

ALAN M. ARAKAWA MAYOR

OUR REFERENCE

YOUR REFERENCE

POLICE DEPARTMENT

COUNTY OF MAUI

55 MAHALANI STREET WAILUKU, HAWAII 96793 (808) 244-6400 FAX (808) 244-6411 * MPD * de puice - Solar and a solar and a

TIVOLI S. FAAUMU CHIEF OF POLICE

DEAN M. RICKARD DEPUTY CHIEF OF POLICE



SUBJECT: Public Safety Radio System Replacement Project Future CIP Estimate Update

The Public Safety Radio System Replacement Project has two (2) facilities left in the original design planned for purpose-built communications facilities to replace existing, commercial facilities where there is no additional space in-building or on tower to provide proper public safety grade facilities and room for future expansion of the land mobile radio system. These facilities at Pu'unianiau, Kula and Hāna Town, Hāna have been modified to the best extent practical during the initial deployment phase of the project.

At the Budget and Finance Committee Chair's request, our consultant was contacted and the projects remaining were reviewed and updated estimates worked through.

The Public Safety Radio facility at Pu'unianiau shares a building with a cellular carrier, and is the location where phone and fiber services enter the site campus. This requires access into the space currently leased for any of the other site tenants to add or remove these phone and fiber services. The towers at this site are also significantly loaded with various antennas including the PSRS microwave and land mobile radio antennas. A facility and tower similar to the one being constructed at Waiakeakua, Lāna'i would be needed to support the various microwave and land mobile radio network links. An updated estimate for this facility is \$3,000,000 for the building and tower, and \$750,000 for the supporting electronics. Telecommunications facilities require a significant amount of groundwork to develop the required electrical grounding system as well as the footing for the tower based on projected loading.

Part of the design process will include an endangered avian species survey to determine any risks to the 'Ua'u (Hawaiian Petrel) specifically, and will include assessment of risks to 'A'o (Newell's Shearwaters) and Nēnē (Hawaiian Goose). Should there be a projected 'take' or killing of one of these species due to the tower structure, a Biological Order will be required by the US Fish and Wildlife Service, and a site monitoring plan and reporting program developed to

The Honorable Riki Hokama Page 2 April 22, 2016

Habitat Conservation Plan would need to be developed and funded. Additionally, there will be a requirement to deposit an amount equivalent to the US Fish and Wildlife's cost per bird projected to be taken into a fund to support the Habitat Conservation Plan. In the case of the Waiakeakua project, the estimated take of 1.2 birds a year over 20 years required us to deposit \$289,000 into the National Fish and Wildlife Fund (NFWF). Using this as a basis, and doubling the projected take considering the largest colony of 'Ua'u in Hawai'i reside on Haleakalā, the estimated cost would be \$560,000. A more accurate amount based on the survey and study would be requested in the Radio Shop's future Operations Budget as a separate line item, solely for this purpose.

This electronics would include the replacement of three (3) microwave links which transit this site currently utilizing equipment which has recently been manufacture discontinued that we would be seeking replacement of in the "C" budget in upcoming budget cycles as part of a phased equipment refresh.

The Hāna site in the Public Safety Radio System shares a commercial facility with cellular carriers and an FM broadcast station. This facility is not as crowded as the Pu'unainiau site, but the site does not have tower space to support a microwave link to deliver connectivity to the site. Currently, leased services are used which provides means of backup communications to this remote community. While infrequent, communications services to Hana have been lost when the carrier's services failed. This places Hāna in a similar risk situation as West Maui regarding communications redundancy and survivability. The site would include a small equipment shelter, emergency power generator installed within the shelter, and a tower to support microwave and land mobile radio network connections. This microwave link would provide a diverse communications path into Hāna, and provide the same protection as the current West Maui projects offer that district. An updated estimate for the facility is \$1,500,000 for the building and tower, and \$300,000 for the supporting electronics.

The State of Hawai'i Biologist indicated that this location should not have any issues with endangered species. However, an endangered avian species survey will still be conducted to determine any unforeseen risks. Using the estimates from the West Maui sites avian survey and study, it is projected that even if these endangered species do transit the area, the risk should be below the threshold that would require a Habitat Conservation Plan and associated costs. Both of these projects exceed the original total project estimate made in 2010. The construction costs and estimated in 2010 were accurate for the time, and were not adjusted in the project to date. An update of the costs was planned for the 2018 CIP request to finish off the original Public Safety Radio System Replacement Project.

The Honorable Riki Hokama Page 3 April 22, 2016

In summary, the updated projected costs for the remaining sites are:

Pu'unianiau • o Construction - \$3,000,000 o Other -\$750,000 \$3,750,000 o USFWS -\$560,000 (to be requested in Radio Shop "B" budget) • Hāna • Construction - \$1,500,000 o Other -\$300,000 \$1,800,000

At this time it would be prudent for this project to take another year break in 2018 to use this time to rework the initial design and obtain better estimated costs to complete the remaining two sites based on the costs and experiences gained in the preceding projects. The Public Safety Radio System Replacement Project 2017 request should be reduced from \$1,910,000 to \$750,000 in the 'Other' category. The remaining \$1,160,000 along with the 2018 request of \$1,675,000 should be moved to 2019 for now and a better estimate for construction be presented during that year's budget deliberations. During this effort we will also examine other site and facility needs which were not originally considered and have since been identified by in the course of site assessments, and work accomplished during the deployment of Public Safety Radio System Replacement Project.

Please contact Communications Coordinator, Mr. Walter Pacheco, at 244-6390 if you have any questions.

Sincerely,

Jival S Jaaum TIVOLI S. FAAUMU Chief of Police