

State of Hawai'i  
Department of Land and Natural Resources  
Engineering Division

September 26, 2014

Board of Land and Natural Resources  
State of Hawaii  
Honolulu, Hawaii

REQUEST ACCEPTANCE OF THE FINAL ENVIRONMENTAL ASSESSMENT AND  
APPROVAL FOR THE ISSUANCE OF A FINDING OF NO SIGNIFICANT IMPACT  
(FONSI) FOR KEĀHUA STREAM BRIDGE, LIHUE, ISLAND OF KAUAI

**BACKGROUND:**

This project will allow a safer and more consistently available vehicular and pedestrian access across Keāhua Stream, and to the recreational resources beyond access by Kuamo'o Road, a non-through street. On most days, water over the existing crossing varies in depth between a few inches and about a foot. The project site currently has a concrete ford crossing for vehicles and pedestrians. Vehicles and some hikers cross here on their way to Powerline Trail, other hiking and hunting trails, and swimming areas on several streams within the forest reserve.

**PROJECT DESCRIPTION:**

The project consists of the construction of a single-span steel truss bridge, 115 feet long, with one 13-foot lane travel lane and a protected sidewalk cantilevered off one side of the bridge. It would be located parallel to the existing ford at a point about 20 feet downstream. The existing roadway approaches on Kuamo'o Road on both sides of the stream would be rerouted into the parking lots, which would be slightly expanded and paved to provide 25 standard parking stalls and two stalls compliant with the Americans with Disabilities Act (ADA). At the east parking lot, a concrete slab would extend over a grass-banked drainage ditch to provide more parking spaces, but the ditch itself would not be affected or disturbed in any way. An accessible ramp would lead from the east parking lot to the bridge, which will have a 3.5-foot wide sidewalk with railings and would also be ADA-compliant. The west parking lot includes a sidewalk that is accessible. Signs would be relocated and new drainage inlets and culverts would be installed. The ford structure itself would be left in place but the pavement approaching it would be removed and vehicular traffic would be blocked from using it. Leaving it in place would avoid any temporary impact on the existing stream or its banks or bed associated with the demolition process. Eliminating vehicular traffic over the submerged ford would end the ongoing impact to the water quality and the biota of the stream from the petrochemicals associated with vehicles that can leak into the stream during crossings, particularly on those occasions in which vehicles get stuck.

**ITEM L-1**

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**PROJECT OVERVIEW:**

Project Location:

The project is located at the crossing of Kuamo‘o Road and Keāhua Stream within the Keāhua Forestry Arboretum of the Līhu‘e-Koloa Forest Reserve, on the island of Kaua‘i.

Existing Use:

The project site currently has a concrete ford crossing for vehicles and pedestrians. Vehicles and some hikers cross here on their way to Powerline Trail, other hiking and hunting trails, and swimming areas on several streams within the forest reserve.

Land Ownership:

The area is within TMK (4) 4-2-001:002, on State Land Use Conservation District land owned by the State of Hawai‘i.

Project Timeframe and Costs:

The project cost is approximately \$3.1 million and would take about six months to complete.

**SUMMARY OF AFFECTED ENVIRONMENT**

Soil and Climate

The average maximum daily temperature is approximately 80 degrees F., with an average minimum of 67 degrees, and annual rainfall averages approximately 100 inches. Geologically, the surface of the project site is composed of late Pliocene and Pleistocene-era lava flows from the Kōloa Volcanic Series. The project site soil is classified as part of the Pooku Series, which are well-drained soils occurring on the uplands of Kauai.

Drainage, Water Features and Water Quality

Project site is in Zone X, outside the designated 500-year floodplain on the Federal Emergency Management Agency’s Flood Insurance Rate Maps (FIRM). No base flood elevations are present on the FIRM Map and no flow data are provided in the FEMA Flood Insurance Study. A one foot freeboard (the distance between the 100-year flood elevation and the bottom of the bridge) was used for the design. With this design, the hydrologic study concluded that the proposed bridge and site improvements at the Keāhua Stream Bridge crossing would have no impact to the existing stream conditions.

Flora, Fauna and Ecosystems

No plant species listed under Federal or State statutes, nor any other rare Hawaiian plants, were encountered in the survey, nor are any expected to occur at the project site. No avian species currently listed or proposed for listing under either federal or State of Hawai‘i Endangered Species statutes was recorded during the course of the survey and no aquatic species protected under State or Federal laws were observed in Keāhua Stream at the project site.

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Air Quality, Noise and Scenic Resources

The proposed action will not measurably affect air quality or noise levels except minimally during construction activities. Construction will cause temporary visual impacts over the course of about six months of construction. No important view planes or scenic sites would be permanently affected by the project. The bridge will alter the visual landscape of the area through another built element in addition to the existing road, ford and parking lot.

Cultural and Historic Resources

Consultation conducted as part of the EA process, including various agencies of DLNR, the Office of Hawaiian Affairs, and local community groups did not reveal any practices that might be occurring, nor did observation or interviews with various park goers. The State Historic Preservation Division (SHPD) is currently reviewing the archaeological assessment. The Final EA was to report on the results of the review. As of July 30, 2014, SHPD has not replied. As a precaution, DLNR will require that in the unlikely event that human skeletal remains, undocumented archaeological resources, or cultural or traditional remains are encountered during future development activities within the project site, work in the immediate area of the discovery shall be halted and the State Historic Preservation Division contacted as outlined in Hawai'i Administrative Rules §13-275-12.

Stream Channel

A Stream Channel Alteration Permit (SCAP) is required for any temporary or permanent activity within the stream bed or banks that may affect flow of water. The scope of this project has no effect on the streambed or banks and this has been confirmed by the Commission on Water Resource Management a division of the Department of Land and Natural Resources.

Conservation and Coastal Lands

All land uses, pursuant to Title 13 Chapter 5, Hawaii Administrative Rules (HAR), must be an identified land use and require that a Conservation District Use Application (CDUA) be filed with the Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL). The proposed improvements are consistent with the Division of Forestry and Wild Life's program and the work is considered maintenance and operation of an existing nonconforming use. Therefore, no CDUA is required for this project. This finding was confirmed by OCCL.

**FINDINGS AND REASONS**

Chapter 11-200-12, Hawai'i Administrative Rules, outlines those factors agencies must consider when determining whether an Action has significant effects:

*1. The proposed project will not involve an irrevocable commitment or loss or destruction of any natural or cultural resources.*

No valuable natural or cultural resources would be committed or lost, and the project would remove motor vehicles from operating within a stream, better protecting water quality and aquatic resources.

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*2. The proposed project will not curtail the range of beneficial uses of the environment.*

The proposed project expands and in no way curtails beneficial uses of the environment.

*3. The proposed project will not conflict with the State's long-term environmental policies.*

The State's long-term environmental policies are set forth in Chapter 344, HRS. The broad goals of this policy are to conserve natural resources and enhance the quality of life. The project has a minor footprint, has been designed to avoid environmental impacts and fulfills aspects of these policies calling for protecting the natural environment and improving human enjoyment of natural resources. It is thus consistent with all elements of the State's long-term environmental policies.

*4. The proposed project will not substantially affect the economic or social welfare of the community or State.*

The project will benefit the economic and social welfare of the community by providing safer and more reliable access to recreational uses and a separation of motor vehicles from pedestrians and waders.

*5. The proposed project does not substantially affect public health in any detrimental way.*

The proposed project will benefit public health by improving safety in a recreational area and removing motor vehicles from operating inside a stream.

*6. The proposed project will not involve substantial secondary impacts, such as population changes or effects on public facilities.*

The proposed project would not lead to major secondary impacts, such as population changes or effects on public facilities. Although the project would involve limited short-term construction labor, these minor services could be provided by local firms and labor and would not induce in-migration. Providing a bridge instead of a ford may encourage more recreational uses in the portions of the Līhu'e-Koloa Forest Reserve that lie beyond the ford, including hiking and hunting trails and swimming spots. However, on typical days this area is already accessible to not only 4WD vehicles but normal cars whose drivers choose to make the water crossing, and any increase would likely be very minor.

*7. The proposed project will not involve a substantial degradation of environmental quality.*

The project will not degrade the environment in any way.

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*8. The proposed project will not substantially affect any rare, threatened or endangered species of flora or fauna or habitat.*

No threatened or endangered species is present or would be adversely affected by the project.

*9. The proposed project is not one which is individually limited but cumulatively may have considerable effect upon the environment or involves a commitment for larger actions.*

No construction or other projects involving an active land use are known to be occurring within a one-mile radius of the project site, nor on the tributary or receiving waters of Keāhūa Stream. Thus, there does not appear to be any potential for adverse cumulative impacts to resources such as water quality, scenic view planes, native vegetation, recreation, or any other resource.

*10. The proposed project will not detrimentally affect air or water quality or ambient noise levels. No adverse effects on these resources would occur.*

All air quality and noise impacts will be temporary.

*11. The project does not affect nor would it likely to be damaged as a result of being located in environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal area.*

Although the bridge is located in an area with flooding risk, this is inevitable in a low-lying stream. As it removes vehicles from an occasionally hazardous crossing, it reduces the potential hazard to life and property. The project would not be imprudent to construct and would employ design and construction standards appropriate to the geologic, hydrologic and seismic context.

*12. The project will not substantially affect scenic vistas and view planes identified in county or state plans or studies.*

No scenic vistas or view planes identified in the Kaua'i County General Plan will be adversely affected by the project, and visual impacts will be negligible. Construction will cause temporary visual impacts over the course of about six months of construction. No important view planes or scenic sites would be permanently affected by the project. The bridge will alter the visual landscape of the area through another built element in addition to the existing road, ford and parking lot, but the bridge has been designed to have visual interest in itself.

*13. The project will not require substantial energy consumption.*

The project involves only minor energy use and no adverse effects are expected.

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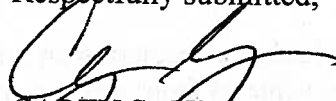
For the reasons above, the proposed action is not expected to have any significant effect in the context of Chapter 343, Hawai'i Revised Statutes and section 11-200-12 of the State Administrative Rules.

**RECOMMENDATIONS:**

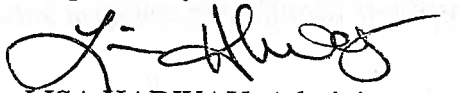
That the Board:

1. Accept the Final Environmental Assessment for the Proposed Keāhua Stream Bridge Project.
2. Based on the review of the Final Environmental Assessment and the comments received during the 30-day comment period to the Draft Environmental Assessment in addition to our responses, find that the project will not have a significant effect on the environmental and cultural resources of the area and approve the issuance of a finding of no significant impact (FONSI) for the proposed project.
3. Authorize the Chairperson to publish a FONSI for the proposed project in the Office of Environmental Quality Control's The Environmental Notice. Such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State.

Respectfully submitted,

  
CARTY S. CHANG  
Chief Engineer

Requested by:

  
LISA HADWAY, Administrator  
Division of Forestry and Wildlife

Approved for Submittal:

  
WILLIAM J. AILA, JR., Chairperson