

CONTRACT

THIS AGREEMENT is made and entered into as of this 26th day of December, 2019, by and between the COUNTY OF HAWAI'I, a municipal corporation duly organized and existing under the laws of the State of Hawai'i, whose business address is 25 Aupuni Street, Hilo, Hawai'i 96720, hereinafter called the "COUNTY," and BROWN AND CALDWELL, a corporation, organized under the laws of the State of California, whose business address is 737 Bishop Street, Suite 3000, Pacific Guardian Center – Mauka Tower, Honolulu, Hawai'i, hereinafter called the "CONSULTANT."

WITNESSETH:

WHEREAS, the COUNTY wishes to obtain the services of the CONSULTANT to render all the necessary professional engineering services required to perform the design, complete construction contract documents, including boilerplate for two phases of the Pāhala Large Capacity Cesspool Conversion project for the County of Hawai'i Department of Environmental Management, Wastewater Division, hereinafter called the "PROJECT"; and

WHEREAS, the CONSULTANT is qualified, ready, willing and able to provide such services; and

WHEREAS, the COUNTY and the CONSULTANT have detailed the scope of work to be performed by the CONSULTANT on the PROJECT in a separate attachment entitled "EXHIBIT A - SCOPE OF WORK", a copy of which is attached hereto;

NOW, THEREFORE, the COUNTY and the CONSULTANT, in consideration of the mutual promises hereinafter set forth, hereby agree as follows:

1. The CONSULTANT shall perform all of the services required for the PROJECT in accordance with the General Terms and Conditions for Consultant Service Contracts dated October 22, 2014, attached hereto and hereinafter called the "GENERAL TERMS & CONDITIONS."

2. That the CONSULTANT shall comply with all of the Federal Requirements for Consultants and Contractors dated June 2018, attached hereto and hereinafter called the CWSRF BOILERPLATE.

3. The compensation for the work under "EXHIBIT B - FEE SUMMARY", subject to the GENERAL TERMS & CONDITIONS, shall consist of a fee not to exceed FOUR MILLION THREE

HUNDRED THOUSAND DOLLARS (\$4,300,000.00), inclusive of all taxes for the CONSULTANT except in the case of a contract amendment increasing or decreasing the scope of work.

4. The work under "EXHIBIT A - SCOPE OF WORK" on this AGREEMENT shall be completed within the time periods established in "EXHIBIT C – SCHEDULE OF WORK" and shall commence after the COUNTY has given the official written notice to proceed, exclusive of review time as may be required by the COUNTY and other agencies.


5. Any additional work that may be required shall be for Professional Services, as defined under Hawai'i Revised Statutes Section 103d-104, Definitions. The CONSULTANT shall submit a detailed scope of work, fee estimate, and project schedule for all additional work to be done. Authorization for the additional work shall be provided via written Task Order(s). All Task Orders issued shall be incorporated into the AGREEMENT by Supplemental Agreement. Supplemental Agreements shall be executed periodically after Task Orders are issued, but prior to contract close out.

6. That liquidated damages for failure to perform the work under Task No's 1 through 12 of EXHIBIT B – FEE SUMMARY within the time fixed or any extension thereof exclusive of review time or any delays beyond the control of the Consultant shall be ONE HUNDRED FIFTY DOLLARS (\$150.00) per calendar day. Project schedule and completion dates shall be as scheduled under EXHIBIT A herein; and

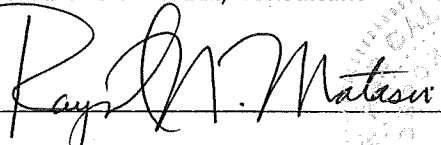
7. If a disagreement concerning this AGREEMENT or CONSULTANT'S work on the PROJECT arises which the parties cannot settle pursuant to the dispute resolution clause of the GENERAL TERMS & CONDITIONS appended hereto and incorporated by reference herein, the parties agree that no action or proceeding involving this AGREEMENT or CONSULTANT'S work on the PROJECT shall be commenced by either party except in the Circuit or District Courts of the Third Circuit, State of Hawai'i, nor shall any action commenced in such court be removed or transferred to any other state or federal court; and

IN WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed as of the day and year first above written.

COUNTY OF HAWAII

By 
Its Roy Takemoto
Managing Director

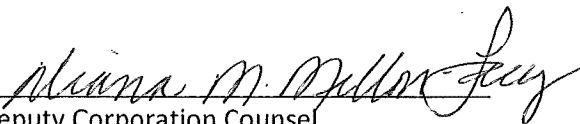
BROWN AND CALDWELL, Consultant

By 
Its Senior Vice President

RECOMMEND APPROVAL:


WILLIAM A. KUCHARSKI, Director
Department of Environmental Management

APPROVED AS TO FORM AND LEGALITY:


Deputy Corporation Counsel
County of Hawaii

DESIGNATED REPRESENTATIVE
for COUNTY OF HAWAII:
Name: Dora Beck, P.E.
Title: Wastewater Division Chief
Telephone: (808) 961-8513
Email: Dora.Beck@hawaiiicounty.gov

DESIGNATED REPRESENTATIVE
for BROWN AND CALDWELL:
Name: Craig Lekven, P.E.
Title: Managing Engineer
Telephone: (808) 442-3301
Email: clekven@brwncald.com

STATE OF HAWAI'I)
) SS.
COUNTY OF HAWAI'I)

On this 26th day of December, 2019, before me personally appeared ROY R. TAKEMOTO, to me personally known, who, being by me duly sworn, did say that he is the Managing Director of the County of Hawai'i, a municipal corporation of the State of Hawai'i, that the foregoing instrument was signed on behalf of the County of Hawai'i by authority given to said Mayor of the County of Hawai'i by Sections 5-1.3 and 13-13 of the County Charter, County of Hawai'i (2016), as amended, and assigned by the Mayor to the Managing Director pursuant to Section 6-1.3(h) of the County Charter; and said ROY R. TAKEMOTO acknowledged said instrument to be the free act and deed of said County of Hawai'i.

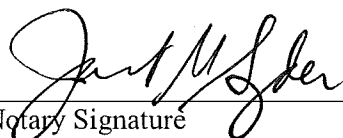


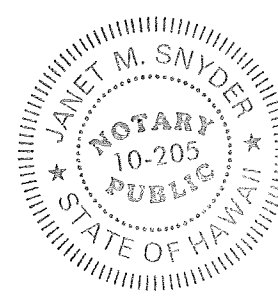

Signature

JANET M. SNYDER
Print or Type Name

Notary Public, State of Hawai'i

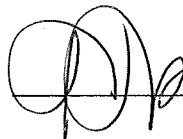
My Commission Expires: 07-18-22

NOTARY CERTIFICATION	
Doc. Date: <u>12/26/19</u>	No. of Pages: <u>3</u>
Notary Name: <u>JANET M. SNYDER</u>	Third Circuit
Doc. Description: <u>Consultancy Contract</u>	
 Notary Signature	<u>12/26/19</u> Date



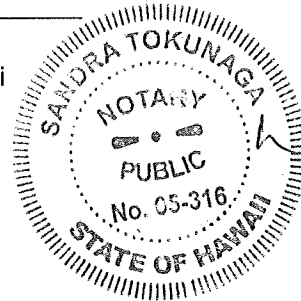
STATE OF HAWAII)
County of Maui) SS.
~~CITY AND COUNTY OF HONOLULU~~)

On this 16th day of October, 2019, before me Sandra Tokunaga-Notary personally appeared Raymond N. Matasci to me known (or satisfactorily proven), who, being by me duly sworn (or affirmed), did say (or satisfactorily proven) that he/she/they is a Senior Vice President of Brown and Caldwell, and that the seal affixed to this instrument is the corporate seal of the corporation, and the instrument was signed in behalf of the corporation by authority of board of its directors/partners/members and Raymond N. Matasci acknowledged the said instrument to be the free act and deed of said of corporation, partnership or other entity.



Notary Public, State of Hawai'i

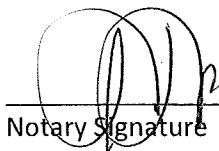
My commission expires:



Doc. Date: Undated at time of signing No. of Pages: 94

Notary Name: Sandra Tokunaga 2 Judicial Circuit

Document Description: Agreement between the County of Hawai'i and Brown and Caldwell for engineering services required for the Pāhala Large Capacity Cesspool Conversion and Wastewater Collection System Improvements for the Department of Environmental Management, Wastewater Division



Notary Signature

Date

10/16/19

My commission expires:

11/10/2021

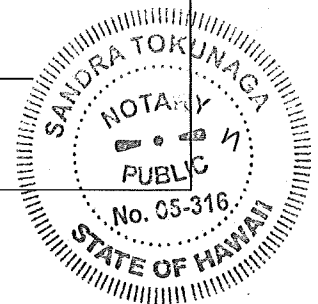


EXHIBIT A – SCOPE OF WORK

GENERAL DESCRIPTION:

1.1 The Consultant shall provide engineering, oversight, coordination, team integration, budget and schedule management, progress meetings and reporting, QA/QC, project risk management and related services necessary for design, document approvals, permitting, bidding and construction contract administration for the Pāhala Large Capacity Cesspool Conversion project. Work will include all geotechnical investigation and reports, utility services and availability, and on-site improvements required to accommodate wastewater treatment and disposal systems to be constructed, and continued lessee operations on, TMK 9-6-002:018, in accordance with the EA and FONSI (or mitigated FONSI) for the project, incorporating current best information available, associated Community Outreach, Program and Project Management Services.

1.1.1 A Phase 1 Environmental Site Assessment was performed on the target property for the wastewater treatment and disposal systems at TMKs 9-6-002:018, which is currently owned by B. P. Bishop Estate Trustees (Kamehameha Schools), and the County has discussed the proposed use with their representatives, representatives of their lessee, as well as members of the public during public outreach sessions.

1.1.2 It is understood that should target properties on parcel 9-6-002:018 be determined not to be available or viable for a new Wastewater Treatment Plant and/or Land Disposal System during Environmental Assessment, subdivision or special permitting (under separate contract) or design, coordination, and outreach conducted hereunder, contract modifications would be required to explore other options.

1.1.3 Work under this contract is being performed in accordance with United States Environmental Protection Agency (USEPA) Region 9 Administrative Order on Consent, Docket No. SDWA-UIC-AOC-2017-0002 dated June 22, 2017 (Consent Order).

A. Work under this contract shall be performed in accordance with the Consent Order and Compliance Dates established in the Consent Order, except as otherwise approved by USEPA.

B. The risks of proceeding with field investigation and detailed design under this Contract in advance of the EA and FONSI (or mitigated FONSI) to meet Consent Order requirements are understood. Schedules and risks will be assessed, re-evaluated and managed throughout the execution of work under this and related Contracts as part of Program and Project Management conducted under this Contract. Associated Consultant recommendations and critical County and CWSRF decisions will be recorded in a program management risk register developed and maintained by the Consultant as a primary support tool informing the work.

C. It is understood the work may be extended or suspended in conjunction with the Consent Order to manage risks.

1.2 Monthly status summaries will include a listing of scheduled and unscheduled work tasks and sub-tasks performed during the preceding month and anticipated in the succeeding two

months; an invoice, broken down by tasks, with supporting sub-consultant invoices; an updated risk register; and an updated CPM schedule (indicating original, approved, scheduled start and finish dates and updated, actual start and finish dates for each task and sub-task, as applicable).

1.3 Project Meetings: The Consultant shall provide meeting summaries with running, tabular action logs including, at a minimum: summary discussion topics and a decision/action log with responsible parties, due date, and tracked status. Critical decisions and action items will be highlighted in the log and their status discussed during each meeting until fulfillment. Program and project schedule and budget issues shall be identified, discussed and corrective actions noted. Weekly conference calls to review progress and discuss outstanding issues and potential problems with the WWD project manager are recommended.

1.4 QA/QC: The Consultant will utilize QA/QC systems designed to manage quality related problems and Owner reviews of design deliverables and bid documents. QA/QC comment report matrices confirming all County review comments have been addressed will be submitted with subsequent deliverables.

1.5 Agency Approvals and Permitting: The Consultant will take the lead in organizing, planning and conducting reviews, meetings and consultation with approving and permitting authorities, agencies and regulators and obtaining required approvals, including associated approval signatures.

1.6 Geotechnical Data Report:

1.6.1 The Consultant shall utilize the services of a qualified, specialized geotechnical sub-Consultant to field truth the geophysical investigation (completed under separate Contract) confirming subsurface lava tube locations within the projects' limits and to conduct field investigations and prepare a geotechnical baseline report, including bore logs and laboratory results of sampling and testing needed to support final design of the Pāhala wastewater treatment plant, disposal system, and collection system, to be issued with the construction bid documents. It will be the Consultant's responsibility to ensure all affected parties are notified in advance of planned geotechnical exploration and secure rights-of-entry, access and any necessary permits prior to commencing work. If an archaeological observer is required to complete the field work, the associated additional services will be outlined in a fee proposal to be authorized by the County by written task order and supplemental agreement. Bore holes and excavations shall be backfilled and affected areas restored to a condition equal to or better than originally encountered. Locations shall be photographed before and after and photographs labeled with the projects' name, date, location identification and bore or sample number. Bore locations shall be surveyed and bore locations and logs included in the 90% construction plans.

1.7 CWSRF Requirements:

1.7.1 The County intends to utilize funding from the Clean Water State Revolving Fund Program (CWSRF) through the State of Hawai'i, Department of Health, Wastewater Branch for detailed design and construction of the Pāhala Large Capacity Cesspool Conversion and construction of the Pāhala Wastewater Collection System projects. All

design and documents produced in fulfillment of this Contract must meet all requirements for participation in the CWSRF program, including boilerplate, Federal crosscutter requirements and American Iron and Steel Provisions, and comply with any mitigation requirements established through the environmental assessment (EA) process.

- 1.7.2 The EA project description for the Pāhala Large Capacity Cesspool Replacement project explicitly states both the related CWSRF project names: Pāhala Large Capacity Cesspool Conversion and Pāhala Wastewater Collection System.
- 1.7.3 Figures: Maps, plans and drawings produced under this Contract shall clearly show individual projects' work areas. Maps, plans and drawings produced under related Contracts for packaging with Construction Contract Documents and Boilerplate produced under this Contract shall also clearly show the individual projects' work areas.
- 1.8 Construction of planned improvements is intended in two phases. This Consultant will, as Program Manager for both CWSRF projects, develop individual sets of bid and construction contract document boilerplate for:
 - 1.8.1 Pāhala Large Capacity Cesspool Conversion and Pāhala Wastewater Collection System Phase 1
 - A. This set of construction contract documents will incorporate current industry standard, regulatory compliant, plans and technical specifications prepared under this Contract for the new, 190,000 gpd average flow capacity Pāhala Wastewater Treatment and Disposal facilities and other associated work on TMK 9-6-002:018 with those prepared under a separate contract by others for closure of two (2) County operated and maintained large capacity cesspools and connection of the existing community collection system to the new transmission system and wastewater treatment plant on TMK 9-6-002:018. The bid form for this project will be broken down by CSWRF project area.
 - 1.8.2 Pāhala Wastewater Collection System Phase 2
 - A. This set of construction contract documents will incorporate plans and technical specifications prepared by others under a separate contract for a new, current industry standard, regulatory compliant, community wastewater collection system located primarily in road rights-of-way.
- 1.9 The scope of work is as outlined in the projects' environmental documents, preliminary engineering report (PER) and the following attachments to Exhibit A:
 - 1.9.1 Consultant's Pāhala Fee Breakdown, dated January 25, 2019
 - 1.9.2 Consultant's Proposal, dated January 28, 2019, as annotated
 - 1.9.3 Consultant's clarifying emails, dated February 1, 2019 and May 16, 2019

1.9.4 Consultant's Design Schedule, dated 1/24/19 and revised 7/1/19 (printed 7/2/19)

1.9.5 Federal Requirements for CWSRF Projects and "CWSRF Boilerplate"

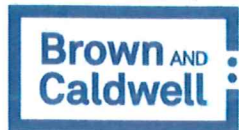
- 1.10 The treatment system shall be designed per EPA's Principles of Design and Operations of Wastewater Treatment Pond Systems for Plant Operators, Engineers, and Managers, August 2011 and Hawaii State Department of Health standards and requirements.
- 1.11 Unforeseen work shall be performed as requested by the County following submittal of a detailed scope of work and fee proposal. **Authorization for performance of unforeseen work shall be provided by written Task Order.** Such work shall be limited to technical and professional services for the project.

ATTACHMENTS TO EXHIBIT A – SCOPE OF WORK

ATTACHMENT A: Pahaia WWTP Design, Bidding, and Construction Services
Estimated Level of Effort and Cost
 January 25, 2019

[illegible]

1955 Main Street, Suite 200
Wailuku, HI 96793
T: 808.442.3301
F: 808.244.9026



January 28, 2019

Ms. Sandra Mendonca, P.E.
County of Hawaii, Wastewater Division
108 Railroad Avenue
Hilo, HI 96720

1055.071116.043

Subject: Pahala Wastewater Treatment Plant Project – Proposal for Design, Bidding,
and Construction Services

Dear Ms. Mendonca:

Brown and Caldwell (BC) is pleased to present our proposal for design, bidding, and construction services associated with the new Pahala Wastewater Treatment Plant (WWTP). BC previously prepared a Preliminary Engineering Report (PER), dated June 2018, as part of the planning process that outlines the recommended facilities for wastewater treatment for the town of Pahala upon which the County of Hawaii, Department of Environmental Management (County) now intends to design and construct the facility.

The new Pahala WWTP will be designed to treat and dispose an Average Dry Weather Flow (ADWF) of 190,000 gallons per day (gpd) of municipal wastewater. The plant will be designed within the proposed 14.9-acre unimproved site located at the makai end of parcel TMK 9-6-002:018, identified as Lot 2 on the PER figures. The new Pahala WWTP will be designed using natural systems as much as possible to minimize maintenance activities due to the location of Operations staff relative to the new WWTP.

Key assumptions associated with our proposal include:

1. The County will secure and subdivide the proposed property identified in the PER
2. Design will be accelerated to provide a final design to meet the September 18, 2019 Administrative Order of Consent [AOC] compliance date. To meet this date, regulatory approvals (building permit, special permits) may occur after this date, and final responses and comments may need to be addressed subsequent to the final design submittal.
3. The design will be sequenced to meet the May 20, 2021 AOC compliance date.

Scope of Services

Our scope of services is divided into the following tasks:

Task 1 – Project Management, Meetings, Site Visits

Description

Project management services will be provided throughout the duration of the project. Project management will include ongoing communication and project coordination with the County of Hawaii Department of Environmental Management Wastewater Division (County), resources to meet the project scope, detailed schedule development, project budget tracking and invoicing, and management of the project team and subconsultants. This task will also include the development of internal site-specific safety plans for field visits and services during construction. Quality assurance/quality

control (QA/QC) procedures will be developed and maintained throughout the duration of the project. Monthly project status summaries will be provided to the County.

Assumptions

- Project kickoff meeting with County via conference call
- Monthly project status meetings with County via conference call

Deliverables

- Project kickoff meeting agenda and meeting minutes
- Project design schedule: 30 calendar days from Notice to Proceed (NTP)
- Project status summaries and invoices: monthly

Task 2: Pre-Design Activities

Description

A geotechnical exploration and evaluation will be conducted by our subconsultant, Yogi Kwong Engineers, LLC (YKE), to support design of both the new Pahala wastewater collection system and the new Pahala WWTP. The work will be structured based on results from a geophysical reconnaissance (provided under another contract) and will consist of supplemental exploratory borings and probe holes. Soil sampling and testing will also be performed to support design activities. In addition, field infiltration tests based on double ring infiltrometer tests will be conducted to support the effluent disposal design at the Pahala WWTP. The detailed scope from YKE is provided.

Assumptions

1. See attached YKE scope

Deliverables

- Geotechnical Evaluation and Feasibility Report – Pahala Collection System
- Geotechnical Evaluation and Feasibility Report – Pahala WWTP

Task 3: Wastewater Treatment Plant Detailed Design

Description

The project will include a design team that entails geotechnical, civil, process mechanical, building mechanical, structural, electrical, instrumentation, and architectural disciplines. Detailed design of the new WWTP shall include the following new facilities and components:

- **Influent Sewer and Potable Water Supply:** The wastewater collection and transmission system within the town to the boundary of existing parcel TMK (3) 9-6-002:018 will be designed by others. In addition, extension of the potable water system to the boundary of the existing parcel will be by others. The influent sewer, water line, HELCO above-ground power lines, and Hawaiian Telcom service will be designed to be located along a ± 25 -foot wide, ± 1500 -foot long easement along the north boundary of existing TMK (3) 9-6-002:018 to the WWTP site.
- **Headworks Facility:** A new Headworks Facility will be designed to accept gravity flow from Pahala Town and provide preliminary treatment for the new WWTP. The Headworks Facility will include screening, odor control, influent flow measurement, and influent sampling equipment. The Headworks Facility will be designed with three channels, each capable of conveying peak flows. Two channels will be populated with in-channel cylindrical screens with $\frac{1}{4}$ -inch openings, and the third channel will be a bypass channel

with a manual bar rack with 1-inch bar openings. The screening system will include screenings washing, dewatering, compacting, and disposal in a single unit, discharging to a single bin. A packaged odor control system using activated carbon will be included to minimize fugitive odors. The Headworks Facility will include a Parshall flume for influent flow measurement and an automated influent composite sampler. The Headworks Facility will also be provided with overhead protection to provide some environmental shelter.

- **Aerated Lagoon System:** A series of aerated lagoons, about 800,000 gallons each, will be designed to provide biological wastewater treatment. Four lined lagoon cells will flow by gravity in series and provide a partial mix environment using high-speed floating aerators. A lagoon bypass system composed of distribution boxes, valving, and piping will allow any lagoon to be taken out of service for maintenance, while still providing sufficient treatment capacity. The last lagoon will be designed with a floating shade ball cover to reduce algae production and improve effluent quality.
- **Constructed Wetland:** A subsurface flow constructed wetland will be designed to provide additional treatment and denitrification of the aerated lagoon effluent. The constructed wetland will include a shallow lined basin with gravel media and planted with emergent wetland vegetation. Distribution of flow will be via a gravity distribution and collection piping network, controlled by an integrated instrumentation and control system.
- **Wetland Feed Pump Station:** The wetland submersible pump station, force main, and appurtenances will be designed to convey lagoon effluent to and from Lagoon 4. The pump station shall be sized for one duty pump and one standby pump. Each pump shall be rated approximately 150 gallons per minute (gpm).
- **Disinfection System:** A ultraviolet (UV) system will be planned and designed to provide disinfection at a dosage sufficient for secondary effluent. UV system configurations and layouts will be evaluated and presented to the County. Lagoon effluent will flow to the UV channel, which will be designed as a concrete structure. A primary and backup unit will be provided for redundancy. If the primary unit is out of service or fails, the backup unit will automatically be placed in service. A bypass channel will be provided when the UV channel requires maintenance. Slide gates will be designed to divert flow to the channels. An effluent electromagnetic flow meter and effluent composite sampler will be designed downstream of the disinfection system.
- **Slow-Rate Land Application Groves:** Four groves for use with a Slow-Rate Land Application (SLA) will be designed to provide effluent disposal and nutrient removal by allowing effluent to percolate at a calculated infiltration rate into the soil. Native Hawaiian tree species are being evaluated under a separate contract. A lined earthen basin will receive disinfected effluent and provide equalization of flows conveyed to the groves. Effluent valving and piping will be designed to cycle lagoon effluent to each of the groves and distribute the effluent evenly across the grove via an integrated instrumentation and control system.
- **Operations Building:** The new Operating Building will be designed and include four rooms: an electrical room, generator room, maintenance and storage room, and a restroom. The building will be a single story building approximately 50-feet long by 35-feet wide. The electrical room will be air-conditioned and house all electrical equipment. An operator's desk and workspace will also be included. The generator room will house the generator and day tank. The maintenance and storage room will hold spare parts, supplies, and support other plant activities. The restroom will be ADA-compliant.
- **Site Improvements:** An asphalt-concrete (AC) paved entrance driveway along Maile Street will be designed. Interior AC-paved maintenance roadways will also be designed between all lagoons and the wetlands, that will adhere to the Fire Code for access and turnaround of a fire truck. The berms surrounding the groves will receive aggregate base (AB) pavement. Some steeper roadways (12 percent slope or greater) will be designed with concrete pavement. Stormwater and drainage systems will also

be designed to ensure there are no adverse impacts to downstream properties from storm runoff. Permanent Best Management Practices will also be designed to ensure stormwater quality is addressed. A drainage report will be prepared as part of the approval process. The entire WWTP site will also be designed with a 6-foot high chain link fence with gates to prevent public access.

- **Water System Improvements:** A water meter with a backflow preventer will be designed near the plant fenceline. The water system will be split into two systems: potable and plant process water. Potable water will service the Operations Building. The plant process water system will supply the screens, screenings washers, and utility stations located throughout the WWTP for maintenance purposes. A second backflow preventer will be designed to separate process water uses from the potable water system.
- **Electrical System Improvements:** Electrical power will be designed to be brought to the project site, which currently has no power. Overhead power lines coordinated and brought in from Hawaii Electric Light Company (HELCO) will supply 480-volt, 3-phase power to the WWTP via a pole-mounted transformer to a service panel with a meter. Security lighting will be limited to the Operations Building.
- **Standby Power System Improvement:** A standby generator to power the WWTP during a power failure will be designed and located in the Operations Building. An above-ground diesel tank, sized to provide power for a minimum of 3 days of operation, will be designed outside of the Operation Building. A manual transfer switch and generator receptacle outside the Operations Building will also be designed to allow a portable trailer-mounted generator to be brought in and connected in the event of an extended power outage.
- **Telemetry System Improvements:** A land-line telephone telemetry system with auto-dialer will be designed to convey alarm conditions and key operational parameters to Hilo-based staff. The telemetry system will also be provided with cell phone coverage as a backup.

Detailed design will include the following tasks:

1. **Basis of Design Report (BODR):** A draft and final BODR will be prepared to document design criteria. The BODR will define codes and standards applicable to the new facilities, design criteria, design features, equipment sizing, and performance requirements. Due to the accelerated schedule, the BODR will be prepared concurrently with the detailed design. The BODR will be organized by engineering discipline and include figures as required to illustrate design concepts. The draft BODR will be submitted at the 60-percent design submittal. The final BODR will be prepared with the 100-percent design submittal.
2. **Kickoff meeting:** A meeting with the County will be held to discuss project schedule and deliverables, establish roles and responsibilities, and introduce the design team.
3. **Design team coordination meetings:** Biweekly internal design team coordination meetings will be held during each design phase.
4. **Progress meetings:** Monthly conference calls will be held monthly with the County to discuss project status, issues, and outstanding decisions.
5. **Design drawings:** Design drawings will be submitted at 60-, 90-, and 100-percent design milestones. Design drawings will be prepared in 2017 Revit and Civil 3D CAD. The anticipated sheet count is approximately 230 sheets.
6. **Technical specifications:** Technical specifications will be submitted at 60-, 90-, and 100-percent design milestones.
7. **Front-end, special provisions, and Division 1 specifications:** Front end and special provision specifications provided by the County will be reviewed and provided with recommended revisions for the project. Division 1 specifications will be prepared.

8. **Construction cost estimates:** Construction cost estimates will be prepared at the 60-, 90-, and 100-percent design milestones. A construction schedule will be developed at the 90 percent design milestone.
9. **Design review meetings** Presentation and review meetings with the County will be held following each milestone to review the design documents, discuss design changes, review equipment preferences, and review facility layouts. Presentations may include 3D images to illustrate major aspects of the new facilities.

Assumptions

1. Design duration will be accelerated to meet the design deadline of September 18, 2019.
2. Design drawings and specifications will be submitted electronically in PDF format. Five (5) hard copies will be submitted to the County at each design milestone.
3. County review duration for each design deliverable is two (2) weeks. The County will consolidate review comments on a comment form and submit them to the design team.
4. The County will reproduce all bid documents for distribution.
5. Project improvements does not include off-site improvements triggered by utility subdivision or other land development triggers. Off-site improvements are limited to the water line being brought to the WWTP site.

Deliverables

1. Draft and final BODR
2. 60-percent general drawings and 3D model presentation
3. 90 and 100-percent design drawings, specifications, and cost estimates
4. 90-percent construction schedule

Task 4: Regulatory Approvals and Permitting

Description

Regulatory approvals and select special permits will be obtained, including the following:

- **Environmental Assessment:** Not included; an environmental assessment is being prepared under a separate contract.
- **County Special Use Permit:** Included, a County special use permit will be required to construct a WWTP that is less than 15 acres in size within the existing parcel TMK (3) 9-6-002:018 because the parcel is zoned for agriculture by the State of Hawaii Land Use Commission. A subconsultant (Wilson Okamoto Corporation) will prepare the permit application.
- **NPDES Construction Stormwater Permit:** Included; the disturbed area is expected to be greater than 1 acre, and therefore an NPDES construction stormwater permit will be required. An application will be prepared for coverage under the General Permit issued by DOH, if available. Otherwise, an individual permit will be pursued. Payment of the \$1,000 permit application fee (or applicable fee at the time of application) will be part of this task.
- **Disability and Communication Access Board (DCAB) Review:** Included; a DCAB application will be prepared and submitted to obtain their required review of the project. Payment of the DCAB review fee will be part of this task. The fee is based on a percentage of the current construction cost and is estimated to be up to \$8,000 fee (or applicable fee at the time of application) for the new WWTP.

- **Air Pollution Control Permit:** Not included; the WWTP will only have an emergency generator with an above-ground diesel tank. Emergency power generators are exempt from air permits.
- **Flood Zone:** Not included; project is outside the flood zone.
- **Building:** Included; a building permit will be required. A building permit application for County submittal will be prepared. We assume the County will pay the applicable fee directly.
- **Grading:** Included; a drainage report will be prepared in addition to preparing this application. We assume that the design documents will be submitted to SHPD as part of the permitting process.
- **Department of Health (DOH):** Included; the BODR and contract documents will be submitted to DOH for review and approval to construct the facility.
- **State Historic Preservation Division (SHPD):** Not included. We assume that the ongoing Section 106 consultation being performed under a separate contract will result in SHPD concurrence of a finding of no significant impact for the project.
- **County and/or State Right-of-Way approvals:** Included; the contract documents will be submitted for County or State approval for utility and roadway connections that may be within County or State Right-of-Ways.

Assumptions

A supplemental proposal with specific scope and fee will be prepared for any additional permit applications or fees that are determined to be required during the course of the project.

Deliverables

1. County Special Use Permit application; one set of comments will be addressed during the permit process.
2. NPDES Construction Stormwater Permit application; one set of comments will be addressed during the NPDES application process.
3. DCAB Review application; one set of comments will be addressed during the DCAB process.
4. Building Permit application; two sets of comments will be addressed during the Building Permit process.
5. SHPD Review application; one set of comments will be addressed during the SHPD process.
6. DOH Review; one set of comments will be addressed during the DOH process.
7. County/State ROW; two sets of comments will be addressed during the ROW approval process.

Task 5. Services during Bidding

Description

Engineering services during bidding will be provided. Services include the following:

- Pre-bid meeting attendance
- Responses to requests for clarification (RFCs)
- Responses to substitution requests
- Preparation of necessary addendums
- Assist County with evaluation of bids, as requested
- Prepare conformed construction documents

Assumptions

1. 40 hours for bidding support and meeting attendance
2. 20 RFCs and 2 hours per RFC to review

3. 8 substitution requests and 2 hours per substitution request to review

Deliverables

1. Responses to RFCs
2. Substitution request review responses
3. Addendums, as needed
4. Five (5) sets of printed (half size) conformed plans and three sets of printed conformed specifications.
5. Electronic (pdf) files for conformed documents.

Task 6. Services During Construction

Description

Engineering services during construction will be provided. Services include the following:

- Construction conference calls
- Construction site visits
- Response to requests for information (RFIs)
- Review of submittals
- Change order support

Assumptions

1. An independent Construction Manager (CM) will be retained by the County
2. 18 conference calls during construction at 2 hours per meeting for two consultants
3. 12 site visits during construction for two Consultants at 8 hours per visit (includes travel)
4. 100 RFIs and 4 hours per RFI to review
5. 40 hours for change order support
6. 250 submittal events and 4 hours per submittal to review
7. Structural Special Inspections are not included; the construction contractor will be required to provide special inspection services via subcontract.

Deliverables

1. Responses to RFIs
2. Submittal review comments
3. Change order documentation

Task 7. PLC and HMI Programming & Testing

Description

1. PLC and HMI software development and testing services will be provided during construction, including:
 - a. Review of HMI graphics, color scheme, and navigation.
 - b. Review of network configuration and addressing.
 - c. Review ancillary software (report generation, alarm notification, etc.) configuration.
 - d. Review of control system hardware (network switches, servers, etc.) configuration.
 - e. Participate in the Factory Acceptance Testing (FAT) of the control system at the Contractors identified location.

- i. Test the PLC program to confirm that each function and alarm point described in the contract documents operates as expected.
 - ii. Test the HMI system to determine the accuracy of the displayed data, and the ability to make modifications to operating setpoint.
 - iii. Observe alarm points as they are displayed on the HMI system and test functions associated with each alarm point such as call-out, acknowledgement, etc.
 - iv. Provide a write up of observations during testing and assist in determining if the control panels are complete and ready to ship and install at the site.
 - f. Deliverables to include:
 - i. Review comments for HMI, network configuration, and hardware configuration.
 - ii. Write up of FAT observations and determination of completion of tests.
2. PLC and SCADA system startup and testing services will be provided during construction, including:
- a. Attend weekly startup meetings with System Integrator, CM, and COH personnel starting approximately one (1) month prior to the start of the component test phase. Meeting will continue through the project commissioning period.
 - b. SCADA Component Tests
 - i. Review component test procedures submitted by the System Integrator and make recommendations to CM and COH regarding approval.
 - ii. Witness component tests and overall integration with plant SCADA system. Prepare a list of deficient items and make recommendations to the CM and COH regarding approval.
 - c. PLC Input/Output Checkout
 - i. Review checkout procedures submitted by the System Integrator and make recommendations to CM and COH regarding approval.
 - ii. Witness and confirm the programmable logic controller input/output checkout performed by the contractor. Prepare a list of deficient items and make recommendations to the CM and COH regarding approval.
 - d. SCADA System Functional Tests
 - i. Review functional test procedures submitted by the System Integrator and make recommendations to CM and COH regarding approval.
 - ii. Witness and confirm function of each system. Verify software functionality and communications with HMI devices and vendor provided control panels. Test HMI screens for connectivity, completeness, and accuracy of displayed information.
 - iii. Prepare a list of deficient items and make recommendations to the CM and COH regarding approval.
 - e. Operational Tests
 - i. Review operational test procedures submitted by the System Integrator and make recommendations to CM and COH regarding approval.
 - ii. Witness the operational test phase of the complete facility. Verify the automatic operation of all aspects of the R-1 system and the integration of the entire system. Test end-to-end data integrity and accuracy. Individually test each alarm point for correct alarm annunciation at the HMI device and alarm notification system. Prepare a list of deficiencies noted during the testing and provide a list to CM. Make recommendations to CM and COH regarding approval.

Task 8. Testing, Startup, Commissioning, Training, and Optimization Services

Description

Testing, startup, commissioning, training, and optimization services for the new WWTP will be provided:

1. Prepare an overview and training presentation for COH O&M staff. Training shall also include field training.
2. Provide delivery acceptance tests and inspections required in individual equipment specifications for pumps, equipment, electrical and control panels when requested by the COH.
3. Attend weekly startup meetings via telephone with Contractor, CM, and COH personnel starting approximately one month prior to the start of the component test phase. Meetings to continue through the project commissioning period. The purpose of the meetings is to coordinate the project startup activities between the construction contractor, the CM, the Consultants and COH O&M personnel who will ultimately operate the facility.
4. Review facility integration schedule from contractor and make recommendations to the CM and COH regarding approval.
5. Meet with the CM, COH and O&M personnel to discuss startup procedures and resolution of any operating problems, in addition to assist with optimization activities.
6. Component Tests:
 - a. Witness equipment component tests as required. Review test data supplied by Contractor and CM on component tests for major equipment as requested. Make recommendations to the CM and COH regarding approval.
 - b. Prepare list of deficient items.
7. PLC Input/Output Checkout:
 - a. Witness and verify programmable logic controller input/output checkout performed by construction contractor.
 - b. Prepare list of deficient items.
8. System and Operational Tests - Preliminary:
 - a. Coordinate with construction contractor and with CM and COH O&M personnel to verify that telemetry systems are functional during the system and operational tests. Test end-to-end data communications integrity and accuracy.
 - b. Coordinate with construction contractor and with CM and COH O&M personnel to verify that control actions and control system responses are implemented during the system and operational tests.
9. System Tests:
 - a. Review system test procedures submitted by construction contractor and make recommendations to CM and COH regarding approval.
 - b. Assist with the system test phases for each system. Verify the PLC program functionality and communications with HMI devices and vendor provided control panels. Test HMI screens for connectivity, completeness, and accuracy of information displayed. Prepare lists of deficiencies noted during testing and provide list to CM for incorporation in overall testing deficiency list. Make recommendations to CM and COH regarding approval.
10. Operational Tests:
 - a. Review operational test procedures submitted by construction contractor and make recommendations to CM and COH regarding approval.

- b. Assist with the operational test phase of the complete facility. Verify integration of the entire system and test end-to-end data integrity and accuracy. Individually test each alarm point for correct alarm annunciation at the HMI device. Prepare lists of deficiencies noted during witness testing and provide list to CM for incorporation in overall testing deficiency list. Make recommendations to CM and COH regarding approval.
11. Commissioning Support:
- a. Provide assistance to COH during commissioning.
12. Optimization:
- a. Conduct a site visit 3 months after WWTP acceptance to assist with optimization of the WWTP processes.
 - b. Review plant performance data for 3 months after WWTP acceptance to assess performance and make recommendations to optimize the WWTP.

Assumptions

1. Start-up and testing phase duration is 3 months.
2. All equipment training will be performed by the Contractor.
3. Two operational overview and training sessions will be provided.
4. Two PLC and HMI operational training sessions will be provided.
5. Two report generation training sessions will be provided.

Deliverables

1. Operational overview and training presentation.
2. PLC and HMI operational overview and training presentation.
3. Report generation operation overview and training presentation.
4. Field reports documenting findings from field observations and recommendations.

Task 9. Record Drawings

Description

Final Record Drawings from construction contractor's markups, CM markups, and Consultant markups will be provided.

Assumptions

1. CMs will provide one set of consolidate drawing markups.

Deliverables

1. Six half-size copies of the final Record Drawings plus electronic (pdf) file.
2. CAD files

Task 10. Operation and Maintenance Manual

Description

An Operations and Maintenance (O&M) manual, draft and final versions, will be prepared in accordance with HAR 11-62 requirements and submitted to DOH for approval. The O&M manual will include the following:

- Operation and maintenance instructions for each treatment process under normal and emergency conditions such as power outage and equipment malfunction.

- Troubleshooting, corrective, and preventive measures to be taken to maintain process control and treatment performance.
- Start-up procedures.
- Manpower requirements needed to operate and maintain the facility.
- Figures showing the layout of individual process areas, equipment locations and equipment numbers. A simplified system-wide hydraulic profile, and graphical representations of the system shall be provided in the O&M manual. Photos may be used on a limited basis where deemed appropriate to better communicate the design intent and functionality to the O&M staff. Equipment manufacturer drawings from submittals and shop drawings may also be used if suitable.
- List of required daily activities, checks and observations.
- Logs or report forms for all operation and maintenance activities performed.
- Flow schematic diagrams with details of piping and valves. A hydraulic profile will be included.
- Site plan of the WWTP including piping and process areas.
- Details on safety equipment including applicable spare parts, maintenance and operation instructions.
- Details on monitoring equipment including spare parts, maintenance and operating instructions.

The O&M manual will be prepared on the following milestone schedule:

1. **O&M Manual Outline.** Prepare annotated O&M manual outline for COH approval.
2. **Draft O&M Manual.** Prepare draft O&M manual using the approved outline.
3. **Final O&M Manual.** Prepare final O&M manual after startup is complete incorporating all comments and changes. Provide technical support as requested by COH answering questions and providing clarification of design concepts and operating philosophies of the WWTP during the preparation of the final O&M manual.

Written certifications of compliance that O&M manual have been prepared in accordance with HAR 11-62 requirements will be provided. Certification documentation for the COH attesting compliance with O&M requirements in accordance with HAR 11-62 requirements shall be prepared.

Assumptions:

1. COH to review and approve O&M manual outlines prior to commencing development of the O&M manual.
2. Review comments shall be forwarded to the Consultant within 30 calendar days of receipt by the COH of the draft manual.

Deliverables:

1. One electronic copy of the O&M manual outline.
2. Three copies of the draft O&M Manual plus electronic (pdf) file.
3. Six copies of the final O&M Manual plus electronic (pdf) file.
4. Certification of Compliance Certifications and supporting documentation.

Task 11. Final Inspection and 1-year Certification

Description

A site visit to the WWTP after one-year of operation will be conducted to review operations and maintenance performance with COH personnel. COH-provided operational and maintenance data from the first year of operation will be summarized and the One-Year Certification will be prepared as required by HAR 11-62.

Deliverables:

1. One electronic (pdf) copy of the draft certification report for review and comment.
2. Three copies of the final certification report plus electronic (pdf) file.

Task 12. Program Management of Collection System Improvements

Description

The consultant shall serve as Program Manager for the collection system improvement project prepared by another consultant (under their own separate contract).

- As Program Manager, the consultant shall be responsible for review and steering of detailed design efforts, data gathering, and provide communication support between the collection system designers, the County, and regulatory and permitting agencies.
- As Program Manager, the consultant will review and provide input regarding the contract scope, fees, and invoices related to work by the collection system consultant.
- The Program Manager will provide up to three (3) trips to Hilo and/or Pahala for project review meetings with the County or the collection system detailed design team.
- The Program Manager will attend quarterly conference calls between the County and USEPA Region 9 to discuss Administrative Order of Consent status.
- The Program Manager will provide up to ten (10) trips to Hilo for DEM management briefings.
- It is understood that Program Management activities under this contract apply to collection system detailed design efforts, bidding period, construction period, and startup and commissioning.

Deliverables:

1. E-mail and electronic (pdf) documents as needed.

Task 13. Community Outreach

Description

The consultant shall assist the County with preparation and execution of up two community meetings during design and construction. Strategy plans for the meetings will be developed, as well as visual presentation materials. A report summarizing each meeting will be prepared. A community outreach specialist subconsultant (EarthPlan) will assist with this task.

Deliverables:

E-mail and electronic (pdf) documents as needed.

Schedule

Our proposed preliminary schedule is summarized in Table 1. Community outreach efforts will occur throughout the project.

Table 1. Proposed Schedule		
Description	Duration	Milestone
Notice to proceed	--	February 1, 2019
60% submittal, Draft BODR	20 weeks	April 17, 2019
90% submittal	13 weeks	July 17, 2019
Final Design, Final BODR	9 weeks	September 18, 2019

Fee

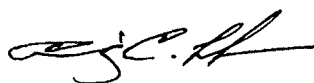
BC will complete the design, bidding, and construction services described above for a lump-sum fee of \$4,208,494.00. Table 2 provides a summary of our fee estimate; additional detail can be provided upon request. BC will invoice monthly on a percentage complete by task basis.

Table 2. Fee Estimate								
Task	Labor Hours				Labor Budget	Subs& ODCs	Tax	Total
	Engineering	CADD	Admin	Total				
1. PM, Meetings, Site visits	2,158	0	500	2,658	\$526,324	\$8,000	\$23,717	\$558,041
2. Pre-Design Activities	76	0	20	96	\$19,508	\$542,400	\$867	\$562,775
3. WWTP Detailed Design	8,580	3,600	292	12,472	\$1,737,754	\$36,000	\$77,842	\$1,851,596
4. Regulatory Approvals/Permitting	434	56	4	494	\$68,124	\$116,260	\$3,468	\$187,852
5. Services During Bidding	208	72	0	280	\$46,744	\$8,000	\$2,430	\$57,174
6. Services During Construction	1,575	80	160	1,815	\$289,066	\$60,000	\$13,940	\$363,006
7. PLC/HMI Programming/Testing	740	0	22	762	\$111,090	\$15,000	\$5,597	\$131,687
8. Testing, Startup, Commissioning	440	0	12	452	\$77,860	\$6,000	\$3,722	\$87,582
9. Record Drawings	12	220	8	240	\$28,584	\$2,000	\$1,358	\$31,942
10. O&M Manual	432	40	40	512	\$76,520	\$2,000	\$3,485	\$82,005
11. Final Inspection/1-Yr Cert	84	0	2	86	\$13,366	\$2,000	\$682	\$16,048
12. Program Management Coll Sys	1,020	0	0	1,020	\$201,000	\$5,000	\$9,144	\$215,144
13. Community Outreach	160	0	16	176	\$34,000	\$28,000	\$1,642	\$63,642
TOTAL	15,919	4,068	1,076	21,063	\$3,229,940	\$830,660	\$147,894	\$4,208,494

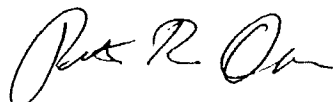
We truly look forward to assisting the County with implementation of this unique and important project. Please call Craig Lekven at (808) 442-3301 if you have any questions.

Very truly yours,

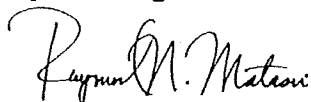
Brown and Caldwell



Craig C. Lekven, P.E.
 Managing Engineer
 Project Manager



Peter R. Ono, P.E.
 Executive Engineer
 Client Service Manager



Raymond N. Matasci, P.E.
 Senior Vice President
 Pacific Area Leader

Attachment A: YKE Geotechnical proposal



December 20, 2018

Mr. Garrett Leong, P.E.
Brown and Caldwell
737 Bishop Street, Suite 3000
Honolulu, HI 96813

Subject: Supplemental Proposal
Geotechnical Exploration and Evaluation Services
in Support of Preliminary Planning and Final Design
Pahala Wastewater Treatment Plant & Sewer Collection System Reconstruction Projects
Pahala, Big Island, Hawaii

Dear Mr. Leong:

Thank you for your request for proposal. Yogi Kwong Engineers, LLC is pleased to provide this revised supplemental fee proposal to provide geotechnical exploration and evaluation services in support of preliminary planning and final design of the subject projects. This fee proposal has been revised to reflect the pending change in Hawaii County GET in 2019.

Based on meetings and correspondence with design team members, Brown and Caldwell and Fukunaga & Associates, we understand a preliminary geotechnical exploration and evaluation report is requested to support initial planning and development of the reconstructed collection system alignments and the new WWTP's preliminary design concepts from a geotechnical standpoint. This proposal is intended to supplement our October 29, 2018 dated fee proposal and includes the proposed scope and lump sum fee to perform a preliminary geotechnical exploration and feasibility evaluation in support of preliminary planning of the subject projects. We anticipate that a supplemental geotechnical exploration will be necessary to support subsequent detailed design of the selected design approach. A rough estimate allowance budget is also proposed for as-needed additional geotechnical investigation, evaluation and report preparation in support of final design as well as geotechnical design services during bidding and construction of the Pahala Wastewater Treatment Plant and Sewer Collection System projects.

Our scope of services and fee estimate to perform the above listed geotechnical exploration and evaluation services, and also geotechnical consultation support services during project planning and preliminary design are summarized in the following attachments. We would be pleased to discuss this proposal at your convenience after your review. Please contact us if you have any questions or require additional information.

Yours truly,
Yogi Kwong Engineers, LLC

Kealohi Sandefur, P.E.
Associate

James Kwong, Ph.D., P.E.
Principal



ATTACHMENT A
Geotechnical Exploration and Evaluation Services in Support of
Preliminary Planning Design of the
Pahala Wastewater Treatment Plant and Sewer Collection System Reconstruction Projects
Pahala, Big Island, Hawaii

December 20, 2018

BACKGROUND

We understand that the County of Hawaii (COH) is in the process of contracting Brown & Caldwell (B&C) and Fukunaga & Associates (F&A) to respectively design a new Pahala Waste Water Treatment Plant and a Reconstructed Sewer Collection System (herein referred to as the WWTP and Collection System projects respectively) with B&C acting as COH's project coordinator for both design projects.

YKE previously submitted a September 13, 2018 proposal addressed to B&C to perform geotechnical exploration and evaluation services in support of both preliminary planning and final design of the WWTP and Collection System projects. YKE was subsequently requested to submit an October 3, 2018 revised proposal addressed to COH to provide preliminary geotechnical exploration and evaluation services to support only the initial planning and preliminary design portions of the WWTP and Collection System projects with the understanding that a supplemental geotechnical exploration to support subsequent detailed final design of the team's selected design approach as well as geotechnical consultation support services during the final design phase and post design bidding and construction phase these projects will be necessary, and that the fee and scope of these additional services would be provided in a separate proposal as requested by COH or its designated design consultants.

At B&C's request, the initial geophysical reconnaissance portion of the preliminary geotechnical exploration and evaluation services as scoped in the October 3, 2018 proposal was re-submitted in a separate proposal to COH which was dated October 29, 2018.

B&C is now requesting YKE to submit this current proposal to perform the remainder of the preliminary field exploration and evaluation services not included in our October 29, 2018 proposal, which includes performing probe holes, exploratory borings, test pits and infiltration tests as provided under Tasks 2.A.2, 2.A.3, 2.B.2, 2.B.3 and 2.B.4 below; providing geotechnical evaluation services in support of the initial planning and preliminary design of the subject projects as provided in Task 3.0 of the October 3, 2018 proposal.

This proposal also includes an initial budget allowance for as-needed geotechnical explorations and evaluation in support of final design as well as geotechnical services during construction as discussed in Tasks 4.0 and 5.0 below.

This proposal is intended to supplement our October 29, 2018 dated fee proposal and supersedes previous proposals dated September 13, and October 3, 2018 respectively.

From discussions with B&C and F&A, we understand that Pahala is known to have lava tubes, such as those which are currently being utilized as LCC's. B&C requests that a preliminary exploration be performed to evaluate the presence of lava tubes along the proposed collection system alignments and at the WWTP site in support of feasibility evaluation of preliminary design concepts. As part of the field exploration, infiltration tests are also requested to be performed at the WWTP site to support development of the slow-rate land application grove design concept.

Based on discussions with B&C, we also understand that supplemental geotechnical exploration(s) and evaluation to support detailed design and development of construction bidding plans and specifications would be performed under a separate contract with B&C with the scope to be defined after the preliminary geotechnical investigation and further development of the selected design concept by B&C and F&A. Based on this understanding of the project approach and the scope considerations at this time, our proposed scope of services for the preliminary geotechnical investigation is discussed below.

Our proposed scope of services for a preliminary geotechnical exploration and feasibility evaluation at the Pahala WWTP project site and along the proposed new collection system alignments is summarized in Tasks 1.0 to 3.0 below. Since the details of the preferred design concept are not known at this time, a preliminary geotechnical scope of services to support development of the 90% and 100% design documents is proposed in Task 4.0 with the understanding that the Task 4.0 scope of services would be defined pending better understanding of the preferred design concept. Geotechnical consultation support services during bidding and construction are discussed in Task 5.0.

YKE-B&C Supplemental Prp Pahala WWTP & Collection System (2018-12-20)



YKE proposes to assign a project manager to coordinate and correspond (e-mails and telecommunication) with B&C and F&A in support of preliminary engineering evaluations to be performed as part of the scope of services outlined herein. Budget for project management is included in this proposal.

Budget for review available record engineering reports and construction drawings, attending project kick off site visit meeting on Hawaii Island, and a preliminary design coordination meeting in Honolulu with the project team is included under our October 29, 2018.

TASK 2.0 – PRELIMINARY GEOPHYSICAL AND GEOTECHNICAL EXPLORATION

In consideration of the documented presence of lava tubes in the Pahala area we propose to perform a two-phase field preliminary exploration including an initial geophysical reconnaissance followed by supplemental probe holes and preliminary exploratory borings.

Ground Penetrating Radar (GPR) and Electrical Resistivity (ER) geophysical methods will be performed to collect preliminary subsurface geophysical data to support planning of subsequent probe holes and borings. Our proposed two-phase preliminary field exploration along the collection system alignments and at the proposed WWTP site are discussed in Tasks 2.A and 2.B below.

The budget and scope for the initial geophysical field reconnaissance described in Tasks 2.A.1 and 2.B.1 below was submitted separately in our October 29, 2018 proposal and is repeated below solely for ease of reference.

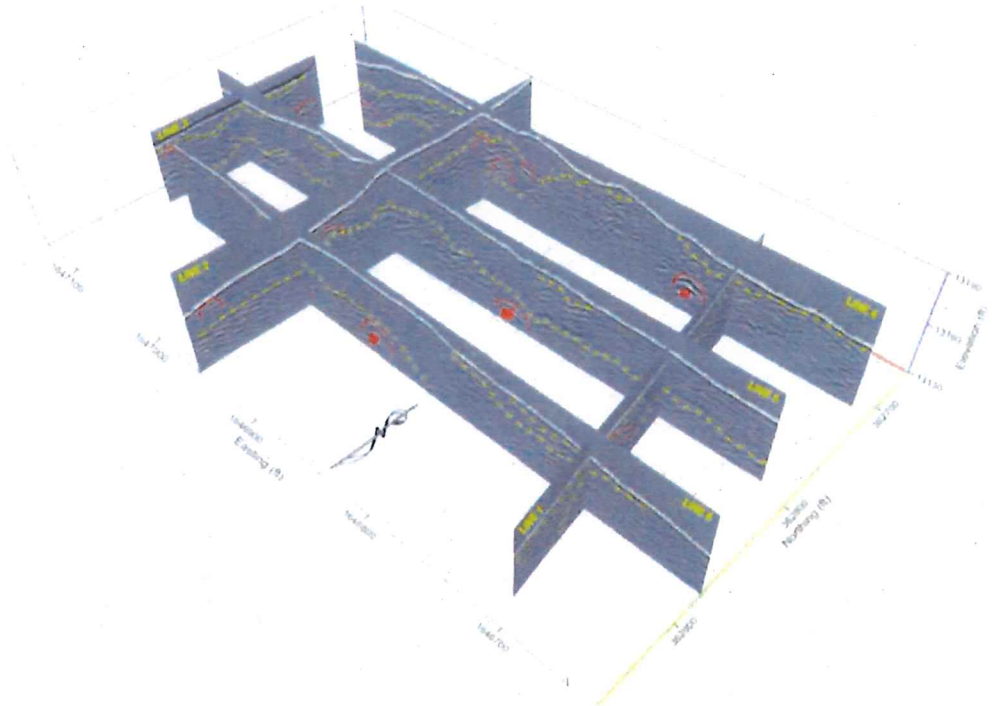
Task 2.A - Sewer Collection System Alignments

Task 2.A.1 - Preliminary GPR and ER Exploration: The geophysical reconnaissance will be performed in a two-phase approach using GPR and ER methods. Based on correspondence with NORCAL, the data collection using ER methods is a slower process compared to GPR and a single ER survey along the 13,400-foot-long collection system alignment would require about 20 working days with a 3-man crew. Therefore, a two-phase geophysical reconnaissance is proposed by first conducting a GPR survey along the 13,400 linear feet collection system alignment followed by ER transects along select alignment locations to supplement the GPR data.

The GPR exploration is proposed to be performed with parallel transects generally adjacent to both shoulders of the roadway along the 13,400 feet of collection system alignment, resulting in approximately 26,800 linear feet of GPR transect data. We have budgeted the GPR exploration based on the proposed collection system alignment as indicated by the red line in the Insert 1.

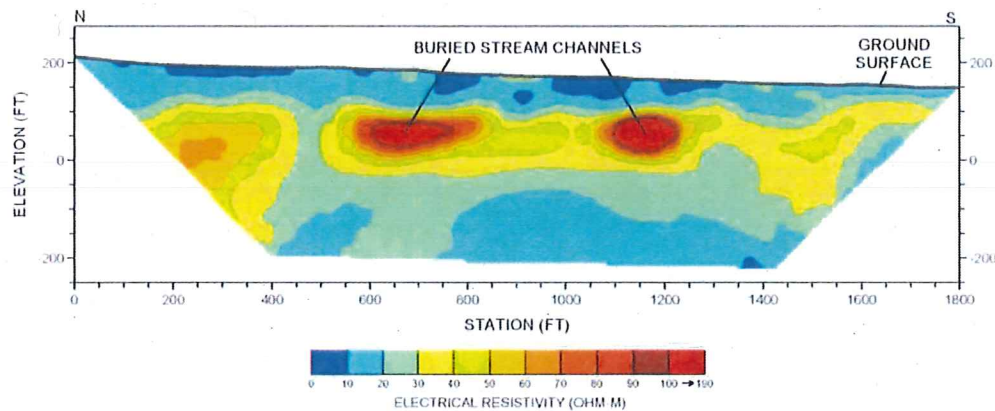
NORCAL estimates that 26,800 linear feet of GPR transects can be performed in four (4) working days with rolling SDPO traffic control following the GPR field crew where needed and assumes that the collection system alignment is easily accessible in areas not located along roadways. Depending on the proximity of the parallel GPR surveys transects, GPR profiles may be plotted using a fence-diagram method. An example GPR fence diagram is shown in Insert 3 for illustrative purposes. It is noted that the below fence plot presents three parallel transects

with transverse GPR profiles whereas the proposed GPR performed along the roadway shoulders is anticipated to include two GPR generally parallel sections.



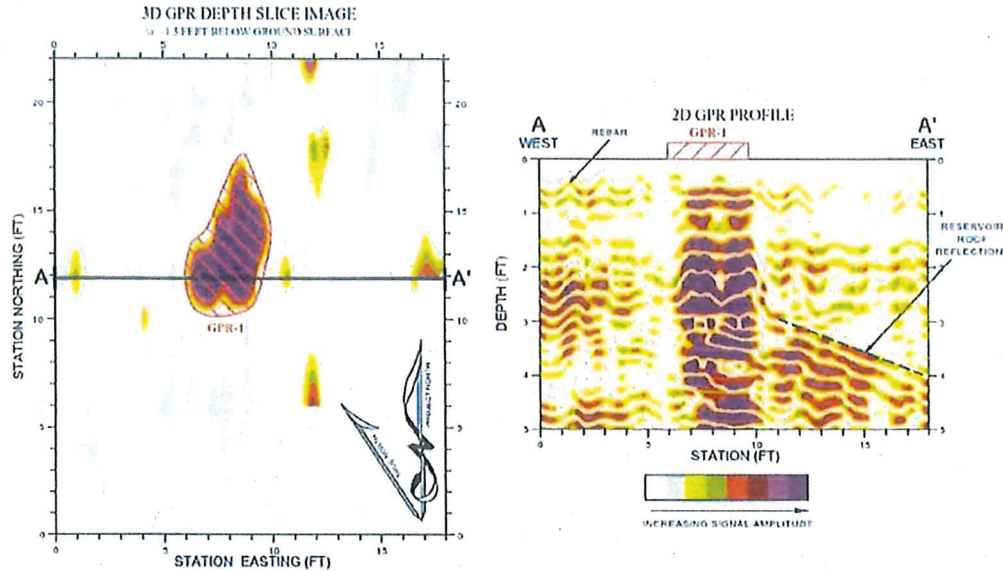
Insert 3 – Illustrative Example of a Fence Diagram Plot with GPR Transect Profiles

Pending completion of the four-day GPR transects, we propose a four-day ER exploration to be performed along select alignment locations. NORCAL estimates that approximately 3,000 LF of ER transects can be performed over the four-day work period. Based on the ability for ER methods to penetrate deeper depths compared to GPR, the ER exploration would be prioritized to along portions of the planned collection system alignment where the project team anticipates the sewer lines would be about 10 feet below grade or deeper. An illustrative example of an ER 2-D profile provided by NORCAL is presented in Insert 4 below.



Insert 4 – Illustrative Example of a Electrical Resistivity 2D Profile

We understand that the project team also requests to perform geophysical reconnaissance of the two LCC sites to evaluate the depth and size of the lava tubes at the two LCCs. We propose to perform two “3-dimensional” GPR transects at both LCC sites. The “3D” GPR method involves performing multiple GPR transects in a grid pattern. For budgeting purpose we propose that the 3-D GPR transects be performed at both LCC sites based on a 50’x50’ exploration area at each LCC site. An illustrative example plot of “3D” GPR data is presented in Insert 5 below.



Insert 5 – Illustrative Example of a “3D” GPR Plan and Profile

NORCAL will submit the draft geophysical data to YKE in support of planning of selection of probe holes locations and the preliminary exploratory borings. Upon completion of the probe holes and exploratory borings NORCAL will review the logs and prepare a final geophysical report. Refer to the attached fee proposal from NORCAL for additional discussion of the GPR and ERT methods.

Task 2.A.2 - Field Exploration Stakeout, One-Call Utility Clearance and County Excavation Permit: Upon review of the draft geophysical exploration findings with the exploration team, YKE proposes to perform a site visit to field mark the boring and probe hole locations selected to verify selected geophysical anomalies identified by the geophysical reconnaissance and at key facilities locations, and notify HOCC to apply for a utility clearance ticket and County Excavation Permit. After HOCC notification, YKE would coordinate with utility companies and agencies to tone and clear underground utility locations prior to drilling. A follow up site visit would be performed to verify borehole and probe hole clearance relative to utility tone marks and submit completed county permit application. For budgeting purposes we have assumed that the probe holes will be performed soon after completion of the geophysical investigation to support interim interpretation of the geophysical data with the exploratory borings scheduled subsequent to the preliminary design coordination meeting necessitating processing the probe holes and exploratory borings as two separate HOCC and County Permits (one for the probe holes and one for the borings).



Task 2.A.3 - Probe Holes and Preliminary Exploratory Borings – The proposed preliminary subsurface exploration includes an estimated 15 to 20 probe holes and nine (9) exploratory borings performed along the collection system alignment.

The probe holes are proposed to be drilled to approximately 10 to 25 feet below the existing ground surface. The purpose of the probe holes will be performed to “ground truth” the geophysical data in areas where geophysical anomalies may indicate potential presence of lava tubes. The probe holes will be drilled using an air track drill rig with pneumatic rock bit. Probe holes will be logged based on observed cuttings, drill advance rate and drill behavior. At the completion of the probe hole drilling, we propose to insert a CCTV televiewer camera into the probe borehole to video document the side walls of the probe hole. The depth to free water, if encountered, will be recorded. After drilling, the probe hole will be backfilled with cuttings mixed with Quikrete.

Work associated with the exploratory borings would include coordination with drill crew for drilling of the exploratory borings, borehole logging, material sampling and identification, and sample preservation, and borehole backfill. The exploratory borings are proposed to be drilled to approximately 10 to 25 feet below the existing ground surface along the proposed collection system alignment with the depths to be defined based on the anticipated subsurface information needs based on the design concept developed prior to drilling the borings. The exploratory borings will be drilled using a truck mounted rotary wash drill rig and will be sampled at 5-foot intervals. Volcanic rock, if encountered, will be continuously cored using an NX, HQ, or PQ core barrel. Closer soil sampling intervals will be performed at selected depths. The depth to free water, if encountered, will be recorded. After drilling, the borings will be backfilled with cuttings mixed with Quikrete.

The drilling work will be under the supervision of our field engineers/geologists, who will also log the soil samples or rock cores obtained from the borings.

Task 2.B – Pahala WWTP

Task 2.B.1 - Preliminary GPR, ER and MASW Explorations: Both GPR and ER data will be obtained along 15 transects crossing the WWTP site that range in length from 220- to 890-feet. The budget is based on 13 days of ER field survey and 3 days of GPR field survey time. Shorter and more closely spaced surveys may be performed to develop closer resolution “3-D Time Slices” as available field time permits within the budget work shifts. A preliminary map of proposed geophysical transects locations is shown in Insert 6 below. It is noted that the geophysical exploration locations will be limited to or adjusted based on access via existing accessible orchard lanes.



Insert 6 – Conceptual Locations of ERT and GPR Transects at the WWTP Site

A half-day reconnaissance is also proposed to perform multi-channel surface waves (MASW) exploration to measure the shear wave velocity at selected locations to support calculation of Vs30 as part of the seismic site classification analysis.

NORCAL will submit the draft geophysical data to YKE in support of selection of exploratory borings and probe holes locations.

Task 2.B.2 - Field Exploration Stakeout and One-Call Utility Clearance: Upon review of the draft geophysical exploration findings YKE proposes to perform a site visit to field mark the boring and double ring infiltrometer locations and notify HOCC to apply for a utility clearance ticket. After HOCC notification, YKE would coordinate with utility companies and agencies to tone and clear underground utility locations prior to drilling. A follow up site visit would be performed to verify borehole and probe hole clearance relative to utility tone marks.

Task 2.B.3 - Exploratory Borings: Subsurface exploration is proposed to include five 5 exploratory borings drilled between 25 to 40 feet bgs for a maximum total drilling footage of 155 feet with the depths of each boring to be defined based on the anticipated subsurface information needs and design concept developed prior to drilling the borings. Work associated with the exploratory borings will include coordination with drill crew for drilling of the exploratory borings, borehole logging, material sampling and identification, and sample preservation, and borehole backfill.

The exploratory borings will be drilled using a truck mounted rotary wash drill rig and will be sampled at 5-foot intervals. Volcanic rock, if encountered, will be continuously cored using an



NX, HQ, or PQ core barrel. Closer soil sampling intervals will be performed at selected depths. The depth to free water, if encountered, will be recorded. After drilling, the borings will be backfilled with cuttings mixed with Quikrete.

The drilling work will be under the supervision of our field engineers/geologists, who will also log the soil samples or rock cores obtained from the borings.

Task 2.B.4 - Double Ring Infiltrometer Tests: We understand that B&C requests measurement of the field infiltration rates based on the double ring infiltrometer tests (ASTM D3385) in support of proposed WWTP design. Fifteen (15) double ring infiltrometer tests as requested by B&C, will be performed within the footprint of the proposed WWTP site and land application system. Up to 15 test pits may be also excavated to perform the tests. YKE proposes to subcontract Isemoto Contractors to excavate the test pits and provide water truck for testing. Depending on the encountered subsurface conditions the ground conditions may not be compatible with the double ring test methods (such as gravelly soils or test performed in rock). If such soil conditions exist an alternative test method following the Department of Health Infiltration test or other mutually agreeable test method can be performed based on the proposed budget. The test pits will be backfilled with excavated on-site materials after completion of the tests.

Assumptions: We understand that the WWTP is located at an active orchard with established dirt roads between rows of trees that can be used for drill rig and water truck access and unimpeded on-foot access during the geophysical reconnaissance. Based on this understanding, we have not included budget for site clearing aside for incidental cutting of small branches that are within an arm's length when standing on the ground.

TASK 3.0 – PRELIMINARY GEOTECHNICAL EVALUATION AND FEASIBILITY REPORT

Due to the limited information pertaining to the subsurface conditions, we understand that the design concept for the WWTP and collection system may be significantly impacted based on the subsurface conditions particularly the prevalence of possible lava tube. We therefore propose to perform preliminary geotechnical evaluations and prepare separate geotechnical feasibility reports in support of development of the respective Pahala WWTP and Collection System design concepts. Our proposed preliminary geotechnical evaluation scope of services is summarized below.

Task 3.A – Pahala WWTP Geotechnical Evaluation and Feasibility Report

Materials obtained from the boring and test pits will be returned to our laboratory for further examination and laboratory testing. The proposed number of laboratory tests are listed below for budgetary purposes:

- Moisture content and Dry Density (50)
- Grain-size distribution (4)
- Atterberg limits (4)
- Direct Shear (2)
- Soil Unconfined Compressive Strength (4)



- Rock Unconfined Compressive Strength (4)
- Rock Point Load Test (10)
- Consolidation (2)
- Expansion Index Test (2)
- Ring Swell (2)
- Laboratory Proctor Compaction Curve (2)
- Laboratory CBR – 1 Point Load test (2)

Actual quantities of each laboratory test shown in the attached fee breakdown may vary depending on actual subsurface conditions encountered.

YKE proposes to perform geotechnical evaluations in support of providing preliminary geotechnical considerations and recommendations in support of B&C's development of design concept for the proposed Pahala WWTP. YKE proposes to submit a draft geotechnical feasibility report for the B&C project design team review and comment, and a final submittal feasibility geotechnical report addressing B&C project team's comments to the draft report. The geotechnical report may include the following:

- Summary of our field exploration and laboratory test program
- Logs of borings and results of field and laboratory tests
- Discussion of site surface conditions, subsurface conditions, regional geology and local geologic units encountered at the site
- Discussion of geophysical survey results and identifying areas of concern due to the presence of subsurface lava tubes
- Evaluation of open trench methods for pipe installation and anticipated construction difficulties
- Preliminary foundation support considerations
- Recommendations for supplemental geotechnical exploration work (i.e. additional borings and/or geophysical survey work) based on initial findings, if needed.

Task 3.B – Collection System Geotechnical Evaluation and Feasibility Report

Materials obtained from the boring and test pits will be returned to our laboratory in Honolulu for further examination and laboratory testing. The proposed number of laboratory tests are listed below for budgetary purposes:

- Moisture content and Dry Density (12)
- Grain-size distribution (7)
- Atterberg limits (5)
- Direct Shear (2)
- Soil Unconfined Compressive Strength (4)
- Rock Unconfined Compressive Strength (5)
- Rock Point Load Test (10)
- Consolidation (2)
- Ring Swell (4)
- Laboratory Proctor Compaction Curve (2)
- Laboratory CBR – 1 Point Load test (2)



We plan to evaluate geotechnical-related constructability issues pertaining to pipeline installation and assess the feasibility of open trenching methods to install the proposed collection system pipeline based on the anticipated subsurface conditions revealed by the literature review, and the preliminary geotechnical exploration and laboratory testing. These findings will be summarized in a preliminary geotechnical feasibility report. Geotechnical discussions in the report may include:

- Logs of Borings and Field and Laboratory Test Results.
- Geophysical Survey Results
- Review and evaluation of available geotechnical and geologic information.
- Site surface conditions along the pipeline alignments.
- Existing utilities and the potential for obstructions.
- Geotechnical issues, including excavation support and groundwater control (if applicable) pertaining to open trenching.
- Preliminary earthwork considerations
- Conceptual approach for pipeline crossing through lava tubes.
- Excavation support minimum requirements considerations, need for groundwater control (if applicable) and related geotechnical considerations.
- Suitability of the in-situ material encountered in the exploratory borings for use as backfill material
- Subgrade preparation, backfill, and compaction considerations,
- Foundation bearing capacity, estimated foundation settlements, and lateral bearing pressure for manholes and other below-grade structures
- Concepts for covering of lava tube surface openings.

ASSUMPTIONS

- Available as-built or record drawings, utility drawings, and easement drawings, and other pertinent information shall be provided by others (B&C, COH, etc.).
- A topographic map will be provided identifying the surface elevations and locations of all underground utilities for purposes of verifying that exploratory boring locations are clear of utilities.
- Right-of-Entry (ROE), Consent to Enter (COE), or site access to private properties shall be obtained and provided by others (i.e. B&C, COH, etc.).
- If needed, National Pollutant Discharge Elimination System (NPDES) permit for YKE's field exploration shall be prepared and obtained and provided by others (i.e. B&C, COH, etc.).
- Vegetation, topographic, and surface conditions of the private and easement properties are unknown at this time. This proposal and the proposed field exploration (exploratory borings, double ring infiltrometer tests, and geophysical surveys) to be located within these private properties were developed based on project information provided by B&C and available Google Earth Imagery. The exact locations of the proposed exploratory borings to be located within private properties will be determined after the initial site visit is performed and surface conditions are assessed.



- Fiber optic lines are not present within the project area and do not need to be confirmed.
- Exploratory boring locations will be located sufficiently away from known subsurface utilities, pipelines, structures, etc.
- Damage to subsurface utilities, pipelines or structures not shown on available record and as-built drawings or located by others prior to the geotechnical exploration will not be the responsibility of Yogi Kwong Engineers, LLC or YK Drilling LLC.
- Contaminated soils are not present at the site.
- Drilling vehicles and equipment (i.e. drill rig, utility trucks, water truck, etc.) can be staged overnight at the project site near the exploratory borings.
- There will be no restrictions on the work hours within the private properties and an eight (8) hour work shift or longer will be allowed Monday through Sunday (including holidays).
- Open trench methods will be used to install the proposed sewer collection system.
- Geotechnical related consultation during design will not exceed the allocated hours provided in this fee proposal.
- Soil and rock core samples obtained during our field exploration will be held for a period of 60 days after submittal of our draft geotechnical report at which time soils samples will be disposed or transmitted to B&C for further storage.

TASK 4.0 – GEOTECHNICAL CONSULTATION SUPPORT SERVICES DURING DESIGN

At this time the need for supplemental field explorations and geotechnical evaluations to support completion of B&C and F&A's design for the WWTP and Collection system is not known. Therefore the above Tasks do not include scope and fee for preparation of a geotechnical report in support of 90% and 100% design. Preparation of a geotechnical baseline or data report, final design report and geotechnical review of construction plans and or specifications is also not included in Tasks 1.0 to 3.0. For project budgeting purposes we have proposed an initial budget allowance to facilitate initiation of geotechnical services in support 90% and 100% design construction bidding documents.

TASK 5.0 – GEOTECHNICAL CONSULTATION SUPPORT SERVICES DURING BIDDING AND CONSTRUCTION

We plan on assisting B&C and F&A during the bidding period, including review and respond to bidding contractor's RFIs during the bidding phase, assisting with addendums as needed, assisting with the pre-bid meeting, if necessary, and attend project design meetings.

If geotechnical special inspection services are requested to support the project's construction manager, we can provide field engineers or technicians to perform as needed geotechnical special inspection (observation and documentation in daily field reports) services to verify conformance with the specified geotechnical requirements. An initial reimbursable budgetary allowance is provided in Attachment B.



SCHEDULE

We have developed the following schedule for use in planning this phase of the project. If the proposed schedule is not acceptable, then we can revise our proposal accordingly. Our proposed tentative schedule is as follows:

Tasks	Schedule
Geophysical Mobilization	week 2
Geophysical Field Survey (WWTP & Collection System)	week 8
Mobilization of Geotechnical Exploration	week 12
Supplemental Geotechnical Exploration	week 16
Laboratory Testing	week 20
Draft Geotechnical Feasibility Report (First Site)	week 24
Draft Geotechnical Feasibility Report (Second Site)	week 26
Project Team Review of First Geotechnical Feasibility Report	week 26
Project Team Review of Second Geotechnical Feasibility Report	week 28
Final Geotechnical Feasibility Reports	weeks 30 and 32
TOTAL	32 weeks

FEE

We propose to perform the above described supplemental geotechnical evaluation services described in Tasks 1.0 to 3.0 for a lump sum fee of **\$493,087.00** in accordance with mutually agreeable terms and conditions and is in addition to the \$184,793.00 lump sum fee proposed in our December 20, 2018 fee proposal for the initial Geophysical Reconnaissance exploration.

~~We request an additional initial budget allowance of **\$150,000.00** be set aside for as needed geotechnical consultation and evaluation support services during project design and bid documents preparation as described in Task 4.0 above. We request a separate initial budget allowance of **\$125,000.00** be set aside for as needed geotechnical design support services during bidding and construction as described in Task 5.0 above.~~

A detailed breakdown of our fee estimate is attached and briefly summarized below.



Task No.	Description	Fee
1.0	Project Coordination and Management	\$ 10,653.00
2.0	Preliminary Geophysical and Geotechnical Field Exploration	--
	Sewer Collection Alignment	--
2.A.1	Preliminary Geophysical Reconnaissance (1)	--
2.A.2	Field Exploration Stakeout, Hawaii One-Call Notification and County Excavation Permit	\$ 41,615.00
2.A.3	Exploratory Borings and Probe Holes	\$ 108,746.00
	Pahala WWTP Site	--
2.B.1	Geophysical Reconnaissance (1)	--
2.B.2	Field Exploration Stakeout and Hawaii One-Call Notification	\$ 14,098.00
2.B.3	Exploratory Borings	\$ 75,165.00
2.B.4	Double Ring Infiltration Tests (15 tests total)	\$ 106,863.00
3.0	Preliminary Geotechnical Analyses and Feasibility Report	--
3.A	Sewer Collection System	\$ 74,398.00
3.B	Pahala WWTP Site	\$ 61,553.00
Lump Sum Total		\$ 493,087.00
Allowance Items		
4.0	Geotechnical Consultation Support During Design	\$150,000.00
5.0	Geotechnical Consultation Support During Bidding and Construction	\$125,000.00
Total With Allowances		\$ 768,087.00

(1) refer to YKE proposal dated October 29, 2018

If services beyond the scope of services discussed in Tasks 1.0 to 3.0 of this proposal are requested or required, we can perform those services a time-and-expense basis and in accordance with the unit rates presented in this proposal with a 3% annual escalation rate. Alternatively, we can prepare a supplemental fee proposal for B&C approval prior to commencement of such additional services.

Labor Category	Billable Rate (Excluding Taxes)
Principal	\$220 / hour
Sr. Project Manager	\$170 / hour
Sr. Geotechnical Engineer	\$144 / hour
Geotechnical Engineer / Geologist	\$108 / hour
Sr. CAD	\$98 / hour
Administrative	\$72 / hour



The proposed fees listed herein assume that YKE will not be requested or required to purchase and maintain insurance in excess of the coverage types and limits listed below. If YKE is requested to purchase and maintain insurance in excess of the coverage types and limits listed below, we will need to revise (increase) our proposed fees after obtaining price quotes for the requested excess insurance coverage.

Insurance Coverage Type	Limits
Professional Liability	\$1M (per claim) \$2M (annual aggregate)
Commercial General Liability	\$1M (per occurrence) \$2M (annual aggregate)
Business Automobile Liability	\$1M (each accident)
Workers' Compensation	\$1M (each accident)

This fee proposal will remain valid for a period of 60 days from this date. Should authorization be delayed beyond this time, we request that we be allowed to review our schedule and fee estimate.

Attachment 2: WOC Special Permit Proposal



WILSON OKAMOTO
C O R P O R A T I O N
INNOVATORS • PLANNERS • ENGINEERS

10349-02
November 9, 2018

Mr. Garrett Leong
Project Engineer
Brown & Caldwell
737 Bishop Street, Suite 3000
Honolulu, HI 96813

SUBJECT: PROPOSAL FOR PROFESSIONAL SERVICES
Planning Services
Pāhala Community Large Capacity Cesspool Replacement
Pāhala Wastewater Treatment Plant Special Permit
Pāhala, Ka'u, Hawai'i
TMK: 9-6-002:018

Dear Mr. Leong:

Wilson Okamoto Corporation is pleased to submit this proposal to provide professional services for the subject project.

Our services shall include:

Wilson Okamoto Corporation Services

- Planning

For the purposes of this Proposal, Brown & Caldwell shall be referred to as the "CLIENT", Wilson Okamoto Corporation as the "CONSULTANT", and the proposed Pāhala Wastewater Treatment Plant Special Permit shall be referred to as the "PROJECT". The CLIENT's Terms and Conditions for Professional Services will be applicable, including the CONSULTANT's Subcontract Addendum – Approved Modifications to Subcontract Terms and Conditions.

PROJECT DESCRIPTION

The County of Hawai'i Department of Environmental Management (DEM) is proposing to develop a new wastewater treatment plant (WWTP) and wastewater collection system to serve the Pāhala community on Hawai'i Island. The community is currently served by 2 large capacity cesspools (LCCs), which can no longer be used as set forth in an Agreement of Consent between federal Environmental Protection Agency (EPA) and the County.

The proposal includes a wastewater collection system to convey collected wastewater to a new WWTP for treatment through an aerated lagoon process and further effluent treatment and disposal using slow rate land application basins. The 14.9 acre site for the WWTP is designated Agriculture by the State Land Use Commission and AG-20a (Agriculture) by the County of Hawaii. The 14.9-acre project site will be owned by the County. An approximately 25-foot wide by 1,500-foot long easement will be used for the transmission line to connect the collection system and other utilities to the WWTP. The State Land Use Agricultural District designation requires DEM to obtain a Special Permit for the 14.9-acre WWTP, which will be processed by the County of Hawai'i Planning Department for a decision by the Planning Commission. As set forth in 205, HRS, § 205-4.5, the 1,500-foot long transmission line and other utilities are permissible uses within the Agricultural District, which does not require a Special Permit.

SCOPE OF SERVICES

The scope of services includes preparing and processing of a State Special Permit application.

A. Permit Application

1. Conduct an initial consultation with the County of Hawaii Planning Department (PD) to verify permitting requirements.
2. Prepare the Special Permit Application Form and supporting background information as required by the County of Hawai'i Planning Department instructions. Much of this information will be available from the Final Environmental Assessment that will be prepared for the project under a separate contract. Also required will be the acceptance correspondence for the archeological inventory survey (AIS) and an archaeological monitoring plan (AMP) by the State Historic Preservation Division (SHPD). Both the AIS and AMP will be prepared under a separate contract.
3. Prepare an assessment of how the proposed project meets the permit criteria.
4. Obtain required plans and drawings of the proposed project from the CLIENT.
5. Prepare a list of the names, addresses and TMK of all owners and lessees of record of surrounding properties. Surrounding properties includes those within 500 of the project site boundary if they are in the Agricultural District or 300 feet if the properties are in the Rural or Urban district. Data for making these determinations shall be obtained from the Real Property Tax Division of the County of Hawaii Department of Finance.
6. Assemble the permit application and submit it to the CLIENT and DEM for review.

7. Revise the application based on comments received and submit it to the PD for its acceptance, and, if necessary, provide any additional information as required by the PD.
8. Prepare 20 copies for submission to the PD.

B. Permit Processing

1. Pursuant to the Hawaii County Planning Commission's Rules of Practice and Procedure, within 10 days of PD's acceptance of the application, prepare and serve first notice of the application on surrounding property owners, as identified in application. In addition to other required project related information, the notice shall include a statement of the recipient's right to submit a written request for a contested case procedure and a copy of the form to "Petition for Standing in Contested Case Hearing."
2. Also, within 10 days of PD's acceptance of the application, prepare and post a sign on the project site notifying the public of the proposed project, in accordance with Chapter 25 Planning Commission Rules of Practice and Procedure and PD instructions for signage. Within five days of posting the sign, prepare and file an affidavit with the PD attesting to the posting, along with a photograph of the sign.
3. Within 10 days of being notified by the PD of the scheduled Planning Commission public hearing but no less than 10 days prior to the hearing, serve the second notice of the application to the surrounding property owners. The contents of the second notice will be the same as the first. The public hearing must be scheduled no later than 90 days after the application is accepted, unless the DEM agrees to a longer schedule. An affidavit or proof of mailing will be filed with the PD prior to the public hearing.
4. Participate in meetings/telephone conferences with the CLIENT and DEM to update progress on application processing and preparation for participating in the Planning Commission public hearing and proceedings.
5. Prepare materials for County's use at the public hearing.
6. Attend one public hearing session to answer questions held at the Planning Commission.
7. Provide follow-up services, as necessary, to assure that permit conditions are accurately and appropriately documented in the permit approval.

10349-02

Proposal to Mr. Garrett Leong

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Items to be provided by others

1. Proposed site plan showing development phases and elevation drawings or renderings of the proposed structures.
2. Surveys, reports, and other documents related to the surrounding uses/areas.
3. If required, a certificate of clearance from the County Director of Finance stating that the real property taxes and all other fees relating to the project site have been paid, and that there are no outstanding delinquencies.

Items Excluded from Scope of Services

1. Preparation of technical studies such as a cultural impact assessment, botanical survey, glint and glare studies, or social/economic impact assessment.
2. Preparation and processing of permits beyond those specified herein.
3. Preparation of design plans or construction documents.
4. Notices to surrounding land owners and filing fee to continue the hearing as may be requested by the DEM.
5. Preparation for, or presentation at, public/community meetings or hearings not included in the above scope of services.
6. Additional services to address potential public controversy or opposition to the project – e.g. participating in a community outreach program beyond a potential public meeting presentation associated with filing the permit application.

SCHEDULE OF SERVICES

The time schedule for the proposed scope of services should proceed according to the following time estimates, exclusive of review periods, significant changes, or other delays beyond the control of the CONSULTANT.

A further detailed/precise schedule will be developed in consultation with the CLIENT.

<u>Task</u>	<u>Estimated Time</u>
Application Preparation	2 months following NTP
Application Processing	6 months following application acceptance
Project Duration (Estimate)	11-16 months*

COMPENSATION FOR PROFESSIONAL SERVICES

For the services outlined above, the Client shall compensate the Consultant according to the terms and conditions of this Agreement.

Fixed Fee

Compensation will be on a fixed fee basis with 4.4386% tax included.

1. Application Preparation	\$ 40,000.00
2. Application Processing	\$ 50,000.00
Total Fixed Fee	\$ 90,000.00

Reimbursable Expenses

Travel	\$ 5,000.00
Special Permit Filing Fee	\$ 500.00
Permit Application Reproduction, signage, notices, postage	\$ 600.00
Other Out-of-Pocket Costs	\$ 500.00
Total Reimbursable Expenses	\$ 6,600.00

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Proposal to Mr. Garrett Leong
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ADDITIONAL SERVICES/AMENDMENTS

Additional services that are not part of this Agreement will be undertaken by the Consultant by separate agreement and at the direction of the Client.

Any significant increase or decrease in the scope of work, or significant time delays beyond the control of the Consultant, shall be subject to a mutually agreed upon amendment to this fee proposal.

AGREEMENT

Your signature on the enclosed copy of this letter and its return to our office will constitute approval of the foregoing terms, and serve as our written notice to proceed.

This fee proposal is firm for a period of thirty (30) days, after which the specific terms of this proposal are subject to change.

Please call Earl Matsukawa or myself if you have any questions.

Sincerely,

WILSON OKAMOTO CORPORATION



Gary T. Okamoto
President



Earl Matsukawa, AICP
Vice President, Director of Planning

GTO/EM/jm

AGREED AND ACCEPTED:

BROWN & CALDWELL

Signature

Date

Title

Mendonca, Sandra

From: Craig Lekven <CLekven@BrwnCald.com>
Sent: Thursday, May 16, 2019 3:57 PM
To: Mendonca, Sandra
Subject: Pahala design proposal clarifications

Sandi,

Per our discussion yesterday:

- The geotechnical scope includes preparing a report that will provide the information that we need for design, based on the borings and lab data that are in the scope. We will direct their boring locations to provide the information that we need for design purposes, based on the design work already completed and the geophysical study. If there is a need for additional geotechnical fieldwork beyond the scope that is included in the proposal then we will request a supplemental agreement to cover the additional effort.
- Our land application tree groves have been planned using USDA NRCS soil survey data. Percolation testing is needed to confirm the site will provide sufficient area for effluent management purposes. Our current estimate based on the design completed to date is that we need an average percolation rate of 1.28 inches/hour or greater to make the site work.
- Due to the site slope the lagoons will need to be constructed out of concrete, rather than earthen berms with synthetic liners as described in the PER.
- The offsite replacement access road to the mac nut processing plant is included in our design scope.
- BC will coordinate with DPW prior to issuing the project to bid. This is included in our permitting scope.
- BC will coordinate with HELCO and Hawaiian Telecom as part of the electrical and I&C scope.
- BC will prepare a certification of compliance with cross-cutter requirements as part of obtaining DOH approval to construct.
- The WWTP NPDES permit application will be coordinated with Fukunaga & Associates' NPDES permit application(s) for the collection system to reflect the project contracting structure. The phase 1 project will include Phase 1 collection system, LCC closure, and WWTP. The phase 2 project will include the new collection system.
- BC will submit grading permit application to SHPD as part of the grading permit application scope.
- BC can conduct the pre-bid conference if the County desires. County will need to attend the pre-bid and provide input where appropriate.

Craig

Craig Lekven
Brown and Caldwell | Wailuku, Maui, HI
CLekven@brwncald.com
T 808.442.3301



We've moved!

2261 Aupuni Street.
Suite 201
Wailuku, HI 96793

EXHIBIT B – FEE SUMMARY:

Table 1 – Project Cost Schedule

Task No.	Description	Cost
1	Project Management	\$558,041.00
2	Geotechnical Evaluation and Report	\$562,775.00
3	Wastewater Treatment Plant Detailed Design	\$1,851,596.00
4	Regulatory Approvals and Permits	\$187,852.00
5	Engineer of Record (EOR) Services During Bidding	\$57,174.00
6	EOR Services During Construction	\$363,006.00
7	PLC and HMI Programming and Testing	\$131,687.00
8	Commissioning and Training	\$87,582.00
9	Record Drawings	\$31,942.00
10	O&M Manual and SOPs	\$82,005.00
11	1-year Inspection and Certification	\$16,048.00
12	Collection System Program Management	\$215,144.00
13	Community Outreach	\$63,642.00
14	Unforeseen Work	\$91,506.00
Total		\$4,300,000.00

Shore, Sandy

From: Craig Lekven <CLekven@BrwnCald.com>
Sent: Friday, February 01, 2019 4:55 PM
To: Mendonca, Sandra; Beck, Dora
Cc: Irina Constantinescu; Ray Matasci; Peter Ono; Michelle Sorensen; Garrett Leong
Subject: Pahala - WWTP design fee detail
Attachments: Pahala Fee Breakdown_2019JAN25.pdf

Sandy/Dora,

See attached detail of the proposed fee. A few notes:

- Task 2 Pre-design activities: This covers the remainder of the geotechnical work.
- Task 3 Design: The estimated WWTP construction cost is \$15M. The \$1.85M design fee is 12.3% of the estimated construction cost, which is about right for a project like this. Typical small WWTP design runs somewhere between 10% to 20% of the estimated construction cost. We are estimating 231 drawings will be needed; this works out to \$8,000 per drawing, which is fairly typical.
- Tasks 6&7 Services during construction & PLC & HMI programming and testing: The combination of these two tasks is 3.7% of the estimated construction cost. Typically services during construction runs about 3 to 4%.

Craig Lekven

Brown and Caldwell | Wailuku, Maui, HI
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EXHIBIT B – FEE SUMMARY:

Table 1 – Project Cost Schedule

Task No.	Description	Cost
1	Project Management	\$558,041.00
2	Geotechnical Evaluation and Report	\$562,775.00
3	Wastewater Treatment Plant Detailed Design	\$1,851,596.00
4	Regulatory Approvals and Permits	\$187,852.00
5	Engineer of Record (EOR) Services During Bidding	\$57,174.00
6	EOR Services During Construction	\$363,006.00
7	PLC and HMI Programming and Testing	\$131,687.00
8	Commissioning and Training	\$87,582.00
9	Record Drawings	\$31,942.00
10	O&M Manual and SOPs	\$82,005.00
11	1-year Inspection and Certification	\$16,048.00
12	Collection System Program Management	\$215,144.00
13	Community Outreach	\$63,642.00
14	Unforeseen Work	\$91,506.00
Total		\$4,300,000.00

EXHIBIT C – SCHEDULE OF WORK

Table 1 Project Schedule

Deliverable Description	Contract Milestone* (rev23,7/1/19)	Administrative Order of Consent Compliance Date
Task 3 a & b – Draft BODR, 60% Submittal	August 17, 2019	
Section 106 Determination	July 17, 2019	
Task 1 – Weekly: QA/QC Procedures and Comment Response Logs, Call Logs with Action Items and Key Decisions Tracked Monthly: Status Reports, Risk Register, Invoices, Schedule Updates	Throughout Project	
Task 2a – Geotechnical Evaluation	March 3, 2020	
Task 2b – Geotechnical Report WWTP	April 14, 2020	
Task 2b – Geotechnical Report Collection System	April 14, 2020	
Task 3 a, c & d – Final BODR and 90% Submittal	July 21, 2020	
Task 3d – Consolidated 100 % Bid Ready Construction Documents for WWTP and Phase 1 Collection System (including LCC Closures)	September 4, 2020	
Task 3 e – Approved (Signed) Final Design WWTP	October 11, 2020	September 18, 2019
Task 4 a – Special Use Permit Application to Planning	May 20, 2020	
Task 4 b – NPDES Permit Application to DOH	August 12, 2020	
Task 4 c – Phase 1 Plan Approvals (DCAB, SHPD, Mayor, DEM, WWD, DOH, DPW, DWS, Planning)	October 11, 2020	
Task 4 b – Building, Grading, Plumbing, Electrical, NPDES, County and State ROW Work Permits Approved and Ready for Contractor Pick-up (or Supplemental Info)	January 9, 2021	
Task 5 a – Notice to Bidders and Electronic Conformed Bid Docs at DPW two weeks before advertisement for Bids	September 28, 2020	
Task 5 b – Pre-Bid Meeting Agenda and Minutes, RFC's, Substitution Requests, Addenda	October 12, 2020 – January 9, 2021	
Notice to Award	February 9, 2021	
Notice to Proceed	April 9, 2021	
Task 6 – Services during Construction (RFIs, Submittals, Cos)	April 10, 2021 – April 30, 2022	
Task 7 – PLC & HMI Programming and Testing	TBD	

Deliverable Description	Contract Milestone* (rev 23, 7/1/19)	Administrative Order of Consent Compliance Date
Task 8 – Start-Up, Commissioning, Training & Optimization	TBD	
Substantial Completion (WWTP construction complete)	April 30, 2022	May 20, 2021
Task 9 – Record Drawings	May 30, 2022	
Task 10 – O&M Manual	May 30, 2022	
WWTP fully operational and both LCCs closed (DOH Approval to Operate and LCC Closure Reports Submitted to DOH and EPA)	June 3, 2022	June 30, 2021
Task 11 – Final Inspection & 1-year Certification to DOH	June 3, 2023	
Task 12 – Collection System Program Management	Throughout Project	
Task 13 – Community Outreach	TBD	
Task 14 – Unforeseen Work	TBD	

- Schedule assumes a 90-day review and approval of draft AIS by SHPD. All included dates are based on Section 106 complete for NEPA purposes July 17, 2019. Consultant shall submit an updated schedule within 14 calendar days of receiving written review comments or approval of draft AIS from SHPD. Milestones shall be updated by Supplemental Agreement, based on the mutually agreeable updated schedule.

GENERAL TERMS AND CONDITIONS
for
CONSULTANT SERVICES CONTRACTS
October 22, 2014

SECTION 1 - DEFINITIONS

When used in these General Terms and Conditions or elsewhere in the contract, the following terms, or pronouns used in place of them, shall have meaning ascribed to them in this section, unless it is apparent from the context that a different meaning is intended.

1.1 CONSTRUCTION MANAGEMENT SERVICES. The endeavor to provide inspection services as an authorized representative of the Director.

1.2 CONSULTANT. Any individual, partnership, firm, corporation or joint venture engaged by the County to perform the services under the contract.

1.3 CONTRACT. The written agreement covering the performance of the services required for the project by the consultant. It shall include these general terms and conditions, and the special provisions. It shall also include all modifications of the contract by supplemental agreements thereto in writing and written orders of the Mayor and Director.

1.4 COUNTY. The County of Hawaii, State of Hawaii.

1.5 DESIGNS AND PLANS. Any and all designs, plans, construction drawings, specifications, cost estimates, work schedules, proposals, studies, reports and other items.

1.6 DIRECTOR. The Director of Environmental Management of the County of Hawaii, Department of Environmental Management, directly or through an assistant or representative.

1.7 ENGINEER. The Director of Public Works of the County of Hawaii, Department of Public Works, directly or through an assistant or representative.

1.8 INSPECTION. Visual observation of materials, equipment, or construction work for the purpose of ascertaining that the work is in substantial conformance with the contract documents and with the design intent. Such inspection shall not be relied upon by others as acceptance of the work, nor shall it be construed to relieve the Contractor in any way from his obligations and responsibilities under the construction contract.

1.9 MAYOR. The Mayor of the County of Hawaii.

1.10 SRF. State Revolving Fund.

SECTION 2 - AWARD AND EXECUTION OF CONTRACT

2.1 AWARD OF CONTRACT: The CONSULTANT, upon being selected to render certain professional services for the project, will be notified of his commission by the DIRECTOR. Said notice shall not be construed to be authorization to proceed with performance of services under the contract.

Any services performed by the CONSULTANT prior to the date indicated in the notice to proceed from the DIRECTOR shall be at his own risk.

2.2 EXECUTION OF CONTRACT: Prior to the drafting of the contract, discussions will be held between the parties relative to the extent of the services to be performed by the CONSULTANT and General Terms and Conditions

October 22, 2014

other pertinent matters. Based on said discussions, the COUNTY will draft the contract and submit the same to the CONSULTANT for review and signature. If the CONSULTANT is an individual, or partnership, the CONSULTANT shall sign the contract in the office of the DIRECTOR or before a notary public. If the CONSULTANT is a corporation, the CONSULTANT shall cause the contract to be signed before a notary public by an officer authorized to do so and shall affix to the contract its corporate certificate, resolution or other instrument vesting such officer with authority to sign the contract on its behalf. The signed contract shall be returned to the COUNTY for signature and further processing.

2.3 TAX CLEARANCES/COMPLIANCE WITH LAWS:

A. In accordance with Section 103-53, Hawaii Revised Statutes (HRS), tax clearances from the State Director of Taxation and the Internal Revenue Service to the effect that due tax returns have been filed and all taxes, penalties and interest have been paid are prerequisites to entering into the contract and to receipt of final payment, except as otherwise provided by rule or statute. Progress payments are subject to statutory assignment to satisfy delinquent taxes, interest and penalties.

B. Consultant is also required to furnish proof of compliance with the requirements of Section 3-122-112, Hawaii Administrative Rules (HAR):

- a. Chapter 237, tax clearance;
- b. Chapter 383, unemployment insurance;
- c. Chapter 386, workers' compensation;
- d. Chapter 392, temporary disability insurance;
- e. Chapter 393, prepaid health care; and
- f. One of the following:
 - (1) Be incorporated or organized under the laws of the State of (hereinafter referred to as a "Hawaii business"); or
 - (2) Be registered to do business in the State (hereinafter referred to as a "compliant non-Hawaii business").

C. Effective July 1, 2011, the Governor of Hawai'i signed Act 190 into law, which requires compliance documentation for awards of \$2,500.00 or more:

The responsibility of all Offerors doing business with the State or County are required to comply with all applicable statutes, administrative rules and procedures. State or County agencies must verify compliance prior to award. Acceptable verification is through Hawai'i Compliance Express (HCE). Vendors wishing to do business with the State or County must register in HCE and be in compliance.

HCE is a one-stop online program where vendors verify and manage their compliance. Once a vendor is registered, HCE provides the following proof of compliance/ compliance documentation:

- Certificate of Good Standing (COGS) from the Department of Commerce and Consumer Affairs (DCCA) Business Registration Division
- Tax clearances (federal and state) from the Department of Taxation (DOTAX)
- Compliance with HRS Chapters 383 Hawai'i Employment Security Law (Unemployment Insurance), 386 (Worker's Compensation Law), 392 Temporary Disability Insurance and 393 Prepaid Healthcare Act, from the Department of Labor and Industrial Relations (DLIR)

There is a nominal fee to subscribe to HCE. Please note that it may take two or more weeks to establish a vendor account in HCE. For more information and to register, see <http://vendors.ehawaii.gov>.

D. The above certificates should be applied for and submitted to the Department as soon as possible. If a valid certificate is not submitted on a timely basis for award of a contract, an offeror otherwise responsive and responsible may not receive the award.

E. In addition to a tax clearance certificate, an original "Certification of Compliance for Final Payment" (SPO Form-22) will be required for final payment. A copy of the form is also available at www.spo.hawaii.gov. Select "Forms for Vendors/Contractors" from the Chapter 103D, HRS, pop-up menu. A consultant making a false affirmation shall be suspended and may be debarred pursuant to Section 103D-702, HRS.

2.4 **CONTRACT NOT BINDING:** The Contract shall not be binding or of any force until said contract has been fully and properly signed by all of the parties thereto, certified by the Director of Finance as to availability of funds in the amounts and for the purpose set forth therein and signed by the Mayor.

SECTION 3 - LEGAL RELATIONS AND RESPONSIBILITY

3.1 **INDEPENDENT CONTRACTOR:** In the performance of the services required under this Agreement, the CONSULTANT shall be an independent contractor with the authority to control and direct the performance and details of the work and services required under this Agreement; however, the COUNTY shall have a general right to inspect work in progress, with proper and reasonable notice, to determine whether, in the opinion of the COUNTY, the work is being performed by the CONSULTANT in accordance with the provisions of this Agreement.

All persons hired or used by the CONSULTANT shall be the CONSULTANT'S agents and employees and the CONSULTANT shall be responsible for the accuracy, completeness, and adequacy of any and all work and services performed by its agents and employees.

Furthermore, the CONSULTANT intentionally, voluntarily, and knowingly assumes the sole and entire liability, if any such liability is determined to exist, to its agents and employees, or to third persons, for all loss, cost, damage, or injury to the extent caused by the negligence of CONSULTANT'S agents and employees in the course of their employment.

The performance of work under this Agreement alone shall not be construed as employment with the COUNTY and shall not entitle the CONSULTANT or the CONSULTANT'S agents, employees, to vacation, sick leave, retirement, or other benefits directly afforded COUNTY employees. The CONSULTANT shall be responsible for payment of income, social security, and any other federal, state, or local taxes that it may be required to pay.

3.2 **INDEMNIFICATION:** The Consultant shall indemnify and hold harmless the County, its officers, agents and employees, from and against any and all actions, claims, suits, damages, losses, costs, and expenses to the extent arising out of the negligent, reckless, intentional or wrongful acts, errors or omissions of the Consultant, its officers, agents, employees or subcontractors occurring during or in connection with the performance of the Consultant's services under this contract, or to the extent arising out of the breach of this Contract by the Consultant. It is strictly understood that the County, its officers, agents and employees shall in no way be held liable for any damages, cause of action or suits resulting from the negligent, reckless, intentional or wrongful acts, errors, or omissions of the Consultant, its officers, agents, employees, or subcontractors. The Consultant shall reimburse the County and its officers, agents, and employees for their defense costs, including but not limited to

attorney's fees and costs, to the extent attributable to the negligent, reckless intentional or wrongful acts or omissions of the Consultant, or its subcontractors and their officers, agents, and employees.

3.3 LIABILITY INSURANCE: The Consultant shall secure adequate public or commercial liability insurance covering death or bodily injury with limits not less than FIVE HUNDRED THOUSAND AND NO/ 100 DOLLARS (\$500,000.00) for personal injury, and for injury or damage to property, which policy shall remain in full force and effect for the term of this contract and which further names the County of Hawai'i as additional insured. Proof of workers compensation coverage and motor vehicle coverage (assuming consultant will be using vehicle(s) in performance of the scope of work) be provided compliant with laws of the State of Hawai'i.

The Consultant shall file with the Department of Environmental Management copies of a certificate of insurance showing it has in full force and effect the required insurance. The Consultant shall give the County thirty (30) days notice of any cancellation in the policy."

3.4 NONDISCRIMINATION IN COUNTY CONTRACTS:

A. Pursuant to Executive Order No. 142, County of Hawaii, dated February 11, 2005, during the performance of this contract, the contractor agrees as follows:

- 1) The contractor shall comply with all requirements set forth in Federal and State laws and regulations relative to Title VI of the Civil Rights Act of 1964, as amended, which provide for non-discrimination in Federally assisted programs.
- 2) The contractor shall not discriminate against any employee or applicant for employment because of race, ancestry/national origin, religion, color, disability, age, marital status, military status, veteran's status, sexual orientation, lactation, arrest and court record, citizenship, or any other classification protected by state and federal law. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training. The contractor agrees to post in conspicuous places notices to be provided by the contracting officer setting forth the provisions of the nondiscrimination clause.
- 3) The contractor shall in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants shall receive consideration for employment without regard to race, ancestry/national origin, religion, color, disability, age, marital status, military status, veteran's status, sexual orientation, lactation, arrest and court record, citizenship, or any other classification protected by state or federal law.
- 4) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract, this contract may be canceled or suspended in whole or in part and the contractor may be declared ineligible for further County contracts until such time that the contractor by satisfactory evidence, in good faith, ceases such discriminatory practices or procedures.
- 5) The contractor who subcontracts any portion of the contract shall assure the County that such subcontractor shall abide by the nondiscrimination provisions stated herein and agrees that any subcontractor who is found in violation of such provisions shall subject the principal contractor's contract with the County to be terminated or suspended pursuant to Section (4) above.
- 6) The County may direct any bidder, prospective contractor, or subcontractor to submit a statement in writing signed by an authorized officer, agent, or employee of the contracting party that the signer's practices and policies do not discriminate on the grounds of race, ancestry/national origin, religion, color, disability, age, marital status,

military status, veteran's status, sexual orientation, lactation, arrest and court record, citizenship, or any other classification protected by state or federal law, and that the terms and conditions of employment under the proposed contract shall be in accordance with the purposes and provisions stated herein.

3.5 LAWS & REGULATIONS: The CONSULTANT shall keep himself fully informed of all laws, ordinances, codes, rules and regulations, governmental changes and development plans, setback limitations, rights-of-way, and all changes thereto, which in any manner affect the contract and the performance thereof.

The CONSULTANT shall comply with all such present laws, ordinances, codes, rules, regulations, design standards and criteria, governmental general and development plans, set back limitations, rights-of-way, including the giving of all notice necessary and incident to the proper and lawful prosecution of the work, and all changes thereto. If any discrepancy or inconsistency is discovered between the contract and any such law, ordinance, code, rule, regulation, design standard, design criterion, governmental general and development plans, setback limitation, rights-of-way, the CONSULTANT shall forthwith report the same in writing to the DIRECTOR.

3.6 SRF BOILERPLATE: When the Project is to be funded through the State Revolving Fund, the consultant shall comply with all federal regulations as listed in the "SRF Boilerplate" Federal Requirements for SRF Projects dated June 1997 as applicable "Cross-cutter" regulations which have been determined as applying to the SRF loan program.

3.7 H.A.R. 3-125 (CHAPTER 125) REQUIREMENTS:

A. The language contained in the following provisions of the Hawaii Administrative Rules, Title 3, Subtitle 11, Chapter 125, are adopted and included by reference:

- 1) §3-125-2 Change order to goods and services contracts;
- 2) §3-125-3 Modifications to goods and service contracts;
- 3) §3-125-5 Authorization for a stop work order for goods and services contracts;
- 4) §3-125-6 Stop work orders for goods and services contracts;
- 5) §3-125-8 Variations in quantities for definite quantity goods and services contracts;
- 6) §3-125-9 Variations in quantities for indefinite quantity goods and services contracts;
- 7) §3-125-12 Price adjustment for goods and services contracts;
- 8) §3-125-14 Novation or change of name;
- 9) §3-125-15 Claims based on a procurement officer's actions or omissions for goods and services contracts;
- 10) §3-125-16 Claims based on oral directives;
- 11) §3-125-17 Termination for default in goods and services contracts;
- 12) §3-125-19 Liquidated damages for goods and services contracts;
- 13) §3-125-21 Termination for convenience of goods and services contracts;
- 14) §3-125-23 Prompt payment by contractors to subcontractors; and
- 15) §3-125-24 Remedies.

B. In the event of conflict or omission between the language of this contract and the intent of Chapter 125, H.A.R., the contract shall not be void or voidable, but the intent of Chapter 125 shall prevail.

SECTION 4 - MODIFICATIONS

4.1 **MODIFICATION OF CONTRACT:** The COUNTY may at any time make such modifications in the contract, as it deems necessary and advisable. Such modifications shall be made by a supplemental agreement in writing or by a written order of the Mayor provided that modifications by such a written order shall be limited to modifications in the scope of services and provided further that modifications involving no reduction or increase in compensation of the CONSULTANT may be made by written order of the DIRECTOR.

Upon receipt of a written order, the CONSULTANT shall proceed with the modification as ordered. If the CONSULTANT does not agree with any of the terms or conditions of or with the amount of the reduction, increase in compensation provided for in the order, he shall file with the DIRECTOR a written protest setting forth his reasons in detail within ten (10) calendar days after receipt of the order. The protest shall be disposed of pursuant to the provisions of subsection 5.4. Failure to file such protest within the time specified shall constitute agreement on the part of the CONSULTANT with the terms, conditions and amount in the order.

In the event the CONSULTANT for reasons related to safety does not agree with and refuses to proceed with the modifications required by the COUNTY in the written order, the Mayor may allow the CONSULTANT to withdraw from the contract without breach, provided the CONSULTANT files with the Mayor a written protest setting his reasons in detail within ten (10) calendar days after receipt of the order. If withdrawal is allowed, the CONSULTANT shall be compensated in the same proportion of the compensation under the contract as the services performed bear to the services to be performed under the contract.

SECTION 5 - PERFORMANCE OF CONTRACT

5.1 **TIME:** Time is of the essence of the contract. Performance of the services under the contract shall begin on the commencement date designated in the notice to proceed and be completed within the number of calendar days specified.

5.2 **DELAY:** If any delay in the performance of the services under the contract occurs as a result of unforeseeable causes beyond the control and without fault or negligence of the CONSULTANT, including but not limited to, acts of God, acts of the public enemy, acts of the COUNTY with respect to the contract, acts of another contractor in the performance of a contract with the COUNTY, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather, or delays of subcontractors or suppliers, then the CONSULTANT shall be granted an extension of the time for performance corresponding to the delay. If as a result of the delay completion of performance within the extended time would cause undue hardship to the CONSULTANT, the DIRECTOR may, in his discretion, grant further extension of the time for performance. No extension of time, however, shall be granted unless a written application therefore stating in detail the cause or cause of delay is filed by the CONSULTANT with the DIRECTOR within ten (10) calendar days after commencement of the delay. The number of days of each extension of time shall be determined by the DIRECTOR.. No such extension shall be deemed a waiver of the right of the COUNTY to require the completion of the services under the contract within the time required herein as so extended by the specific terms of such extension or extensions, nor a waiver of right to terminate the contract for any other or additional delay not covered by the specific terms of such extension or extensions.

5.3 **PROSECUTION OF THE WORK:** The CONSULTANT shall be available upon reasonable demand to discuss the progress of the services being performed under contract. All questions arising during the performance of the contract that must be resolved by the Mayor or DIRECTOR shall be brought to their immediate attention.

The CONSULTANT shall direct his work to relate appropriately to, and in accordance with, established and generally accepted engineering, planning and/or architectural design principles and practices in effect at the time that CONSULTANT'S professional services are rendered.

The CONSULTANT shall be responsible for the accuracy of all computations and completeness of all work.

All notes, including field notes, designs, drawings, tracings and other data produced in the performance of the contract shall be the property of the COUNTY.

The DIRECTOR shall have access, at all reasonable times, to all notes, designs, drawings, tracings or other technical data pertaining to the services being performed under the contract for the purpose of inspection and making copies of them. Upon completion of the services under the contract, any and all such notes, studies, designs, drawings, tracings or other technical data shall be delivered and surrendered to the COUNTY on demand, provided that copies of notes, studies and other technical data may be delivered and surrendered instead of originals.

5.4 MEDIATION: At the option of, and in the sole discretion of the Director, any dispute, controversy or claim arising out of or in connection with the interpretation or performance of any term or condition of this Agreement or any breach or alleged breach of this Agreement, shall be submitted to and resolved by non-binding mediation by a neutral and independent mediator, who shall be selected by the parties by mutual agreement, or if the parties are unable to agree upon the selection of a mediator, then in accordance with the commercial arbitration rules of the American Arbitration Association. The mediation shall take place in the County of Hawaii, State of Hawaii. The cost of the mediator and other mediation costs shall be borne equally by the parties. The mediation process and the outcome of the mediation shall remain confidential to the maximum extent permissible by law. Notwithstanding the foregoing terms, the parties shall make every reasonable effort to resolve disputes, controversies or claims between themselves in a cooperative fashion prior to submitting a dispute to mediation.

5.5 SUBCONTRACTING OR ASSIGNMENT OF CONTRACT: The CONSULTANT shall not subcontract or assign all or any part of the services under the contract without the prior written consent of the DIRECTOR. Any consent by the COUNTY to subcontract, assign or otherwise dispose of any portion of the contract shall not be construed to relieve the CONSULTANT of any responsibility for the performance of the contract.

5.6 STANDARDS: All work related to wastewater projects shall be performed in conformance with the Design Standards of the Department of Wastewater Management, City and County of Honolulu. Where there are no established Standards, the CONSULTANT shall submit the proposed Standard(s) for approval.

5.7 OWNERSHIP OF DOCUMENTS: Upon completion, the CONSULTANT agrees to relinquish and furnish to the COUNTY all original tracings of any and all plans and stencils which hereafter shall become the property of the COUNTY.

SECTION 6 - SERVICES TO BE PERFORMED BY THE COUNTY

6.1 COOPERATION BY THE COUNTY: The COUNTY shall, without cost to the CONSULTANT, through the DIRECTOR, cooperate fully with the CONSULTANT and will promptly place at the disposal of the CONSULTANT all available pertinent information which the COUNTY may have in its possession. The County will certify to the accuracy of certain information in writing whenever it is possible to do so. The COUNTY does not represent that other information not certified as accurate is so and takes no responsibility therefore, and the CONSULTANT shall rely on such information at his own risk.

SECTION 7 - COMPENSATION

7.1 COMPENSATION: The CONSULTANT shall be paid the amount stated in the written agreement, less any reduction in compensation and plus any increase in compensation pursuant to subsection 7.4 as full compensation for the performance of the services under the contract.

7.2 ABANDONMENT OF THE PROJECT; DEATH OR DISABILITY OF CONSULTANT: In the event the COUNTY terminates the contract because it wishes to abandon, defer, restudy or revise the project, or in the event the CONSULTANT, in the case of an individual, dies or become physically or mentally disabled, the CONSULTANT or his estate shall be compensated in the same proportion of the compensation under the contract as the services performed bear to the services to be performed under the contract.

7.3 PROGRESS PAYMENTS: Prior to any progress payment authorization, the CONSULTANT shall submit and the COUNTY shall approve a detailed schedule of values corresponding to the specific services to be performed. As long as the services of the CONSULTANT are being performed in a manner satisfactory to the COUNTY, the COUNTY shall pay the CONSULTANT monthly partial payments in amounts proportionate to the value of the services performed by the CONSULTANT as indicated in the schedule of values.

7.4 REDUCTION OR INCREASE IN COMPENSATION: The compensation of the CONSULTANT shall be reduced whenever modification of the contract pursuant to subsection 4.1 reduces the services to be performed by the CONSULTANT.

The compensation of the CONSULTANT shall be increased to reimburse him for increased costs to perform the services under contract if performance of the services was delayed for more than six months by an act or omission of the COUNTY. No such reimbursement, however, shall be made unless he files a written application therefore with the DIRECTOR within thirty (30) calendar days after termination of the delay. In addition, the compensation of the CONSULTANT shall be increased whenever modification of the contract pursuant to subsection 4.1 requires the CONSULTANT to perform services not required under the contract. For each such modification and each modification reducing the services to be performed by the CONSULTANT, the compensation of the CONSULTANT shall be increased or reduced in accordance with the supplemental agreement or if no supplemental agreement has been entered into, by an amount equal to the sum total of the following:

- a) Wages of employees actually engaged in the services required by the modification and the salary cost of principals when actually engaged in such services in the case of an increase in compensation or the wages of employees and the salary cost of principals who would have been engaged in the case of a reduction in compensation;
- b) One hundred fifty percent (150%) of (a) for all other overhead, including bonus allowances, cost of supplies used, cost of transportation within the State of Hawaii required for the project and profit; and
- c) Other direct costs, including the cost of transportation to and from destination outside of the County of Hawaii and long-distance telephone calls.
- d) The State of Hawaii General Excise Tax payable by the CONSULTANT on (a), (b) and (c).

7.5 ASSIGNMENT OF MONEY DUE OR PAYABLE: Assignment of money due or to become payable to the CONSULTANT under the contract shall not be valid without the prior written consent of the Mayor. The rights of the assignee to moneys due or to become due to the CONSULTANT shall be subject to subsection 8.4.

7.6 ACCEPTANCE AND FINAL PAYMENT: Final payment will be made only after the issuance of a notice of final approval and acceptance by the Mayor advising the CONSULTANT of the satisfactory

fulfillment of the terms of the contract and receipt of a certificate from the Director of Taxation, as provided in Section 103-53, HRS, relating to prerequisite for final settlement of contracts.

Acceptance by the CONSULTANT of the final payment shall constitute payment in full for all services performed under the contract.

SECTION 8 - REMEDIES

8.1 **RIGHT OF THE COUNTY TO TERMINATE:** The COUNTY shall have the right to suspend performance of the services under the contract or terminate the contract in whole or in part at any time by written notice to the CONSULTANT. Upon termination all data, plans, specifications, reports, estimates, summaries, completed work and work in progress and such other information and materials as may have been accumulated by the CONSULTANT in the performance of his services shall, in the manner and to the extent determined by the DIRECTOR, become the property of and be delivered to the COUNTY. If the termination is for reasons other than default of the CONSULTANT as provided in subsection 8.2, the CONSULTANT shall be compensated in accordance with subsection 7.2.

It is understood and agreed that any services to be provided in accordance with the terms of this contract may be terminated immediately, in whole or in part, upon a finding by the County that the services must be provided by public employees pursuant to Civil Service Laws or that such services will be discontinued. It is further understood, that should such a finding be made, the COUNTY will not be liable under this contract for any resulting damages, and such a termination will not be considered a breach of this agreement.

8.2 **TERMINATION BECAUSE OF CONSULTANT'S DEFAULT:** The COUNTY shall have the right to enter into a new contract with another CONSULTANT and pay a reasonable compensation for such services as may be necessary to properly complete the services under the contract if it terminates the same because the CONSULTANT:

- a) fails to begin work under the contract at the time required,
- b) is unnecessarily delaying the performance of the contract or any part thereof,
- c) is failing to perform the contract with sufficient or adequate personnel, equipment or materials or is making sufficient progress to ensure the completion of the contract with the time specified,
- d) fails to perform the contract in accordance with directions of the DIRECTOR,
- e) discontinues performance of the contract,
- f) fails to recommence performance of the contract within a reasonable time after service of a written order to do so if the performance has been suspended,
- g) becomes insolvent or is declared bankrupt,
- h) commits any act of bankruptcy or insolvency,
- i) allows any final judgment to stand against him unsatisfied for a period of ten (10) calendar days,
- j) makes an assignment for the benefit of creditors,
- k) fails to pay for all labor, tools, materials and equipment,
- l) has abandoned the contract,
- m) or violates or fails to comply with any of the terms, covenants and conditions of the contract.

The fee of such other CONSULTANT shall be paid from said unexpended amount of the compensation under the contract. Should the compensation of such other CONSULTANT exceed such unexpended amount, the CONSULTANT shall reimburse the COUNTY for the difference as part of the damages caused by CONSULTANT'S default. The provisions of this subsection shall not apply if the CONSULTANT is an individual and the default is due to his death or mental or physical disability.

8.3 LIQUIDATED DAMAGES: The amount of damage to the COUNTY as a result of failure to complete performance of specified services under the contract within the time fixed or any extension thereof, exclusive of overhead expenses, being certain but difficult, it not impossible, to ascertain, the CONSULTANT agrees to pay the sum stated in the contract as liquidated damages, and not by way of penalty, for every day delay until the services are completed and accepted, or a reasonable time has expired for completion and acceptance of the services remaining to be performed.

8.4 AUTHORITY TO WITHHOLD MONEY DUE OR PAYABLE: The COUNTY may withhold such amount from the money due or to become payable under the contract to the CONSULTANT, or any assignee under subsection 7.5, as may be necessary to protect the COUNTY against liability or to satisfy the obligations of the CONSULTANT to the COUNTY and to employees, subcontractors and material men who have performed labor or furnished material and equipment under the contract and may make such payments from such amounts as may be necessary to discharge such obligations and protect the COUNTY.

8.5 DISPUTES (HAR § 3-126-31)

(1) All controversies between the County and the Consultant which arise under, or are by virtue of, this contract and which are not resolved by mutual agreement, shall be decided by the Procurement Officer in writing, within ninety (90) calendar days after a written request by the Consultant for a final decision concerning the controversy; provided that if the Procurement Officer does not issue a written decision within ninety (90) calendar days after written request for a final decision, or within such longer period as may be agreed upon by the parties, the Consultant may proceed as if an adverse decision had been received

(2) The Procurement Officer shall immediately furnish a copy of the decision to the Consultant, by certified mail, return receipt requested, or by any other method that provided evidence of receipt.

(3) Any such decision shall be final and conclusive, unless fraudulent, or unless the Consultant brings an action seeking judicial review of the decision in a circuit court of the State within six (6) months from the date of the receipt of the decision.

(4) The Consultant shall comply with any decision of the Procurement Officer and proceed diligently with performance of this contract pending final resolution by a circuit court of this State of any controversy arising under, or by virtue of, this contract, except where there has been a material breach of contract by the Count; provided that in any event the Consultant shall proceed diligently with the performance of the contract where the Chief Procurement Officer has made a written determination that continuation of work under the contract is essential to public health and safety.

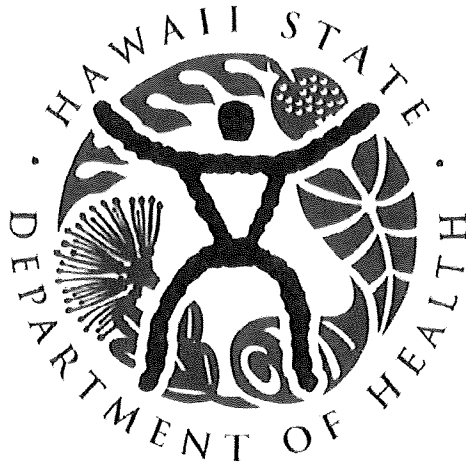
8.6 REMEDIES NOT EXCLUSIVE: The express provision herein of certain measures which may be exercised by the COUNTY for its protection shall not be construed to preclude the COUNTY from exercising any other or further legal or equitable right to protect interest.

"CWSRF BOILERPLATE"

FEDERAL REQUIREMENTS

FOR

CONSULTANTS AND CONTRACTORS



June 2018

"CWSRF BOILERPLATE"
FEDERAL REQUIREMENTS
FOR
CONSULTANTS AND CONTRACTORS

To the Consultant, Contractor or Sub-contractor of a CWSRF loan funded project:

All CWSRF projects must comply with all the federal regulations listed herein which have been determined as applying to the SRF loan program.

A. CROSS-CUTTER REGULATIONS

1. ENVIRONMENTAL AUTHORITIES:

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

Should the contractor discover potential archaeological or historical resources during construction, all work in the area of the find shall stop and the construction management consultant shall be called in to evaluate the situation and make recommendations to the State Historic Preservation Officer, Department of Land and Natural Resources, State of Hawaii. The Historic Preservation Officer will determine what will be necessary for construction to proceed.

2. 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. SECTION 13 OF THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, 33 USC 1251

No person in the United States shall, on the grounds of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal assistance under... the federal Water Pollution Control Act...

- e. 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.

- f. 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.

- g. 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.

- h. 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.

- i. 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.

- j. 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.

- k. 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.

1. 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.: Not Applicable for Consultants
(CWSRF Loan Recipient to fill in)

Modification No.: Not Applicable for Consultants
(CWSRF Loan Recipient to fill in)

The consultant or construction contractor understands that labor standards interviews will be conducted during the course of construction in accordance with Standard Form 1445.

3. 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. AMERICAN IRON AND STEEL (AIS) SECTION 608 OF THE CLEAN WATER ACT (CWA):

Funds made available from a State water pollution control revolving fund established under this title may not be used for a project for the construction, alteration, maintenance, or repair of treatment works unless all of the iron and steel products used in the project are produced in the United States.

See attached *AIS Guidance*.

C. REQUIRED FEDERAL FORM AND INFORMATION:

1. The following EPA form shall be submitted by the Consultant or Contractor to the recipient (County) for each CWSRF project:

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

2. The following information must be included in the contract specifications:

- a. Davis Bacon Requirements (see attached)

LABOR STANDARDS INTERVIEW

CONTRACT NUMBER			EMPLOYEE INFORMATION		
NAME OF PRIME CONTRACTOR			LAST NAME		FIRST NAME
			MI		
NAME OF EMPLOYER			STREET ADDRESS		
			CITY		
SUPERVISOR'S NAME			STATE	ZIP CODE	
LAST NAME		FIRST NAME	MI	WORK CLASSIFICATION	WAGE RATE

ACTION	CHECK BELOW	
	YES	NO
Do you work over 8 hours per day?		
Do you work over 40 hours per week?		
Are you paid at least time and a half for overtime hours?		
Are you receiving any cash payments for fringe benefits required by the posted wage determination decision?		
WHAT DEDUCTIONS OTHER THAN TAXES AND SOCIAL SECURITY ARE MADE FROM YOUR PAY?		

HOW MANY HOURS DID YOU WORK ON YOUR LAST WORK DAY BEFORE THIS INTERVIEW?	TOOLS YOU USE	
DATE OF LAST WORK DAY BEFORE INTERVIEW (YYMMDD)		
DATE YOU BEGAN WORK ON THIS PROJECT (YYMMDD)		

THE ABOVE IS CORRECT TO THE BEST OF MY KNOWLEDGE		
EMPLOYEE'S SIGNATURE		DATE (YYMMDD)
INTERVIEWER	SIGNATURE	TYPED OR PRINTED NAME
		DATE (YYMMDD)

INTERVIEWER'S COMMENTS			
WORK EMPLOYEE WAS DOING WHEN INTERVIEWED	ACTION (If explanation is needed, use comments section)	YES	NO
	IS EMPLOYEE PROPERLY CLASSIFIED AND PAID?		
	ARE WAGE RATES AND POSTERS DISPLAYED?		

FOR USE BY PAYROLL CHECKER	
IS ABOVE INFORMATION IN AGREEMENT WITH PAYROLL DATA?	
<input type="checkbox"/> YES	<input type="checkbox"/> NO
COMMENTS	

CHECKER			
LAST NAME	FIRST NAME	MI	JOB TITLE
SIGNATURE			DATE (YYMMDD)

MBE/WBE PROCUREMENTS MADE DURING REPORTING PERIOD
EPA Financial Assistance Agreement Number:

[illegible]

Type of product or service codes:

1 = Construction

2 = Supplies

3 = Services

4 = Equipment

1 - Construction 2 - Supplies 3 - Services 4 - Equipment

Note: Refer to Terms and conditions of your Assistance Agreement to determine the frequency of reporting. Recipients are required to submit MBE/WBE reports to EPA beginning with the Federal fiscal year quarter the recipients receive the award, continuing until the project is completed.

EPA FORM 5700-52A - (Approval Expires 06/30/14)

Instructions:

A. General Instructions:

MBE/WBE utilization is based on 40 CFR Part 33. EPA Form 5700-52A must be completed by recipients of Federal grants, cooperative agreements, or other Federal financial assistance which involve procurement of supplies, equipment, construction or services to accomplish Federal assistance programs.

Recipients are required to report 30 days after the end of each federal fiscal quarter, semiannually, or annually, per the terms and conditions of the financial assistance agreement.

	Quarterly Reporting Due Date	Semiannual Reporting Due Date	Annual Reporting Due Date
Agreements awarded prior to May 27, 2008	January 30, April 30, July 30, October 30	N/A	October 30
Agreements awarded on or after May 27, 2008	N/A	April 30, October 30	October 30

MBE/WBE program requirements, including reporting, are material terms and conditions of the financial assistance agreement.

B. Definitions:

Procurement is the acquisition through contract, order, purchase, lease or barter of supplies, equipment, construction or services needed to accomplish Federal assistance programs.

A **contract** is a written agreement between an EPA recipient and another party (also considered "prime contracts") and any lower tier agreement (also considered "subcontracts") for equipment, services, supplies, or construction necessary to complete the project. This definition excludes written agreements with another public agency. This definition includes personal and professional services, agreements with consultants, and purchase orders.

A **minority business enterprise (MBE)** is a business concern that is (1) at least 51 percent owned by one or more minority individuals, or, in the case of a publicly owned business, at least 51 percent of the stock is owned by one or more minority individuals; and (2) whose daily business operations are managed and directed by one or more of the minority owners. In order to qualify and participate as an MBE prime or subcontractor for EPA

recipients under EPA's DBE Program, an entity must be properly certified as required by 40 CFR Part 33, Subpart B.

U.S. citizenship is required. Recipients shall presume that minority individuals include Black Americans, Hispanic Americans, Native Americans, Asian Pacific Americans, or other groups whose members are found to be disadvantaged by the Small Business Act or by the Secretary of Commerce under section 5 of Executive order 11625. The reporting contact at EPA can provide additional information.

A **woman business enterprise (WBE)** is a business concern that is, (1) at least 51 percent owned by one or more women, or, in the case of a publicly owned business, at least 51 percent of the stock is owned by one or more women and (2) whose daily business operations are managed and directed by one or more of the women owners. In order to qualify and participate as a WBE prime or subcontractor for EPA recipients under EPA's DBE Program, an entity must be properly certified as required by 40 CFR Part 33, Subpart B.

Business firms which are 51 percent owned by minorities or women, but are in fact managed and operated by non-minority individuals do not qualify for meeting MBE/WBE procurement goals. U.S. Citizenship is required.

Good Faith Efforts

A recipient is required to make the following good faith efforts whenever procuring construction, equipment, services, and supplies under an EPA financial assistance agreement. These good faith efforts for utilizing MBEs and WBEs must be documented. Such documentation is subject to EPA review upon request:

1. Include of MBEs/WBEs on solicitation lists.
2. Assure that MBEs/WBEs are solicited once they are identified.
3. Divide total requirements into smaller tasks to permit maximum MBE/WBE participation, where feasible.
4. Establish delivery schedules which will encourage MBE/WBE participation, where feasible.
5. Encourage use of the services of the U.S. Department of Commerce's Minority Business Development Agency (MBDA) and the U.S. Small Business Administration to identify MBEs/WBEs.

6. Require that each party to a subgrant, subagreement, or contract award take the good faith efforts outlined here.

C. Instructions for Part I:

- 1a. Specify Federal fiscal year this report covers. The Federal fiscal year runs from October 1st through September 30th (e.g. **November 29, 2010 falls within Federal fiscal year 2011**)

- 1b. Check applicable reporting box, quarterly, semiannually, or annually. Also indicate if this is the last report for the project.

- 1c. Indicate if this is a revision to a previous year, half-year, or quarter, and provide a brief description of the revision you are making.

- 2a-c. Please refer to your financial assistance agreement for the mailing address of the EPA financial assistance office for your agreement.

The "EPA DBE Reporting Contact" is the DBE Coordinator for the EPA Region from which your financial assistance agreement was originated. For a list of DBE Coordinators please refer to the EPA OSBP website at www.epa.gov/osbp. Click on "Regional Contacts" for the name of your coordinator.

- 3a-c. Identify the agency, state authority, university or other organization which is the recipient of the Federal financial assistance and the person to contact concerning this report.

- 4a. Provide the Assistance Agreement number assigned by EPA. A separate report must be submitted for each Assistance Agreement.

***For SRF recipients:** In box 4a list numbers for ALL OPEN Assistance Agreements being reported on this form. Please note that although the New DBE Rule (which took effect May 27, 2008) revised the reporting frequency requirements from quarterly to semiannually, that change only applies to agreements awarded AFTER the New DBE Rule took effect. Therefore, SRF recipients may either continue to report activity for all Agreements on one form on a quarterly basis until the last award that was made prior to the New DBE Rule has been closed out; OR, the recipient may split the submission of SRF reports into quarterly reports for Agreements awarded prior the New DBE Rule, and semiannually for the awards made after the New DBE Rule.

- 4b. Refer back to Assistance Agreement document for this information.

- 5a. Provide the total amount of the Assistance Agreement which includes Federal funds plus recipient matching funds and funds from other sources.

***For SRF recipients only:** SRF recipients will not enter an amount in 5a. Please leave 5a blank.

- 5b. Self-explanatory.

- 5c. Provide the total dollar amount of **ALL** procurements awarded this reporting period by the recipient, sub-recipients, and SRF loan recipients, **including** MBE/WBE expenditures. For example: Actual dollars for procurement from the procuring office; actual contracts let from the contracts office; actual goods, services, supplies, etc., from other sources including the central purchasing/ procurement centers).

***NOTE:** To prevent double counting on line 5C, if any amount on 5E is for a subcontract and the prime contract has already been included on Line 5C in a prior reporting period, then report the amount going to MBE or WBE subcontractor on line 5E, but exclude the amount from Line 5C. To include the amount on 5C again would result in double counting because the prime contract, which includes the subcontract, would have already been reported.

- 5d. State whether or not sub-awards and/or subcontracts have been issued under the assistance agreement by indicating "yes" or "no".

- 5e. Where requested, also provide the total dollar amount of all MBE/WBE procurement awarded during this reporting period by the recipient, sub-recipients, SRF loan recipients, and prime contractors in the categories of construction, equipment, services and supplies. These amounts include Federal funds plus recipient matching funds and funds from other sources.

***For SRF recipients only:** In 5c please enter the total procurement amount for the quarter, or semiannual period, under all of your SRF Assistance Agreements. The figure reported in this section is **not** directly tied to an individual Assistance Agreement identification number. **(SRF state recipients report state procurements in this section)**

6. If there were no MBE/WBE accomplishments this reporting period, please briefly explain what

specific steps you are taking to achieve the MBE/WBE requirements specified in the terms and conditions of the Assistance Agreement.

7. Name and title of official administrator or designated reporting official.
8. Signature, month, day, and year report submitted.

D. Instructions for Part II:

For each MBE/WBE procurement made under this assistance agreement during the reporting period, provide the following information:

1. Check whether this procurement was made by the recipient, sub-recipient/SRF loan recipient, or the prime contractor.
2. Check either the MBE or WBE column. If a firm is both an MBE and WBE, the recipient may choose to count the entire procurement towards EITHER its MBE or WBE accomplishments. The recipient may also divide the total amount of the procurement (using any ratio it so chooses) and count those divided amounts toward its MBE and WBE accomplishments. If the recipient chooses to divide the procurement amount and count portions toward its MBE and WBE accomplishments, please state the appropriate amounts under the MBE and WBE columns on the form. **The combined MBE and WBE amounts for that MBE/WBE contractor must not exceed the "Value of the Procurement" reported in column #3**
3. Dollar value of procurement.
4. Date of procurement, shown as month, day, year. Date of procurement is defined as the date the contract or procurement was awarded, **not** the date the contractor received payment under the awarded contract or procurement, unless payment occurred on the date of award. **(Where direct purchasing is the procurement method, the date of procurement is the date the purchase was made)**
5. Using codes at the bottom of the form, identify type of product or service acquired through this procurement (e.g., enter 1 if construction, 2 if supplies, etc).
6. Name, address, and telephone number of MBE/WBE firm.

**This data is requested to comply with provisions mandated by: statute or regulations (40 CFR Part 30, 31,

and 33); OMB Circulars; or added by EPA to ensure sound and effective assistance management. Accurate, complete data are required to obtain funding, while no pledge of confidentiality is provided.

The public reporting and recording burden for this collection of information is estimated to average 1 hour per response annually. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclosure or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, OPPE Regulatory Information Division, U.S. Environmental Protection Agency (2136), 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460. Include the OMB Control number in any correspondence. Do not send the completed form to this address.

AMERICAN IRON AND STEEL (AIS) GUIDANCE

Covered Iron and Steel Products

What is an iron or steel product?

For purposes of the CWSRF projects that must comply with the AIS requirement, an iron or steel product is one of the following made primarily of iron or steel that is permanently incorporated into the public water system or treatment works:

Lined or unlined pipes or fittings;
Manhole Covers;
Municipal Castings (defined in more detail below);
Hydrants;
Tanks;
Flanges;
Pipe clamps and restraints;
Valves;
Structural steel (defined in more detail below);
Reinforced precast concrete; and
Construction materials (defined in more detail below).

What does the term 'primarily iron or steel' mean?

'Primarily iron or steel' places constraints on the list of products above. For one of the listed products to be considered subject to the AIS requirements, it must be made of greater than 50% iron or steel, measured by cost. The cost should be based on the material costs.

Can you provide an example of how to perform a cost determination?

For example, the iron portion of a fire hydrant would likely be the bonnet, body and shoe, and the cost then would include the pouring and casting to create those components. The other material costs would include non-iron and steel internal workings of the fire hydrant (i.e., stem, coupling, valve, seals, etc). However, the assembly of the internal workings into the hydrant body would not be included in this cost calculation. If one of the listed products is not made primarily of iron or steel, United States (US) provenance is not required. An exception to this definition is reinforced precast concrete, which is addressed in a later question.

If a product is composed of more than 50% iron or steel, but is not listed in the above list of items, must the item be produced in the US? Alternatively, must the iron or steel in such a product be produced in the US?

The answer to both question is no. Only items on the above list must be produced in the US. Additionally, the iron or steel in a non-listed item can be sourced from outside the US.

What is the definition of steel?

Steel means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements. Metallic elements such as chromium, nickel, molybdenum, manganese, and silicon may be added during the melting of steel for the purpose of enhancing properties such as corrosion resistance, hardness, or strength. The definition of steel covers carbon steel, alloy steel, stainless steel, tool steel and other specialty steels.

What does 'produced in the United States' mean?

Production in the United States of the iron or steel products used in the project requires that all manufacturing processes, including application of coatings, must take place in the United States, with the exception of metallurgical processes involving refinement of steel additives. All manufacturing processes includes processes such as melting, refining, forming, rolling, drawing, finishing, fabricating and coating. Further, if a domestic iron and steel product is taken out of the US for any part of the manufacturing process, it becomes foreign source material. However, raw materials such as iron ore, limestone and iron and steel scrap are not covered by the AIS requirement, and the 7 material(s), if any, being applied as a coating are similarly not covered. Non-iron or steel components of an iron and steel product may come from non-US sources. For example, for products such as valves and hydrants, the individual non-iron and steel components do not have to be of domestic origin.

Are the raw materials used in the production of iron or steel required to come from US sources?

No. Raw materials, such as iron ore, limestone, scrap iron, and scrap steel, can come from non-US sources.

If an above listed item is primarily made of iron or steel, but is only at the construction site temporarily, must such an item be produced in the US?

No. Only the above listed products made primarily of iron or steel, permanently incorporated into the project must be produced in the US. For example trench boxes, scaffolding or equipment, which are removed from the project site upon completion of the project, are not required to be made of U.S. Iron or Steel.

What is the definition of 'municipal castings'?

Municipal castings are cast iron or steel infrastructure products that are melted and cast. They typically provide access, protection, or housing for components incorporated into utility owned drinking water, storm water, wastewater, and surface infrastructure. They are typically made of grey or ductile iron, or steel.

Examples of municipal castings are:

- Access Hatches;
- Ballast Screen;
- Benchches (Iron or Steel);
- Bollards;
- Cast Bases;
- Cast Iron Hinged Hatches, Square and Rectangular;
- Cast Iron Riser Rings;
- Catch Basin Inlet;
- Cleanout/Monument Boxes;
- Construction Covers and Frames;
- Curb and Corner Guards;
- Curb Openings;
- Detectable Warning Plates;
- Downspout Shoes (Boot, Inlet);
- Drainage Grates, Frames and Curb Inlets;
- Inlets;
- Junction Boxes;
- Lampposts;
- Manhole Covers, Rings and Frames, Risers; 8
- Meter Boxes;
- Service Boxes;
- Steel Hinged Hatches, Square and Rectangular;
- Steel Riser Rings;
- Trash receptacles;
- Tree Grates;
- Tree Guards;
- Trench Grates; and
- Valve Boxes, Covers and Risers.

What is 'structural steel'?

Structural steel is rolled flanged shapes, having at least one dimension of their cross-section three inches or greater, which are used in the construction of bridges, buildings, ships, railroad rolling stock, and for numerous other constructional purposes. Such shapes are designated as wide-flange shapes, standard I-beams, channels, angles, tees and zees. Other shapes include H-piles, sheet piling, tie plates, cross ties, and those for other special purposes.

What is a 'construction material' for purposes of the AIS requirement?

Construction materials are those articles, materials, or supplies made primarily of iron and steel, that are permanently incorporated into the project, not including mechanical and/or electrical components, equipment and systems. Some of these products may overlap with what is also considered "structural steel". This includes, but is not limited to, the following products: wire rod, bar, angles, concrete reinforcing bar, wire, wire cloth, wire rope and cables, tubing, framing, joists, trusses, fasteners (i.e., nuts and bolts), welding rods, decking, grating, railings, stairs, access ramps, fire escapes, ladders, wall panels, dome structures, roofing, ductwork, surface drains, cable hanging systems, manhole steps, fencing and fence tubing, guardrails, doors, and stationary screens.

What is not considered a 'construction material' for purposes of the AIS requirement?

Mechanical and electrical components, equipment and systems are not considered construction materials. Mechanical equipment is typically that which has motorized parts and/or is powered by a motor. Electrical equipment is typically any machine powered by electricity and includes components that are part of the electrical distribution system.

The following examples (including their appurtenances necessary for their intended use and operation) are NOT considered construction materials: pumps, motors, gear reducers, drives (including variable frequency drives (VFDs)), electric/pneumatic/manual accessories used to operate valves (such as electric valve actuators), mixers, gates, motorized screens (such as traveling screens), blowers/aeration equipment, compressors, meters, sensors, controls and switches, supervisory control and data acquisition (SCADA), membrane bioreactor systems, membrane filtration systems, filters, clarifiers and clarifier mechanisms, rakes, grinders, disinfection systems, presses (including belt presses), conveyors, cranes, HVAC (excluding ductwork), water heaters, heat exchangers, generators, cabinetry and housings (such as electrical boxes/enclosures), lighting fixtures, electrical conduit, emergency life systems, metal office furniture, shelving, laboratory equipment, analytical instrumentation, and dewatering equipment.

If the iron or steel is produced in the US, may other steps in the manufacturing process take place outside of the US, such as assembly?

No. Production in the US of the iron or steel used in a listed product requires that all manufacturing processes must take place in the United States, except metallurgical processes involving refinement of steel additives.

What processes must occur in the US to be compliant with the AIS requirement for reinforced precast concrete?

While reinforced precast concrete may not be at least 50% iron or steel, in this particular case, the reinforcing bar and wire must be produced in the US and meet the same standards as for any other iron or steel product. Additionally, the casting of the concrete product must take place in the US. The cement and other raw materials used in concrete production are not required to be of domestic origin.

If the reinforced concrete is cast at the construction site, the reinforcing bar and wire are considered to be a construction material and must be produced in the US.

Construction Contract Language for AIS

Projects funded with monies from the Clean Water State Revolving Fund are subject to the American Iron and Steel (AIS) requirement as in Section 608 of the Clean Water Act. The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the State that a) the Contractor has reviewed and understands the AIS requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the AIS requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with the AIS requirement, or information necessary to support a waiver of the AIS requirement, as may be requested by the Purchaser or the State. Failure to comply with the AIS requirement 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).

Sample Certifications

The following information is provided as a sample letter of step certification for AIS compliance. Documentation must be provided on company letterhead.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Step Certification for Project (XXXXXXXXXX)

I, (company representative), certify that the (melting, bending, coating, galvanizing, cutting, etc.) process for (manufacturing or fabricating) the following products and/or materials shipped or provided for the subject project is in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. Xxxx
2. Xxxx
3. Xxxx

Such process took place at the following location:

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

The following information is provided as a sample letter of certification for AIS compliance. Documentation must be provided on company letterhead.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Certification for Project (XXXXXXXXXX X)

I, (company representative), certify that the following products and/or materials shipped/provided to the subject project are in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. Xxxx
2. Xxxx
3. Xxxx

Such process took place at the following location:

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

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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 treatment work under the CWSRF the following clauses:

(1) 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

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- (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.

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- (2) 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.
- (3) 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).

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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

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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.

(4) 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

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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.
- (5) 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.
- (6) 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.
- (7) 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.
- (8) 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.
- (9) Disputes concerning labor standards. Disputes arising out of the labor standards

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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.

- (10) 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

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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

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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>.