
MEMORANDUM

From	Martin Bowman	Date	26 th June 2021
To	Mr John Green Helena Valley Lifestyle Resort Pty Ltd		
Subject	Vegetation and Tree Survey Helena Valley Lifestyle Village Stages 7A,7B and 8B		

Further to the site inspection of the trees remaining in your next approved development stages, I am able to advise you of the species of trees and the condition of the vegetation, suitable as a supporting technical document for a Clearing Permit to enable you to remove some of the remnant trees within the site.

I set out this advice in this memo, which will also accompany the application, which you have engaged me to prepare on your behalf.

1.0 Background

The Helena Valley Lifestyle Resort has been in operation for many years and expansion of the site is now warranted by market demand.

Figure 1 shows the location of the land.

Development Applications for the next stages of development in accordance with an approved Masterplan for the site have been granted.

The implementation of the next stage of expansion will require the removal of a number of native trees, as well as a number of non-native trees for which DWER approval is not required.

A professional arborist (Paperbark Technologies) has inspected the remaining trees in the context of the development plan and has advised and located trees which can be safely retained on the basis of their health location and visual values.

The overall masterplan land is historical farming and small scale rural use land, and portions of the land in the west appear to have been historically mined for sand, then rehabilitated with partial but varying success using non endemic river red gums (*E.camaludulensis*).

Remnant endemic trees also remain as scattered individuals or small copses with weedy non - native understory.

As a result of the existing largely cleared nature of the proposed expansion area, it has been possible to use open historically cleared parts of the land for soil and equipment storage whilst not needing to clear any significant trees or other vegetation. Individual and copses of endemic

trees have been tagged by the arborist so as to protect them until such time as a clearing permit can be obtained.

2.0 Survey Method

Survey commenced with a review of a recent aerial photograph of the application area. Figure 2 shows this aerial photography together with an overlay showing where indigenous vegetation is located, the location of trees to be retained and the distribution area of non-endemic vegetation.

This review led to the conclusion that the land was in a degraded condition with most of the original vegetation having been cleared and undergrowth apparently in degraded condition

A review of regional vegetation complex type mapped for the land was then conducted using standard published literature, in order to establish a baseline for the species of native trees and any shrubs remain.

Finally, a site inspection was conducted on 25th June 2021 in the company of site managers to view and photograph the clearing application area and the remnant trees. Photography of tree forms, foliage and flowering materials was used to confirm tentative field identifications using information available on Florabase.

3.0 Survey Findings

3.1 Aerial Photography

The aerial photography presented at figure 1 shows that approximately 80% of the development expansion area has been cleared and remains as either an earthen surface with low scattered weed population or as remnant individual trees, small groups of trees and stockpiles of construction materials and soils .

3.2 Review of Published Information

Review of published information revealed that the original vegetation is mapped at regional scale as Forrestfield Vegetation Complex.

This is described as “Vegetation ranges from open forest of *Eucalyptus calophylla* - *Eucalyptus wandoo-Eucalyptus marginata* to open forest of *Eucalyptus marginata* - *Eucalyptus calophylla* - *Casuarina fraserana* - *Banksia* spp. Fringing woodland of *Eucalyptus rudis* in the gullies that dissect the Ridge Hill Shelf (DCE, 1980).”

This is generally consistent with site survey findings, however the outcomes of historical sand mining, and natural regeneration showed during site survey that there is establishment of additional *Eucalyptus* species were noted and are listed subsequently.

Site survey identified a number of native tree species and also a common non-endemic eucalypt species. These were identified in the field as *Eucalyptus camaldulensis* and it is implied by their distribution and location that there were planted after sand mining ceased as part of rehabilitation effort.

3.3 Site Survey

A site inspection was conducted on 25th June 2021.

The survey confirmed the aerial photographic information and showed that the site was approximately 80% cleared and that the remnant vegetation comprising a mixture of endemic species and non-endemic Eucalypts in degraded vegetation condition with intervening non vegetated land consisting of open weedy ground, tracks, construction waste and soil stockpiles.

Species identified on site included the following: *Corymbia calophylla*, *Eucalyptus wandoo*, *Eucalyptus marginate*, *Allocasuarina fraserana*, *Eucalyptus patens*, *Eucalyptus accedens*, *Banksia menziesii*, *Banksia attenuata*, *Banksia grandis*, *Acacia sp.* And *Eucalyptus camaldulensis* (non-endemic)

Figure 2 provides a site map showing how the endemic and non-endemic vegetation is distributed through the land. The area of endemic vegetation to be cleared is calculated at 0.1958 ha.

Fauna values were evaluated and found to be restricted to several mature jarrah trees which have hollows and were supporting nesting native birds, in particular galahs and 28 parrots.

Each of these trees is to be retained and no trees with observable hollows are proposed for clearing.

For the balance of the land fauna habitat values are negligible and confined to scattered canopy and trunk/branch habitats for transient fauna. There will be limited blossom food sources at various times of the year and eucalyptus fruits and nuts for cockatoo foraging.

There were no apparent nesting activities apart from with the tree hollows within the large mature jarrah trees which are to be retained.

4.0 Conclusions

The land is in a clearly degraded condition and contains only a relatively small area where endemic plant species prevail.

There are 4 trees within the endemics which are to be retained in an effort to sustain avian fauna roosting and nesting habitats.

The balance of the endemic species are small in number and will make only a negligible contribution to local fauna habitats and fauna population support.

There is negligible ground level vegetation which could support mammalian fauna and the ongoing use of the site for construction support is likely to have caused fauna to locate in more favourable habitats.

There are no apparent vegetation, flora or fauna values which could mitigate against the issue of a clearing permit by the DWER.



