Keystone Ecological Pty Ltd
abn 13 099 456 149
PO Box 5095 Empire Bay NSW 2257
telephone 1300 651 021
email office@keystone-ecological.com.au
web www.keystone-ecological.com.au

Mr Brendan Smith
Senior Environment Officer - Biodiversity
Northern Beaches Council
PO Box 1336
DEE WHY NSW 2099

By email: brendan.smith@northernbeaches.nsw.gov.au

11th March 2018

RE: Ecological review of Species Impact Statement for DA2017/0385

Dear Brendan,

Pursuant to your request, I have completed a review of the Species Impact Statement (SIS) provided by the Applicant (prepared by Narla Environmental, dated 18 December 2017) to accompany DA 2017/0385 for a private hospital at Lot 2 DP 1145029, 4A Larool Road Terrey Hills.

I note that Appendix J Biodiversity Management Plan (BMP) in the SIS was empty, and there was no Waterways Impact Statement (WIS) appended. I assumed that the relevant reports referred to in the SIS were the versions submitted as part of the Development Application, being May (BMP) and April (WIS) 2017.

As you know, a Species Impact Statement (SIS) is called for because, in the opinion of the determining authority, the proposal is likely to have a significant adverse impact on matters of import, and / or there is not enough information to have sufficient certainty regarding the likelihood of significant adverse impact.

The SIS process provides an opportunity to address the perceived problems with an application, specifically by the collection of additional data to deal with the uncertainty, and / or provide a solution that removes the offending impacts or sufficiently ameliorates those impacts. In my experience, the latter issues are usually and most easily achieved by exploration of a different (usually smaller) footprint.

While novel management actions are welcome, they cannot be relied upon in the Assessment of Significance for mitigation of impact, as clearly stated in the Threatened Species Assessment Guidelines issued by the (then) Department of Environment and Climate Change (August 2007):

Proposed measures that mitigate, improve or compensate for the action, development or activity should not be considered in determining the degree of the effect on threatened species, populations or ecological communities, unless the measure has been used successfully for that species in a similar situation.

In my opinion, the most valuable opportunity provided by the SIS process - to find a solution to the objectionable parts of a development - has been largely squandered for this proposal.

My previous opinion in support of Council's decision to refuse the proposal and request a SIS were principally due to:

- The unacceptable, unquantified, or unassessed potential impacts on
    - Coastal Upland Swamp Endangered Ecological Community (CUS EEC)
    - Duffys Forest Endangered Ecological Community (DF EEC)
    - *Grevillea caleyi*
    - *Cercartetus nanus* Eastern Pygmy-possum (EPP) and its habitat
    - *Calyptorhynchus lathami* Glossy Black-Cockatoo (GB-C) and its habitat
    - *Varanus rosenbergi* Rosenberg's Goanna (RG) and its habitat
- Non-compliance with the Development Control Plan (DCP)
- Unresolved conflict between bushfire hazard mitigation and biodiversity conservation
- Inadequacy of offsets and compensatory mechanisms
- Inconsistency and uncertainty re the footprint being assessed

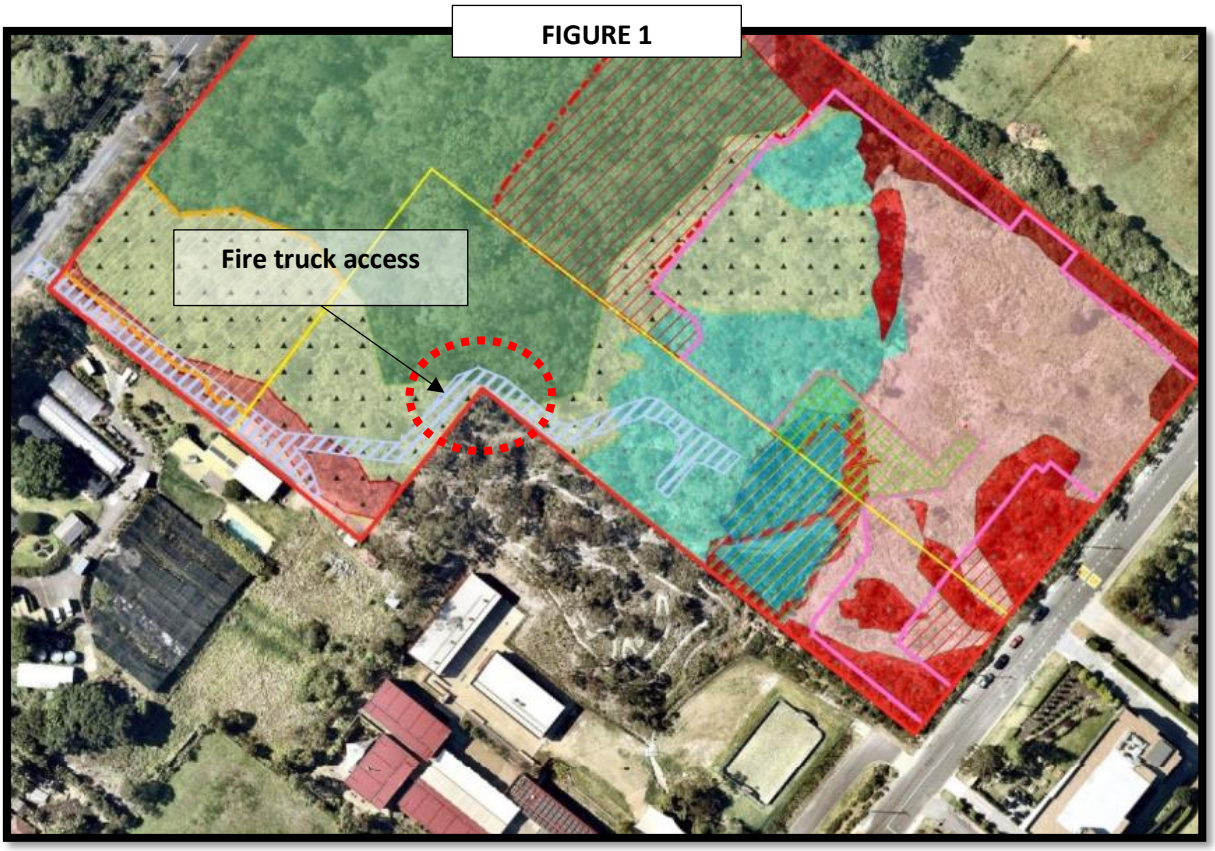
Narla have again undertaken exemplary field investigations to provide more information regarding the local occurrence of CUS, the local occurrence of DF, the presence of EPP in a nearby reserve, and the assessment of additional fauna habitat. They have also provided additional detail regarding innovative management actions and a one-off contribution to the Trust managing a nearby reserve.

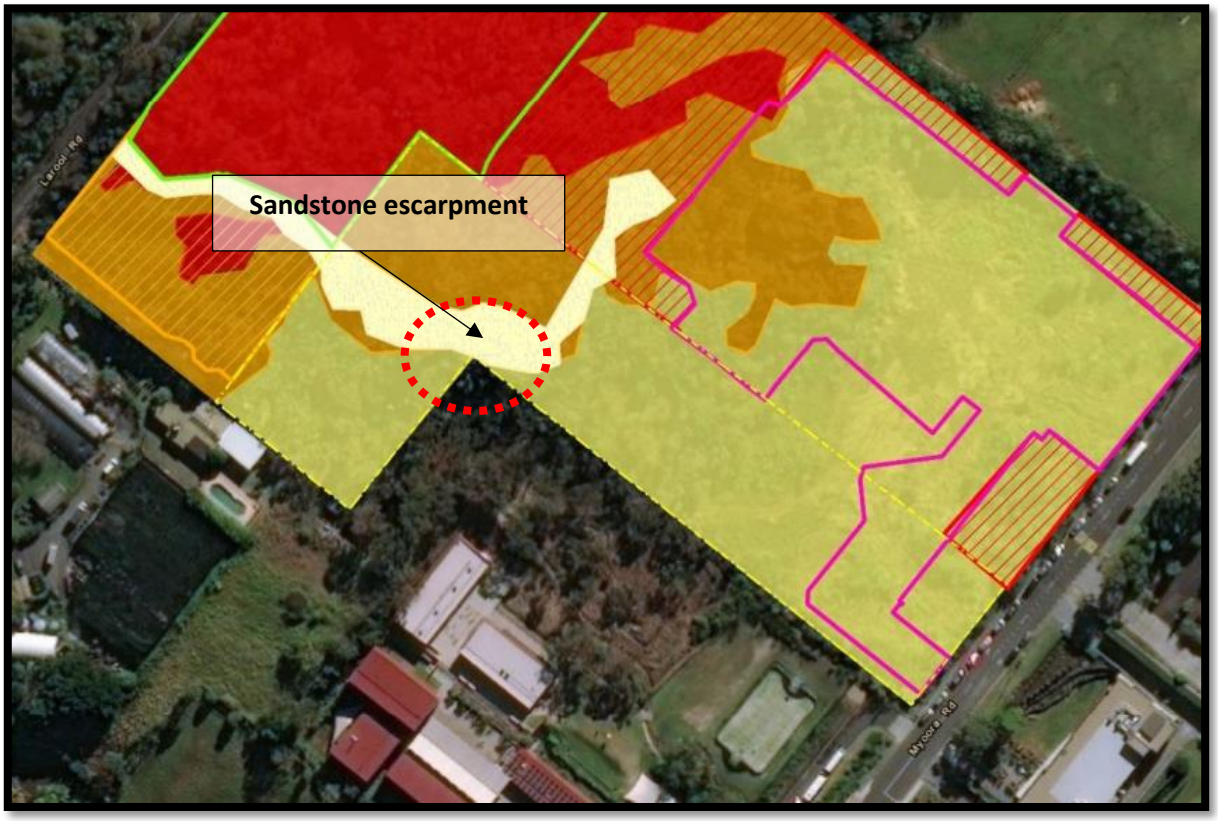
However, the SIS is inadequate in several ways, being that some of these actions are themselves insufficient or insufficiently argued; it does not address fundamental matters that required attention; and it does not explore an alternative footprint.

The most egregious of the matters not addressed is the continued disregard of the areas required to be cleared for the hospital development that happen to occur within the adjacent easement. In this way, the SIS persists in under-reporting the amount of clearing required for the subject development.

In addition to the clearing for the Asset Protection Zone (APZ) for the school in the easement, there is direct impact across approximately 0.22 hectares of bushland for the hospital development. This includes clearing for the APZ, as well as for the construction of the access for a fire truck. This additional area includes many important ecological features, the impacts of which have not been acknowledged and therefore not assessed. The impacts include the loss of at least 0.1 hectares is DF EEC, habitat for EPP, habitat for RG, and habitat for microbats. There is also no acknowledgement or discussion regarding ow the fire access track is to be constructed, given that it is mooted to cross over the sandstone escarpment (see Figure 1 below).

FIGURE 1





- **Coastal Upland Swamp EEC**

The SIS has now better defined the local occurrence of the CUS, with investigations for the SIS uncovering many more patches of CUS in the vicinity of the site, much of which is in reserves.

Given the additional areas of CUS that comprise the local occurrence, and the proposed detailed ameliorative measures, in my opinion the direct and indirect impacts of the proposal to the CUS on site is unlikely to threaten the persistence of the local occurrence of CUS.

- **Duffys Forest EEC**

The SIS persists with ignoring the additional area of this community to be cleared within the APZ within the easement. This should be addressed as potential impacts arising from the subject development.

- ***Grevillea caleyi***

There has been no further exploration of the management actions required for the persistence of this species on site, particularly the implementation of an appropriate fire regime.

- **Eastern Pygmy Possum**

While the additional information has established the presence of the EPP in the nearby reserve to the south west, there is no guarantee that this is part of the local population. There has been no analysis shown of the habitat available within the likely home range of the individuals recorded on site, nor any discussion of the size of the local population. Again, the loss of habitat for this species within the additional APZ clearing has been ignored.

The conclusion in the SIS regarding the absence of adverse significant impact is predicated on the link to the reserve (i) being used by the EPP and (ii) remaining intact. In fact, this link is shown in Figure 19 of the SIS (page 112 as "protected"), but it is comprised of vegetation beneath power lines within a road reserve, and trees on private land. No protections for this link are in place or can be expected to ensue.

Other than the provision of replacement hollow habitat, the proposed offsets for the losses of EPP habitat are not feasible.

The proposed planting of 1180 to 3120 *Banksia ericifolia* trees as shown in the landscape plan will allow only 0.5 square metres per tree. This is insufficient for the growth of this species. They will not mature and provide good foraging habitat for at least 8 years, which is longer than the probably life cycle of EPP in nature. Additionally, this proposed planting conflicts with the requirements of the APZ, as it will create a significant fire risk immediately adjacent to the hospital building.

The proposed contribution of $75,000 to the conservation management of the nearby reserve is laudable, but its value as an appropriate offset for the proposed loss of EPP habitat and threat to

a local population is unexplored. This is unfortunate, as there are assessment tools available (e.g. BioBanking, Biodiversity Offset Assessment Method) to determine the adequacy of such an offer.

The EPP are likely to be able to easily cross Larool Road, so the necessity for elaborate crossing structures is questioned. Also, there is no evidence that this species would use such crossings.

Glossy Black-Cockatoo

The proposed plantings of *Allocasuarina* trees at a 3:1 ratio to replace lost forage are problematic in that (i) such plantings will create a fire hazard, and (ii) there is no guarantee that it will result in enough female trees.

Rosenberg's Goanna and microbats

The potential impacts on important escarpment habitat has been ignored.

Overall, the SIS has failed to address the complete set of direct and indirect impacts for many threatened entities on site and has not explored alternative footprints.

In my opinion, the proposal remains unsatisfactory in terms of potential impacts on biodiversity.

Your sincerely,

Elizabeth Ashby

Principal Consultant