



Natural Environment Referral Response - Biodiversity

Application Number:	DA2024/0262
Proposed Development:	Demolition works and construction of a dwelling house, horse arena, stables and paddocks
Date:	02/09/2024
Responsible Officer	Anne-Marie Young
Land to be developed (Address):	Lot 6 DP 749791 , 113 Orchard Street WARRIEWOOD NSW 2102

Reasons for referral

This application seeks consent development on land, or within 40m of land, containing:

- All Development Applications on
- Actual or potential threatened species, populations, ecological communities, or their habitats;
- Wildlife corridors;
- Vegetation query stipulating that a Flora and Fauna Assessment is required;
- Vegetation query - X type located in both A & C Wards;

And as such, Council's Natural Environment Unit officers are required to consider the likely potential environmental impacts.

Officer comments

Original Comments (17th May 2024)

Council's Biodiversity Referrals team have assessed the Development Application for compliance against the following applicable provisions:

- NSW Biodiversity Conservation Act 2016
- NSW Biodiversity Conservation Regulation 2017
- Pittwater LEP 2014 cl. 7.6 Biodiversity Protection
- Pittwater 21 DCP cl. B4.18 Heathland/Woodland Vegetation
- Planning for Bushfire Protection 2019 - Bush Fire Prone Land

Council's Biodiversity referrals team are unable to complete the assessment of the Development Application as there is insufficient information within the BDAR to make a determination. Upon submission of the required amendments, Council's Biodiversity referrals team will recommence assessment.

Biodiversity Values Map and Entry into the Biodiversity Offset Scheme (BOS)

The majority of the site is identified on the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) Biodiversity Values Map (BV Map). Under the NSW Biodiversity

Conservation Act 2016, any removal of native vegetation from within BV mapped areas will trigger the Biodiversity Offset Scheme (BOS) and the requirement for a Biodiversity Development Assessment Report (BDAR). As the proposed development is located within the BV Map and the proposal requires the removal of native vegetation, the BOS is triggered. A BDAR (Kingfisher Urban Ecology and Wetlands, February 2024) has been prepared and submitted with the Development Application. The BDAR has identified that the Development Application triggers the BOS due to the removal of native vegetation within the BV map as well as exceeding the area clearing threshold. The Ecologist has assessed the proposal under the Streamlined Assessment - Small Area Module which is reflected in the Biodiversity Offsets and Agreement Management System (BOAMS).

It is noted that the BDAR and associated fieldwork was undertaken by Kingfisher Urban Ecology and Wetlands and certified by Accredited Assessor Kathryn Duchatel (BAAS17054).

Council's review of the BDAR has identified a number of outstanding issues and errors with the BDAR, as outlined below. Review of the BDAR also included a site assessment including an audit of BAM Plots 1 and 3.

Native Vegetation Surveys

- The Ecologist has selected Belrose Coastal Slopes as the Mitchell Landscape in BOAMS. However, the BDAR has identified that the correct Mitchell Landscape is Sydney - Newcastle Barriers and Beaches. This is to be amended in BOAMS.
- The Ecologist has applied three different Vegetation Zones within PCT 3176: VZ1 - Moderate, VZ2 - Low (Sandstone Boulders) and VZ3 - Low. In accordance with the BAM Operational Manual (Stage 1), the assessor must stratify areas of each PCT that are in different broad condition states into separate Vegetation Zones (VZ). Council's Biodiversity Referrals team do not agree with the stratification of vegetation and have identified two VZs rather than three, these being VZ1 Moderate (east) and VZ2 Moderate (west), based largely on landscape position, presence of sandstone outcropping within the west of the site and slight differences in the Vegetation Integrity (VI) scores for each of the plots (undertaken by Council). Vegetation mapping is to be reviewed, to include all native vegetation within the site, including the south-eastern corner of Plot 4, which has not been mapped.
- Furthermore, the Ecologist has identified five Management Zones (MZ) within each of the VZs, including new structures, footprint, APZ, 10 and 50. Council do not agree with the proposed MZs, and have instead identified two MZs to reflect either wholesale clearing or partial clearing (in accordance with future clearing entitlements). Council have identified that the development footprint (including the APZ) and the residual 10/50 area that extends past the APZ are the two proposed MZs. This is because the future VI score of the development footprint (including the APZ) will be 0 (reflective of wholesale clearing) and the future VI score of the residual area of the 10/50 clearing entitlement that extends past the APZ being reduced in BOAMS to clear all understory species (reflective of partial clearing).
- The Ecologist has miscalculated the full impact of native vegetation clearing in BOAMS within a number of MZs. Only two MZs have had the future VI score reduced to 0, including for 'structures' and '10' (of the 10/50). See Table 3.4 of the BDAR. The total area of the footprint, APZ and structures MZs should all be reduced to 0. The remaining MZ '50' (of the 10/50) has been correctly calculated by the Ecologist, reflecting the removal of understory and the retention of trees. This miscalculation within the MZs appears to intentionally underestimate the clearing impact and as a result reduces the generation of Ecosystem Credits required by the proposal.
- Council's Biodiversity Officers undertook BAM Plots in the same location as the Ecologist had undertaken Plot 1 and Plot 3 and revealed a significant difference in the structure and composition of vegetation within the plots. A number of species were not identified within the BAM Plots by the Ecologist, reducing native species richness. Furthermore, the Ecologist had

calculated a much lower cover percentage for many of the species recorded in the plot. Misrepresentation of vegetation condition has the potential to influence credit obligations, and in this instance, the result of the plots being undertaken at a low standard has meant that two VZs have such a low VI score that credits are not generated to offset the vegetation within those areas. As such, the proposed offset area for vegetation within the site is only 0.14 ha out of a total of 0.80 ha that is being impacted.

- It is noted that two of the BAM plots undertaken by the Ecologist (Plots 2 and 3) are not entirely within the boundary of the subject site. Any additional or future plots are to be located within the boundaries of the lot.
- Council's Biodiversity Officers calculated VI scores of 48.7 (Plot 1) and 43 (Plot 3). This depicts a more accurate representation of the moderate condition of vegetation found on site. As such, the Ecologist is required to revise the BAM plots and resubmit plot data.

Bat Surveys

The Ecologist identified that targeted surveys were required for Large-eared pied bat, which is listed as threatened species under the BC Act, and is classified as a candidate Serious And Irreversible Impacts (SAIL) species in accordance with the BAM (2020). One Anabat Swift detector was utilised for targeted survey and was installed on site between the 11/11/2022 and 17/11/2022, within the required survey period. However, the survey does not meet the minimum survey effort as prescribed in the 'Species credit' threatened bats and their habitats NSW guide for the Biodiversity Assessment Method (DPIE 2021). The minimum survey effort is four Anabat detectors over four nights or one device for 16 nights (or equivalent). As the survey does not meet the minimum requirements, the species is assumed present and species credits will be required to be generated for Large-eared pied bat and an SAIL assessment for the species is to be included in the BDAR.

Furthermore, the Ecologist has not included a map of the location of the Anabat Detector within the BDAR and has not specified the name, details or experience of the threatened bat surveyor who analysed the results of the survey. This information is required to be included in the BDAR in accordance with the 'Species credit' threatened bats and their habitats NSW guide for the Biodiversity Assessment Method (DPIE 2021).

The Ecologist also stated in the BDAR that two species credit bat species potentially occurred within the site, but could not be confidently identified, including Southern Myotis and Eastern Cave Bat which are also candidate SAIL species. As such, additional targeted survey is required to be undertaken in accordance with the guidelines, or, they are to be assumed present on site. If the latter is decided, species polygons must be mapped in accordance with the guidelines in order to calculate species credits. Note: suitable habitat is located on site for Eastern Cave Bat and Large-eared Pied Bat in accordance with requirements listed in the Threatened Biodiversity Database Collection (TBDC).

Avoid and Minimise

The Ecologist has made no attempt to describe strategies in which the proposal has avoided and minimised impacts on biodiversity values associated with the proposals location or design. Rather, they have included screenshots of impacts associated with tree loss taken directly from the submitted Arborist Report. There are also no maps of alternative footprints considered by the proposal to avoid or minimise impacts to biodiversity. This should be provided given the previous Development Applications submitted in the past for the site. Council believe that there is potential to avoid and minimise, particularly with the location of the proposed dwelling. For example, If the dwelling was located closer to the road or within the footprint of the existing dwelling, the APZ and future 10/50 clearing entitlements would not extend so far into remnant native vegetation within the western portion of the site. There has been no consideration of this within the BDAR and there are no alternative designs discussed within the report.

Clearing for Asset Protection Zones

Advice provided by Council's Biodiversity Referrals team for the previously withdrawn Development Application (DA2023/1127) was that *"the bushfire consultant and arborist are to confirm if tree removal is required in addition to the 25 trees proposed for removal in order for the APZ to meet the minimum requirements of Planning for Bushfire Protection. Additional tree removal may not be supported (29/09/2023)"*. This has not been addressed in the current application. From review of the Arborist Report, after consideration of the trees proposed for removal for the development footprint, it is unclear if canopy cover has been reduced enough to meet the minimum APZ requirements. As such, further tree removal may be required, in which case it must be considered in the impact assessment.

Biodiversity Management Plan (BMP)

Council's Biodiversity referrals team previously requested that a Biodiversity Management Plan (BMP) be submitted with the application in order to clarify proposed impact mitigation measures. This has not been submitted with the current application and is required to be included with the application in order for Council's Biodiversity Referrals team to complete the referral. We note that the BDAR states that the preparation of a BMP will be via a condition of consent, however is considered that review of the full BMP is required prior to determination in order to demonstrate how any retained vegetation and wildlife habitat will be protected and managed.

Compliance with Council's LEP and DCP

The BDAR has considered the applicable LEP and DCP controls, however has only considered the loss of trees as a potential impact. It is important to note that a key element of the BOS is the consideration of the future potential for native vegetation clearing within the property as a result of clearing entitlements such as APZs and 10/50. In addition, applicable local planning controls require consideration of impacts to all native vegetation. From calculations within the BDAR, it is estimated that up to 80% of native vegetation within the site will be modified. As such, the full impacts of the vegetation clearing should be reassessed by the Ecologist for compliance against the LEP and DCP controls.

Required Documentation

In summary, the application requires the following:

- Amended BDAR
- Species credits generated for Large-eared Pied Bat, Eastern Cave Bat, Southern Myotis
- Biodiversity Management Plan
- Updated Bushfire and Arborist Reports confirming whether the proposed tree removal satisfies the minimum APZ requirements in accordance with Planning for Bushfire Protection 2019. The amended BDAR must also be consistent with the conclusions of the updated Bushfire and Arborist Reports
- Upon resubmission, shapefiles are to be cleaned and tidied in order for them to be adequately analysed. The shapefiles currently consists of numerous polygons for one management zone which makes calculation of areas unnecessarily difficult.

Amended Comments (2nd September 2024)

Amended documentation was submitted by the applicant and has been reviewed by Council's Biodiversity Referrals team, including:

- Amended BDAR (Kingfisher Urban Ecology and Wetlands, July 2024)
- Vegetation Management Plan (Kingfisher Urban Ecology and Wetlands, July 2024)
- Pre-Development Application Asset Protection Zone/Landscaping Report (CBAA Bushfire Experts, July 2024)
- Additional Bushfire Information (No details of author or date)

It is noted that the Amended BDAR has been submitted as a Draft, has not been signed and certified by an Accredited Assessor, does not include finalised credit reports in Appendix 2 and Council have not been added as a case party in the Biodiversity Offsets and Agreement Management System (BOAMS). As such, Council are unable to review the final credit outcomes in BOAMS which is critical to the assessment of the BDAR and application as a whole and the application must be refused.

In relation to the amendments to the BDAR, the Ecologist has provided amended BAM plots in accordance with Council's request, therefore increasing the VI score and resulting in a significant increase in Ecosystem Credits and Species Credits. Credits increased from 1 to 8 Ecosystem Credits for PCT 3176 Sydney Enriched Sandstone Moist Forest and from 5 to 10 Species Credits for Swift Parrot and Large-eared Pied Bat

It is noted that in the previous Biodiversity Referral comments, Council's Biodiversity Officers requested that the Ecologist consider Eastern Cave Bat as the Ecologist identified a call potentially representing the species on site during targeted surveys. The species has not been considered by the Ecologist and credits have not been generated. The requirements for the species are the same as the Large-eared Pied Bat which has generated 10 species credits. Furthermore, it is noted that the Ecologist has stated that they received verbal advice from the BOS help desk relating to the microbat targeted survey. For future reference, any advice from the BOS helpdesk in relation to alteration of targeted survey methodology is to be obtained in writing and included in the BDAR.

While the Ecologist has amended the Vegetation Zones and Management Zones in accordance with Council's request, as Council do not have access to BOAMS, the amendments cannot be verified and confirmed. Furthermore, Council have not been supplied with amended shapefiles in accordance with the previous request.

Whilst justification for avoidance and minimisation has now been included in the BDAR, it is difficult to follow and lacks quantitative evidence of the progressive reduction of impacts to biodiversity such as a comparison of total areas of impact or differences in tree removal between proposed designs. For example, the main justification by the Ecologist states is that "the total development footprint for 2024 is smaller than original. The APZ being the largest impact. The APZ will be only a partial reduction in vegetation and created and maintained in accordance with the VMP (July 2024)". The APZ has not been considered for previous versions of the plans in terms of impact/avoid and minimise. In comparison, the current assessment of impacts relies totally on the APZ and arena area, where all other discussion of previous plans discussed them in relation to only the development footprint. This demonstrates that the comparison of impacts is not consistent and makes it difficult to ascertain the overall reduction of biodiversity impacts across the plan variations.

The Vegetation Management Plan (VMP) is unclear, and is missing critical information that is required to be amended, including:

- A clear description of management zones within the VMP. Section 1.1 describes two management zones, however there are currently a number of zones discussed including VMP area, APZ area, Sandstone area, Central area, Front roadside house, approved horse arenas, paddocks and stables area, Conservation zones of the APZ, restoration area and Koaa area (?). Should these area be sub-zones within the VMP management zones, as management will be different to meet the objectives of the management zones (APZ vs Conservatino vs Landscaped area?)
- A site map showing site boundaries, bush fire asset protection zones (APZs), any new 10/50 Code clearing entitlements, and BMP management zones including any proposed temporary or permanent fencing (Figure 2.1 missing)
- Paragraph 2 in section 1.2 needs to be re-written to clarify meaning.

- Section 1.2 includes a heading Benchmark, but it is unclear if this is different to Performance Criteria in section - suggest deletion.
- The BDAR is not referenced as an information source in section 1.4.
- The need for Section 1.6 Summary Actions is questioned - suggest deletion.
- Section 1.6.1 should be moved to earlier in section 1 of the Plan so the relationship between the proposed development footprint, APZ and Conservation areas and the proposed VMP management areas is clearer.
- Section 2.1 includes management actions, however there is an entire section on management later in the document and another summary at Table 3.1 - this results in lack of clarity of management requirements within zones?
- Section 2.1.1 (Sandstone Area) is stated as being within the conservation area, however management for APZ requirements such as under pruning and canopy separation is included. The statement on page 6 "Areas outside the APZ are the conservation zones of the APZ" is unclear.
- Describing the Central area that spans both VMP and APZ areas is confusing, and the actions required largely ignore requirements for the conservation zone but includes extensive detail for the APZ.
- Whether ground fuels are to be managed with leaf blower or raking, fuel should be removed from the site to comply with APZ requirements.
- There is reference to a Fire and Vegetation Mgt Plan, and it is unclear if this is a separate document or it is a reference to two existing documents.
- The examples of habitat to be retained would be more important for APZ area where native vegetation management may occur that would possibly impact the fauna habitats. All habitat outside APZ must be retained.
- Is section 2.1.3 management in accordance with the approved Landscape Plan and APZ requirements. The sentence "Environmental weeds (exotics that spread by seed or piece) are not planted on site and if grow as weeds that they are removed.." needs to be amended?
- Section 2.2 Weeds would be better to follow section describing native Vegetation above.
- Section 2.3 is incomplete.
- Baseline photo points. These are to be taken at the time of the BMP preparation and before works commence to track progress of site management, and a map of the location and direction of photo points (including coordinates).
- A list of suitable local native species for planting on site and the minimum planting densities for groundcovers, understorey, mid-storey and canopy. The VMP notes that this is available in Appendix VI, however it is missing from the document.
- A suitable weed management methodology including primary and secondary weeding. The VMP discusses weed control in Section 3.1.4, however only discusses secondary weed removal. It is understood that the presence of weeds within the site is currently low, therefore the requirement for secondary weed removal to occur on a quarterly basis is considered excessive.
- The performance criteria for weeding in Table 4.1 is to be revised to ensure that after 6 months total weed control is <20% and maintained at <10% in the following years. It is noted that in Table 4.1 the Ecologist has stated that "planting only to take place if natural recruitment is <10% across native regeneration areas". A suitable timeframe is to be allocated to this performance criteria, such as in year 2 or 3 of the VMP.
- Table 4.1 - some management actions must be in place prior to commencement rather than within 6 months of commencement.
- Table 4.1 - there is confusion between natural regeneration, revegetation (natural)(?) and plantings, and monitoring of natural recruitment will be required to determine if revegetation is required, and the plant densities and heights must be defined for the two zones.
- Section 5.1 Monitoring requires detail of what information will be collected, and to justify the cost of \$1685 per visit?

- Table 6.1 VMP schedule of works is to be revised to ensure that secondary weeding is undertaken no more than bi-annually and to occur concurrently with the vegetation monitoring. Erosion controls and fencing and signage and are to be inspected at a minimum of once per annum.
- The table of contents, table numbers and table references, figure numbers and figure references etc throughout the document are incorrect which makes comprehension difficult.
- Better integration of the VMP requirements and the BDAR Mitigation Measures is required in order to make the VMP a single source of requirements for the management of the development site.

Furthermore, the VMP is to be prepared in accordance with Guideline 3: Biodiversity Management Plan of Northern Beaches Council's Biodiversity Requirements for Development Applications.

The proposal is therefore unsupported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

Recommended Natural Environment Conditions:

Nil.