Natural Environment and Climate Change

Referral Response - DA2017/0385 – Private Hospital, Terrey Hills

Background

Council's Natural Environment and Climate Change (NECC) advice in relation to the proposed hospital application was initially provided to the applicant as part of formal advice in February 2017 following a Pre-Lodgement Meeting between Council and the applicant. It is acknowledged that the initial application contemplated additional meeting rooms and subdivision of the rear portion of the property. Due to the scale of impacts, NECC's advice included requirements for preparation of a Species Impact Statement (SIS) which was considered necessary due to the scale of impacts irrespective of alternative development layouts. The PLM notes also identified the extent of the approved bushfire APZ located within the easement established to the benefit of the adjoining German School.

Council staff met with the applicant on two separate occasions during assessment of the application (one on site and one at Council offices).

Following submission of the development application, Council's NECC biodiversity recommended refusal of the application on three occasions (referrals dated 19/06/2017, 20/09/2017 and 13/10/2017 – see referrals here) following submission of additional information submitted by the applicant.

In summary, NECC recommended refusal of the application on the basis of the following;

- Inconsistent with relevant objectives and requirements of the Warringah Development Control Plan 2011 (WDCP) including:
    - Part E2 - Prescribed Vegetation
    - E3 Threatened species, populations, ecological communities listed under State or Commonwealth legislation, or High Conservation Habitat
    - E4 - Wildlife Corridors
    - E5 - Native Vegetation
    - E6 - Retaining Unique Environmental Features
    - E8 - Waterway and Riparian Land
- Inconsistent with relevant objectives and requirements of the Warringah Protection of Waterways and Riparian Lands Policy
- Inconsistent with relevant objectives and requirements of the Warringah Water Management Policy.
- The extent of clearing proposed within the existing Section 88b easement (to the benefit of the German School) and exclusion of impact assessment covering this additional clearing despite being outside of approved APZs.

- The overall scale of impacts proposed, a reliance on unproven mitigation measures, and absence of a Species Impact Statement (SIS) submitted with the application.

Immediately prior to the Sydney North Planning Panel Meeting (20/012/2017) the applicant submitted further additional information in the form of an SIS (Narla Environmental, 2017) and as a result, the matter was deferred pending review and consideration of the SIS as detailed in the following referral response.

Current Referral Response - Natural Environment Climate Change - Biodiversity 02/03/2018

The SIS (Narla Environmental, 2017) is a detailed document which comprehensively addresses most matters identified in the Chief Executives Requirements (CERs) as issued by the Office of Environment and Heritage (OEH) in relation to the proposal. However, outstanding matters of contention relating to the proposal and SIS include;

- The extent of vegetation clearing and impacts required to establish APZs including within the existing 88b easement
- Demonstration that the local population of Eastern Pygmy- possum is part of a population located in nearby larger areas including Dundundra Falls Reserve (Crown Land) and Kur-ring-gai National Park
- A lack of clarity around compensatory options described in the SIS including either a Conservation Agreement OR Biodiversity Stewardship Site established over the residual 0.95ha of vegetation on site (note, subsequent clarification has been provided by the applicant outside of the SIS)
- The feasibility of the effectiveness of proposed mitigation measures including rope bridges over Larool Road, revegetation within the road verge/carriageway and revegetation within already vegetated areas on site
- The inconsistency of the proposal with WDCP 2011 part E – the Natural Environment (as identified in the background above).

On the basis of the above and in previous assessments, Council's NECC Biodiversity section does not support the proposal as the proposal will likely result in a significant impact upon:

- The local occurrence the Duffys Forest Ecological Community;
- The local occurrence of the Coastal Upland Swamp;
- The local population of Eastern Pygmy-possum.

Detailed Response

The following responses are based on review of the SIS (Narla Environmental, 2017) against the Chief Executives Requirements (CERs) following the "*Checklist for determining if an SIS has met the requirements of the Chief Executive of the Office of Environment and Heritage*" (OEH).Select matters from the checklist have been included in bold text below.

Has the survey undertaken provided sufficient information to determine the likely impacts of the proposal on threatened species, populations and ecological communities?

Comprehensive flora and fauna surveys have been undertaken as part of the assessment. Section 4.2.2 of the CERs identifies additional survey requirements for specific species including (but not limited to) Eastern Pygmy-possum. In addition to those surveys on the subject site, the SIS has identified additional records and habitat for this species in the nearby Crown Land (Dundundra Falls).

No additional records of Eastern Pygmy-possum were recorded on site (in nest boxes) or in the nearby Larool Road Reserve preventing detailed assessment of the extent of the local population. The SIS states (pg. 95) "*it cannot be confirmed whether these individuals form a part of the same population of if Larool Road acts as a movement barrier to the species.*" As required in Section 4.2.2 of the CERs, the applicant has therefore been unable to demonstrate "*the assumption in the assessment supporting the development application that the Eastern Pygmy-possums recorded on the site are part of a larger local population that exhibits has interconnectivity between the site and adjoining areas of habitat.*"

It is acknowledged that individuals may on occasion cross Larool Road, however, as previously noted, roadside vegetation along Larool Road is a fragmented mixture of local native species, planted non local natives and exotic weeds occurring as a narrow strip along the road verge. Much of this vegetation is considered to be in poor condition and is also subject to periodic clearing by energy providers and roadside maintenance teams. The persistence of patches of vegetation and/or trees on adjacent private property is doubtful, especially where such properties are bushfire prone and subject to the Rural Fire Service 10/50 Vegetation Clearing Code.

Has the assessment of impacts included the impacts of ALL activities associated with the development, including bushfire hazard reduction requirements, access road upgrades, downstream and downslope impacts, detention basins, severing of fauna movement corridors, etc.

Part of the proposed hospital APZs are located within an existing Section 88b Easement associated with pre-existing APZ requirements for the adjacent German School. The SIS states that the entire easement must be managed as an APZ and therefore does not require assessment in this SIS. Council notes that APZ clearing associated with the German School development consents has been undertaken and does not extend to the easement boundary, but is largely contained within the approved APZs as shown in Figure 1 (see over).

As previously identified, Council's NECC Biodiversity section considers that the extent of clearing currently permitted within the easement is based on what is 'reasonably necessary' for management of the school APZs. Council's assessment of what is reasonably necessary in terms of managing the APZ within the easement is based on the requirements of Planning for Bushfire Protection 2006 and the existing school development consents (including bushfire reports) which identify APZs within the easement consistent with those mapped in Figure 1. Note that on the basis of the SIS, the entire easement would be an APZ including the area which appears to fall outside both the school and hospital APZs (see north-west of easement in Figure 1).

Vegetation within the easement but outside of the approved school APZs includes both Endangered Ecological Communities and habitat for threatened species. Impact assessments within the SIS do not account for these areas on the premise that clearing is already permitted within the entire easement.

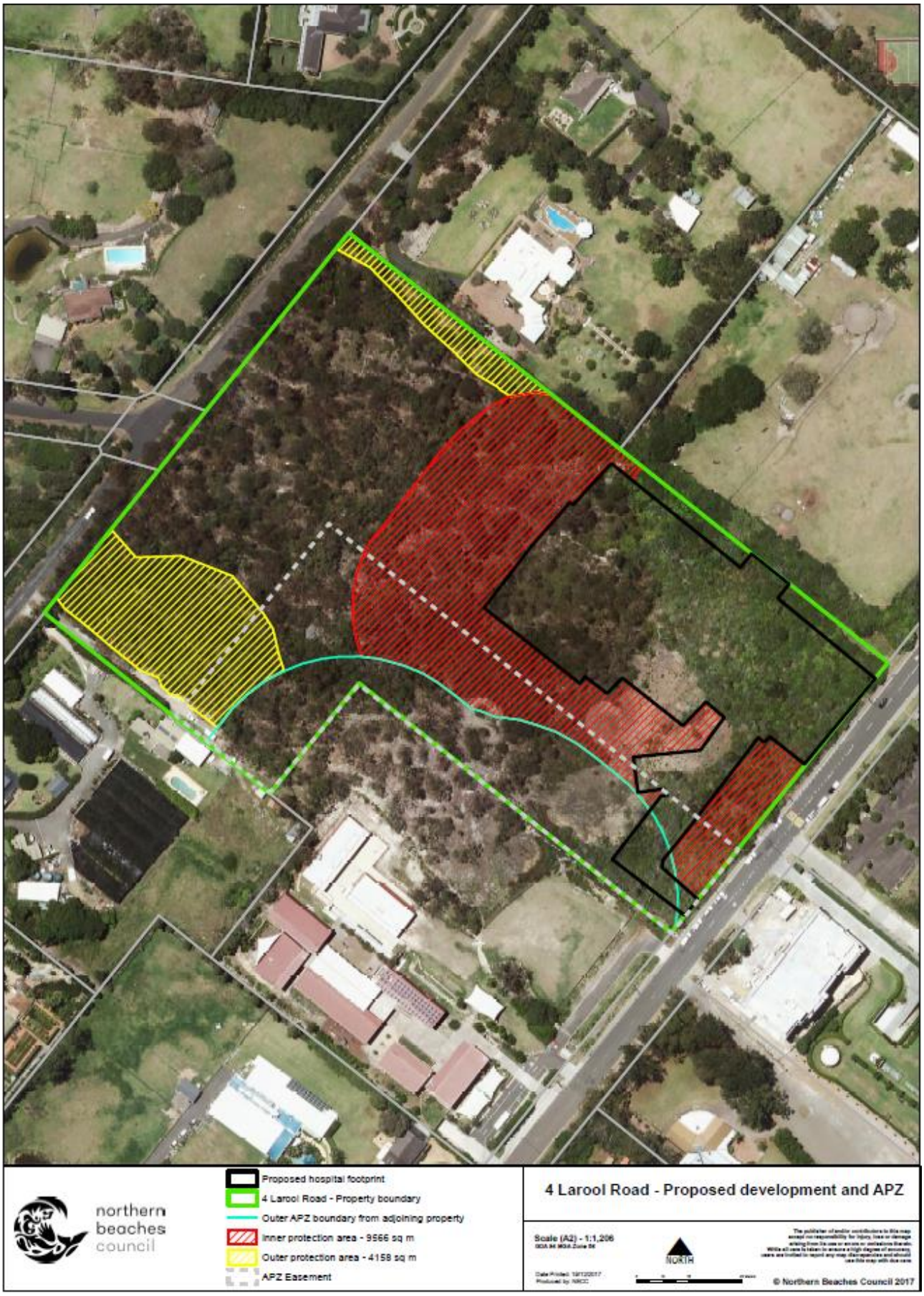

Figure 1: Proposed development and APZs for the hospital and adjoining school. Note that the proposed hospital would result in all vegetation within the easement (dotted line) being managed as an APZ.

Have all proposals for compensatory actions (e.g. purchase or revegetation of habitat) been discussed with the relevant landowners/manager and has their support been given?

Voluntary Conservation Agreement (SIS pg. 163)

Section 7.1.2 of the SIS identifies compensatory actions including the establishment of either a 'Biodiversity Stewardship Site' or 'Conservation Agreement' under the *Biodiversity Conservation Act 2016* (BC Act). The SIS (as exhibited) also states that the applicant remains uncertain as to which option would be chosen.

Council's NECC Biodiversity section supports establishment of a Biodiversity Stewardship Site pursuant to Part 5, Division 2 of the BC Act. Establishing a Biodiversity Stewardship Site is the most viable alternative for the protection and ongoing management of retained native vegetation (including threatened species) on the site.

Mitigation Options (SIS Figure 19, Eastern Pygmy-possum management measures)

Subject to Council approval, the SIS proposes the installation of overhead fauna crossing structures (e.g. rope bridges) on Larool Road, intended to link vegetation on the subject land to vegetation in the road verge. The SIS also proposes supplementary planting of fauna habitat (e.g. *Banksia ericifolia*) within the road verge along Larool road intended to enhance connectivity to nearby areas.

Consultation with Council's Transport & Civil Infrastructure team indicates that the potential for road crossing structures is constrained by the minimum clearance requirements for the existing high voltage power lines (an easement) along Larool road. The powerlines require a 6m clearance from any overhead structure and given the narrow road shoulder and distance to the powerline, overhead road crossing structures may be unfeasible. Should sufficient clearances be available, Council would require an appropriate road Act approval for the structure and appropriate deed with the property owner. Other issues with the proposed road crossing structures include ongoing ownership and maintenance of the crossing structures. Maintenance of the structures would need to rest with the applicant and also be included in the deed of agreement.

Supplementary revegetation within the road carriageway may be feasible but would be subject to requirements for ongoing maintenance and require a deed of agreement.

NECC Waterway Referral Response

Council engaged an external engineer to independently review the water management aspects of the proposal and the potential impacts on the Coastal Upland Swamp in the Sydney Basin Bioregion Endangered Ecological Community (EEC). The report concludes that "*if the proposed water management system is maintained in its current form we recommend the development be refused as it will cause water quality and quantity related impacts to the identified Coastal Upland Swamp and Kierans Creek*".

The proposed water management system has been determined to be deficient in the following areas:

- Resupply with surface will not mimic natural conditions in terms of volumes and recharge rates

- Modelling undertaken does not quantify the change in water balance of the existing swamp (i.e. as a result of the proposed development and recharge system)
- The proposed total OSD storage volume of 245m^3 (153m3/ha) is too low is insufficient to ensure peak flows discharged from the proposed development would be maintained at pre development levels for all storm events and durations
- Inadequate stormwater quality treatment measures are proposed which will lead to detrimental downstream water quality impacts
- The NorBe water quality target is not achieved
- The ANZECC water quality targets are not achieved
- The proposed development will lead to a substantial increase in stormwater flow volumes discharged from the site
- The proposed development will significantly alter the hydrological regime of the identified EEC Coastal Upland Swamp (i.e. surface flows volume increases & storm frequency increases)
- The proposed stormwater management measures do not lead to an outcome that mimics natural conditions.

The outcomes of this independent review are consistent with Council's previous assessments which remain current. In this regard, the recommendation of refusal is maintained on the basis that the proposed development will lead to a significant decline in the conditions of the Coastal Upland Swamp EEC due to the impacts on hydrology in addition to other direct and indirect impacts as noted in the previous assessments.

It is acknowledged that the applicant and their consultants have endeavoured to seek resolution to these matters and it is considered that a workable water management solution can be implemented with the following recommended design improvements/changes including:

- Increased proposed OSD storage to ensure more frequent storm events are limited to pre-development peak flows (i.e. closer to a rate of 250-300m^3/ha
- Undertake a water balance of the swamp under both pre and post development conditions using the total upstream catchment
- Consider use of measures to intercept groundwater upslope of the development and convey this to the swamp
- Consider the use of rainwater storage and reuse onsite
- Introduce a groundwater barrier downslope of the site to maintain more moisture within the swamp area (i.e. to reverse the effect of the downslope boundary fence cut works)
- Revise all modelling to not only demonstrate minimal quantity/quality related impacts but also model the swamps water balance (pre & post development) to ensure this remains similar to pre development conditions (i.e. Cv within 10% and the proportion of groundwater/surface water supply is maintained.