ATTACHMENT E.

Applicable Monitoring and Assessment Program for Clean Water Act (CWA) Section 401 Water Quality Certification, Kawela Bridge Replacement, Kawela, Molokai, Hawaii

Applicable Monitoring and Assessment Program for Clean Water Act (CWA) Section 401 Water Quality Certification, Kawela Stream Bridge Replacement, Kawela, Moloka'i, Hawai'i

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Introduction

This applicable monitoring and assessment program (AMAP) accompanies the Section 401 Water Quality Certification (WQC) application for the replacement of Kawela Bridge, which crosses Kawela Stream on the southern coast of Moloka'i (Fig 1).

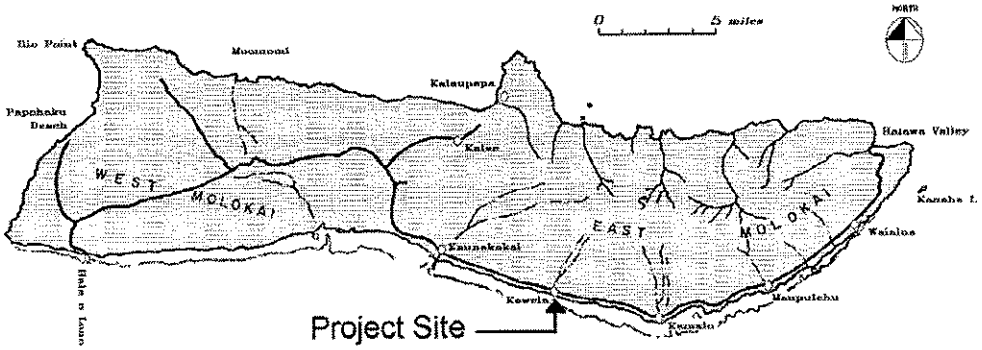

Figure 1. Project location on the Island of Moloka'i.

This AMAP describes the monitoring requirements and the data quality objectives to be met during water quality monitoring efforts for the WQC. The intent of the AMAP is to conduct water quality sampling and analysis to monitor potential impacts caused by in-stream work. The AMAP includes baseline (preconstruction), during-construction, and post-construction monitoring. Data collected as part of the AMAP will be used to assess the adequacy of best management practices (BMPs) applied during construction and will facilitate assessing the impacts of the project on the water quality of Kawela Stream. If shown to be necessary by the monitoring data, BMPs will be modified during construction to protect water quality.

Background information

The Hawai'i Department of Transportation (HDOT) proposes to replace Kawela Bridge, located between Milepost 5.110 and Milepost 5.118, on Kamehameha V Highway or Route 450 (hereinafter referred to as "the Project") on the southern coast of the Island of Moloka'i. The bridge crosses Kawela Stream, an interrupted stream (State Perennial Stream ID No. 4-2-15), just upstream from the *muliwai* (a coastal estuarine pond), which is not always open to the ocean (*AECOS*, 2006). Although Kawela Stream is perennial in the upper reaches, it is often dry upstream of and under the bridge.

The existing highway bridge will be removed and replaced. The footprint of the new bridge will be 5.8 m (19 ft) wider and 3.7 m (12 ft) longer than the existing bridge. The stream channel under the bridge will be lined with concrete. Grouted rock will be placed on the stream banks upstream and downstream of the concrete channel and access ramps will be constructed on both sides of the bridge. During construction of the new bridge, a temporary bypass road will be constructed on the *makai* side of the coastal highway, and will be removed once the new bridge is completed. The proposed bridge layout plan is shown in Fig. 2.

Kawela Stream is not listed as an impaired water body (HDOH, 2008); however, "South Moloka'i-Nearshore waters to 18' from southwest point - Waialua" is listed as impaired by the State. This listing means that the nearshore waters do not meet the Hawai'i water quality standards (HDOH, 2009). The geographic scope of listing is the nearshore waters from the shoreline out 5.5 m (18 ft), from the southwest point on Moloka'i to Waialua. The pollutants for which this area is listed are nutrients, turbidity, and suspended solids. As a result of this impaired listing, a study will be conducted to determine the total maximum daily load (TMDL) of pollutants that the nearshore waters of South Moloka'i can accommodate without violating Hawaii's water quality standards. A TMDL has not yet been established, and the water body has been assigned a priority code "L," indicating it has been assigned a low priority for initiating TMDL

development. Since Kawela Stream is not listed and the nearshore waters do not have a TMDL established, only those parameters listed in the General Monitoring Guidelines (HDOH, 2000) will be measured. Additional monitoring is not proposed during construction and no monitoring is proposed to determine operational impacts of the new bridge.

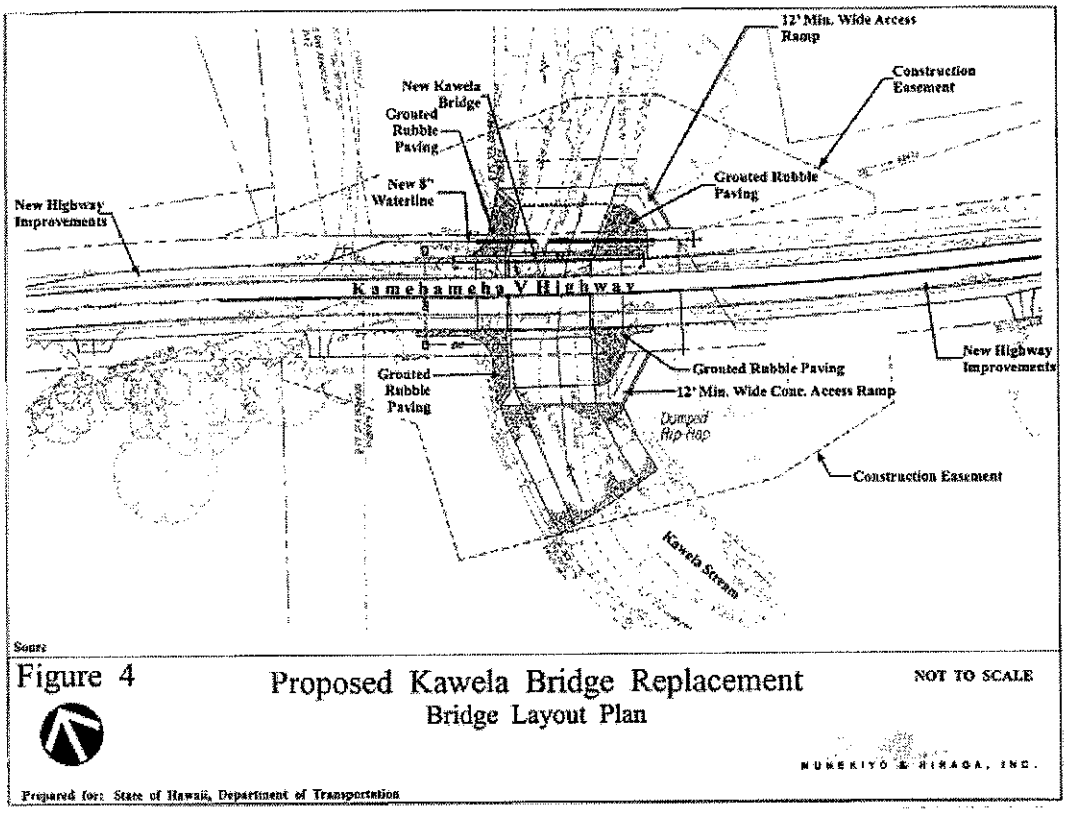

Figure 2. Proposed layout of new bridge (Munekiyo & Hiraga, 2009).

Monitoring program

The monitoring program largely follows the General Monitoring Guidelines for Section 401 Water Quality Certification Projects (HDOH, 2000).

Organization and responsibilities

The water sampling and field testing will be performed by *AECOS* field technicians experienced in water quality monitoring in Hawai'i stream

environments. Samples for turbidity and total suspended solids (TSS) will be collected and delivered to the *AECOS* Laboratory in Kāne'ohe, O'ahu for analyses.

The construction contractor's assigned representative will perform daily visual inspections and take photographs of the construction site to ensure that the construction activities do not result in adverse impacts to Kawela Stream. Sampling personnel will perform visual inspections and take photographs while sampling. Photographs of each monitoring station and areas of potential and actual disturbance will be taken. Photographs will include a date and time stamp or that information will be embedded in the metadata associated with the digital photograph files.

Information recorded by the contractor's representative and the samplers will include at a minimum: description of the construction activity, date, time, and any other observed activities, such as weather conditions, precipitation, and flow, which may not be related to construction activities but may affect water quality. A copy of the contractor's daily observations and photographs will be provided to *AECOS* for use in preparing the final report. Sampler observations will be included with the individual sampling reports. Contractor observations will be available on-site while the project is on-going. Upon project completion all observations and field books will be available (for at least five years) at the *AECOS* office for inspection by HDOH-authorized personnel during normal business hours.

Table 1 provides the names, responsibilities and qualifications of the personnel involved with this monitoring program.

Table 1. Summary of responsibilities and qualifications.

Name	Responsibility	Qualification
Snookie Mello *AECOS*, Inc. (808)234-7770	Project Manager	*AECOS* Project Manager, over 20 years project management, laboratory, and field experience
AECOS field technicians	Collect samples and perform field measurements. Photograph monitoring stations and area of potential and actual disturbance while sampling.	Trained in collecting water samples, performing field measurements in aquatic and marine environments, and monitoring construction contractors working in marine and aquatic environments.

Table 1 (continued).

Name	Responsibility	Qualification
Construction contractor representative (to be determined by contractor)	Notify AECOS and HDOT when in-stream construction will start with enough time to collect 401 WQC preconstruction samples prior to starting work. HDOT (or duly authorized representative) will notify HDOH-CWB. Make daily visual observations of BMPs and construction activity to be logged in a notebook (SM, 1998). Take photographs (with date/time stamp and description) and provide notebook and photographs to AECOS to be used as part of the assessment process. Notify HDOT of any modifications of work plan, BMPs, or AMAP. HDOT (or duly authorized representative) will notify HDOH-CWB. Investigate water quality exceedences, take corrective actions, and report findings to HDOT (or duly authorized representative) who will report it to HDOH-CWB.	Knowledgeable of construction activities as they relate to 401 WQC requirements. Familiar with Kawela or other interrupted perennial streams. Knowledgeable of WQC monitoring requirements for this project.

Parameters to be measured

Receiving water quality parameters to be measured are: temperature, dissolved oxygen (DO), pH, salinity, turbidity, and total suspended solids (TSS). Photographs will be taken during each scheduled sampling event.

Sampling locations

Four sampling stations will be established (Fig. 3). Approximate latitudinal and longitudinal coordinates for each monitoring station obtained from Google Earth follow Fig. 3. There will be one upstream control station and one downstream *muliwai* control station. Two impact stations will be monitored due to tidal influence (i.e., on a rising spring tide or during high surf water may be flowing towards the mountain through the project).

The upstream control station (UCS) will be located approximately 15 m (50 ft) upstream of the project limits, an upstream impact station (UIS) will be located 1 m (3 ft) upstream of the project limits, a downstream impact station (DIS) will be located 1 m (3 ft) downstream of the farthest downstream silt containment device, and a downstream *muliwai* control station (MCS) will be located approximately 15 m (50 ft) downstream of the project limits in the *muliwai*.

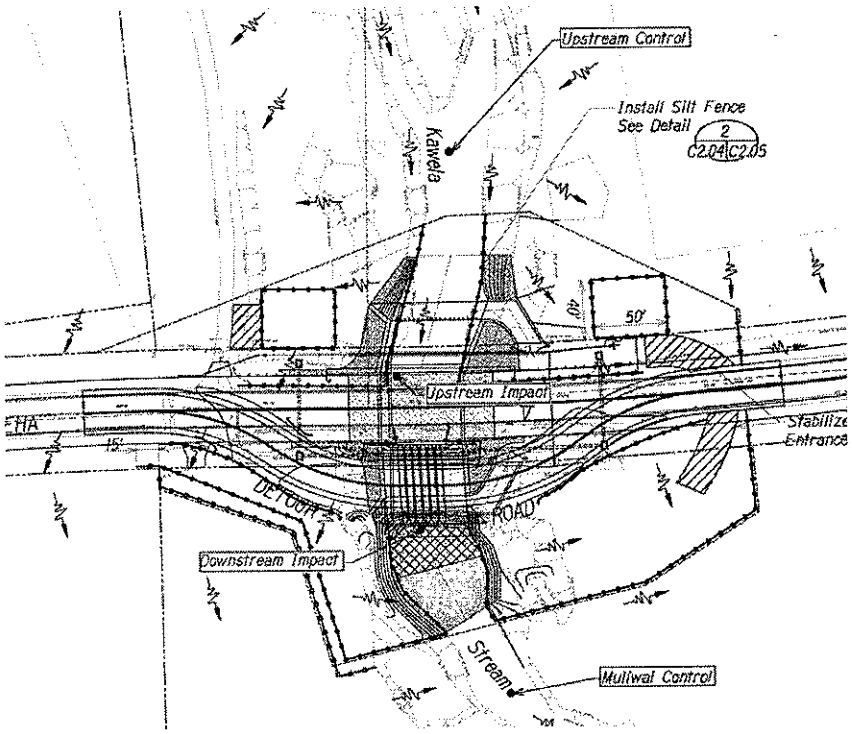

Figure 3. Kawela Bridge replacement project monitoring stations. (Figure provided by ATA).

Station Name	Latitude	Longitude
Upstream Control	21° 03'54" N	156° 56'53" W
Upstream Impact	21° 03'54" N	156° 56'55" W
Downstream Impact	21° 03'53"N	156° 56'55" W
Muliwai Control	21° 03'51"N	156° 56'56" W

Once the monitoring program begins, Global Positioning System (GPS) coordinates (with datum) of the sampling site locations will be recorded during sampling and provided to HDOH-CWB with the field notes. The sampling locations may change due to natural environmental conditions.

Sampling frequency

In-stream work will be conducted in four phases, for a total of approximately 26 months. BMPs will be installed and remain until completion of the Project. Proposed modifications to the schedule or BMPs are subject to acceptance by HDOH-CWB.

Preconstruction sampling—Prior to construction, samples will be collected once a day over a period of two weeks (or at less frequent intervals if there is more time) at the two control stations and two impact stations for a total of ten sampling events. The four sampling locations, UCS, UIS, DIS, and MCS, are shown above in Fig. 3. Collecting preconstruction samples over a longer time period will provide a representative baseline covering temporal and seasonal differences. Photographs will be taken at each station during each sampling event.

During-construction sampling—Samples will be collected from the two controls stations and two impact stations once a week. The four during-construction sampling locations, UCS, UIS, DIS, and MCS, are shown above in Fig. 3. Photographs will be taken at each station during each sampling event.

Postconstruction sampling—Postconstruction sampling will occur one time per week for three weeks once the project is completed and all in-stream BMPs are removed. The four sampling locations—UCS, UIS, DIS, and MCS—shown above in Fig. 3, will be sampled. Photographs will be taken at each station during each sampling event.

Sample collection

The field samplers will record their initials, the date, time of sample collection and time of field measurements, location, and field measurement for each sample. They will note construction activity, unusual site conditions, and condition of any treatment device or facility at the time of sample collection. Samplers will note any non-construction related activity that might impact water quality. Field personnel will record weather conditions, whether the stream is flowing, and whether stream flow is impeded from entering the ocean at the time of sampling and prior to sampling, if known. If the stream is not flowing or if the flow is too low to collect a sample at the Upstream Control

Station (UCS) or at either of the two impact stations (UIS and DIS), this information will be recorded and a photograph of the sampling stations will be taken. Photographs of each monitoring station and areas of potential and actual disturbance will be taken. Photographs will include date and time stamp or that information will be embedded in the metadata associated of digital photograph files.

Turbidity and TSS will be measured from grab samples collected by the field samplers. Temperature, salinity, and DO will be measured *in situ.* pH may be measured *in situ* or from a collected sample, but must be measured within 15 minutes of sample collection. Table 2 lists the analyses to be measured, hold times, and preservation.

Table 2. Analytical hold times and preservatives for the AMAP.

Analysis	Hold time	Preservation
Temperature	immediate	none
Salinity	immediate	none
Dissolved Oxygen	immediate	none
pH	15 minutes	none
Turbidity	48 hrs	chill on ice* to 4°C
Total Suspended Solids	7 days	chill on ice* to 4°C

*wet ice will be used in the field to chill the samples quickly.

Samples will be collected at each monitoring station. A one-liter plastic bottle will be used for turbidity and TSS analysis. Prior to collecting a sample, each plastic bottle will be pre-rinsed with the water to be sampled. The samples will be collected just below the surface by facing the bottles upstream to fill. Once collected, sample bottles will be tightly capped and placed in a cooler on ice until they are received by the laboratory. pH may be measured out of a bottle or beaker (used only for pH measurement) within 15 minutes of collection if it is not measured *in situ.*

Field analysis

Temperature and DO will be measured with the DO meter, pH will be measured with a pH meter, and salinity will be measured with a handheld refractometer or a DO meter that also measures salinity. Analysis of pH must be undertaken within 15 minutes of sample collection. Temperature and DO should be made *in situ*, if conditions allow. Salinity and pH may be measured from a sample collected specifically for those analyses. Table 3 provides information on the methods and instruments to be used.

Table 3. Analytical methods and instruments to be used in the field for the AMAP.

Analysis	Units	Method	Reference	Instrument*
Temperature	°C	SM 2550B	SM (1998), YSI manual	YSI DO thermistor
Salinity	psu	Refractive index	Refractometer instructions, YSI manual	Hand held refractometer or YSI 85
Dissolved Oxygen	mg/L	SM 4500-O G / membrane electrode	SM (1998), YSI manual	YSI Do meter 550 or 85
pH	standard units	SM4500-H^+	SM (1998)	Hanna pHEP 5 pocket pH meter

*A typical instrument is listed; other manufacturers may be substituted.

All instrument calibration procedures will be undertaken prior to field measurements. pH, temperature, salinity, and DO will be measured in the field. Meter calibration procedures are outlined in the manufacturer instructions and standard operating procedures (SOP) specifically written for the refractometer, pH, and DO meters to be used (*AECOS*, Inc. 2005, 2010a, 2010b; HACH 2008a, 2008b; Hanna Instruments, 2005; YSI Incorporated, 2007, 2009). Operation and calibration will only be performed by personnel who have been properly trained in these procedures. Documentation of calibration and any maintenance information will be maintained in appropriate field or log books. All calibrations will be made prior to analyzing the samples.

Any field equipment that has been shown by calibration or otherwise to be defective, is to be taken out of service until it has been repaired. The equipment is

placed back in service only after verifying by calibration that the equipment performs satisfactorily. If at any time calibration and maintenance is beyond the capability of the trained personnel, the Project Manager will be notified. An attempt will be made to solve the problem. If the equipment or instrument still cannot be repaired, the equipment will be taken out of service and sent for repair and replacement equipment will be obtained from the laboratory.

Chain of Custody procedures

Once samples have been obtained and site conditions and field measurements have been properly documented in the field notebook, a written record of the chain of custody of the samples must be made for the turbidity and total suspended solids analyses. A chain of custody (COC) form will be filled out and accompany the samples to the laboratory; information on the form will state which analyses are to be performed (Appendix A). The form will identify the samples, so the laboratory can report the analytical results by sample ID. When transferring possession of samples, the sampler will sign and record the date and time on the COC record. Each person who takes custody will fill in the appropriate section of the COC record.

Laboratory analysis

The laboratory will document the analytical procedures used and any relevant Quality Assurance/Quality Control (QA/QC) and instrument calibration information pertaining to the specific analyses. All analytical results and field notes will be entered into a notebook or file established for this purpose, and will be provided in a final report prepared for the monitoring program. This file, including relevant QA/QC results, will be retained in the laboratory records up to 5 years and will be available for inspection by HDOH-authorized personnel during normal business hours.

The laboratory will participate annually in US Environmental Protection Agency (USEPA)-certified provider water studies for water pollution and water supply for turbidity and total suspended solids determination.

TSS and turbidity will be analyzed at the laboratory. Table 4 provides information on laboratory methods and instruments to be used.

Table 4. Analytical methods and instruments to be used in the laboratory for the AMAP.

Analysis	Units	Method	Reference	Instrument*
Turbidity	ntu	EPA 180.1, rev. 2.0	USEPA (1993)	2100N Hach Turbidimeter
Total Suspended Solids	mg/l	SM 2540D	SM (1998)	Mettler H31

* Typical instruments are listed; other manufacturers may be substituted.

Data Quality Objectives and criteria for measurement data

Data quality objectives (DQOs) are qualitative and quantitative statements developed through a seven-step process based on USEPA guidance for developing DQOs (USEPA, 2006). The project-specific DQOs below describe each step and how it pertains to the monitoring and assessment of water quality during this project.

Step 1: State the problem

The Project will require in-stream work that includes lining the stream bed and bank with concrete, placing grouted rock on the stream banks upstream and downstream of the concrete channel, construction of access ramps on both sides of the bridge, and construction of a temporary diversion bridge. Kawela Stream flows into the Pacific Ocean immediately downstream of the Project. Potential impacts from construction include introducing sediment into Kawela Stream and the nearshore waters of the Pacific Ocean. Cement pours may increase pH. This monitoring program is designed to monitor potential impacts from construction activity to the stream.

Step 2: Identify the decision

The intent of the applicable monitoring and assessment program (AMAP) is to conduct water sampling and analysis that will monitor the proposed in-stream and stream bank work. The intent of this AMAP is to (1) ascertain that the Best Management Practices (BMPs) for the project are adequate to comply with State water quality standards, (2) promptly determine if BMPs are inadequate so that modification of the BMPS can be implemented in a timely manner to bring the

activity into compliance; and (3) serve as a basis for self-compliance, so that activities associated with the proposed action can proceed within the parameters required by State water quality standards.

Step 3: Identify the inputs to the decision

The data that are collected as a part of the AMAP will be used in the decision rules to determine if the objectives listed above are being met. Preconstruction monitoring results will be used to assess baseline conditions. Field measurements, field notes, and turbidity results will be reported to HDOH-CWB by facsimile or via email. Preconstruction data will be tabulated and arithmetic and geometric (as appropriate) means will be calculated upon completion of preconstruction sampling.

During construction all data and photos will be transmitted to HDOH0-CWB by HDOT (or it's duly authorized representative). During construction, field measurements will be faxed or emailed (as pdf) and color photos will be emailed to HDOH-CWB by close of business the day following sampling or the first business day following holidays, furlough days or weekends. During construction, laboratory data, will be transmitted by facsimile to HDOH-CWB (808-586-4352) or email cleanwaterbranch@doh.hawaii.gov within 24 hours or the first business day following holidays, furlough days and weekends. Brief reports of analytical results will be compiled within two weeks after completion of all analyses for each sampling event. The reports will include a running statistical summary (after three water samples have been collected) for the current phase of the project.

Post-construction monitoring will be conducted three times after construction is completed. Data will be tabulated and arithmetic and geometric (as appropriate) means will be calculated. Data will be used to assess whether the objectives listed in Step 2 have been met.

Step 4: Define the study boundaries

Data collection will be limited both spatially and temporally. Temporally, data collection will be limited to three monitoring phases extending from two weeks prior to construction to three weeks after the end of construction. Construction is expected to require approximately 26 months of in-stream and stream bank work. Sampling will occur ten times (once a day for two weeks, or less frequently if time allows) during the preconstruction sampling phase, one time a week during construction, and three times (once a week for three weeks) during the post-construction phase. Data will be collected from the two control

and two impact stations during preconstruction, during-construction, and postconstruction sampling.

Spatially, the monitoring plan will be limited to four stations in the receiving waters of Kawela Stream, two control stations and two impact stations. Sta. USC will monitor the quality of the water 15 m (50 ft) upstream of the construction site. Sta. UIS will monitor the quality of the water 1 m (3 ft) upstream of the construction site and Sta. DIS will monitor the quality of the water 1 m (3 ft) downstream of the construction site. Sta. MCS will monitor the quality of the water approximately 15 m (50 ft) downstream of the project limits. Sampling locations are shown in Fig. 3. Data collected will monitor the effects of the project construction on water quality at each station, allowing a determination of the effectiveness of the project BMPs to be made.

Step 5: Develop a decision rule

The results of this study will be evaluated against the decisions outlined during Step 2 of the DQO process. If the measured parameters at the impact stations exceed Hawai'i water quality standards, and the exceedence is not related to ambient conditions, it could be necessary to repair or modify the BMPs to improve water quality.

During field sampling, samplers are required to take field notes, which are described in the Sample Collection section. High surf and high tide may cause Kawela Stream to flow towards the source and away from the mouth. Samplers will note which direction the water is flowing. The terms up current and down current are used in this monitoring program to define the direction of water flow. Up current in this monitoring program is specifically defined as that water which has not flowed through or been impacted by the Project. Down current is specifically defined as that water that flowed through or may have been impacted by the Project. If at any time it is noted that there is a turbidity plume extending beyond the BMPs and the plume is associated with construction, all work should stop until the cause is determined and corrected.

The following numerical references for turbidity and TSS will evaluated and finalized following the analysis of all preconstruction data to establish baseline "grey area" and "95% probability area." If the turbidity at the downstream *muliwai* control station at any time exceeds any of these numerical references:

- 20% greater than the turbidity at the upstream control station,
- the turbidity exceeds the 95% probability level as calculated from the preconstruction monitoring data

or if the total suspended solids (TSS) at the downstream *muliwai* control station at any time exceeds any of these two numerical references:

- 20% greater than the TSS at the upstream control station,
- the TSS exceeds the 95% probability level as calculated from the preconstruction monitoring data

or if pH results at the down current control stations:

- fall outside of the range of 7.0 to 8.6 (pH criteria for estuary and open coastal waters near a stream);

then, a determination must be made whether the cause is attributable to construction (i.e., BMP failure) or a non-construction activity. The field sampler or laboratory analyst will notify the *AECOS* project manager of the exceedances. The project manager will notify the contractor's representative. If the field samplers notice a problem in the field, they will notify the contractor's representative directly, or if the representative is not available, the on-site manager. The contractor's representative or on-site manager will attempt to track the cause of the exceedance. If it is determined that construction is causing the problem, then the activity responsible should cease until the problem is corrected. The contractor will verbally notify HDOH-CWB of the problem and any corrective action taken. If the discharge event is caused by other factors, then the contractor will report the findings (with material evidence) to HDOH-CWB.

Step 6: Specify tolerable limits on decision errors

Environmental decisions are uncertain. Some uncertainty will be the result of sample design errors and some uncertainty will be the result of measurement errors. When examining the data against the decision rules (Step 5), a decision must be made if the data show the water quality of the stream is within the range of ambient conditions (null hypothesis) or if the water quality of the stream is affected by construction activities. Two potential decision errors exist, Type I—false rejection of the null hypothesis (conclude a water quality impact has occurred where one has not) or Type II—false acceptance of the null hypothesis (conclude no water quality impact has occurred where one has). The tolerable limit on decision errors is set at >80%, it is assumed that differences in the percent change can be negative or positive (two-sided t-test), and the α significance level is set at 0.05.

To address decision errors that are the result of measurement errors, quality controls will be conducted on approximately 10% of the field measurements and samples collected and analyzed in the laboratory. Acceptable relative percent differences for field duplicates are 75% or less. Laboratory control

limits for quality control samples is established between 90% and 110%. Replicate analysis will be performed in 10% of the samples.

Step 7: Optimize the design

The sampling locations and sampling frequency were developed in accordance with water quality regulations promulgated in Hawai'i Administrative Rules (HAR) Chapter 11-54 (HDOH, 2009) and the General Monitoring Guideline for Section 401 Water Quality Certification Projects (HDOH, 2000). This sampling program may be modified based on analysis of data, visual observations, changes in construction, changes in environmental conditions, and other information that may become available during construction. Optimization of the design, if necessary, will improve monitoring and assessment of construction impacts on Kawela Stream.

Reports and assessment

A preconstruction monitoring report will assess water quality and compare baseline data to applicable Hawai'i water quality standards. This report will be prepared within 45 days of completion of preconstruction monitoring and analysis. Tabulated data and statistical analysis need to meet DQOs will be available prior to the commencement date of the proposed construction activities. The data will be used to set decision rule limits appropriate for the project. HDOT or its assigned representative will mail the completed report to HDOH-CWB.

Draft results of during-construction monitoring for field measurements, color photos and turbidity will be sent via facsimile or email (as a pdf) by HDOT (or its dully authorized representative) to HDOH-CWB within 24 hours or the first business day after they become available. *In situ* sampling results will be submitted by HDOT or its assigned representative via facsimile or email (as a pdf) within 24 hours or by the next business day. Depending on sample load in the laboratory, turbidity will be submitted within 72 hours and TSS within 8 days. Within two weeks of completing all analyses, *AECOS* will mail a typed report of results to the HDOT, Highways Division. The report will also be sent to HDOH-CWB via facsimile (808)586-4352 or email (as a pdf) at cleanwaterbranch@doh.hawaii.gov. These reports will have a running statistical summary (provided there are sufficient data for statistical analysis) for each phase of the project. These reports will also include field notes.

A final report and water quality assessment will be prepared upon completion of the monitoring program. This report will be submitted by HDOT or its

assigned representative to HDOH-CWB within 60 days following completion of post-construction monitoring and analysis. The final report will identify the methods and procedures for analytical measurements and include all data collected as well as statistical summaries of results by station and activity phase (preconstruction, during construction, and postconstruction). This report will also assess whether water quality was impacted by the construction activity. Upon completion of the monitoring program, the contract laboratory will retain the original data and field notebook for a minimum of five years.

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Appendix A

AECOS, Inc.
Chain of Custody Form

AECOS, Inc.

45-939 Kamehameha Highway Suite 104
Kaneohe, Oahu, HI 96744
Tel: (808) 234-7770 Fax: 234-7775

CHAIN OF CUSTODY FORM

PROJECT FILE No.

LOG NUMBER [ ]

CLIENT:
ADDRESS:

CONTACT:
PHONE No.: ☎
Purchase Order No.:

☐ RUSH
☐ SEE REVERSE
SPECIAL INSTRUCTIONS

	☒	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	SAMPLE TYPE	CONTAINER(S)		REQUESTED ANALYSES	PRESERVATION
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

CLIENT PROVIDING SAMPLES TO THE LABORATORY SHOULD COMPLETE AS MUCH OF THE ABOVE FORM AS POSSIBLE. NOTE NAME AND DATED SIGNATURE OF PERSON COLLECTING THE SAMPLE MUST BE ENTERED BELOW ⚓. INFORMATION REQUESTED IN SHADED BOXES ABOVE TO BE FILLED IN BY THE LABORATORY.

SAMPLED BY: DATE 20___
PRINT NAME
RELINQUISHED: DATE 20___
SIGNATURE TIME

COMMENTS:

RECEIVED BY: DATE 20___
SIGNATURE TIME
RELINQUISHED: DATE 20___
SIGNATURE OR INITIALS TIME

PRECAUTIONS:

RECEIVED FOR LABORATORY: DATE 20___
SIGNATURE TIME
RELINQUISHED: DATE 20___
SIGNATURE OR INITIALS TIME

DISPOSAL:

USE (BLACK) INK

RETURN SAMPLE TO CLIENT ☐

NOTE: IF ANY INFORMATION IS PROVIDED ON THIS SIDE OF FORM, CHECK THE "SEE REVERSE" BOX ON THE FRONT SIDE OF FORM

ADDITIONAL CUSTODY RECORD
TRANSPORTERS

RECEIVED BY:	DATE
	20___
SIGNATURE	TIME
RELINQUISHED:	DATE
	20___
SIGNATURE OR INITIALS	TIME

RECEIVED BY:	DATE
	20___
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SIGNATURE	TIME
RELINQUISHED:	DATE
	20___
SIGNATURE OR INITIALS	TIME

☐ SEND INVOICE TO
(ONLY IF DIFFERENT FROM CLIENT):

FIRM:
ADDRESS:

ATTN:

Purchase Order No.: ☐

☐ SEND RESULTS TO
(ONLY IF DIFFERENT FROM CLIENT):

FIRM:
ADDRESS:

ATTN:

☐ SPECIAL INSTRUCTIONS:

PLEASE INITIAL HERE: ☐

DRAW MAP OR DIAGRAM OF SAMPLE SITES HERE