EXHIBIT 8

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October 31, 2018

Mr. Ronald Sato
Helber, Hastert, and Fee Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai'i 96813
Transmitted via email to: rsata@hhf.com

Dear Mr. Sato,

We have reviewed the draft Environmental Impact Statement (DEIS) for the Hawaiian Memorial Park Expansion. The Division of Forestry and Wildlife (DOFAW) offers the following comments on the DEIS.

Protected Species

Black-line Damselfly Habitat Requirements

The black-line damselfly (*Megalagrion nigrohamatum nigrolineatum*) has been documented as currently present at a seep located within the project area. This species is one of 23 damselfly species endemic to Hawaii. It is a single-island endemic, found only on the island of O'ahu. The species inhabits stream corridors, as well as springs and seeps near streams. Populations of black-line damselfly previously occurred in both the Waianae and Ko'olau mountains, and while they remain in low abundance in Ko'olau streams, the species is now considered extirpated from the Waianae Mountains. Habitat loss and habitat alteration, and the introduction of non-native species (introduced fish and amphibian predators) have resulted in dramatic declines in populations of Hawaiian damselflies across their historic ranges.

Springs and seeps represent integral habitat for declining damselfly species. Aquatic invasive predators typically travel in surface waters to disperse across the landscape, therefore streams are ideal corridors in which these predators become established and expand their ranges. In contrast, seeps and springs have only intermittent or no connectivity to other bodies of water. As a result, these habitats often remain refuges for threatened species which would otherwise be subject to high mortality from introduced predators. An example of a damselfly which has been extirpated from nearly its entire native range on O'ahu by aquatic invasive predators is the orange-black damselfly (*M. xanthomelas*). That species is now found in just a single 100-meter stretch of artificial habitat that is maintained and the population persists because the habitat has no surface-

water connection to any stream. At the proposed Hawaiian Memorial Park expansion, the seep (also referred to as a spring) in question that is within the Hawaii Memorial Park property also has no direct surface-water connection and is likely to serve a similar role for *M. nigrohamatum nigrolineatum* and therefore could be crucial for conservation of this species on Oahu.

The DEIS does recognize the importance of the seep habitat and discusses management actions under the proposed action for the area. There is a commitment to fence the area to keep out pigs, monitor water flow and the presence of non-native fish predators, and work with the US Fish and Wildlife Service to establish a habitat restoration and conservation program (p. 3-56). There is no proposal in the DEIS proposed action to establish a managed preserve for the seep area. This needs further explanation and evaluation. We note that Figure 2.7 indicates at least part of the seep area is designated as an area to be revegetated.

Hydrology Assessment for Impacts to the Black-line Damselfly

Appendix H of the DEIS is a subcontractor Report *Assessment of the Potential Impact on Groundwater of the Proposed Expansion of the Hawaiian Memorial Park.* This report describes the groundwater seep habitat that supports the damselfly as emanating in part from approximately four feet downslope from a dug well. This source is further described as follows: "The groundwater seep is maintained by the natural discharge of groundwater moving downslope through the poorly permeable residual soils overlying the unweathered Kailua volcanics at depth" (p. 21).

The general description of the proposed action which is described in the subcontractor report is that the project would involve "installation of retaining walls and fill of tens of feet in depth in the area upslope from the well and seep" (p. 13). The report states "Loading by the fill behind the retaining walls does have the potential to compress the soils below through which the groundwater is moving downslope." (p. 22). The proposed solution to alleviate this potential compression and ensure that the quantity and direction of groundwater flow is maintained is to construct "at least two and possibly three deeper subsurface drains" (p. 22).

DOFAW does not agree that the proposed solution is sufficient to maintain the essential flow characteristics that support the endangered blackline damselfly habitat and there is unlikely to be any solution under the existing plan and site layout with the proposed extensive cut and fill and retaining walls that can provide the degree of certainty necessary that there would be no impacts to the damselfly habitat. A description of the full length of the seep flow is described as follows in the subcontractor plan: "Based on results of the well test, flow in the upper one third to one half of the linear seep is maintained by subsurface leakage from the well" then "Further downslope, flow in the seep increases continuously to its ultimate discharge into the Ohaha Place drainage system" (pp. 21-22). This description indicates that subsurface groundwater in other areas of the site, other than from the groundwater in the area of the dug well, may be important to maintain the habitat in the lower one-half of the seep area. This indication of complexity is supported in the discussion of soils in the DEIS which notes the complex terrain and surface hydrology in the area of the seep: "The spring area contains multiple swale alignments and localized standing water" (p. 3-11 of the DEIS main text). The overall complexity and uncertainty of groundwater discharge along the entire length of the seep flow that is supporting

the endangered damselfly is a significant consideration.

Although the DEIS does specify monitoring of the seep flow after the alterations are made (p. 3-56), there is minimal data available to judge what seasonal level of flow would be a concern and no contingencies proposed if a flow abnormality is observed. The DEIS also states that "Herbicide, and to a lesser extent pesticide, usage may occur as a result of landscaping maintenance activities associated with cemetery expansion area" (p. 3-87). Specific measures would be needed to prevent runoff with these substances from reaching the seep area. Fertilizer runoff may also alter vegetation growth and affect water quality in the seep. An additional area of concern is that there is apparently no permit for the existing dug well that is now the source of the upper portion of the seep and if so this structure is not legal at the present time.

Based on the above analysis DOFAW recommends that the project proposed action be redesigned to avoid the need for large amounts of fill and retaining walls that are hydrologically upgradient of the seep. If this avoidance is not possible, the project proponent should apply to DLNR for a Habitat Conservation Plan and associated Incidental Take License for impacts to the damselfly. Additionally, we suggest implementation of further measures to ensure pesticides or herbicides do not reach the seep area through surface runoff. We also recommend that the landowner work with the DLNR Commission on Water Resource Management and DOFAW to decide how to address the unpermitted dug well going forward to ensure that habitat for the damselfly is maintained.

Hawaiian Hoary Bat

The proposed avoidance measure for this species to avoid disturbance of trees greater than 15 feet in height during the bat breeding and pupping season of June 1 to September 15 is adequate as written.

Seabirds

DOFAW agrees that seabirds are not expected to be impacted based on the project proposed action: "The project should not impact protected seabirds because: 1) no night-time construction is planned, and 2) no exterior lighting is planned as part of site improvements" (p. ES-6).

Vegetation and Landscaping

If the proposed action for the project is approved, DOFAW has the following recommendations regarding vegetation:

- Avoid importing to Oahu soil or other plant material from off-island. You may consider the Hawaii Interagency Biosecurity Plan at http://dlnr.hawaii.gov/hisc/plans/hibp/ in planning, design, and construction so that the project is in-line with the plan.
- Use native plant species for landscaping that are appropriate for the area (i.e. climate conditions are suitable for the plants to thrive, historically occurred there, etc.). Invasive plant species should be avoided. DOFAW recommends consulting the Hawai'i weed risk assessment website to determine the potential invasiveness of plants proposed for use in the project (http://www.botany.hawaii.edu/faculty/daehler/wra)

We appreciate the opportunity to provide comments on the proposed action. Please contact James Cogswell, Wildlife Program Manager, at 808-587-4187 or James.M.Cogswell@hawaii.gov if you have any questions.

Sincerely,

David G. Smith
Administrator

cc: Chairperson, Board of Land and Natural Resources
DLNR Land Division