Make the following Section a part of the Standard Specifications:

"SECTION 671 – PROTECTION OF THREATENED AND ENDANGERED SPECIES

671.01 Description. The endangered Hawaiian hoary bat or 'ope'ape'a (Lasiurus cinereus semotus) may roost, forage, and rear young in the general vicinity of the proposed project. The project site is located in a known flight corridor for the endangered Hawaiian petrel or 'ua'u (Pterodroma sandwichensis), the endangered Hawai'i distinct population segment (DPS) of the band-rumped stormpetrel or 'ake'ake (Oceanodroma castro), and the threatened Newell's shearwater or 'a'o (Puffinus auricularis newelli), hereinafter referred to as Hawaiian seabirds. Endangered Hawaiian waterbirds, including the Hawaiian stilt or ae'o (Himantopus mexicanus knudseni), the Hawaiian coot or 'alae ke'oke'o (Fulica americana alai), the Hawaiian gallinule or 'alae 'ula (Gallinula galeata sandvicensis), and the Hawaiian duck or koloa (Anas wyvilliana) are known to be in the general vicinity of the project and may be attracted to the project staging areas even in sub-optimal locations if water is present. Also, to be considered is the threatened Hawaiian goose or nēnē (Branta sandvicensis) which may use the construction staging areas or areas adjacent to the roadway.

The Contractor shall protect these threatened and 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 notes in the Contract Plans:
 - (1) Hawaiian Hoary Bat. Hawaiian hoary bats nest in both native and non-native woody vegetation.

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

- (a) There shall be no disturbance, removal, or trimming of woody plants greater than fifteen (15) feet (4.6 meters) tall during the bat birthing and pup rearing season (June 1 through September 15).
- **(b)** Barbed wire shall not be used for fencing.
- (2) Hawaiian Seabirds. Hawaiian seabirds may traverse the project area at night during breeding, nesting and fledgling season, which extends from March 1 through December 15. Permanent lighting poses a very high risk of seabird attraction so new highway lighting should not be installed to protect seabird flyways and preserve the night sky. Additional or increased lighting exacerbates the problem of Newell's shearwater fallout.

Fallout shall be defined as the occurrence of seabirds being harmed, injured or killed and falling to the ground due to: 1) collision with structures such as wires, poles, or other objects; 2) light attraction and the resulting collision with structure associated with or near the light sources; or, 3) the exhaustion from circling the light source.

If nighttime work will be required in conjunction with the development of the project, the Contractor shall incorporate these measures to avoid and minimize project-related adverse effects to Hawaiian seabirds:

- (a) Before beginning any work at the project site, the Contractor shall:
 - i. Collect information regarding the protection of seabirds and seabird fallout.
 - ii. Submit to the Engineer for acceptance a protection of seabirds training plan including a detailed description of information and materials the Contractor intends to use in the training classes. The training plan shall be submitted to the Engineer for acceptance at least fifteen (15) days in advance of the class. If the Engineer rejects the training plan, the Contractor shall revise and promptly propose another training plan.
 - iii. Disseminate information regarding the protection of seabirds and seabird fallout by conducting training classes for all employees, subcontractors, suppliers and other personnel working on the project, including HDOT personnel, on such topics as the Save Our Shearwater (SOS) program, proper use of temporary lighting, procedures to store and report downed seabirds, and the consequences of non-compliance with the laws regarding threatened and endangered seabirds. The Engineer may request for additional topics related to seabirds to be included in the training classes.

Training classes shall be taught by authorized representatives of the U.S. Fish and Wildlife Service (USFWS), the Department of Land and Natural Resources, the SOS program or other qualified personnel accepted by the Engineer.

100 101	iv.	Furnish the Engineer with Contractor has held training
102 103		dates of the classes, identif training, and the content and
104 105	(b) Th	ne Contractor shall compl
106	• •	ion requirements:
107	00110110101	em requirementer
108	i.	As directed by the Engineer
109		conduct additional training
110		project to update all employ
111		suppliers, HDOT personnel a
112		new and/or updated inform
113		protection of seabirds and se
114		
115	ii.	No permanent streetlights sh
116		of the project.
117		
118	iii.	All temporary lights used for
119		sunset and sunrise) shall o
120		wavelengths less than five h
121		and shall be downward-facin
122		bulb can only be seen from
123		lights shall include but are not
124		light towers, lights for constr
125		other lights as determined I
126		traffic control devices, inclu
127		arrow boards, portable chang
128		and other lighting device a
129		Engineer shall be shielded.
130	. .	liadete electibe tume ed efficies
131	iv.	Lights shall be turned off whe
132		occurring in the lighted area
133		motion sensor switches and
134		outdoor lights.
135	.,	Nighttime construction and th
136	V.	Nighttime construction and the
137		lights shall cease during the
138		period (September 15 through
139 140	vi.	Where fences extend above
141	VI.	
		durable scare tape or bird de
142 143		to increase visibility and mini
144	vii.	For powerlines and other ca
145	VII.	•
146		vegetation height and vert minimized.
170		minimizeu.
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- n evidence that the classes, including the y who conducted the nature of the training.
- y to the following
 - , the Contractor shall classes during the yees, subcontractors. and other personnel on nation regarding the abird fallout.
 - all be installed as part
 - night work (between contain less than 2% undred fifty (550) nm, g and shielded so the n below. Temporary t limited to flood lights, ruction equipment and by the Engineer. All uding warning lights, geable message signs is determined by the
 - n human activity is not a, or install automatic timer controls on all
 - e use of all temporary peak seabird fledgling h December 15).
 - vegetation, integrate eterrent into the fence mize fence strikes
 - bles, exposure above tical profile shall be

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148	viii.	The Contractor shall furnish and maintain a small
149		(approximately 10" x 12" x 19"), portable cat kennel
150		on site to temporarily hold a downed seabird. The
151		Contractor shall obtain acceptance of the cat
152		kennel from the Engineer prior to use.
153		Refiner from the Engineer prior to doc.
154	ix.	If a downed dead seabird is found, the Contractor
155	IA.	shall contact the USFWS (Ms. Megan Laut at 808-
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156		792-9400), the Kauai Branch Division of Forestry
157		and Wildlife (DOFAW) Office at (808) 274-3433 or
158		SOS at (808) 635-5117 within twenty four (24)
159		hours.
160		
161	X.	If the downed seabird is alive, the Contractor shall:
162		
163		I. Pick up the seabird from behind as soon
164		as possible using a clean towel, t-shirt or cloth
165		by gently wrapping it around its back and wings.
166		
167		II. Place the seabird in the cat kennel and
168		immediately contact the SOS Program
169		Coordinator at 808-635-5117 for further
170		instructions on where to deliver the seabird.
171		
172		III. Deliver the seabird to the location
173		determined by the coordinator of the SOS
174		program and as directed by the Engineer.
175		7 3
176		IV. Keep the seabird in a cool, quiet location
177		and out of direct sunlight with adequate
178		ventilation.
179		vontiliation.
180		V. The Contractor and any personnel on-
181		site shall not feed, provide water, handle or
182		release the seabird.
183		release the seabild.
	vi	The Centractor shall maintain records of all downed
184 185	xi.	The Contractor shall maintain records of all downed
185		seabirds for the duration of the project. The records
186		shall include the date, time, location and condition
187		(dead or alive) the seabird was found and delivered.
188		Submit a copy of the records to the Engineer after
189		finding each and every downed seabird.
190 101	(3) Hawaiia	n Waterbirds Howeiien weterbirds accurate freeb
191 192	` '	n Waterbirds. Hawaiian waterbirds occupy fresh water marshes, coastal estuaries and natural or
192		water marshes, coastal estuaries and natural or ls. Hawaiian stilts also occupy areas with ephemeral
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or persistent standing water, conditions of which can be found in culverts and drainage structures. Threats to these species from this project may include predation, reduced reproductive success, disturbance from human activity and injury or mortality from vehicle strikes.

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

- (a) In areas where known presence of Hawaiian waterbirds occurs, post, implement and enforce reduced speed limits, and inform project personnel and Contractors of the presence of these endangered species on-site.
- **(b)** If water resources are located within or adjacent to the project site, employ USFWS Recommended Standard Best Management Practices for work in aquatic environments.
- (c) Where appropriate habitat occurs within the vicinity of the project area, survey for Hawaiian waterbirds and nests prior to initiation of project work using survey biologists familiar with the species' biology. Survey biologists should be trained and capable of identifying adults and juveniles of each species, nesting behaviors, and nests. Repeat surveys again within three (3) days of project initiation and after any subsequent delay of work of three (3) or more days (during which the birds may attempt to nest).
- (d) If a nest of active brood is found, the Contractor shall:
 - i. Contact the USFWS (Ms. Megan Laut at 808-792-9400) or the Kauai Branch DOFAW Office at (808) 274-3433 within twenty four (24) hours for further guidance.
 - ii. 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.
 - iii. A biological monitor that is familiar with the species' biology shall be 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.

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(4) Hawaiian Goose. Hawaiian goose or nēnē uses various habitat types. Threats to the species from this project include disturbance from human presence, and injury and mortality from vehicle strikes. An increased human presence at the project site could disturb nēnē nesting, foraging, or loafing in the area.

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

- (a) Nēnē in or near the project area shall not be approached, fed, or disturbed in any way.
- (b) All food and or beverage waste shall be disposed of in appropriate, covered trash receptacles.
- (c) If nēnē are observed loafing, foraging, or otherwise present within the project area during the breeding season (September 1 through April 30), a trained biologist familiar with nēnē nesting behavior shall survey for nests in and around the project area prior to resumption of any work. Surveys shall be repeated after any subsequent delay of work of three (3) or more days (during which the birds may attempt to nest).
- (d) If a nest is identified within a radius of one hundred fifty (150) feet of the project area, or a previously undiscovered nest is found within the one hundred fifty (150)-foot radius after work begins, all work shall cease immediately, and the Contractor shall contact the USFWS (Ms. Megan Laut at 808-792-9400) or the Kauai Branch DOFAW Office at (808) 274-3433 for further guidance.
- (e) Reduced speed limits shall be posted and implemented in areas where nēnē are known to be present, and project personnel and Contractors will be informed of the presence of endangered species onsite.
- (f) There shall be no feeding of birds or dogs on the project site.
- (5) BMPs Regarding Work in Aquatic Environments. The Contractor shall incorporate
- (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 USFWS as set forth by the Endangered Species Act and the DOFAW as set forth under the provisions of the Hawaii Revised

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