

SUZANNE D. CASE

WILLIAM D. BALFOUR, JR. KAMANA BEAMER, PH.D. MICHAEL G. BUCK MILTON D. PAVAO VIRGINIA PRESSLER, M.D. JONATHAN STARR

> JEFFREY T. PEARSON DEPUTY DIRECTOR

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

COMMISSION ON WATER RESOURCE MANAGEMENT

P.O. BOX 621 HONOLULU, HAWAII 96809

STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT

January 28, 2016 Honolulu, Hawaii

Resubmittal of an Application for a Stream Channel Alteration Permit (SCAP.4271.6)

County of Maui, Department of Public Works

Kahana Nui Bridge Replacement and Utility Lines, Kahana Stream, Lahaina, Maui

TMK: (2) 4-3-005:029(por.) and (083 por.); 4-3-019:028(por.) and 049(por.)

APPLICANT:

<u>LANDOWNER:</u> Same

County of Maui Department of Public Works 200 South High Street, 4th Floor

Wailuku, Hawaii 96793

SUMMARY OF REQUEST:

The County of Maui, Department of Public Works (DPW), proposes to replace the Kahana Nui Bridge which spans the Kahana Stream and install water and sewer lines. A Stream Channel Alteration Permit (SCAP-MA-367) application was previously approved by the Commission on Water Resource Management (Commission) on May 19, 2004. However, the permit expired while in the process of acquiring easements from adjoining landowners. The scope of work is the same.

LOCATION:

Kahana Stream bridge is located approximately 300 feet from the shoreline at the Lower Honoapi'ilani Road, Lahaina, Maui. (Exhibit 1).

STREAM DESCRIPTION:

The Kahana Stream is approximately 7-miles long, is perennial in the upper elevations and intermittent at its lower elevations. (Exhibit 2). The contributing watershed is five-square miles, with a maximum elevation of 4,500 feet in the West Maui mountains. The mouth of the stream is blocked by a sand berm approximately 150 feet in width. The water impounded by the

Approved by Commission on Water Resource Management at the meeting held on

B3

January 28, 2016

berm extends from the shoreline to a point about 30 feet to the east of the bridge. From this point, and for a distance of approximately 150 feet, the stream bed contains various isolated pockets of water. About 180 feet east of the bridge, the stream bed is usually dry. The presence of the sand berm and the impounded water is a prevailing condition. While the sand berm is breached during large storm events, afterwards, the normal wave action deposits sand and blocks the channel again.

BACKGROUND:

According to State Department of Transportation (DOT) standards, the existing Kahana Nui Bridge is structurally deficient and functionally obsolete. Accordingly, DPW proposes to replace the existing bridge with one that meets current DOT standards.

On March 12, 2003, the Maui Planning Commission approved a Special Management Area (SMA) permit, which expired while in the process of acquiring easements from adjoining landowners.

On May 19, 2004, the Commission approved SCAP-MA-367. However, the permit expired while in the process of acquiring easements from adjoining landowners.

On Nov. 2, 2015, Munekiyo & Hiraga, Inc., submitted a complete SCAP application on behalf of the County of Maui. The scope of work is the same.

On November 24, 2015, the Maui Planning Commission approved a Special Management Area Use permit.

PROJECT DESCRIPTION

The existing bridge is 29 feet wide (**Exhibit 3**). The span over the stream is also proposed to be increased from 29 feet to 40 feet in order to provide greater streamflow capacity. The new bridge will be 41 feet wide and 40 feet long. Construction activities proposed below the stream's ordinary high water mark include and include the following:

- Excavating the stream bed and banks of about 119 cubic yards or 2340 square feet;
- Extending the existing concrete slab beneath the bridge;
- Concrete abutment walls along both sides of the stream supporting the bridge;
- Concrete piles and pile caps to support the abutment walls;
- On the mauka and makai sides of the new bridge, grouted rubble paving (GRP) aprons with a minimum thickness of 12 inches will be installed within the stream bed and along the side slopes and top banks of the stream;
- Concrete rubble masonry (CRM) wingwalls will be on both ends of the bridge;
- 16-inch waterline will be installed in the stream bed on the makai side of the bridge:
- 8-inch waterline and a new 21-inch sewer line will be installed in the stream bed on the mauka side of the bridge. The new water and sewer lines will be protected with reinforced concrete jackets. The existing water and sewer lines in the stream bed will be removed once the new lines are completed;

• Temporary silt fences along the top banks of the stream are proposed, as well as temporary cofferdams to create watertight enclosures around construction work areas in the stream.

Construction materials for the project will be obtained from a local rock quarry and from local concrete and building material suppliers. To the extent possible, boulders excavated from the stream bed or side slopes will be utilized for fill material. The type and composition of the fill materials will depend on their application and design specifications. The materials to be used in work below the ordinary high water mark include geotextile fabric, concrete, boulders about 1 to 1.5 feet in diameter, steel rebar, lumber, and filter-wrapped bags filled with sand/gravel. All material used for the project will comply with applicable design specifications.

Various machinery and equipment will be utilized for the work below the ordinary high water mark. Generally, a backhoe (or similar) will be used for cut and fill activities. A pile driver will be used for placing the new pre-cast concrete piles, and a front-end loader will be utilized for material handling. Water pumps will be used for dewatering work areas within the temporary coffer dams. All construction equipment and machinery will be positioned along the top banks of the stream and not within the stream channel.

Best Management Practices. Filter-wrapped sand/gravel bags will be utilized for the temporary coffer dams in order to secure and protect construction work areas within the stream. Predrilling will be performed prior to driving the pre-cast concrete piles in order to facilitate pile-driving operations and minimize the amount of material being displaced by the pre-cast piles. In addition, temporary silt fences will be installed along the top banks of the stream prior to the start of demolition work. Dredged material will be hauled away by the contractor for disposal at a County-approved landfill site.

The demolition of the existing abutment walls and footings, the construction of the abutment walls, wingwalls, pre-cast concrete piles, GRP improvements, and installation of new utility lines will be conducted incrementally and be limited to one side of the stream at a time in order to allow for stream flows during storm events.

The implementation of the project will occur during the dry season, when flows in the stream are at its lowest. The work below the ordinary high water mark is estimated to take about 6 months.

The streamflow capacity of the proposed bridge will be 1,193 cfs. While this is a 35 percent increase in capacity over existing conditions, it still does not meet the 100-year flow rate of 5,100 cfs. It was determined that providing this capacity would be impractical at this location. The required bridge section would need to be 4 to 5 times as wide as what is proposed, which would extend significantly beyond the current stream banks.

AGENCY REVIEW COMMENTS:

County of Maui, Planning Department: No objections.

Department of Hawaiian Home Lands: No comments.

Department of Land and Natural Resources (DLNR), Aquatic Resources: No objections, however, construction should be planned for drier parts of the year. We recommend that you reduce drainage, sedimentation, and contamination from the work site. Additionally, it is recommended to clean and reduce debris and vegetation in the upstream areas which may get caught under the bridge during heavy stream flows.

DLNR, Engineering: No comments.

DLNR, Forestry and Wildlife: No comments.

DLNR, Historic Preservation: No comments.

DLNR, Land Division: No comments.

DLNR, State Parks: No objections.

Department of Health (DOH), Clean Water Branch:

- 1. Any project and its potential impacts to State waters must meet the following criteria:
 - a. Antidegradation policy (HAR, §11-54-1.1) requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected;
 - b. Designated uses (HAR, §11-54-3) as determined by the classification of the receiving State waters; and
 - c. Water quality criteria (HAR, §11-54-4 through §11-54-8).
- 2. You may be required to obtain National Pollutant Discharge Elimination System (NPDES) permit coverage for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55).

For NPDES general permit coverage, a Notice of Intent (NOI) form must be submitted at least 30 calendar days before the commencement of the discharge. An application for a NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. To request NPDES permit coverage, you must submit the applicable form ("CWB Individual NPDES Form" or "CWB NOI Form") through the e-Permitting Portal and the hard copy certification statement with the respective filing fee (\$1,000 for an individual NPDES permit or \$500 for a Notice of General Permit Coverage). Please open the e-Permitting Portal website located at: https://ehacloud.doh.hawaii.gov/epermit/. You will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool and locate the appropriate form. Follow the instructions to complete and submit the form.

3. If the project involves work in, over, or under waters of the United States, it is recommended that the applicant contact the Army Corp of Engineers, Regulatory Branch regarding their permitting requirements.

Pursuant to Federal Water Pollution Control Act [commonly known as the "Clean Water Act" (CWA)], Paragraph 401(a)(1), a Section 401 Water Quality Certification (WQC) is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may **result** in any discharge into the navigable waters..." (emphasis in original). The term "discharge" is defined in CWA, Subsections 502(16), 502(12), and 502(6); Title 40 of the Code of Federal Regulations, Section 122.2; and HAR, Chapter 11-54.

- 4. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Ch. 11-54, and/or permitting requirements, specified in HAR, Ch. 11-55, may be subject to penalties of \$25,000 per day per violation.
- 5. It is the State's position that all projects must reduce, reuse, and recycle to protect, restore, and sustain water quality and beneficial uses of State waters. Project planning should:
 - a. Treat storm water as a resource to be protected by integrating it into project planning and permitting. Storm water has long been recognized as a source of irrigation that will not deplete potable water resources. What is often overlooked is that storm water recharges ground water supplies and feeds streams and estuaries; to ensure that these water cycles are not disrupted, storm water cannot be relegated as a waste product of impervious surfaces. Any project planning must recognize storm water as an asset that sustains and protects natural ecosystems and traditional beneficial uses of State waters, like community beautification, beach going, swimming, and fishing. The approaches necessary to do so, including low impact development methods or ecological bio-engineering of drainage ways must be identified in the planning stages to allow designers opportunity to include those approaches up front, prior to seeking zoning, construction, or building permits.
 - b. Clearly articulate the State's position on water quality and the beneficial uses of State waters. The plan should include statements regarding the implementation of methods to conserve natural resources (e.g. minimizing potable water for irrigation, gray water re-use options, energy conservation through smart design) and improve water quality.
 - c. Consider storm water Best Management Practice (BMP) approaches that minimize the use of potable water for irrigation through storm water storage and reuse, percolate storm water to recharge groundwater to revitalize natural hydrology, and treat storm water which is to be discharged.
 - d. Consider the use of green building practices, such as pervious pavement and landscaping with native vegetation, to improve water quality by reducing excessive runoff and the need for excessive fertilization, respectively.
 - e. Identify opportunities for retrofitting or bio-engineering existing storm water infrastructure to restore ecological function while maintaining, or even enhancing, hydraulic capacity. Particular consideration should be given to areas prone to flooding, or where the infrastructure is aged and will need to be rehabilitated.

Staff: The lead agency for the protection of water quality is the Department of Health, Clean Water Branch, who administer the Federal Clean Water Act (33 U.S.C. §1251 et seq.) and the State Water Pollution Act (HRS Ch. 342D; HAR Ch. 11-54 Water Quality Standards; and HAR Ch. 11-55 Water Pollution Control). HAR §11-54-1 through §11-54-8 defines Best Management Practices, water quality criteria applicable to inland and nearshore waters and is based on the Federal Clean Water Act. HAR Ch. 11-55 Appendix C defines discharges of storm water associated with construction activity.

Office of Hawaiian Affairs: No comments.

US Army Corps of Engineers: No comments.

US Fish and Wildlife Service: Our comments and recommendations are provided under the authorities of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), as amended (ESA); Fish and Wildlife Coordination Act of 1934 [16 U.S.C. 661 et seq.; 48 Stat. 40 I], the National Environmental Policy Act of 1969 [42 U.S.C. 4321 et seq.; 83 Stat. 401], as amended (NEPA) and the Clean Water Act of 1977 [33 USC 1251 et seq.; 91 Stat. 1566], as amended, among others. We have also attached an electronic copy of 20 CFR Part 230 Compensatory Mitigation for Losses of Aquatic Resources; Final Rule, dated April 10, 2008 which explains the authority for compensatory mitigation that your project actions may initiate.

The Service has concerns regarding the aquatic and marine resources and wildlife that may be negatively impacted by the project actions that include, but are not limited to, excavation and discharge of materials in the stream bed. Such materials may pose a risk to stream quality and to marine benthic communities if disposed in the stream bed. We recommend you analyze the possible changes to coastal hydrology as a result of removing material above and below the highwater mark and streambed and avoid and minimize translocation of material and debris to the aquatic and marine environment that may occur during the wet periods. Under 20 CFR Part 230, compensatory mitigation for losses of aquatic resources, the project may require mitigation. The Service also has concerns about future erosion after removal of the temporary coffer dam and silt erosion control.

We also recommend you schedule a planning meeting in coordination with the Service and the State and Federal sponsors, contractors, Danielle Jaywardene and Randy McIntosh at National Marine and Fisheries Service, ESA/EFS division, Wendy Wiltse, EPA, and Glenn Higashi at the DLNR Division of Aquatic Resources, so that the project purpose and scope may be presented and discussed to help minimize and avoid impacts to the maximum extent practicable.

Your project may impact the endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*) roosts in both exotic and native woody vegetation and, while foraging, will leave young unattended in "nursery" trees and shrubs. If trees or shrubs suitable for bat roosting are cleared during the breeding season, there is a risk that young bats could inadvertently be harmed or killed. To minimize impacts to the endangered Hawaiian hoary bat, woody plants greater than 15 feet (4.6 meters) tall should not be removed or trimmed from June 1 to September 15. Site clearing or

January 28, 2016

tree trimming necessary for the project should be timed in order to avoid disturbance to Hawaiian hoary bats.

Based on your Stream Channel Alteration Permit Application, excavation will be conducted by machinery located along the streams edge. The use of heavy machinery on beaches may impact sea turtles by creating barriers to nesting and basking turtles and vehicle ruts which interfere with hatchlings crawling to the ocean. Driving on the beach to access project sites can cause sand compaction, which may result in adverse impacts on nest site selection, digging behavior, clutch viability, and emergence by hatchlings, as well as directly kill pre-emergent hatchlings.

Transporting, storing, and the placement of fill are activities that can increase the risk of introducing, spreading, and establishing non-native terrestrial and aquatic invasive species including plants, animals and microbes. This can occur as a contaminant of a specific commodity or as a stowaway. The pathways of introduction as contaminant and stowaway include, but are not limited to species transported via: construction equipment, personal protective equipment, and delivery of supplies, materials, goods, foot traffic, vehicles or vessel traffic. Invasive species introduced as contaminants and stowaways could occur as a result of inadequate sanitation and inspection during and prior to movement. We recommend that all construction equipment and supplies be inspected to ensure they are free of invasive species. Methods such as Hazard Analysis and Critical Control Point (HACCP) planning (http://www.haccp-nrm.org) should be utilized to conduct pathway analysis and include requirements to perform certain tasks to prevent the inadvertent movement of invasive species into the activity area from other locations.

Seabirds, including the Newell's shearwater (*Puffinus auricularis newelli*), Hawaiian petrel (*Pterodroma sandwichensis*), and band-rumped storm petrel (*Oceanodroma castro*) fly at night and are attracted to artificially lighted areas resulting in disorientation and subsequent fallout due to exhaustion. Seabirds are also susceptible to collision with objects that protrude above the vegetation layer, such as utility lines, guy-wires, and communication towers. Additionally, once grounded, they are vulnerable to predators and are often struck by vehicles along roadways. To reduce potential impacts to seabirds, we recommend the following minimization measures to be incorporated into your project description:

- Construction activities should only occur during daylight hours. Any increase in the use of nighttime lighting, particularly during peak fallout period (September 15 through December 15), could result in additional seabird injury or mortality.
- If lights cannot be eliminated due to safety or security concerns, then they should be positioned low to the ground, be motion-triggered, and be shielded. Effective lighting shields should be completely opaque, sufficiently large, and positioned so that the bulb is only visible from below.

Staff: Vegetation along the project corridor is dominated by introduced plant species. There are no known rare, endangered, or threatened species of flora, fauna, or avifauna within the vicinity of the project corridor. The proposed project is not anticipated to impact wetlands, wildlife, or turtle habitat (Final Environmental Assessment, Lower Honoapiilani Road, 2002).

January 28, 2016

We recommend that the Landowner contact the Fish and Wildlife Service regarding their concerns about aquatic resources, birds, bats, monitoring plans, and permit requirements, if any.

CHAPTER 343 - ENVIRONMENTAL ASSESSMENT:

In accordance with the requirements of Chapter 343, HRS, and Chapter 11-200-8, HAR, an environmental assessment was triggered due to the use of State and County lands and funds (HRS §343-5(a)). On November 8, 2002, the County DPW filed a Finding of No Significant Impact, Lower Honoapi'ilani Road.

On October 28, 2002, a Final Environmental Assessment (EA), for Lower Honoapiilani Road Improvements (Hoohui Road to Napilihau Street) Project No. STP 3080(8), was received by the Office of Environmental Quality Control and is available online for review: http://oeqc.doh.hawaii.gov/Shared%20Documents/EA_and_EIS_Online_Library/Maui/2000s/20 02-11-08-MA-FEA-LOWER-HONOAPIILANI-RD.pdf

LEGAL AUTHORITIES

Water as a Public Trust. Under the public trust and HRS §174C, there is an inherent presumption in favor of the four public trust purposes, yet allowing for use and development in a reasonable and beneficial manner. The state water resources trust thus embodies a dual mandate of protection and maximum reasonable and beneficial use. The four public trust purposes are:

- 1. Maintenance of waters in their natural state:
- 2. Domestic water use of the general public, particularly drinking water;
- 3. The exercise of Native Hawaiian and traditional and customary rights, including appurtenant rights; and
- 4. Reservations of water for use on Hawaiian home lands. *Water Use Permit Applications*, 94 Hawaii 97, 9 P.3d 409 (2000); and *Waiola O Molokai*, *Inc.*, 103 Hawaii 401, 83 P.3d (2004).

HRS §174C-71 <u>Protection of instream uses.</u> The commission shall establish and administer a statewide instream use protection program. In carrying out this part, the commission shall cooperate with the United States government or any of its agencies, other state agencies, and the county governments and any of their agencies. In the performance of its duties the commission shall:

- (3) Protect stream channels from alteration whenever practicable to provide for fishery, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses;
 - (A) The commission shall require persons to obtain a permit from the commission prior to undertaking a stream channel alteration; provided that routine streambed and drainageway maintenance activities and maintenance of existing facilities are exempt from obtaining a permit;
 - (B) Projects which have commenced construction or projects reviewed and approved by the appropriate federal, state, or county agency prior to July 1, 1987, shall not be affected by this part;

(C) The commission shall establish guidelines for processing and considering applications for stream channel alterations consistent with section 174C-93:

HRS §174C-93 <u>Permits for construction or alteration</u>. No person shall construct or alter a stream diversion works, other than in the course of normal maintenance, without first obtaining a permit from the commission

HAR §13-169-48 <u>Interim instream flow standard for West Maui.</u> The Interim Instream Flow Standard for all streams on West Maui, as adopted by the commission on water resource management on October 19, 1988, shall be that amount of water flowing in each stream on the effective date of this standard, and as that flow may naturally vary throughout the year and from year to year without further amounts of water being diverted offstream through new or expanded diversions, and under the stream conditions existing on the effective date of the standard. (Eff. Oct. 8, 1988).

HAR §13-169-52 Criteria for ruling on application.

- (c) In reviewing an application for a permit, the commission shall cooperate with persons having direct interest in the channel alteration and be guided by the following general considerations:
 - (1) Channel alterations that would adversely affect the quantity and quality of the stream water or the stream ecology should be minimized or not be allowed.
 - Where instream flow standards or interim instream flow standards have been established pursuant to subchapters 3 and 4, no permit shall be granted for any channel alteration which diminishes the quantity or quality of stream water below the minimum established to support identified instream uses, as expressed in the standards.
 - (3) The proposed channel alteration should not interfere substantially and materially with existing instream or non-instream uses or with channel alterations previously permitted.

STAFF REVIEW:

HAR §13-169-52(c) set out the criteria for ruling on SCAP applications:

- (1) Channel alterations that would adversely affect the quantity and quality of the stream water or the stream ecology should be minimized or not be allowed.
- Staff: Initial BMP work will include the installation of silt fencing and sand bag barriers. The quantity and quality of the stream water or stream ecology is unchanged.
- Where instream flow standards or interim instream flow standards have been established pursuant to subchapters 3 and 4, no permit shall be granted for any channel alteration which diminishes the quantity or quality of stream water below the minimum established to support identified instream uses, as expressed in the standards.

- Staff: The interim instream flow standard (IIFS) for West Maui is that amount of water flowing in each stream on the effective date of this standard (December 10, 1988), and as that flow may naturally vary throughout the year (HAR §13-169-48). The identified instream uses may include fish habitat and stream flow contribution to the nearshore waters. The quantity and quality of stream water is unchanged.
- (3) The proposed channel alteration should not interfere substantially and materially with existing instream or non-instream uses or with channel alterations previously permitted.
- Staff: Instream uses, such as ecosystem maintenance or recreation, are unchanged. There are no non-instream uses identified.

RECOMMENDATION:

That the Commission:

1. Approve the subject Stream Channel Alteration Permit (SCAP.4271.6) application to replace Kahana Nui Bridge and install water and sewer lines subject to the standard conditions in Exhibit 4.

Respectfully submitted,

JEFFREY T. PEARSON, P.E.

Deputy Director

Exhibits:

- 1. Project Location and Sand Berm at the Mouth of the Stream.
- 2. Location, Kahana Stream.
- 3. Photos of the Existing Kahana Nui Bridge.
- 4. Standard Stream Channel Alteration Permit Conditions.

APPROVED FOR SUBMITTAL:

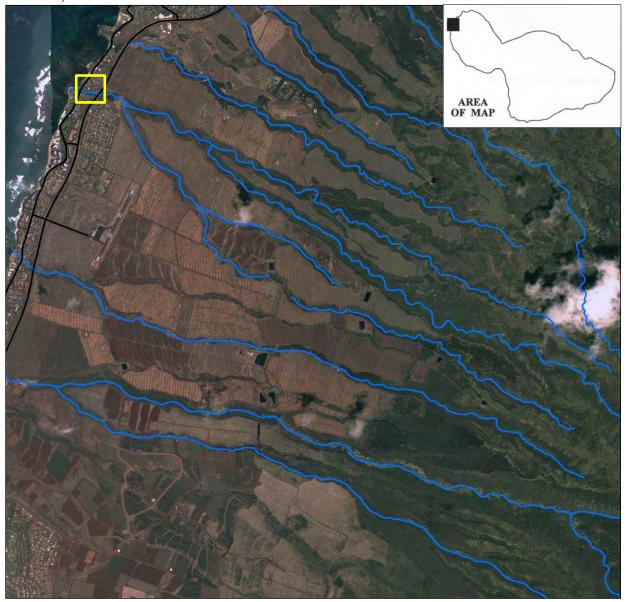
SUZANÑE D. CASE

Chairperson

Project Location and Sand Berm at the Mouth of the Stream.



Location, Kahana Stream.



Photos of the Existing Kahana Nui Bridge.



Photo No. 1: North View, Mauka Side.



Photo No. 2: North View, Makai Side.



Photo No. 3: Looking Mauka.



Photo No. 4: Looking Makai.

EXHIBIT 3

STANDARD STREAM CHANNEL ALTERATION PERMIT AND STREAM DIVERSION WORKS PERMIT CONDITIONS (Revised January 28, 2016)

- 1. The permit application and staff submittal approved by the Commission at its meeting on {Date}, shall be incorporated herein by reference.
- 2. The project may require other agency approvals regarding wetlands, water quality, grading, stockpiling, endangered species, and floodways. The permittee shall comply with all other applicable statutes, ordinances, and regulations of the Federal, State and county governments.
- 3. The permittee, his successors, assigns, officers, employees, contractors, agents, and representatives, shall indemnify, defend, and hold the State of Hawaii harmless from and against any claim or demand for loss, liability, or damage including claims for property damage, personal injury, or death arising out of any act or omission of the applicant or his successors, assigns, officers, employees, contractors, and agents under this permit or related to the granting of this permit.
- 4. The permittee shall notify the Commission, by letter, of the actual dates of project initiation and completion. The applicant shall submit a set of as-built plans and photos in electronic format of the completed work to the Commission upon completion of this project. This permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The proposed work under this permit shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Commission upon showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.
- 5. Before proceeding with any work authorized by the Commission, the permittee shall submit one set of construction plans and specifications in electronic format to determine consistency with the conditions of the permit and the declarations set forth in the permit application.
- 6. The permittee shall implement site-specific, construction Best Management Practices (BMPs) in consultation with the Department of Health's Clean Water Branch and other agencies as applicable, that are designed, implemented, operated, and maintained by the permittee and its contractor to properly isolate and confine construction activities and to contain and prevent any potential pollutant(s) discharges from adversely impacting State waters per HRS Ch. 342D Water Pollution; HAR §11-54-1 through §11-54-8 Water Quality Standards; and HAR Ch. 11-55 Water Pollution Control, Appendix C. BMPs shall control erosion and dust during construction and schedule construction activities during periods of low stream flow.
- 7. The permittee shall protect and preserve the natural character of the stream bank and stream bed to the greatest extent possible. The applicant shall plant or cover lands denuded of vegetation as quickly as possible to prevent erosion and use native plant species common to riparian environments to improve the habitat quality of the stream environment.
- 8. In the event that subsurface cultural remains such as artifacts, burials or deposits of shells or charcoal are encountered during excavation work, the applicant shall stop work in the area of the find and contact the Department's Historic Preservation Division immediately. Work may commence only after written concurrence by the State Historic Preservation Division.