Make the following section a part of the Standard Specifications:

"SECTION 671 – PROTECTION OF ENDANGERED SPECIES

671.01 Description. The endangered Hawaiian Hoary Bat (*Lasiurus cinereus semotus*), sea turtles (including the Hawksbill Sea Turtle [or 'Ea *Eretmochelys imbricate*] (endangered), and the Central North Pacific distinct population segment (DPS) of the Green Sea Turtle or Honu (*Chelonia mydas*) (threatened), the Hawaiian Goose (*Branta (Nesochen sandvicensis*), Hawaiian Petrel (*Pterodroma sandwichensis*), Band-Rumped Storm-Petrel (*Oceanodroma castro*), and the threatened Newell's Shearwater (*Puffinus newelli*) are in the general vicinity of the proposed project that may transit or visit the proposed project. Also to be considered are the Hawaiian waterbirds, including the Hawaiian Stilt or Ae'o (*Himantopus mexicanus knudseni*), the Hawaiian Coot or 'Alae ke'oke'o (*Fulica alai*), the Hawaiian Gallinule or 'Alae 'ula (*Gallinula chloropus sandvicensis*), and the Hawaiian Duck or Koloa Maoli (*Anas wyvilliana*) (all endangered).

The Contractor shall protect these endangered species throughout the construction duration.

671.02 Materials. None

671.03 Construction.

(A) Pre-Construction and Construction Requirements. Comply with the following conditions and the notes in the Contract Plans:

(1) Hawaiian Hoary Bats. Hawaiian Hoary Bats nest in both exotic and native woody vegetation. There will be no disturbance, removal, or trimming of woody plants greater than 15 feet (4.6 meters) tall during the birthing and pup rearing season (June 1 through September 15).

Additionally, barbed wire will not be used for fencing.

(2) Hawaiian Monk Seal. All regular on-site staff shall be trained to identify the Hawaiian Monk Seal and trained on appropriate steps to take if these species are present on-site.

Construction activities shall not take place if a Hawaiian Monk Seal is in the construction area or within 150 feet of the construction area. Construction can only begin after the animal voluntarily leaves the area. If a monk seal/pup pair is present a minimum 300-foot buffer shall be observed. If a Hawaiian Monk Seal is noticed after work has already begun, that work may continue only if, in the best judgment of the Biological Monitor, that there is no way for the activity

to adversely affect the animal(s).

Any construction-related debris that may pose an entanglement threat to Hawaiian Monk Seals shall be removed from the construction area at the end of each day and at the conclusion of the construction project.

Workers shall not attempt to feed, touch, ride, or otherwise intentionally interact with any listed species.

(3) Sea Turtles. Sea turtles may nest on any sandy beach in the Pacific Islands. Nesting occurs on beaches from May through September, peaking in June and July, with hatchlings emerging through November and December. Construction can compact and erode sand and sediments, destroy sea turtle nests, erode beaches, create runoff of contaminants, and create light that disorients hatchlings and deters nesting. Off-road vehicle traffic on beaches, including construction equipment, directly affecting sea turtles and their nests by crushing individuals and degrading habitat with erosion and compacting sand and sediment.

To avoid and minimize project-related adverse effects to sea turtles and their nests, incorporate these conservation measures:

(a) No vehicle use or modifying the beach/dune environment during the sea turtle nesting or hatching season, which extends from May through December.

(b) Employ U.S. Fish and Wildlife Service Recommended Standard Best Management Practices when working in aquatic environments.

(c) Remove any project-related debris, trash, and equipment from the beach or dune if not actively in use.

(d) Do not stockpile project-related materials in the intertidal zone, reef flats, stream channels, or river channels.

Optimal turtle nesting habitat is a dark beach, free of barriers that could restrict sea turtle movement. Lighting and human presence deters nesting turtles from approaching, laying eggs, and successfully nesting. Artificial light disorients sea turtles and they become exhausted, causing them to nest in inappropriate locations, such as at or below the high tide line. Artificial lighting also disorients hatchlings as they emerge from nests. Sea turtles need darkness on beaches so they can successfully navigate back to the ocean. In-water work at

night shall be avoided, unless emergency maintenance and repair of erosion and sediment controls are necessary to meet permit conditions.

Contractor shall incorporate these measures to avoid and minimize project-related adverse effects to sea turtles and their young from lighting:

(a) Avoid nighttime work during the nesting and hatching season, which extends from May through December.

(b) Minimize the use of lighting and shield all project-related lights to ensure this light is not visible from any beach.

(c) If full shielding of light is not possible, or if you require the use of headlights, fully enclose the light source using light filtering tape or filters.

(4) Hawaiian Goose. Any Hawaiian Goose in or near the project area will not be approached, fed, or disturbed in any way.

If Hawaiian Goose are observed loafing, foraging, or otherwise present within the project area during the breeding season (September 1 through April 30), a trained biologist will survey the area near the project prior to work each day. Also, nest surveys will be conducted in and around the project area by a biologist familiar with the nesting behavior of Hawaiian Goose prior to the resumption of any work. Surveys will be repeated after any delay in work of three or more days. If a nest is identified within 150 feet of the work area, all work will cease and the United States Department of Interior Fish and Wildlife Service (USFWL) will be contacted immediately for further guidance.

In areas where Hawaiian Goose are known to be present, reduced speed limits will be posted and implemented and project personnel and Contractors will be informed of the presence of endangered species on-site.

(5) Hawaiian Seabirds. Newell's Shearwater and Band-Rumped Storm-Petrel may traverse the project area at night during breeding season, which extends from March 1 through December 15. If night time work will be required in conjunction with the development of the project, all lights will be fully shielded so the bulb can only be seen from below bulb height and will only be in use when necessary to reduce the potential for interactions of nocturnally flying seabirds with external lights and man-made structures. All outdoor lights will be

turned off when human activity is not occurring in the lighted area.

No night time construction will occur during the peak seabird fledging period (September 15 through December 15).

(6) Hawaiian Waterbirds. Hawaiian waterbirds occupy fresh and brackish-water marshes and natural or manmade ponds. Hawaiian stilts also occupy areas with ephemeral or persistent standing water. Because this project occurs near water, threats to these species from this project may include disturbance from human activity and injury or mortality from vehicle strikes.

Contractor shall incorporate these measures to avoid and minimize project-related adverse effects to the Hawaiian waterbirds:

(a) In areas where known presence of Hawaiian waterbirds occurs, post and implement reduced speed limits, and inform project personnel and Contractors of the presence of these endangered species.

(b) Because water resources occur in the project site, employ U.S. Fish and Wildlife Service Recommended Standard Best Management Practices when working in aquatic environments.

(c) Survey for Hawaiian waterbirds in or near the project area prior to work using survey biologists. Survey biologists should be trained and capable of identifying adults and juveniles of each species, nesting behaviors, and nests.

i. Surveys for species and nests should be repeated when a delay of work occurs that is three days or more (during which the birds may attempt to nest).

ii. If a nest or active brood is found, contact the Service within 24 hours for further guidance.

iii. Establish and maintain a 100-ft buffer around all active nests and/or broods until the chicks/ducklings have fledged. Do not conduct potentially disruptive activities or habitat alteration within this buffer.

iv. Have a biological monitor that is familiar with the species' biology present on the project site during all construction or earth moving activities until the chicks/ducklings fledge to ensure that Hawaiian

waterbirds and nests are not adversely affected.

(7) Essential Fish Habitat. Contractor shall conduct a pre-construction biological survey to determine whether infrastructure materials (e.g, riprap, piles, boulders) are colonized with benthic communities. If infrastructure materials (e.g, riprap, piles, boulders) that are colonized with benthic communities will be removed or destroyed as part of permitted activities, Contractor shall prepare relocation plan for HDOT approval, and relocate these materials to an appropriate receiving site.

The Contractor shall prevent debris from falling into the water.

(B) Compliance Requirements. The Contractor shall protect all species noted above for the duration of construction. Failure to comply with the construction requirements, harm or a taking of an individual during the construction duration shall be enforceable by the U.S. Fish and Wildlife Service as set forth by the Endangered Species Act. Resultant penalties and/or fines shall be at the Contractor's expense without cost or liability to the State.

671.04 Measurement. The Engineer will measure the work required for the protection of endangered species on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation and as ordered by the Engineer.

671.05 Payment. The Engineer will pay for the accepted protection of endangered species on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation. Payment will be full compensation for the work prescribed in this section, by the Engineer, and in the contract documents.

The Engineer will pay for the following pay item when included in the proposal schedule:

Pay Item	**Pay Unit**
Protection of Endangered Species	Force Account

An estimated amount may be allocated in the proposal schedule under "Protection of Endangered Species", but the actual amount to be paid will be the sum shown on the accepted force account records, whether this sum be more or less than the estimated amount allocated in the proposal schedule."

END OF SECTION 671