and D.G. Berrett.** 1987. A field guide to the birds of Hawaii and the tropical Pacific. Princeton, New Jersey. 409pp.
- Pyle R.L.** 2002. Checklist of the birds of Hawaii -- 2002. 'Elepaio 62(6):137-148.
- Reynolds, M.H., B.M.B. Nielsen, and D.J. Jacobi.** Survey on the Hawaiian Hoary Bat in the District of Puna, Hawaii Island. 'Elepaio 57(9):153-157.
- Tomich, P.Q.** 1986. Mammals in Hawaii. Bishop Museum Press. Honolulu. 275pp.

**BOTANICAL SURVEY OF THE
KAUA‘I DEPARTMENT OF WATER
PROPOSED CONSTRUCTION SITES AT
KALAHEO**

by

**Art Whistler, Ph.D.
Isle Botanica
Honolulu, Hawaii**

Report prepared for

Belt Collins Hawaii Ltd.

May 2011

INTRODUCTION

The County Department of Water (DOW) is proposing to upgrade its water system in upland Kalaheo with replacement waterlines, storage tanks, and possibly a well. To do so, a botanical survey is needed to determine what effect, if any, the proposed construction will have on native plants and vegetation. The study area lies about 2 miles north of Kalaheo near the north end of Pu'ulima Road, and comprises three parcels and some of the roads connecting them together (see Fig. 1). The largest site, called the "Clearwell Parcel" comprises approximately 4 acres of land situated in a clearing in a plantation forest. It is accessed by means of a short unpaved road that leads to it from an unnamed, unpaved road leading off from the north end of Pu'ulima Road.

The second site, called the "Yamada Tank Parcel," is situated about a half mile southeast of the Clearwell Parcel, and comprises approximately 0.7 acres presently occupied by an abandoned house and its associated overgrown vegetation. The third site, called the "Nursery Parcel," is located directly across Pu'uwai Road from the Yamada Tank Parcel. It comprises approximately 1.94 acres and is presently occupied by an abandoned nursery surrounded by a chain-link fence. The roads to be surveyed comprise the unpaved one leading up to Clearwell Parcel, and the paved road leading south from the other two parcels and eventually ending up in front of the gate of a water tank ("908 Tank" in Fig. 1). These roads are shown in blue in Fig. 1. All three sites and the sides of the connecting roads are heavily disturbed, and native vegetation is nowhere to be found in the area.

Previous Studies

Very few studies have been carried out in the area, and only one was located in the library of the Office of Environmental Quality Control, that one for the "Yamada Tank Parcel" that was part of its acquisition for the current proposed project. That report (Belt Collins Hawai'i 2010) noted in its brief flora section that "Mature vegetation occupies approximately 65 percent of the property. Introduced species as well as invasive plants are predominant. The notable varieties include bamboo, strawberry guava, Christmas berry, eucalyptus, koa haole, sword fern, pothos, and wedelia. None of these species are rare, threatened, or endangered."

The current status of any endangered species previously reported from the surrounding area was checked using the official database of Threatened and Endangered Plant Species (USFWS 2005). This list is identical to the State of Hawai'i list of Threatened and Endangered species. In addition, the Hawai'i Natural Heritage Program database (Anon. 2005) of federally listed plant species was checked for any possible Threatened and Endangered Plant Species found in the area, but none were found.

METHODOLOGY

After the literature review, a botanical field survey was conducted on the three parcels and the designated roads between them by principal investigator (Art Whistler) on 21 May 2011. A "walk-through survey" was employed, and all plant species encountered were recorded, along with an indication of their frequency. Particular care was taken in looking for any federally listed Threatened or Endangered Plant species. However, their presence on the site would be highly unlikely due to the extensive disturbance, both past and present, that has occurred in the

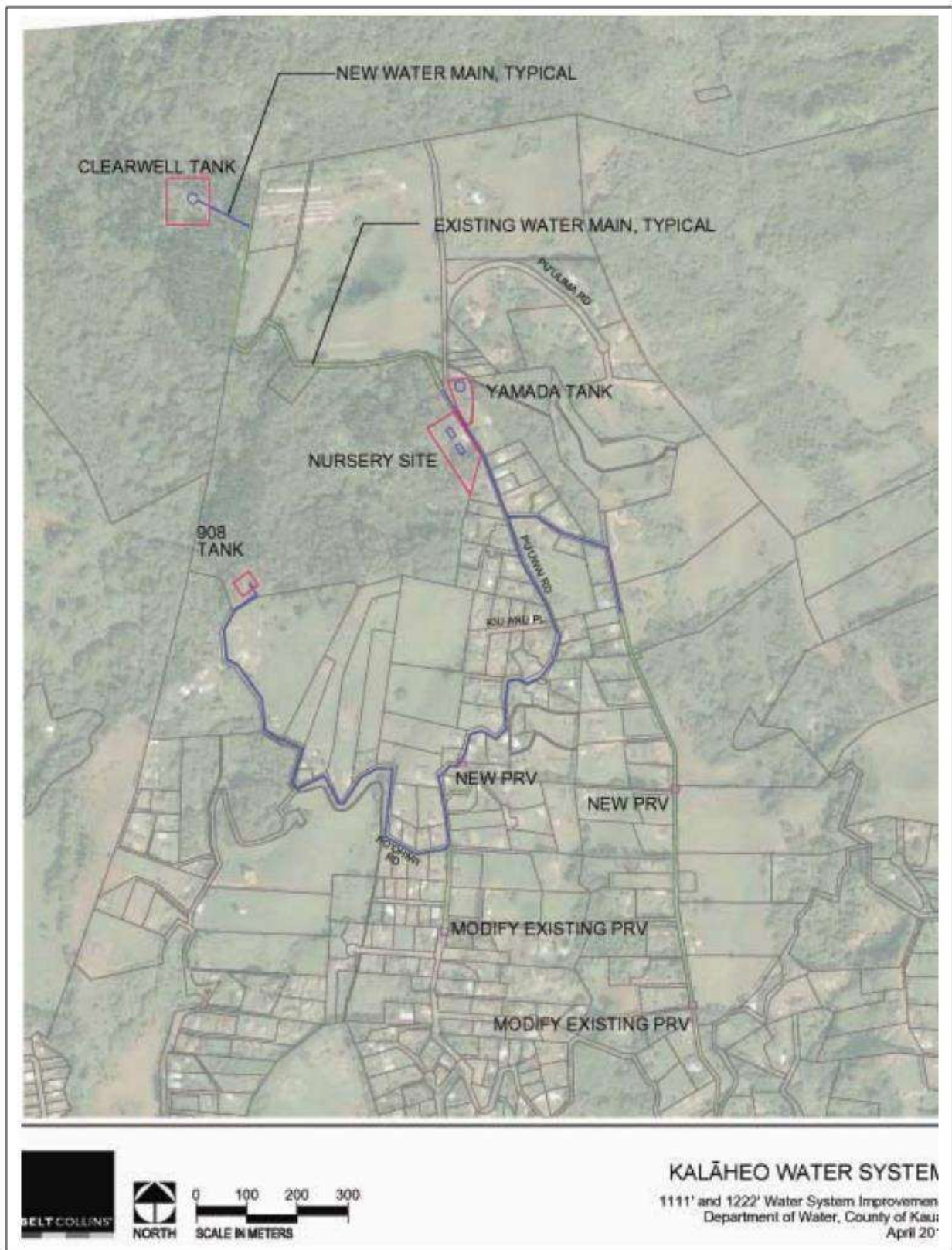


Fig. 1. Map of the Kalaheo Study Area

study area. All of the species encountered during the fieldwork were familiar to the Principal Investigator and were identified in the field. The species encountered on the three parcels were incorporated into a checklist of all plants found at the study site (see Table 1). Notes were taken on vegetation types present on the three parcels, indicating the dominance and frequency of the plant species found there. These notes were written up into the vegetation description below.

After the parcels were studied, the Principal Investigator walked the roads designated in blue in Fig. 1. These roadsides were so disturbed and dominated by hedges, lawns, and other disturbed vegetation that no species lists were made because most of plants found there were ornamentals and lawn grasses. Afterwards a general description of the vegetation types present at the site was written, which included a checklist of all species found during the study.

RESULTS

Flora

One hundred eight plant species were recorded in the study area (see Table 1). Only two of these are native, the indigenous fern ally called moa (*Psilotum nudum*) and the grass kukae pua'a (*Digitaria setigera*); no endemic species were found. Endemic plants are species restricted to a single region or area, i.e., in the case of Hawai'i, they are found only in Hawai'i. Indigenous species, however, can be rare in Hawai'i, but may be common elsewhere in the Pacific. Over 90% of the native plants in Hawai'i are endemic, one of the highest rates in the world. In biodiversity terms, the endemic status is the more important of the two categories, since if an endemic species is endangered or threatened in Hawai'i, it would likewise be classified globally. The indigenous species are listed with an "I" in the table.

Four of the 108 species are Polynesian introductions (listed as "P" in Table 1): 'ihi (*Oxalis corniculata*), banana (*Musa Xparadisiaca*), ki (*Cordyline fruticosa*), and popolo (*Solanum americanum*). All are common in Hawai'i. The majority of the 108 species encountered during the surveys are naturalized or weedy "alien" (listed as "XN" in Table 1) plants that were accidentally or intentionally introduced to Hawai'i, but which have now become established in the islands and can spread on their own. The remaining plants are alien species that are restricted to cultivation, i.e., they do not reproduce and spread by themselves. These are mostly ornamentals, and are listed in Table 1 as "XC."

Vegetation

Three types of vegetation can be recognized at the study site: (1) Managed Land Vegetation; (2) Plantation Forest; and (3) Artificial Marsh. All of these are classified as disturbed vegetation, and only two native species was encountered in them. The three types of vegetation are described below.

(1) Managed Land Vegetation

This comprises the vegetation, sometimes referred to as "Ruderal Vegetation," on areas that are under periodic or frequent management, such as roadsides, lawns, and gardens. The Clearwell Parcel comprised a large of area of this vegetation that surrounds the used and abandoned structures present on the site (Fig. 2). It is dominated by a number of alien weedy species such as ageratum (*Ageratum conyzoides*), goosegrass (*Eleusine indica*), wedelia (*Wedelia*

trilobata), and narrow-leafed plantain (*Plantago lanceolata*), as well as lesser amounts of other weedy species. On the edges of the dirt road that runs around much of the perimeter are large patches of the formerly cultivated ornamental plants that have maintained themselves. This includes white ginger (*Hedychium coronarium*), Chinese taro (*Alocasia cucullata*), tannia (*Xanthosoma sagittifolium*), red spiral ginger (*Costus woodsonii*), bougainvillea (*Bougainvillea glabra*), and many other species. In some places the ground is covered with dense patches of wedelia. These ornamentals appear to have been planted for landscaping, and have persisted up until now. No native species were found in this vegetation.

The whole Nursery Parcel is covered with Managed Land Vegetation (Fig. 3). It is dominated by weeds such as beggar's tick (*Bidens pilosa*), wedelia, *Galinsoga parviflora* (no common name), sigesbeckia (*Sigesbeckia orientalis*), ageratum, and buttonweed (*Spermacoce assurgens*), as well as lesser amounts of many other species. The area appears to be maintained by periodic weed-whacking, which prevents them from getting too tall and dense.

The open areas of the Yamada Tank Parcel are covered with Managed Land Vegetation (Fig. 4). This is in the form of lawns dominated by the large crabgrass (*Digitaria ciliaris*), and plantings of hedges and ornamental or fruit trees such as mango and avocado. In some places, there is a dense ground cover of wedelia, particularly along the edge of the forest that covers the west side of the parcel. A large clump of bamboo (*Bambusa vulgaris*) is found on the site, the leaves of which often cover the ground, preventing most herbaceous species from growing there. In areas that are not mown, weeds such as hairy swordfern (*Nephrolepis multiflora*), honohono (*Commelina diffusa*), and Guinea grass (*Panicum maximum*) are sometimes dominant.

Nearly all of the roadsides between the sites are dominated by Managed Land Vegetation dominated by weedy species in open areas and ornamentals and lawn grasses in residential areas. The one exception to this is the road leading to the Clearwell Parcel. It goes through a forest dominated by swamp mahogany (*Eucalyptus robusta*), the canopy of which produces a dense shade that allows little light for herbaceous species to grow, and hence these roadsides are mostly devoid of vegetation (Fig. 5).

(2) Plantation Forest

This is forest that is dominated by trees that have been replanted in a revegetation scheme. It is best represented at the Clearwell Parcel, where it surrounds the clearing in which the buildings and tanks are located (Fig. 6). It is dominated by two species, Norfolk Island pine (*Araucaria heterophylla*) and albizia (*Albizia chinensis*). In clearings and on the edges of the forest, the smaller moho (*Heliocarpus popayanensis*) is sometimes common, but this light-loving tree is unable to grow in the dense shade of the forest. Very little else grows in the dense shade, and the forest floor is sometimes dominated by seedlings of the Norfolk Island pine. This forest, consequently, has a very low biodiversity, and no native species were found here.

There is a patch of forest on the western portion of the Yamada Tank Parcel. It is dominated by swamp mahogany (*Eucalyptus robusta*), with an understory of smaller strawberry guava (*Psidium cattleianum*), guava (*Psidium guava*), and Christmas berry (*Schinus terebinthifolius*). The shady areas of this forest were largely devoid of ground cover, but large patches of wedelia (*Wedelia trilobata*) are found along the margins. No native species were found here.

(3) Artificial Marsh

This type of vegetation is dominated herbaceous plants that are adapted to constantly wet soil. It was found in only one location in the study area, next to the tank at the Clearwell Parcel (Fig. 7). It seems to be growing in a filled-in tank or water retaining area, and thus cannot be classified as a wetland that would need protecting. It is also very small in extent. The dominant species are watercress (*Nasturtium officinale*), *Pycneus polystachyos* (no common name), and wedelia (*Wedelia trilobata*), and lesser amounts of several other wetland-loving species, none of which are native.

DISCUSSION AND CONCLUSIONS

One hundred eight vascular plant species were recorded at the study site, two of them indigenous and none endemic. Both indigenous species are common in Hawai'i and elsewhere in the Pacific, and neither is classified as Threatened or Endangered by the U.S. Fish and Wildlife Service (2005). No threatened or endangered plant species have ever been recorded in the area, according to the Natural Heritage Program database (Anon. 2005) of Federally Listed plant species. Because of the extensive and pervasive nature of the disturbance to the study area, it is unlikely that any Threatened or Endangered Plant Species would be found there in the future. No undisturbed native vegetation or other sensitive types of vegetation occur in the study area. Because there are no endemic species, native vegetation, or wetlands present in the study area, there are no botanical impediments to carrying out the proposed construction.

LITERATURE CITED

- Anon. 2005 (Revised). Hawai'i Natural Heritage Program Database. Hawai'i Natural Heritage Program, Honolulu.
- Belt Collins Hawaii. 2010. Draft environmental assessment, land parcel acquisition, Kalaheo, Kaua'i, Hawai'i. Mimeo., prepared for the Department of Water, County of Kaua'i.
- Porter, J. R. 1972. Hawaiian names for vascular plants. University of Hawai'i College of Tropical Agriculture Experimental Station Paper 1:1-64.
- St. John, H. 1973. List and summary of the flowering plants in the Hawaiian Islands. Pacific Tropical Botanical Garden Memoir 1: 1-519.
- U.S. Fish and Wildlife Service (USFWS). 2005. Endangered and Threatened Wildlife and Plants. 50CFR 17:11 and 17:12 (Tuesday, November 1, 2005).
- Wagner, W.L., D.R. Herbst, and S.H. Sohmer. 1999. Manual of the flowering plants of Hawai'i. University of Hawai'i Press and Bishop Museum Press, Honolulu. 2 vols.

TABLE 1. PLANT SPECIES CHECKLIST

The following is a checklist of the vascular plants inventoried during the field study on the three parcels of the Kalaheo Water System sites. The plants are divided into four groups, Ferns (including fern allies), Gymnosperms, Monocots, and Dicots. Within these groups, the species are presented taxonomically by family, with each family and each species in the family in alphabetical order. The taxonomy and nomenclature of the ferns follow Palmer 2003 and the flowering plants (Monocots and Dicots) follow Wagner *et al.* (1999). In most cases, common English and/or Hawaiian names listed here have been taken from St. John (1973) or Porter (1972).

For each species, the following information is provided:

1. Scientific name with author citation.
2. Common English and/or Hawaiian name, when known.
3. Biogeographic status. The following symbols are used.
 - E = endemic (found only in Hawai‘i).
 - I = indigenous (native to Hawai‘i as well as other geographic areas).
 - P = Polynesian introduction (introduced to Hawai‘i by Polynesians before the advent of the Europeans).
 - X = Introduced or alien (not native, introduced to Hawai‘i, either accidentally or intentionally, after the advent of the Europeans).
4. Relative frequency (abundant, locally abundant, common, locally common, occasional, uncommon, rare).

Species	Common Names	Status ¹	Distribution ²
FERNS AND FERN ALLIES			
NEPHROLEPIDACEAE (Sword Fern Family)			
<i>Nephrolepis multiflora</i> (Roxb.)	hairy swordfern	XN	1 -- 3
POLYPODIACEAE (Common Fern Family)			
<i>Phlebodium aureum</i> (L.) J. Sm.	laua‘e-haole	XN	1 -- 3
PSILOACEAE (Psilotum Family)			
<i>Psilotum nudum</i> L.	moa	I	-- -- 3
THELYPTERIDACEAE (Downy Woodfern Family)			
<i>Christella parasitica</i> (L.) Leville	oak fern	XN	1 2 --
GYMNOSPERMS			
ARAUCARIACEAE (Araucaria Family)			
<i>Araucaria heterophylla</i> (Salisb.) Franco	Norfolk Island pine	XC	1 -- --

Species	Common Names	Status ¹	Distribution ²			
MONOCOTS						
AGAVACEAE (Agave Family)						
<i>Cordyline fruticosa</i> (L.) A. Chev.	ti, ki	P	1	2	--	--
<i>Dracaena fragrans</i> (L.) Ker Gawler	fragrant dracaena	XC	1	--	--	--
AGAVACEAE (cont'd.)						
<i>Dracaena marginata</i> Lam.	red-edged dracaena	XC	--	--	3	
<i>Sansevieria fasciata</i>	bowstring hemp	XC	1	--	--	
Cornu ex Gérome & Labroy						
AMARYLLIDACEAE (Amaryllis Family)						
<i>Hemerocallis fulva</i> (L.) L.	orange day-lily	XC	--	--	3	
ARACEAE (Arum Family)						
<i>Alocasia cucullata</i> (Lour.) G. Don	Chinese taro	XC	1	--	--	
<i>Epipremnum pinnatum</i> (L.) Engl.	pothos	XC	1	--	3	
<i>Philodendron lacerum</i> (Jacq.) Schott	-----	XC	1	--	--	
<i>Philodendron scandens</i> (Schott) Bunting	heart-leaved philodendron	XC	1	--	--	
<i>Xanthosoma sagittifolium</i> (L.) Schott	tannia	XC	1	--	--	
COMMELINACEAE (Spiderwort Family)						
<i>Commelina diffusa</i> N. L. Burm.	honohono	XN	--	--	3	
CYPERACEAE (Sedge Family)						
<i>Pycnus polystachyos</i> (Rottb.) P. Beauv.	-----	XN	1	2	--	
<i>Torulinium odoratum</i> (L.) S. Hooper	-----	XN	--	2	--	
MUSACEAE (Banana Family)						
<i>Musa xparadisiaca</i> L.	banana	P	--	--	3	
POACEAE (Grass Family)						
<i>Bambusa vulgaris</i> Schrader ex Wendl.	bamboo	XC	--	--	3	
<i>Brachiaria mutica</i> (Forssk.) Stapf	California grass	XN	--	--	3	
<i>Chloris radiata</i> (L.) Sw.	radiate fingergrass	XN	1	2	--	
<i>Digitaria cf. ciliaris</i> (Retz.) Koeler	large crabgrass	XN	--	--	3	
<i>Digitaria setigera</i> Roth	kukaepua'a	I	--	2	--	
<i>Digitaria violascens</i> Link?	violet crabgrass	XN	--	2	--	
<i>Eleusine indica</i> (L.) Gaertn.	goose grass	XN	1	2	--	
<i>Leptochloa uninervia</i>						
(K. Presl) Hitchc. & Chase	-----	XN	1	--	3	
<i>Oplismenus compositus</i> (L.) P. Beauv.	-----	XN	1	--	--	
<i>Panicum maximum</i> Jacq.	Guinea grass	XN	1	2	3	
<i>Paspalum conjugatum</i> Bergius	t-grass	XN	1	--	--	
<i>Paspalum fimbriatum</i> Kunth	fimbriate paspalum	XN	1	2	--	
<i>Paspalum dilatatum</i> Poir.?	dallis grass	XN	1	--	--	
<i>Pennisetum purpureum</i> Schumach.	elephant grass	XN	1	--	3	
<i>Sacciolepis indica</i> (L.) Chase	Glenwood grass	XN	--	2	--	
<i>Setaria palmifolia</i> (J. Koenig) Stapf	palm grass	XN	1	--	--	
<i>Sporobolus diander</i> (Retz.) P. Beauv.	dropseed	XN	--	--	3	

Species	Common Names	Status ¹	Distribution ²		
ORCHIDACEAE (Orchid Family)					
<i>Phaius tankervilleae</i> (Banks ex L'Her.) Bl.	Chinese ground orchid	XN	--	--	3
ZINGIBERACEAE (Ginger Family)					
<i>Costus woodsonii</i> Maas	red spiral ginger	XC	1	--	--
<i>Hedychium cornorarium</i> Koenig	white ginger	XC	1	--	--
DICOTS					
ACANTHACEAE (Acanthus Family)					
<i>Pseuderanthemum reticulatum</i> (W. Bull) Radlk.	el dorado	XC	1	--	--
Acanthaceae sp. indet.		XC	1	--	--
ANACARDIACEAE (Mango Family)					
<i>Mangifera indica</i> L.	mango	XC	--	--	3
<i>Schinus terebinthifolius</i> Raddi	Christmas berry	XN	1	--	3
APIACEAE (Carrot Family)					
<i>Centella asiatica</i> (L.) Urb.	Asiatic pennywort	XN	1	--	--
APOCYNACEAE (Periwinkle Family)					
<i>Allamanda cathartica</i> L.	allamanda	XC	--	--	3
ARALIACEAE					
<i>Schefflera actinophylla</i> (Endl.) Harms	octopus tree	XN	1	--	3
ASTERACEAE (Sunflower Family)					
<i>Ageratum conyzoides</i> L.	ageratum	XN	1	2	--
<i>Bidens pilosa</i> L.	beggar's-tick	XN	1	2	--
<i>Crassocephalum crepidioides</i> (Benth.) S. Moore	crassocephalum	XN	1	2	--
<i>Elephantopus mollis</i> Kunth	elephant's-foot	XN	1	--	--
<i>Emilia fosbergii</i> Nicolson	red pualele, emilia	XN	--	2	--
<i>Galinsoga parviflora</i> Cav.	-----	XN	1	2	--
<i>Sigesbeckia orientalis</i> L.	sigesbeckia	XN	1	2	--
<i>Sonchus oleraceus</i> L.	sow thistle	XN	1	--	--
<i>Synedrella nodiflora</i> (L.) Gaertn.	synedrella	XN	1	--	--
<i>Wedelia trilobata</i> (L.) Hitchc.	wedelia	XN	1	2	3
<i>Youngia japonica</i> (L.) DC.	Oriental hawksbeard	XN	1	2	--
BRASSICACEAE (Mustard Family)					
<i>Nasturtium officinale</i> W.T. Aiton	watercress	XC	1	--	--
CUSCUTACEAE (Dodder Family)					
<i>Cuscuta campestris</i> Yuncker	dotter	XN	--	--	3
EUPHORBIACEAE (Spurge Family)					
<i>Breynia nivosa</i> (W. Bull) Small	snowbush	XC	1	--	3
<i>Chamaesyce hirta</i> (L.) Millsp.	garden spurge	XN	1	2	--
<i>Chamaesyce hypericifolia</i> (L.) Millsp.	graceful spurge	XN	1	2	--

Species	Common Names	Status ¹	Distribution ²		
EUPHORBIACEAE (cont'd.)					
<i>Chamaesyce hyssopifolia</i> (L.) Small	-----	XN	--	2	--
<i>Phyllanthus debilis</i> Klein ex Willd.	phyllanthus weed	XN	--	2	--
<i>Phyllanthus tenellus</i> Roxb.	-----	XN	1	--	--
<i>Ricinus communis</i> L.	castor bean	XN	1	--	--
FABACEAE (Pea Family)					
<i>Acacia confusa</i> Merr.	Formosan koa	XC	--	--	3
<i>Albizia chinensis</i> (Osbeck) Merr.	albizzia	XN	1	--	--
<i>Chamaecrista nictitans</i> (L.) Moench	partridge pea, lau-ki	XN	1	2	--
<i>Crotalaria incana</i> L.	fuzzy rattlepod	XN	1	--	--
<i>Desmanthus pernambucanus</i> (L.) Thellung	virgate mimosa	XN	1	--	--
<i>Desmodium incanum</i> DC.	Spanish clover	XN	--	--	3
<i>Indigofera suffruticosa</i> Mill.	indigo, 'iniko	XN	1	--	--
<i>Leucaena leucocephala</i> (Lam.) de Wit	koa haole	XN	1	2	3
<i>Mimosa pudica</i> L.	sensitive plant	XN	1	--	3
<i>Trifolium repens</i> L.	white clover	XN	--	--	3
LAURACEAE (Laurel Family)					
<i>Persea americana</i> Mill.	avocado	XC	--	--	3
LYTHRACEAE (Loosestrife Family)					
<i>Cuphea carthagenensis</i> (Jacq.) Macbr.	tarweed	XN	1	2	--
MALVACEAE (Mallow Family)					
<i>Malvastrum coromandelianum</i> (L.) Garcke	false mallow	XN	1	--	3
<i>Malvaviscus penduliflorus</i> A.P. de Candolle	Turk's cap	XC	1	--	--
<i>Sida rhombifolia</i> L.	Cuba jute	XN	1	--	3
MORACEAE (Mulberry Family)					
<i>Ficus microcarpa</i> L. f.	Chinese banyan	XN	1	--	3
MYRSINACEAE (Myrsine Family)					
<i>Ardisia elliptica</i> Thunb.	shoebutton ardisia	XN	1	--	3
MYRTACEAE (Myrtle Family)					
<i>Eucalyptus robusta</i> Sm.	swamp mahogany	XC	--	--	3
<i>Pimentia dioeca</i> (L.) Merr.	allspice	XN	1	--	--
<i>Psidium cattleianum</i> Sabine	strawberry guava	XN	1	--	3
<i>Psidium guajava</i> L.	guava	XN	--	--	3
NYCTAGINACEAE (Four-o'clock Family)					
<i>Bougainvillea glabra</i> Choisey	bougainvillea	XC	1	--	--
ONAGRACEAE (Evening Primrose Family)					
<i>Ludwigia octovalvis</i> (Jacq.) Raven	primrose willow	XN	--	2	--
OXALIDACEAE (Wood-Sorrel Family)					
<i>Oxalis corniculata</i> L.	wood sorrel	P	1	2	--
<i>Oxalis debilis</i> Kunth	pink wood-sorrel	XN	1	--	--
PASSIFLORACEAE (Passionflower Family)					
<i>Passiflora edulis</i> Sims	passionfruit, liliko'i	XN	1	--	--

Species	Common Names	Status ¹	Distribution ²		
PLANTAGINACEAE (Plantain Family)					
<i>Plantago lanceolata</i> L.	narrow-leaved plantain	XN	1	2	--
<i>Plantago major</i> L.	broad-leaved plantain	XN	--	--	3
POLYGALACEAE (Milkwort Family)					
<i>Polygala paniculata</i> L.	bubblegum plant	XN	1	--	--
PRIMULACEAE (Primrose Family)					
<i>Anagallis arvensis</i> L.	scarlet pimpernel	XN	1	--	--
ROSACEAE (Rose Family)					
<i>Rubus rosifolius</i> Sm.	thimbleberry	XN	1	--	--
RUBIACEAE (Coffee Family)					
<i>Coffea arabica</i> L.	coffee	XN	1	--	--
<i>Paederia scandens</i> (Lour.) Merr.	maile pilau	XN	--	--	3
<i>Spermacoce assurgens</i> Ruiz & Pav.	buttonweed	XN	1	2	--
SAPOTACEAE (Sapodilla Family)					
<i>Chrysophyllum oliviforme</i> L.	satinleaf	XN	--	--	3
SCROPHULARIACEAE (Snapdragon Family)					
<i>Castilleja arvensis</i> Cham. & Schlechtend.	Indian paintbrush	XN	--	--	3
SOLANACEAE (Nightshade Family)					
<i>Physalis peruviana</i> L.	poha	XN	1	--	--
<i>Solanum americanum</i> Mill.	black nightshade, popolo	P	1	--	--
TILIACEAE (Linden Family)					
<i>Heliocarpus popayanensis</i> Kunth	moho	XN	1	--	--
<i>Triumfetta semitrilobata</i> Kunth	burbush	XN	1	2	--
URTICACEAE (Nettle Family)					
<i>Pilea microphylla</i> (L.) Liebm.	rockweed	XN	1	2	--
VERBENACEAE (Verbena Family)					
<i>Stachytarpheta cayennensis</i> (Rich.) Vahl	blue rat's-tail	XN	1	--	--

¹XC = alien cultivar; XN = alien naturalized (weed); I = indigenous; and P = Polynesian introduction

²1 = Clear Well Site; 2 = Nursery; and 3 = Yamada property.



Fig. 2. Managed land at the Clearwell Parcel.



Fig. 3. Managed Land at the Nursery Parcel.



Fig. 4. Managed Land at the Yamada Tank Parcel.



Fig. 5. Plantation Forest along the road to the Clearwell Parcel.



Fig. 6. Plantation Forest at the Clearwell Parcel.



Fig. 7. Artificial Marsh at the Clearwell Parcel.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawaii 96850

In Reply Refer To:
01EPIF00-2020-I-0289

June 12, 2020

Ms. Joanna L. Seto, P.E., Chief
State of Hawaii
Department of Health
Safe Drinking Water Branch
Uluakupu Bldg. 4
2385 Waimano Home Road, Suite 110
Pearl City, Hawaii 96782

Subject: Informal Consultation for Kalaheo Water System Improvements, Project No: K-01, K-12, Packages A, B and C, Kalaheo, Kauai, Hawaii

Dear Ms. Seto:

The U.S. Fish and Wildlife Service (Service) received your letter and enclosures on April 17, 2020 requesting our concurrence with your determination that the Kalaheo Water System Improvements, Project No: K-01, K-12, Packages A, B, and C, may affect, but is not likely to adversely affect, the following federally listed species: the endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*).

The findings and recommendations in this consultation are based on the following: 1) your informal consultation request; 2) your enclosed fauna and flora surveys (Exhibits A and B respectively and 3) other information available to us. This response is in accordance with section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 *et seq.*).

Project Description

The proposed work would entail building one new 0.5 million gallon (MG) water storage tank, one new 0.1-MG water storage tank and the installation of 11,600 linear feet of water lines and other water system appurtenances in Kalaheo, Kauai to improve the public water system. No nighttime work is scheduled to occur and no woody vegetation greater than 15 feet high within the project area will be disturbed, removed or trimmed during the bat birthing and pup rearing season (June 1 through September 15). Three strands of barbed wire will be installed around each water tank, the total amount to be installed is 3,241 linear feet.

**INTERIOR REGION 9
COLUMBIA-PACIFIC NORTHWEST**

IDAHO, MONTANA*, OREGON*, WASHINGTON
*PARTIAL

**INTERIOR REGION 12
PACIFIC ISLANDS**

AMERICAN SAMOA, GUAM, HAWAII, NORTHERN
MARIANA ISLANDS

Consequences of the Proposed Action on Hawaiian hoary bat

You indicated that the Hawaiian hoary bat may potentially forage in the area, primarily in the early evening hours. However, construction activities will primarily occur during daytime hours. In addition, the proposed improvements would be primarily limited to areas that have already been developed. You indicated that in order to minimize adverse impacts to the Hawaiian hoary bat, woody plants greater than 15 feet tall will not be removed or trimmed during the bat breeding and pupping season (June 1 through September 15).

The project description states that barbed wire is included at the top of the perimeter fencing at the two reservoir sites for security purposes and in accordance with DOW standards. Three strands of barbed wire will be installed around each water tank, the total amount to be installed is 3,241 linear feet (0.61 miles). Hawaiian hoary bats forage for insects from as low as three feet to higher than 500 feet above the ground and can become entangled in barbed wire used for fencing. Hawaiian hoary bats are more vulnerable to barbed wire fences that occur in open areas rather than fences in forested areas. Based on the vegetation survey you provided, the project sites are a mix of alien forest and managed vegetation, thus they are not open areas. The best estimate of bat mortalities with barbed wire fences are from Haleakala National Park where they observed 1.3 bats killed per 100 miles (161 kilometers) per year. However, we have evaluated the risk of potential impacts from the use of barbed wire for this project based on that information and risk to Hawaiian hoary bat including the lifespan of your proposed fence it is unlikely and therefore discountable.

By implementing the above conservation measures, it is not probable that adult or young Hawaiian hoary bats will be impacted since no woody vegetation greater than 15 feet will be cleared during the pupping season. Therefore, the impacts are discountable. It is also discountable that the Hawaiian hoary bats will be impacted by the barbed wire on fencing. Because impacts from the proposed project are discountable, we concur with your determination that the proposed project may affect, but is not likely to adversely affect the Hawaiian hoary bat.

Summary

Based upon the above, we concur that the proposed project may affect, but is not likely to adversely affect, the endangered Hawaiian hoary bat within the project area. Reinitiation of consultation is required and shall be requested by the Federal agency or by the Service, where discretionary Federal involvement or control over the action has been retained or is authorized by law and:

- 1) If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;
- 2) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the written concurrence; or,
- 3) If a new species is listed or critical habitat designated that may be affected by the identified action.

If you have any questions or concerns regarding this consultation, please contact Michelle Clark, Fish and Wildlife Biologist (phone: 808-457-7276, email: michelle_clark@fws.gov). When referring to this project, please include this reference number: 01EPIF00-2020-I-0289.

Sincerely,

Aaron

Nadig

Island Team Manager

Oahu, Kauai, Northwestern Hawaiian
Islands and American Samoa

Digitally signed by

Aaron Nadig

Date: 2020.06.12

12:21:47 -10'00'

DAVID Y. IGE
GOVERNOR OF HAWAII



BRUCE S. ANDERSON, Ph.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
SAFE DRINKING WATER BRANCH
ULUAKUPU BLDG. 4
2385 WAIMANO HOME ROAD, SUITE 110
PEARL CITY, HI 96782

In reply, please refer to:
File: SDWB
Downer46.docx

April 29, 2020

Alan S. Downer, Ph.D.
Administrator, Deputy State Historic Preservation Officer
State Historic Preservation Division
Kākuhihewa Building
601 Kamokila Boulevard, Suite 555
Kapolei, HI 96707
[via DLNR.Intake.SHPD@hawaii.gov]

Dear Dr. Downer:

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation Initiation and Request for Concurrence of No Historic Properties Affected Determination
Kalāheo Water System Improvements, Job No. K-01, K-12
Package A—0.5 MG Yamada Reservoir
Package B—0.1 MG Clearwell Reservoir (1238.5' Overflow)
Package C—Water Main Installation
Kalāheo, Kaua'i, Hawai'i, Tax Map Keys (TMKs): (4) 2-4-003:007, 2-4-009:003, and various rights-of-way (plat maps [4] 2-4-003, 2-4-004, and 2-4-005)

On behalf of the Environmental Protection Agency (EPA), the State Department of Health (DOH) requests to initiate NHPA Section 106 consultation and obtain State Historic Preservation Officer (SHPO) concurrence on the Kalāheo Water System Improvements project effect determination of **no historic properties affected** pursuant to Title 36 of the Code of Federal Regulations (CFR) Section 800. This project will use federal funding from the State Drinking Water State Revolving Fund (DWSRF) and is therefore subject to NHPA Section 106 consultation.

Proposed Project

The Kaua'i Department of Water (DOW) is proposing to build one new 0.5-million gallon (MG) water storage tank, one new 0.1-MG water storage tank, and approximately 11,600 linear feet (LF) of water lines and install other water system appurtenances in Kalāheo, Kaua'i, to improve the water system serving the community. These improvements will help the system meet maximum daily demand storage capacity and fire flow requirements, as well as improve water pressure. The above referenced construction bid packages are described below. See **Enclosure 1** for TMK maps of the project area.

Package A includes a 0.5-MG reinforced concrete reservoir, approximately 260 LF of 12-inch diameter ductile iron pipe, approximately 120 LF of 8-inch diameter ductile iron pipe, and appurtenances; demolition; site clearing and grubbing; earthwork; concrete retaining walls; chain-link fencing; a gate; asphaltic concrete pavement; a drainage system; and grassing. The project is located at the intersection of Pu'ulima Road and Pu'uwai Road in Kalāheo, Kaua'i, Hawai'i (TMK [4] 2-4-03:007). This package includes 13,800 cubic yards of excavation over an area of 0.78 acres. The trenching for this package has a width of 2–3 feet and a depth of 3–13 feet below finished grade.

Package B includes a 0.1-MG reinforced concrete reservoir, approximately 1,315 LF of 8-inch diameter ductile iron pipe, and appurtenances; demolition; site clearing and grubbing; earthwork; a concrete retaining wall; a control building; a hydropneumatic booster pump system; a 1½-inch diameter water service lateral; chain-link fencing; a gate; a concrete access road; a cellular confinement construction access road; asphaltic concrete pavement; a drainage system; and grassing. The project is located along Pu'uwai Road in Kalāheo, Kaua'i, Hawai'i (TMK [4] 2-4-09:003). This package includes 2,254 cubic yards of excavation over an area of 1.15 acres. The trenching for this package has a width of 2–3 feet and a depth of 3.8–6.75 feet below finished grade.

Package C includes 3-, 6-, 8-, and 12-inch diameter ductile iron pipe and appurtenances; trench excavation; connections to existing waterlines; temporary waterline and temporary service connections; demolition and removal of existing waterlines and appurtenances; replacement of existing service laterals, including water meters and meter boxes; and pavement restoration. The trenching for this package is contained within the public roadway, has a width of 2–3 feet and a depth of 4.25–9 feet below finished grade. The project is in TMKs (4) 2-4-003, 2-4-004, and 2-4-005 on the following streets:

Street	12"	8"	6"	3"
Kīkala Road	—	1,150 LF	14 LF	—
Pu'uwai Road	830 LF	2,775 LF	24 LF	—
Po'ohiwi Road	—	3,151 LF	3,288 LF	34 LF
Access Road to TMK: 2-4-04-49	—	121 LF	174 LF	—
Total	830 LF	7,197 LF	3,500 LF	34 LF

Proposed Project Area

Area of Potential Effect (APE) maps (**Enclosure 2** and **Enclosure 3**) are attached to this letter. Site plans of each project package are attached as **Enclosures 4, 5** and **6**. The project area consists of two parcels, the approximately 4.0-acre Clearwell site and the approximately 1.1-acre Yamada site, in addition to the right-of-way corridor connecting the two parcels primarily along Pu'uwai Road and Po'ohiwi Road. The total APE is approximately 11.6 acres and is owned by the County of Kaua'i, except for the Clearwell site which is currently owned by the State Department of Land and Natural Resources (DLNR). The Clearwell site has been subdivided and DLNR is in the process of finalizing an executive order to have the site set aside for DOW. The recordation of the subdivision map with the State Bureau of Conveyances was recently completed.

The project area is in the mauka portion of Kalāheo Homesteads, starting approximately 1 mile north of Kaunualoi Highway. The project area is primarily bounded on the west by Pu'uwai Road and is at 850–1200 feet above mean sea level (MSL). The Clearwell site is located at the existing Kalāheo Filtration Plant about 1,200 feet above MSL. The soils at the Clearwell site are primarily comprised of Kalapa silty clay, 20–40% slopes. The Yamada site is primarily Puhi silty clay loam, 25–40% slopes. The right-of-way corridor primarily traverses Placentia sandy loam and Puhi silty clay loam, 15–25% slopes while also including Puhi silty clay loam, 3–8% slopes, and Puhi silty clay loam, 8–15% slopes. Puhi Series soils are well-drained soils derived from igneous rock while Kalapa Series soils have moderate permeability, rapid runoff and severe erosion. The project area and surrounding areas have clearly been modified by earthmoving activities associated with construction of commercial and residential structures and miscellaneous infrastructure. The Clearwell site has previously been developed with a concrete house structure (since abandoned). The Yamada site is covered with vegetation and discrete piles of a demolished building. The right-of-way corridor is primarily Pu'uwai and Po'ohiwi Road, which contain existing underground utilities and are paved with asphalt.

The Yamada site contains a demolished residence in the rear section of the parcel. This residence was constructed in the early 1950s but never completed or occupied and is currently in discrete piles within the parcel. There was a 10-foot wide water pipeline easement on the eastern boundary of the property believed to contain an abandoned 4-inch diameter pipe and a 10-foot wide water pipeline easement at the rear of the property containing an inactive 6-inch diameter pipe. As of 2015, the County of Kauai submitted a Declaration of Abandonment, Cancellation and Surrender of Right of Way, and therefore no longer has any rights or title to the easements. The Clearwell site currently houses the Kalāheo Treatment Facility, consisting of three 110,000-gallon concrete tanks. No active water treatment processes are conducted at the Clearwell site. The existing concrete tanks at the Clearwell site are used as water storage tanks. One tank was deactivated due to damages sustained from the 1992 Hurricane 'Iniki.

Potential Historic Properties

An Archaeological Literature Review and Field Inspection (ALRFI) report was completed by Cultural Surveys Hawai'i, Inc (CSH) in June 2012. See **Enclosure 10** for a copy of the ALRFI report. Site visits were conducted by CSH on April 29, May 2, and May 5, 2011. The field inspection did not identify any archaeological sites within the project area and found that most of the area had been disturbed with recent activity for transportation, residential, or commercial purposes. SHPD correspondence regarding this report consists of the attached letters (see **Enclosure 9**): Log no. 2012.3339, Doc. No. 1212SL21 and Log No. 2013.3703, Doc. No. 137GC18. CSH's report recommended no further archaeological work for the project.

CSH also completed a Cultural Impact Assessment (CIA) for the project in June 2012. See **Enclosure 11** for a copy of the CIA report. During the research for the CIA, CSH contacted SHPD, Office of Hawaiian Affairs (OHA), the Kaua'i/Ni'ihau Island Burial Council (KNIBC), and community and cultural organizations for a review of the project and to identify anyone with cultural knowledge of the area. SHPD and OHA responded with the attached letters (see **Enclosure 8**), respectively, Log No. 2011.1700, Doc. No. 1107PC003 and Doc. No. HRD11/5058D. CSH interviewed Mr. John Brune Jr; Mr. Ernie Ferreira; and Ms. Anne Punohu; these three individuals provided information about the history of the project area.

The conclusion of the CIA, based on the information gathered for the cultural and historic background and community consultation, was that the project would be unlikely to but could potentially impact Native Hawaiian cultural resources and burials.

In May 2016, CSH completed an Archaeological Inventory Survey (AIS) for the project. See **Enclosure 12** for a copy of the AIS report. The fieldwork was conducted by CSH on May 8 and June 3, 2015. The survey and report were completed in response to the attached SHPD letter (Log no. 2013.3703, Doc. No. 1307GC18), in which SHPD recommended that an AIS be completed prior to any ground-disturbing activities (see **Enclosure 9**). The attached SHPD letters (see **Enclosure 9**) Log No. 2015.03498, Doc. No. 1510MN07 and Log No. 2016.00878, Doc. No. 1604MN20 reiterated the need to conduct an AIS. The attached SHPD letter (see **Enclosure 9**) accepting the AIS is Log No. 2016.00779, Doc. No. 1605MN16. The final attached SHPD letters for Chapter 6E-8 and 6E-42 reviews, Log No. 2016.00779, Doc No. 1605MN16 and Log No. 2016.01326, Doc. No. 1605MN20, respectively, (see **Enclosure 9**) give the project a determination of "no historic properties affected".

Section 106 Consultation and Comments

A copy of the Draft Environmental Assessment (DEA) was sent to the: U.S. Army Corps of Engineers, Clean Water Branch and SDWB of the State DOH, State DLNR Land Division, State Department of Hawaiian Home Lands (DHHL), SHPD, OHA, Kaua'i County Department of Planning (KDP), Kaua'i County Department of Public Works, Kaua'i County Fire Department, Kaua'i County Police Department, Kaua'i Island Utility Cooperative (KIUC), Hawaiian Telcom, Līhu'e Regional Library, Hanepēpē Public Library, Kōloa Public Library, and two other landowners near the project area. Letters sent to the various agencies with a copy of the DEA are attached as **Enclosure 7**.

Comments on the DEA were received from the: DLNR Commission on Water Resource Management, DLNR Land division, DLNR Engineering Division, DLNR Office of Conservation and Coastal Lands, DLNR Division of State Parks, DHHL, DOH Environmental Planning Office, SDWB, and KIUC. None of the comments received from these agencies were related to project impacts on archaeological, cultural, or historic properties.

A final Environmental Assessment (EA) was completed in July 2012 by Belt Collins Hawaii LLC with a determination of Finding of No Significant Impact (FONSI). This EA was published to the Office of Environmental Quality Control (OEQC) website (http://oeqc2.doh.hawaii.gov/EA_EIS_Library/2012-07-23-KA-FEA-Kalaheo-Water-System-Improvements.pdf).

As mentioned previously in this letter, an ALRFI report and an AIS have already been submitted to SHPD for review and comment. The AIS was accepted by SHPD. In addition, a CIA was conducted for this project. Key agencies and individuals with cultural and historic knowledge of the project area were consulted as part of the CIA.

Letters were sent to Native Hawaiian Organizations (NHOs) on the attached list (see **Enclosure 13**) to initiate Section 106 consultation.

A sample letter sent to the NHOs is attached as **Enclosure 14**. NHOs and Native Hawaiian descendants with ancestral lineage or cultural ties to, cultural knowledge or concerns for, and cultural or religious attachment to the proposed project area were asked to provide a response within 30 days of notification. In addition, Section 106 notice/advertisement was published in the March 8, 2020, edition of the OEQC's *The Environmental Notice* (see **Enclosure 15**).

On March 12, 2020, Jodi Higuchi Sayegusa, Deputy Director of KDP, contacted Belt Collins Hawaii to provide documentation to help inform the County of Kaua'i Historic Preservation Review Commission (KHPRC). Belt Collins provided the requested documentation to Ms. Sayegusa.

On or about March 17, 2020, Alex Wong of KPD advised that the KHPRC wished to be updated as the Section 106 consultation progresses and that the KHPRC does not anticipate the proposed project "as being contentious." There were no comments on the proposed project work.

As of April 14, 2020, no written comments were received in response to the NHO letters or the public notice in *The Environmental Notice*.

Project Determination

Pursuant to 36 CFR §800, as EPA's delegated authority, and based on research and consultations already performed, DOH has determined that there will be **no historic properties affected** for the NHPA Section 106 consultation.

Comments and Request for Additional Information

DOH is authorizing DOW to continue the Section 106 consultation with SHPD for this project. DOW has contracted Belt Collins Hawaii LLC to coordinate directly with SHPD during the Section 106 consultation process and to address any SHPD comments. Belt Collins Hawaii LLC is DOW's agent for the purposes of Section 106 consultation. If needed, DOW and its consultant will work with and provide responses directly to SHPD and copy the Safe Drinking Water Branch (SDWB) and EPA on all correspondence relating to this Section 106 review. Mr. Bryan Wienand is the project manager for the Kalāheo Water System Improvements project. His contact information is provided below.

Kaua'i Department of Water
4398 Pua Loke Street
Līhu'e, Hawai'i 96766
Email: bwienand@kauaiwater.org
Telephone: (808) 245-5449

Mr. Jay Stone is DOW's agent for the Section 106 consultation. His contact information is provided below.

Belt Collins Hawaii LLC
2153 N. King Street, Suite 200
Honolulu, HI 96819
Email: kalaheowsi@bchdesign.com
Telephone: 808-846-3337

Alan S. Downer, Ph.D.
April 29, 2020
Page 6

Pursuant to 36 CFR §800.3(4), please provide written response with SHPD determination or concurrence with DOH determination within 30 days from date of receipt of this letter to: Ms. Joanna L. Seto, P.E., via sdwb@doh.hawaii.gov. Please contact Ms. Joan Corrigan of the SDWB Engineering Section at 586-4258 or via joan.corrigan@doh.hawaii.gov if you have any questions.

Sincerely,



JOANNA L. SETO, P.E., CHIEF
Safe Drinking Water Branch

JC:cw

Enclosures:

1. TMK Maps
2. Figure 1: APE map
3. Figure 2: Aerial APE map
4. Package A Site Plan
5. Package B Site Plan
6. Package C Site Plan
7. Letters sent to various agencies with copy of DEA
8. SHPD and OHA response letters to CIA
9. Letters received from SHPD
10. Archaeological Literature Review and Field Inspection
11. Cultural Impact Assessment
12. Archaeological Inventory Survey
13. NHO Mailing List
14. NHO Sample Letter
15. Public Notice (OEQC's *The Environmental Notice*)

- c: Mr. Keith Aoki, Kaua'i DOW (w/o encls.) [KAoki@kauaiwater.org only]
Mr. Bryan Wienand, Kaua'i DOW (w/o encls.) [bwienand@kauaiwater.org only]
Mr. Jay M. K. Stone, Belt Collins Hawaii LLC (w/o encls.) [via jstone@bchdesign.com only]
Mr. Joshua Amaris, EPA R9 (w/o encls.) [via Amaris.Josh@EPA.gov only]
Ms. Garnet Clark, SHPD (with encls.) [via Garnet.Clark@hawaii.gov only]

DAVID Y. IGE
GOVERNOR OF HAWAII



SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
FIRST DEPUTY

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

May 29, 2020

Joanna L. Seto, P.E., Chief
Safe Drinking Water Branch
State of Hawaii, Department of Health
Uluakupu Bldg., 4
2385 Waimano Home Road, Suite 110
Pearl City, HI 96782
Email: sdwb@doh.hawaii.gov

IN REPLY REFER TO:
Log No. 2020.00978
Doc. No. 2005GC04
Archaeology

Dear Ms. Seto:

**SUBJECT: National Historic Preservation Act (NHPA) Section 106 Review—
Section 106 Consultation and Concurrence with Project Effect Determination
Kalāheo Water System Improvements, Job No. K-01, K-12
Package A-0.5 MG Yamada Reservoir, Package B-0.1 MG Clearwell
Reservoir (1238.5' Overflow) and Package C-Water Main Installation
Kalāheo Ahupua'a, Kona District, Island of Kaua'i
TMK: (4) 2-4-003:007, (4) 2-4-004:039 por., (4) 2-4-009:003 and
(4) 2-4-003, 004, 005 Rights-of-Way**

This letter provides the State Historic Preservation Division's (SHPD's) review of the County of Kaua'i (COK) Department of Water (DOW) project titled, *Kalāheo Water System Improvements, Job No. K-01 and K-12*. The SHPD received the original submittal on April 30, 2020 and additional information on May 18, 2020 via email (Jay Stone [Belt Collins] to Garnet Clark [SHPD]) clarifying the project's area of potential effect (APE). The submittal materials include:

- [X] A letter dated April 29, 2020 from HI-DOH initiating NHPA Section 106 consultation and requesting the State Historic Preservation Officer's (SHPO's) concurrence with a project effect determination of "no historic properties affected;"
- [X] SHPD HRS 6E-Submittal Form, TMK plat maps, photographs, and permit sets for Packages A, B, and C;
- [X] Previous SHPD correspondence;
- [X] Section 106 public consultation notices and consultation letters to interested parties and NHOs;
- [X] Supporting document titled, *Archaeological Literature Review and Field Inspection (LRFI) for the Kaua'i County Kalaheo Water System Improvements Project, Kalaheo and Wahiawa Ahupua'a, Koloa District, Island of Kaua'i, TMK: (4) 2-4-004:038 por.; 2-4-004:999 por.; 2-4-09:003* (Hammatt and Shideler, June 2012); and
- [X] Supporting document titled, *Archaeological Inventory Survey Report for the Kaua'i County Kalāheo Water System Improvements Project, Kalāheo and Wahiawa Ahupua'a, Kōloa District, Kaua'i TMKs: [4] 2-4-009:003 por., 2-4-002, 2-4-003, 2-4-004, 2-4-005, and 2-4-006 portions* (Kamai et al., March 2016).

The submittal indicates that the proposed project will utilize federal funding from the Department of Environmental Protection Agency's (EPA's), Safe Drinking Water Act, and is therefore a federal undertaking as defined in 36 CFR 800.16(y). The proposed undertaking is subject to compliance with Section 106 of the NHPA. The EPA has delegated the State of Hawaii Department of Health to be EPA's authorized agent to conduct all NHPA Section 106 consultation.

Project Description

The proposed water system improvements will help to enhance the existing water system serving the community of Kalāheo, Kauaʻi. These improvements will support the system to meet maximum daily demand storage capacity and fire flow requirements, as well as improve water pressure. The proposed County of Kauaʻi Department of Water (DOW) project includes 3 packages (Packages A, B and C). Package A includes the construction of a 0.5-million-gallon (MG) water storage tank with appurtenances, installation of 12- and 18-inch drain lines, and 8- and 12-inch water lines. Package B involves the construction of a 0.1-MG water storage tank with related infrastructure work and installation of 12-inch drain lines and 8-inch water lines. Lastly, Package C will involve the installation of approximate 11,567 linear feet of 3-inch, 6-inch, 8-inch, and 12-inch water lines.

The total cumulative area of potential effects (APE) is approximately 11.6 acres within Kalaheo Ahupuaʻa. The APE includes lands owned by the County of Kauaʻi, and the Department of Land and Natural Resources State Parks (SP) and Land Division (LD). The APE information for Packages A, B, and C is provided below.

Package A, Yamada Reservoir

Table 1. Package A

TMKs	Total Parcel Area (ac)	Total Disturbed Area
(4) 2-4-003:007	0.755	0.692
(4) 2-4-004:039	1.940	0.016
(4) 2-4-004-Puuwai Rd-ROW	2.282	0.051
TOTAL	4.977	0.759

The current APE for Package A begins at the intersection of Puʻulima Road and Puʻuwai Road. The APEs consists of a 0.692-acre portion of the 0.75-acre DOW-owned property identified as (4) 2-4-003:007; a 0.016-acre portion of the 1.918-acre DLNR-owned property identified as TMK: (4) 2-4-004:039 and a 0.051-acre portion of the 2.282-acre County ROW Puʻuwai Road, totaling 0.759 acre.

Table 2. Package A- Drain Lines (DL) and Water Lines (WL)

TMKs	Diameter	Length (feet)	Maximum Trench Depth
(4) 2-4-003:007	18-inch-DL	287	23 ft
	12-inch DL	99	3.6 ft
	12-inch WL	260	13 ft
	8-inch WL	120	4 ft
(4) 2-4-004:039	18-inch DL	17	9.7 ft
(4) 2-4-004-Puuwai Rd-ROW	18-inch DL	30	10 ft

The Yamada site [TMK: (4) 2-4-004:0039] is covered with vegetation and discrete piles of a demolished building located in the rear section of the parcel. The scope of work includes the construction of a 0.5-MG water storage tank, within TMK: (4) 2-4-0003:007, site clearing and grubbing, construction and installation of concrete retaining walls; installation of chain link fencing, asphalt concrete pavement, and landscaping, installation of 12- and 18-inch drain lines and 8- and 12-inch water lines. Excavations include 13,800 cubic yards; anticipated depths will extend to a maximum of 23 ft below current ground surface.

Package B, Clearwell Reservoir (1238.5' Overflow)

Table 3. Package B

TMKs	Total Parcel Area (ac)	Total Disturbed Area
(4) 2-4-004:005 [Water Easements and access in favor of DOW] DLNR State Parks	52.244	0.072
(4) 2-4-009:003 [DLNR Lands]	1,583.187	4.130
(4) 2-4-004-Puuwai Rd-ROW	2.282	2.282
TOTAL	1,638.251	6.464

The 4.134-acre property identified as TMK: (4) 2-4-009:003 [Clearwell Reservoir] for Package B is located within DLNR- and County-owned lands as identified in Table 3. The Clearwell APE is located within the 4.1-acre portion of the 1,583-acre DLNR-owned lands.

Table 4. Drain Lines (DL) and Water Lines (WL)

TMKs	Diameter	Linear Feet	Maximum Trench Depth
(4) 2-4-009:003	8-inch-WL	1,315	6.8-ft
(4) 2-4-009:003	12-inch DL	70	6.9-ft

The scope of work involves excavation of approximately 2,254 cubic yards; the construction of a 0.1-MG reinforced concrete reservoir with appurtenances; control building; hydropneumatics booster pump system; construction of a concrete access road; a cellular confinement construction access road; concrete pavement; drainage system and landscaping and installation of chain link fence and gate. Additionally, the installation of approximately 1,315 ft of 8-inch water line and 70-ft of drainage line. Excavation for subsurface utilities will extend to a maximum of 6.9-ft below finished grade.

Package C, County of Kauai ROW

Table 1. Package C- Public Water Lines (WL)

TMKs	Diameter	Length (feet)	Maximum Trench Depth
Kikala Road	8-inch-WL	1150	6.5 ft
	6-inch WL	14	7.8 ft
Pu'uwai Road	12-inch WL	830	8.6 ft
	8-inch WL	2775	6.5 ft
	6-inch WL	24	7.8 ft
Po'ohiwi Road	8-inch WL	3151	6.5 ft
	6-inch WL	3288	6.5 ft
	3-inch WL	34	9.0 ft
Access Road to TMK: 2-4-004:049	8-inch WL	121	6.5
	6-inch WL	174	7.8

The DOH identifies the following HRS §6E-8 supporting documents and previous SHPD:

- 2012 In June 2012, SHPD received a Cultural Impact Assessment (CIA) titled, *Cultural Impact Assessment for the Kaua'i County Kalāheo Water System Improvements Project, Kalāhe and Wahiawa Ahupua'a, Kōloa District, Kaua'i Island, TMKs (4) 2-4-003:007, 2-4-003:999 por., 2-4-004:039, 2-4-004:049, 2-4-004:999 por., 2-4-005:999 por., 2-4-006:999 por., and 2-4-009:003* (Vogeler and Hammatt, June 2012). Consultation conducted in support of the CIA included the SHPD, Office of Hawaiian Affairs (OHA), the Kaua'i/Niihau Island Burial Council (KNBC), community and cultural organizations. Three individuals Mr. John Burne Jr.; Mr. Ernie Ferreira; and Ms. Anne Punahou provided information on the history of the current project area. In a letter dated July 28, 2011 (Log No. 2011.1700, Doc No. 1107PC003), the SHPD requested the project proponent include as many outreach discussions with the community at large, talk story sessions and consultation with senior citizen groups.
- 2012 In November 2012, SHPD received a project supporting document titled, *Archaeological Literature Review and Field Inspection (LRFI) for the Kaua'i County Kalaheo Water System Improvements Project, Kalaheo and Wahiawa Ahupua'a, Koloa District, Island of Kaua'i, TMK: (4) 2-4-004:038 por.; 2-4-004:999 por.; 2-4-09:003* (Hammatt and Shideler, June 2012). This LRFI indicates that no previous archaeological studies have been conducted within the 12-acre project area. The field pedestrian surface inspection identified no historic properties and indicated that the project area has been previously developed for commercial, residential, and/or infrastructure purposes. The LRFI recommended no further work within the project area. In a letter dated December 12, 2012 (Log No. 2012.3339, Doc No. 1212SL21), the SHPD did not concur with the recommendation of no further work because no adequate AIS has been conducted to determine whether historic properties are present, and if so to gather sufficient information and to evaluate their significance. The SHPD requested an AIS be conducted within the current project area.

- 2016 In April 2016, SHPD received an archaeological inventory survey (AIS) titled, *Draft Archaeological Inventory Survey Report for the Kaua'i County Kalāheo Water System Improvements Project, Kalāheo and Wahiawa Ahupua'a, Kōloa District, Kaua'i TMKs: [4] 2-4-009:003 por., 2-4-002, 2-4-003, 2-4-004, 2-4-005, and 2-4-006 portions* (Kamai et al., March 2016). In a letter dated May 31, 2016 (Log No. 00779, Doc No. 1605MN16), the SHPD accepted the AIS which included upgrades to the Clearwell tank and access road and waterline (TMK: (4) 2-4-009:003 por); the Nursery tank site (TMK: 2-4-004:039), the proposed Yamada Reservoir and well site (TMK: 2-4-003:007), the existing 0.3-acre booster pumps and well site (TMK: 2-4-004:049); and an approximate 5.72-acre County ROW connecting the Yamada/Booster pumps sites within Pu'uwai, Po'ohiwi and Kikala Roads (TMK: (4) 2-4-002 through (4) 2-4-006 por.). A single newly identified historic property (SIHP 50-30-10-2290) was documented, consisting of a plantation-era water control site, with two features. Feature A consists of a remnant ditch, and Feature B was documented as a concrete sluice gate. Site 2290 was assessed as significant under criterion "d" (information content) pursuant to HAR §13-275-6. The SHPD concurred with the site significance and made a project effect determination of "no historic properties affected."
- 2016 In a letter dated June 1, 2016 (Log No. 2016.01326, Doc No. 1605MN20) SHPD made a project effect determination of "no historic properties affected" for Clearinghouse Application CL-2016-012 for the Kalāheo Water System Improvements Package grading permit for the approximate 0.71-acre proposed Yamada Reservoir and well Site (TMK: (4) 2-4-003:007).

The DOH indicates that NHPA Section 106 consultation letters were sent to the County of Kauai Historic Preservation Review Commission (KHPRC), Native Hawaiian Organization and Native Hawaiian descendants with ancestral lineage or cultural ties, cultural or religious attachments, cultural knowledge or concerns to the proposed project area (see Enclosure 13). Additionally, on March 8, 2020, a NHPA Section 106 notice/advertisement was published in the OEQCs *Environmental Notice*. As of April 14, 2020, the DOH received a single comment from the KHPRC indicating that the Commission wishes to be updated as the NHPA 106 consultation progresses and that they do not anticipate the proposed project as being contentious.

The DOH reiterates that the current APE has been extensively altered by previously developed for commercial, residential and/or infrastructure purposes, and the SHPD has previously made an HRS §6E-8 project effect determination of "no historic properties affected" for the current project. Therefore, the DOH has determined that the NHPA Section 106, project effect determination is *no historic properties affected* pursuant to 36 CFR 800.4(d)(1)

Based on the information provided above, the **SHPO concurs** with the DOH project effect determination of *no historic properties affected*.

DOH is the office of record for this undertaking. Please maintain a copy of this letter with your environmental record review.

Please contact Dr. Susan A. Lebo, Archaeology Branch Chief, at Susan.A.Lebo@hawaii.gov or at (808) 692-8019 for any questions regarding this letter.

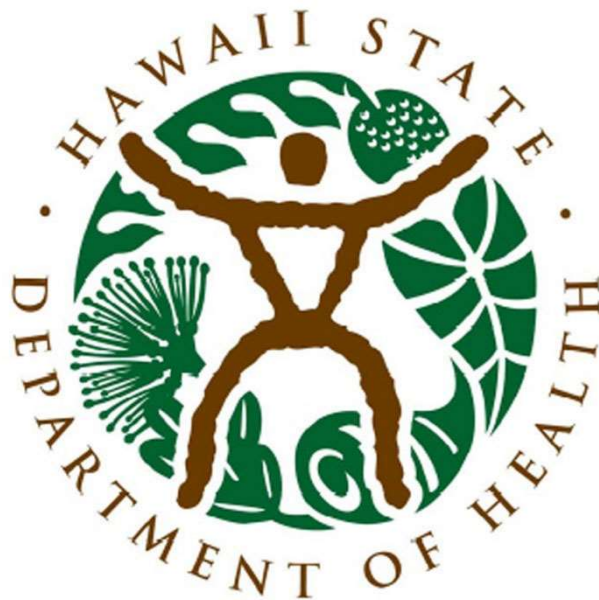
Aloha,

Alan Downer

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc: Joshua Amaris, EPA, R9, Amaris.Josh@epa.gov
Joan Corrigan, DOH, joan.corrigan@doh.hawaii.gov
Keith Aoki, Kaua'i DOW, Kaoki@kauaiwater.org
Bryan Wienand, Kaua'i DOW, bwienand@kauaiwater.org
Jay Stone, Belt Collins Hawaii LLC, jstone@bchdesign.com

“DWSRF BOILERPLATE”
FEDERAL REQUIREMENTS
FOR
CONSULTANTS AND CONTRACTORS



March 2021

FEDERAL REQUIREMENTS FOR CONSULTANTS AND CONTRACTORS

All Consultants, Contractors, and Sub-contractors of a DWSRF funded project must comply with all the federal regulations listed herein.

CROSS-CUTTER REGULATIONS

(1) ENVIRONMENTAL AUTHORITIES

A. ARCHEOLOGICAL AND HISTORIC PRESERVATION ACT OF 1974, 16 USC 469a-1

If potential archaeological or historical resources are discovered during construction, all work in the area shall cease immediately and the construction management consultant shall evaluate the situation and make recommendations to the Hawaii State Historic Preservation Division. The Historic Preservation Officer will determine the necessary actions for construction to proceed.

(2) ECONOMIC AUTHORITIES

A. PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT, 2 C.F.R. Part 200.216

The recipient and subrecipients are prohibited from using Federal funds to procure or obtain equipment, systems, or services that use “covered telecommunications equipment or services” identified in the regulation as a substantial or essential component of any system, or as critical technology as part of any system as described in section 889 of PUB. L. 115-232.

(3) SOCIAL POLICY AUTHORITIES

A. AGE DISCRIMINATION ACT OF 1975, 42 USC 6102

No person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

B. CIVIL RIGHTS ACT OF 1964, TITLE VI, 42 USC 2000d

No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

C. EQUAL EMPLOYMENT OPPORTUNITY, EXECUTIVE ORDER 11246, AS AMENDED

The contractor, subcontractor, or consultant for any SRF project shall maintain a policy of non-discrimination in the treatment of employees, shall make this policy known to employees, and shall recruit, hire and train employees without regard to race, color, sex, religion and national origin.

D. REHABILITATION ACT OF 1973, 29 USC 794

No otherwise qualified handicapped individual in the United States shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

- E. **MINORITY BUSINESS ENTERPRISE DEVELOPMENT, EXECUTIVE ORDER 12432**
This executive order sets forth in more detail the responsibilities of Federal agencies for the monitoring, maintaining of data and reporting on the use of minority enterprises.
- F. **NATIONAL PROGRAM FOR MINORITY BUSINESS ENTERPRISE, EXECUTIVE ORDER 11625**
This Executive Order directs Federal agencies to promote and encourage the use of minority business enterprises in projects utilizing federal funds.
- G. **NATIONAL WOMEN'S BUSINESS ENTERPRISE POLICY AND NATIONAL PROGRAM FOR WOMEN'S BUSINESS ENTERPRISE, EXECUTIVE ORDER 12138**
This Executive Order directs each department or agency empowered to extend Federal financial assistance to any program or activity to issue regulations requiring the recipient of such assistance to take appropriate affirmative action in support of women's business enterprises and to prohibit actions or policies which discriminate against women's business enterprises on the grounds of sex.
- H. **SMALL BUSINESS ADMINISTRATION REAUTHORIZATION AND AMENDMENT ACT OF 1998, PUB. L. 100-590, SECTION 129**
This Amendment directs Federal agencies to promote and encourage the use of small business enterprises in projects utilizing federal funds.
- I. **DEPARTMENT OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT, AND AGENCIES APPROPRIATIONS ACT, 1993, PUB. L. 102-389**
The Administrator of the Environmental Protection Agency shall, hereafter to the fullest extent possible, ensure that at least 8 per centum of Federal funding for prime and subcontracts awarded in support of authorized programs, including grants, loans and contracts for wastewater treatment and for leaking underground storage tanks, be made available to businesses or other organizations owned or controlled by socially and economically disadvantaged individuals (within the meaning of Section 8(a)(5) and (6) of the Small Business Act (15 U.S.C. 637(a)(5) and (6)), including historically black colleges and universities. For purposes of this section, economically and socially disadvantaged individuals shall be deemed to include women.
- J. **DISADVANTAGED BUSINESS ENTERPRISE RULE, 2008, 40 CFR PART 33**
Prior to the award of a consultant or construction contract, the Contractor or Consultant shall fully comply with 40 CFR Part 33, entitled "Participation by Disadvantaged Business Enterprises in Procurement Under Environmental Protection Agency (EPA Financial Assistance Agreements)". The Consultant or Contractor shall notify the County prior to termination of a Disadvantaged Business Enterprise (DBE) subconsultant or subcontractor for convenience by the Contractor. In addition, the Consultant or Contractor shall employ the six good faith efforts listed in 40 CFR 33.301 when soliciting a replacement subconsultant or subcontractor.
The Consultant or Contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Consultant or Contractor shall carry out applicable requirements of 40 CFR Part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the Consultant

or Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or other legally available remedies.

K. DAVIS BACON ACT, TITLE 29, PART 5, CODE OF FEDERAL REGULATIONS

The consultant or construction contractor shall comply with the labor standards provided under this act, including but not limited to:

1. Payment of the prevailing wage rate;
2. Posting of prevailing wage rates and Davis-Bacon poster at the work site where it can be easily seen by the workers;
3. The following Wage Determination General Decision and Modification numbers apply to this contract:

Wage Determination General Decision No.: HI20220001
(loan recipient to fill in)

Modification No.: 7
(loan recipient to fill in)

(4) MISCELLANEOUS AUTHORITIES

A. DEBARMENT AND SUSPENSION, EXECUTIVE ORDER 12549

Prior to the award of a construction or consultant contract, the Contractor or Consultant shall fully comply with Subpart C of 40 CFR Part 32, entitled "Responsibilities of Participants Regarding Transactions" and ensure that any lower tier covered transaction and subsequent lower tier transaction, includes a term or condition requiring compliance with Subpart C. The Contractor shall certify that his subcontractors and suppliers are not on the Excluded Parties List when the bid proposals are submitted. The Consultant shall certify that his sub-consultants are not on the Excluded Parties List. The Contractor or Consultant acknowledges that failing to disclose the information required under 40 CFR 32.335 may result in the delay or negation of payment, or pursuance of legal remedies, including suspension and debarment. The Contractor or Consultant may access the Excluded Parties List System at <http://epls.arnet.gov>.

B. REQUIRED FEDERAL FORM AND INFORMATION

The following EPA form(s) shall be submitted by the Consultant or Contractor to the recipient for each DWSRF project:

EPA Form 5700-52A (MBE/WBE Utilization Under Federal Grants, Cooperative Agreements, and Other Federal Financial Assistance)

C. AMERICAN IRON AND STEEL (PUB. L. 113-76)

Projects funded with monies from the drinking water state revolving fund are subject to the American Iron and Steel (AIS) requirement, such that all products made primarily of iron or steel must be produced in the united states. The contractor shall submit certification that the material was produced in the united states or information necessary to verify an approved waiver of the AIS requirement. Additionally, contractor shall comply with, and shall execute and submit any written documentation or certification required by the AIS or other applicable law, rule or regulation. Failure to comply with AIS requirements by the

contractor shall permit the purchaser or state to recover as damages against the contractor any loss, expense, or cost (including, without limitation, attorney's fees) incurred by the purchaser or state resulting from any such failure (including, without limitation, any impairment or loss of funding, whether in whole or in part, from the state or any damages owed to the state by the purchaser).

D. DAVIS BACON

The following information must be included in the contract specifications:

- (1) Davis Bacon Requirements (see attached).

DAVIS BACON REQUIREMENTS

(1) Contract and Subcontract provisions.

(a) The Recipient shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a construction project under the DWSRF the following clauses:

(l) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in §5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

The Recipient may obtain wage determinations from the U.S. Department of Labor's web site, www.dol.gov.

(ii) (A) The Recipient, on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

- (2) The classification is utilized in the area by the construction industry; and
 - (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
 - (B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Recipient agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the Recipient to the State award official. The State award official will transmit the report, to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210 and to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.
 - (C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the and the Recipient do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the award official shall refer the request, and the local wage determination, including the views of all interested parties and the recommendation of the State award official, to the Administrator for determination. The request shall be sent to the EPA Regional Coordinator concurrently. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
 - (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
 - (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- (II) Withholding. The Recipient shall upon written request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be

withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(III) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii) (A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the Recipient, that is, the entity that receives the sub-grant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State or EPA. As to each payroll copy received, the Recipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number).

The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the Recipient for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the Recipient.

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

- (1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
- (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
- (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

- (iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause

the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(IV) Apprentices and trainees.

- (i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has

received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- (V) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- (VI) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- (VII) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- (VIII) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- (IX) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors)

and the Recipient, State, EPA, the U.S. Department of Labor, or the employees or their representatives.

(X) Certification of eligibility.

- (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(2) Contract Provision for Contracts in Excess of \$100,000.

(a) Contract Work Hours and Safety Standards Act. The Recipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Section 1, above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- (1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.
- (3) Withholding for unpaid wages and liquidated damages. The Recipient shall upon the request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid

wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

- (4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.
- (b) In addition to the clauses contained in Section 1, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the Recipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Recipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

(3) Compliance Verification

- (a) The Recipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(6), all interviews must be conducted in confidence. The Recipient must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are available from EPA on request.
- (b) The Recipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, the Recipient should conduct interviews with a representative group of covered employees within two weeks of each contractor or subcontractor's submission of its initial weekly payroll data and two weeks prior to the estimated completion date for the contract or subcontract. The Recipient must conduct more frequent interviews if the initial interviews or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. The Recipient shall immediately conduct necessary interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence.
- (c) The Recipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The Recipient shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable the Recipient shall spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and two weeks prior to the completion date the contract or subcontract. The Recipient must conduct more frequent spot checks if the initial spot check or other

information indicates that there is a risk that the contractor or subcontractor is not complying with DB. In addition, during the examinations the Recipient shall verify evidence of fringe benefit plans and payments thereunder by contractors and subcontractors who claim credit for fringe benefit contributions.

- (d) The Recipient shall periodically review contractors and subcontractors use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.
- (e) The Recipient must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed above and to the appropriate DOL Wage and Hour District Office listed at <http://www.dol.gov/esa/contacts/whd/america2.htm>.