Our Ref: 18AWE02T

17 October 2019

Dino DiPaolo
Design Manager
A W Edwards Pty Ltd
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Dear Dino

Response to submission received for State Significant Development No. 9741 from DPIE

Travers bushfire & ecology have been requested to prepare a response to the comments provided by DPIE for tree retention and removal. I refer you to State Significant Development No. 9741 for the proposed Data Centre, 1 Sirius Road, Lane Cove West, NSW.

DPIE are generally of the opinion that the proposed reduction in impact from 0.79ha total to 0.66ha does not adequately avoid/minimise the clearing of vegetation. With that in mind, it is likely that there will be a further requirement for the site's design and as such, all reporting will require some form of updating.

The following comments and responses relate specifically to DPIE's letter dated 3 October 2019.

Issue 1 - Tree removal and retention

Tree removal
The previous TAR proposed removing 125 trees - 82 of these trees were to be removed regardless of their SULE rating as they were located within the impact area and a further 43 trees were recommended for removal due to poor condition (see page of TAR). The RTS notes the revised scheme has reduced the extent of tree removal (page 125) but EES does not consider it to be a significant reduction in the number of trees to be removed.

The revised reports contain inconsistent advice in relation to the number of trees that are proposed to be removed, for example:

- The EIS states the proposed development would account for the removal of 84 trees on the subject site (regardless of their SULE rating) (page 228)
- The RTS states the proposed development will account for the removal of 84 trees within the impact area regardless of their SULE rating but it also indicates the number of trees to be removed for poor SULE rating is 39 which amounts to a total of 123 trees being removed (page 119).
- the revised TAR indicates 83 trees are proposed for removal regardless of the SULE rating and in total 122 trees are proposed to be removed (see section 4.3, page 9 and section 6.1, page 18)
- the Summary of Changes indicates 114 trees are proposed to be removed.

The proponent needs to clarify the number of trees that are now proposed to be removed. It appears the total number of trees proposed to be removed is either 114 or 122-123 trees compared to 125 trees previously.

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Retention of Trees

EES notes Drawing No. LDA-05 in the landscape documentation proposes to retain a number of invasive exotic trees at the site including:

- 6 x Camphor Laurel (*Cinnamomum camphora)*
- 3 x Large-leaved Privet (*Ligustrum lucidum)*
- 1 x Small-leaved Privet (*Ligustrum sinense)* and
- 1 x Black Locust *Gleditsea tricanthos*.

Response

We note that there has been limited changes in the number of trees being retained since the first submission of the tree assessment report (TAR).

It appears there isn't a consistent reporting of the number of trees being retained and removed between the reports, and DPIE's comment on the TAR advice is not consistent with the 6 September 2019 report which stated one hundred and fourteen (114) trees to be removed and fifty seven (57) to be retained.

With regard to the retention of invasive species, the TAR is to be updated to show any Camphor Laurel, Privet or Black Locust Trees that were to be retained, be removed. Whilst investigating the TAR dated 6 September 2019, it is noted that six (6) Camphor Laurel, two (2) Large-leaved Privet and one (1) Black Locust are retained. This is contradictory to that noted on LDA-05 in the landscape documentation which proposed retention of eleven (11) trees. In changing these invasive species to be removed and consistent with the vegetation management plan (VMP), this will require Table 4.1 of the TAR to be updated to the following:

The following table is a summary of trees proposed for removal and retention:

Table 4.1 – Trees to be removed or retained

Trees removed within the development impact area regardless of SULE rating	80	46.78%
Trees removed for very poor condition SULE 3b, 3c or 4a-f	34	19.88%
Invasive tree species to be removed	9	5.26%
Trees retained	48	28.07%
Total	171	100.00%

If we are to update the report based upon the current proposal, an additional nine (9) trees would be removed as they are considered invasive and inconsistent with the VMP, therefore a total of one hundred and twenty three (123) would be removed and forty eight (48) would be retained.

To compensate for the removal of the nine (9) invasive species, we recommend the replanting of native trees as a replacement.

Given the overall reduction of two (2) trees from the original report, and that DPIE does not believe the proposal adequately avoids/minimises the clearing of vegetation in the context of the BDAR, it is likely that the site layout will need further refinement. In that instance the TAR will need to be updated and recounts of the tree retention and removal will be refined and emulated throughout the landscaping plans, VMP, EIS and any other documentation utilising this information.

Issue 2 - Hollow-bearing trees

Hollow Bearing Trees

The previous TAR indicated 10 hollow-bearing trees were required to be removed (section 4.3, Page 9). The revised TAR notes "the proposal will require the removal of eight hollow-bearing trees which collectively have 23 hollows of varying sizes (section 3.4, page 6). OEH previously recommended the tree hollows are replaced at a ratio greater than 1:1. The TAR confirms 24 compensatory nest boxes are to be installed (page 6)

Response

The proposed nest box installation (or re-use of hollows) is at a 1:1 ratio only because there is not suitable room on site to cater for more as it would be overcrowding and not expected to have any further benefit for the local fauna species that utilise hollow-bearing resources. More nest boxes may be added if the amount of native bushland being retained is increased, or conversely it may retain additional hollow-bearing trees and the replacement ratio would increase to more than 1:1. If additional nest boxes are required, these could be erected into trees on the adjoining Council reserve such that the benefit of nesting resources is improved. Council approval would need to be sought to undertake the installation.

Issue 3 - Mitigation measures

OEH previously recommended the Mitigation Measures are amended to include the following:

1. the revegetation areas of contaminated land including the riparian corridor of Stringybark Creek; the fire trail and the vegetated areas of the APZ are to be planted with a diversity of appropriate local native plant species from the native vegetation community (or communities) that occur, or once occurred, on the site
2. the revegetation areas and landscaped areas must use a diversity of local provenance species (trees, shrubs and groundcovers) from the native vegetation community (or communities) that occurs, or once occurred, on the site,
3. Any native trees that are required to be cleared from the site shall be salvaged (for example tree hollows and tree trunks which are greater than approximately 25-30cm in diameter and 3 m in length) and placed in the revegetation and regeneration areas to enhance habitat
4. Remnant native vegetation that is required be removed from the site, especially juvenile plants shall be translocated to the revegetation and regeneration and landscape areas
5. the topsoil from areas of native vegetation that are to be cleared for the development shall be collected and used in the revegetation and regeneration areas on the site
6. seed from any native plants to be removed shall be collected and used in the revegetation and regeneration areas landscape areas
7. Any trees that are to be planted at the site shall use advanced and established local native species from the relevant vegetation communities which occur on the site, preferably with a minimum tree height of 2-2.5 metres and /or plant container pot size of 50-75 litres to mitigate the removal of trees and the habitat they provide
8. any trees that are to be removed from the site are replaced at a ratio greater than 1:1
9. any tree hollows to be removed are to be replaced at a ratio greater than 1:1

Response

These mitigation measures are generally dealt with in the implementation of the VMP.

1. Agreed. The VMP provides a methodology for the contaminated lands remediation area, refer to section 3.1.5 for an overview. Section 3.3.1 provides an overview of the restoration and revegetation strategies to be implemented across the site including bushland areas, APZ areas, screening planting and contaminated lands.
2. Agreed. Section 3.3.1 of the VMP states the following: Revegetation and direct seeding will utilise local provenance collected seed, including species found within Smooth-barked Apple - Red Bloodwood open forest. A minimum of twenty five (25)

species is to be used in each community. The final plant installation list is to be approved by the project ecologist. A further five (5) species minimum are to be planted in the outlet protection areas.

Native species from Appendix 1 – Table A1 are to be used for revegetation purposes. Alternatives to this list may be used as approved by the project ecologist. The location of the planted species will be determined by the revegetation contractors under the direction of the project ecologist considering existing vegetation communities, any native regeneration present and suitable topographical and bed conditions.

3. Agreed in principle. Section 3.5 of the VMP describes the guidelines for ameliorating the loss of nesting hollows, in particular noting that hollow bearing limbs are to be dismantled by an arborist prior to felling the entire tree, with a fauna ecologist present to supervise in the event that fauna can be relocated if the hollow is being utilised. Hollows may be reused and attached to a suitable tree, replaced by a nest box, or the hollow may be placed on the ground in a restoration area for use by ground dwelling species. The VMP does not specifically stipulate the dimensions of point 3. As there is limited restoration areas, only a proportional number of logs of the recommended size would be used

4. Disagree. The transplanting of juvenile material may not necessarily be feasible for a number of reasons, but particularly as it is not a cost effective approach, and not all species will have a good success rate of translocation. A lot of the bushland has a moderate-high degree of weeds, and transferring of weed propagules should be avoided. The use of tube stock for most of the revegetation works will be more cost effective, and will ensure a rich mix of species diversity. With translocation, only certain species will survive and it would likely need supplementing.

5. Disagree. This item was not considered in the VMP as a lot of the area of existing bushland is on moderate steep slope with rocky outcrops, and the edges have a moderate-high level of weeds. Utilising machinery in these areas may not be appropriate because of the topography and outcrops, and spreading of weed propagules is not appropriate. Some small areas may be suitable for topsoil collection and reuse, but overall, the viability of this exercise is considered to be quite limited. Utilisation of clean topsoil may be more cost and time effective, however a combination of both on-site and off-site top soil may be considered as appropriate.

6. Agreed. In Table 3 of the VMP and section 4.5 item 7, it states that the as part of the pre-construction works, seed collection shall be undertaken from local provenance stock. It does not stipulate that seed shall be collected from site, but it is agreed, that subject to the seasonality of commencement of works, seed can be collected from site where possible, and supplemented with other tube stock sourced locally. This feature may be added into the VMP.

7. Disagree. Advanced trees of 50-75L that are locally native, may be very difficult to source, in particular with regard to quantities and species mix or richness. Utilisation of trees of this size may not be economically feasible as the costing for semi-advanced trees could easily be spread across the sourcing of many of the required shrubs and groundcovers. The VMP does not specify the size of stock for revegetation works, however tube stock is usually more accessible when trying to source endemic plants.

   The use of screening plants in the APZ and replacement of invasive tree species within the existing bushland remnants should try to source larger trees as specified in point 7.

8. Agreed. Currently, the ratio is approximately 1:1 for replacement of trees. The application of additional trees within landscaping beds is dependent upon the landscaping plans, and their compliance with APZ standards. The VMP may consider some additional plantings within remnant bushland areas, such as replacement of the existing invasive trees at a 2:1 ratio in the same approximate location, therefore adding an extra nine (9) trees overall. The density of canopy trees has been specified as 1 per 50m^2, with sub-canopy trees as 1 per 30m^2. Increasing the sub-canopy density to 1 per 10-15m^2 would ensure an effective replacement of trees closer to a 2:1 ratio.

9. Agreed. The Item 2 Response is directed at hollow-bearing tree replacement. Based on the current plan, it will remove twenty three (23) hollows, and proposed to reinstall twenty four (24). An improved ratio can be achieved through installation on the adjoining Council reserve subject to their approval.

If you require any further information please do not hesitate to contact the undersigned on (02) 4340 5331 or at info@traversecology.com.au.

Yours faithfully

Michael Sheather-Reid
Managing Director – ***Travers bushfire & ecology***

Travers bushfire & ecology **is accredited and certified as follows:**

Bushfire Planning & Design (BPAD) Accredited Practitioners – level 2 & 3	**Accredited BioBanking & Biodiversity Assessors**
Certificated Watercourse Assessors	**AQ5 Qualified Arborists**
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