

Ms Kylie Fitzpatrick  
Department of Environment, Parks and Water Security  
PO Box 3675  
Parap NT 0801

Dear Ms *Kylie* Fitzpatrick

**Re: Referral – North One Hotel and Apartments, KTT Investment Pty Ltd**

The Department of Environment, Parks and Water Security (DEPWS) has assessed the information submitted for the above referral and provides the following comments:

**Flora and Fauna Division**

**Terrestrial Ecosystems**

Based on a search of DEPWS flora and fauna databases within 10km of the property, expert knowledge of species' habitat requirements and information about habitats occurring within the area, the following threatened species were identified as potentially occurring within or immediately adjacent to Lot 7651 Town of Darwin.

Common Name	Scientific Name	TPWC Act	EPBC Act
Common Brushtail Possum (North-western)	<i>Trichosurus vulpecula arnhemensis</i>		Vulnerable
Mitchell's Water Monitor	<i>Varanus mitchelli</i>	Vulnerable	
Yellow-spotted Monitor	<i>Varanus panoptes</i>	Vulnerable	

**Common Brushtail Possum:** This species is known to be relatively common in suburban and rural areas around Darwin. The species is considered to be locally common with large areas of suitable habitat located in the adjacent golf course and nearby botanic gardens. Vegetation along the southern boundary of the proposal is also likely to support the species, but this has been excluded from the development footprint. As there is no impact to suitable habitat and the species appears to be resilient in urban landscapes, the Flora and Fauna Division considers that the risk to this species is very low.

**Yellow-spotted Monitor:** Habitat for this species is associated with riverine and riparian habitats as well as urban environments. Yellow-spotted Monitor was historically common across its range but has recently undergone significant declines due to the spread of cane toads. The proposal will require the clearing of a relatively small area of foraging habitat, but this is unlikely to exacerbate existing threats (cane toads). The Flora and Fauna Division considers that the risks to this species is low.

Mitchell's Water Monitor: This species is known to occur along the Darwin foreshore and is expected to occupy mangrove habitats along Little Mindil Creek. The proposal appears to be situated adjacent to mangrove habitat, however no direct impacts to Little Mindil Creek are expected. New built structures proposed in the landscape concept may provide additional habitat for the species, as is observed in other developed areas along the Darwin foreshore. Furthermore, the proposal is unlikely to exacerbate existing threats (cane toads) to the species. The Flora and Fauna Division considers that the risk to the species is low.

Significant and Sensitive Vegetation: DEPWS mapping identifies an area of remnant coastal vine-forest associated with the escarpment on the southern boundary of the site. Coastal vine-forest is a significant and sensitive vegetation type in the Northern Territory and it provides foraging and roosting habitat for many fauna species (particularly frugivorous bird species) as well as supporting a diverse number of plant species. Importantly, maintaining a network of vine-forest patches through the local area is necessary to support ecological processes such as pollination and seed dispersal.

The proposal is entirely located in a cleared area and is planned to avoid impacts to the coastal vine-forest associated with the escarpment, as well as the mangrove vegetation along Mindil Creek which may contain foraging habitat for migratory shorebirds. To ensure these areas are not accidentally impacted during construction, the Division supports Land Management Unit's recommendation (below) to demarcate the vegetation as 'no-go' areas in the Erosion and Sediment Control Plan and to ensure the vegetation is fenced/taped off. The Division also acknowledges that there is an existing maintenance covenant (731712) in place with the Northern Territory Government. Ongoing maintenance of the retained vegetation as per the covenant is supported and would ensure ongoing weed removal, mulching and revegetation.

#### Recommendation

The Flora and Fauna Division has identified values within Lot 7651 Town of Darwin that are relevant to the Northern Territory Environmental Protection Authority's (NT EPA) environmental factor – Terrestrial Ecosystems. These values are generally associated with the escarpment and Little Mindil Creek both of which have been excluded from the development footprint. The retention of vegetation in these areas and ongoing maintenance and management will contribute to ensuring these values remain during and post development. Risks to biodiversity values are assessed to be low.

#### Environment Division

Potential issues identified include:

1. A change in land use, which may trigger the need for a contaminated land assessment in accordance with the National Environment Protection (Assessment for Site Contamination) Measure (ASC NEPM).
2. The generation or importation of fill (waste material), which may require a waste classification assessment.
3. Noise generation, which will require careful management in accordance with the NT EPA's guidelines.

#### Rangelands Division

##### **Land Assessment Branch**

An acid sulfate soil investigation has not been undertaken to date. The disturbance of land with an acid sulfate soil risk should be avoided. However, if disturbance is necessary for development, then an acid sulfate soil field investigation will be required.

The geotechnical site investigation must be undertaken to delineate the presence of acid sulfate soils. The investigation must be conducted by a suitably qualified and experienced professional, preferably a Certified Professional Soil Scientist (CPSS) with Soil Science Australia, in accordance with the 'Queensland Acid Sulfate Soil Technical Manual: Soil Management Guidelines v4.0', available at <https://www.publications.qld.gov.au/dataset/acid-sulfate-soil-guidelines>.

Further, the investigation must include Chromium Reducible Sulfur (CRS) soil testing at an appropriate site density and to a soil depth immediately below the proposed disturbance.

If acid sulfate soils are detected through CRS testing, and exposure of these soils is still unavoidable, then an acid sulfate soil management plan is required. The acid sulfate soil management plan must include the following:

- exact location of the proposed disturbance
- depth and volume of soil to be disturbed (m<sup>3</sup>)
- clearly presented CRS results
- acid-base accounting results which clearly indicate an accurate liming rate
- appropriately designed treatment pads
- lime/soil mixing regimes
- an appropriate monitoring program.

### **Land Management Unit**

It is noted a conceptual Erosion and Sediment Control Plan (ESCP) was included in the referral (Appendix 12) for informational purposes. This ESCP was not assessed by the Land Management Unit. However, prior to the ESCP being finalised the extent of existing vegetation associated with Little Mindil Creek and the escarpment must be clearly marked on the ESCP as 'no-go' areas.

The Land Management Unit commented on the development application relating to this referral in October 2021 (PA2021/0297). The Unit's recommendation for the development application was that due to the size, type of works and the location adjacent to Darwin Harbour, it is recommended that preparation and implementation of an ESCP be included as a condition on the Development Permit.

### **Weed Management Branch**

With respect to declared weeds, it is unlikely that the proposed actions have the potential to have a significant impact on the environment.

### **Water Resources Division**

No issues of concern requiring comment within the responsibilities of the Water Resources Division have been identified.

Should you have any further queries regarding these comments, please contact Maria Wauchope by email [maria.wauchope@nt.gov.au](mailto:maria.wauchope@nt.gov.au) or phone (08) 8999 3692.

Yours sincerely

A handwritten signature in black ink, appearing to read 'LDR', with a horizontal line underneath the letters.

Luis Da Rocha  
Executive Director, Rangelands

2 November 2021