

3.2.3 Armstrong's Cycad (*Cycas armstrongii*)

Request: The Supplement provided an assessment of the species potential habitat and the likely impact of the proposal upon potential habitat within what is assumed to be the Extent of Occurrence. The assessment suggests that 0.3 % of potential habitat will be removed as part of the development. However, the scale at which the potential habitat has been identified, and the proportion affected by the development is not appropriate for the actual distribution of the habitat (i.e. the identified habitat is not uniformly suitable for the species at the classification and mapping scale used). In addition, the Supplement does not account for variations in density across the species range, which is likely to be related to a finer scale delineation of potential habitat within the landscape.

The NT EPA requires:

- An assessment of the species Area of Occupancy within the Extent of Occurrence needs to be provided to assess the significance of the *C. armstrongii* population on Noonamah Ridge. The assessment needs to identify the areas of highest likelihood of occurrence and/or those sites within the landscape with particularly high densities of *C. armstrongii*.
- Areas of higher density of *C. armstrongii* could be incorporated into the Zone CN network that informs the Planning Scheme amendment for the site.

Response: Figure 3-16 of the SEIS provides an indication of the Area of Occupancy of *Cycas armstrongii*, using Eucalypt woodland and forest spatial data as a surrogate. It is acknowledged that the density of this species within that area varies, as it does within the Noonamah Ridge project area. However, as can be seen, the occurrence of *C. armstrongii* within the project area is centrally located within the mainland population's Area of Occupancy. The suitable habitat for this species within the project area is contiguous with large areas of suitable habitat immediately surrounding most of the site. The occurrence of *C. armstrongii* at Noonamah Ridge, therefore, is unlikely to contribute significantly to the species' genetic diversity or to constitute a key source population either for breeding or for dispersal. Moreover, the project area is within the heartland for this species, rather than being the limit of its range. For these reasons, the population of *C. armstrongii* within the project area is not considered necessary for the species' long-term survival and recovery, and therefore is not an 'important population'.

Because of its rural character, the Noonamah Ridge development does not involve broad scale clearing of the entire site. As is the case in much of the existing rural area, a significant proportion of the project site will retain remnant vegetation that supports *C. armstrongii*. Some of this will be included in reserves zoned for conservation (see Section 3.5), but most of it will be on private land. Land clearing on individual lots will be governed in accordance with the *NT Planning Scheme*, which contains standard land-clearing requirements for lots 2 ha and larger – namely Clauses 10.2 and 10.3, as well as the *Land Clearing Guidelines* (DNRETAS 2010). For lots smaller than 2 ha, a new clause will be incorporated into the *NT Planning Scheme* (through a Planning Scheme Amendment specifically for the Noonamah Ridge area), requiring land-holders to obtain a permit to clear more than 1,000 m² of native vegetation (exclusive of the assigned building envelope).

In addition, in line with the principles of ecologically-sustainable development underlying this project, Intrapac is committed to retaining native vegetation – and particularly *C. armstrongii* – where possible in public land (e.g. when landscaping parks, public open spaces, roadside verges etc.).

Together, these measures will all ensure the persistence of *C. armstrongii* across the project area and support the genetic diversity that occurs there.