"SECTION 671 - PROTECTION OF ENDANGERED SPECIES

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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). In the event that Ohia Trees are found in the project area, Newcomb's tree snail (*Erinna newcombi*) may be present.

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).

Barbed wire will not be used for fencing.

(2) 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

47 48	and compacting sand and sediment.
	To avoid and minimize project related adverse effects to see
49	To avoid and minimize project-related adverse effects to sea
50	turtles and their nests, incorporate these conservation measures:
51	
52	(a) No vehicle use or modifying the beach/dune
53	environment during the sea turtle nesting or hatching season,
54	which extends from May through December.
55	
56	(b) Employ U.S. Fish and Wildlife Service Recommended
57	Standard Best Management Practices when working in aquatic
58	environments.
59	
60	(c) Remove any project-related debris, trash, and
61	equipment from the beach or dune if not actively in use.
62	equipment from the boast of dans if het delivery in doc.
63	(d) Do not stockpile project-related materials in the intertidal
64	zone, reef flats, stream channels, or river channels.
	Zone, reer hats, stream chambers, or fiver chambers.
65	Outined toutle reating behitet in a double cook from a frequency
66	Optimal turtle nesting habitat is a dark beach, free of barriers
67	that could restrict sea turtle movement. Lighting and human presence
68	deters nesting turtles from approaching, laying eggs, and successfully
69	nesting. Artificial light disorients sea turtles and they become
70	exhausted, causing them to nest in inappropriate locations, such as at
71	or below the high tide line. Artificial lighting also disorients hatchlings
72	as they emerge from nests. Sea turtles need darkness on beaches so
73	they can successfully navigate back to the ocean. In-water work at
74	night shall be avoided unless emergency maintenance and repair of
75	erosion and sediment controls are necessary to meet permit
76	conditions.
77	
78	Contractor shall incorporate these measures to avoid and
79	minimize project-related adverse effects to sea turtles and their young
80	from lighting:
81	nom ngming.
82	(a) Avoid nighttime work during the nesting and hatching
83	season, which extends from May through December.
84	Season, which extends from May through December.
	(h) Minimize the use of lighting and chief all project related
85	(b) Minimize the use of lighting and shield all project-related
86	lights to ensure this light is not visible from any beach.
87	
88	(c) If full shielding of light is not possible, or if you require
89	the use of headlights, fully enclose the light source using light
90	filtering tape or filters.
91	
92	(3) 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.

(4) Hawaiian Seabirds. Hawaiian Petrel, 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).

(5) 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) All regular on-site construction staff shall be trained to identify waterbirds and take appropriate conservation measures when the waterbirds are present, including within

139	equipment staging areas.
140	
141	(b) In areas where known presence of Hawaiian waterbirds
142	occurs, post and implement reduced speed limits, and inform
143	project personnel and Contractors of the presence of these
144	endangered species.
145	
146	(c) Because water resources occur in the project site
147	employ U.S. Fish and Wildlife Service Recommended
148	Standard Best Management Practices when working in aquation
149	environments.
150	
151	(d) Survey for Hawaiian waterbirds in or near the project
152	area prior to work using survey biologists. Survey biologists
153	should be trained and capable of identifying adults and
154	juveniles of each species, nesting behaviors, and nests.
155	javormos er caeri opedice, riceting seriaviere, and ricete.
156	i. Surveys for species and nests should be
157	repeated at the initial start of construction and when a
158	delay of work occurs that is three days or more (during
159	which the birds may attempt to nest).
160	which the birds may attempt to hest).
161	ii. If a nest or brood is found, contact the U.S. Fish
162	and Wildlife Service (USFWS) within 48 hours for
163	
	further guidance.
164	Establish and maintain a 100 ft huffer around al
165	iii. Establish and maintain a 100-ft buffer around al
166 167	active nests and/or broods until the chicks/ducklings
167	have fledged. Do not conduct potentially disruptive
168	activities or habitat alteration within this buffer.
169	
170	iv. Have a biological monitor that is familiar with the
171	species' biology present on the project site during al
172	construction or earth moving activities until the
173	chicks/ducklings fledge to ensure that Hawaiian
174	waterbirds and nests are not adversely affected.
175	
176	(6) Newcomb's Snail. In the event that Ohia Trees are found
177	in the project area where clearing is required, a trained biologist will
178	survey the area for tree snails using USFWS methodology
179	described in Interim Guidelines for Conducting Tree Snail Surveys
180	in the Mariana Islands.
181	
182	(B) Compliance Requirements. The Contractor shall protect all species
183	noted above for the duration of construction. Failure to comply with the
184	construction requirements, harm or a taking of an individual during the

185	construction duration shall be enforceable by the U.S. Fish and Wildlife
186	Service as set forth by the Endangered Species Act. Resultant penalties
187	and/or fines shall be at the Contractor's expense without cost or liability to the
188	State.
189	
190	671.04 Measurement. The Engineer will measure the work required for the
191	protection of endangered species on a force account basis in accordance with
192	Subsection 109.06 - Force Account Provisions and Compensation and as ordered
193	by the Engineer.
194	
195	671.05 Payment. The Engineer will pay for the accepted protection of
196	endangered species on a force account basis in accordance with Subsection 109.06
197	- Force Account Provisions and Compensation. Payment will be full compensation
198	for the work prescribed in this section, by the Engineer, and in the contract
199	documents.
200	
201	The Engineer will pay for the following pay item when included in the
202	proposal schedule:
203	
204	Pay Item Pay Unit
205	
206	Protection of Endangered Species Force Account
207	
208	An estimated amount may be allocated in the proposal schedule under
209	"Protection of Endangered Species", but the actual amount to be paid will be the
210	sum shown on the accepted force account records, whether this sum be more or
211	less than the estimated amount allocated in the proposal schedule."
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214	FND OF SECTION 674
215	END OF SECTION 671