

22 March 2021

Our ref: 20SYD-16452

Ethos Urban
173 Sussex Street, Sydney

Attention: Paul Altree-Williams

Dear Paul,

SSD 10479 Response to submission - DPIE – Biodiversity comments

Eco Logical Australia has reviewed the DPIE comments and provided input to design changes to address the comments from DPIE. The responses below are based on the revised concept contained in Attachment 1.

Regards,



David Bonjer
Principle Planner, NSW

Comment / Extract	Response
Department of Planning, Industry and Environment Western Sydney Planning Partnership	
3. Part 3 – Development Controls – Airport Safeguards	
The site is partially within the 8 km wildlife buffer zone on the Wildlife Buffer Zone Map of the SEPP and careful consideration must be given to any proposed vegetation or landscaping to minimise wildlife attraction as per Clause 21 of Part 3 of the Aerotropolis SEPP. Whilst the EIS has referenced this clause, the Partnership is of the view there is a requirement to provide a written assessment of the wildlife that is likely to be present on the land, and the risk of the wildlife to the operation of the Airport. Although most of the site will be developed for warehouse uses, the remaining RE2 and E2 land and proposed landscaping has the potential to attract wildlife and it is recommended that a written assessment be provided as part of the SSD application.	The riparian zones on site are being retained and managed under a VMP. Their retention is a requirement of the strategic planning framework established by the DPIE. There is no significant increase in riparian habitat as a result of the development and therefore no significant change to existing wildlife use is anticipated.
Biodiversity and Conservation Division	
As previously advised, the north eastern corner of the site is zoned E2 Environment Conservation and RE2 Private Recreation. The Mamre Road Precinct Structure Plan identifies this area as open space, environment conservation and indicative riparian buffer. Regarding the environment conservation land, the precinct structure plan states that this is “land to be protected for its high conservation value and supported with surrounding buffers”. The EIS indicates that part of warehouse W6, carparking and a basin impact and encroach into the RE2 zoned land. Within the RE2 zone, warehouse and basin uses are prohibited. The proposed development is therefore inconsistent with the structure plan and zoning regime applying to the site	The north east corner has been re-designed to retain the entry and exit points of the 1st order watercourse through this part of the site. See attached diagram.
1. Biodiversity	
Finalisation of the BAM-C – The BAM-C needs to be finalised and the case submitted so it can be reviewed by EES. Digital shape files for all maps and spatial data also need to be provided. Candidate species credit species Several candidate species credit species that were excluded from further assessment need to be assessed in accordance with Step 4 of section 6.4 of the BAM, due to the following reasons. - Acacia pubescens was excluded because “Suitable habitat was not present within the development site” (page 36). However, this species is associated with habitat occurring within the development site i.e. PCT 850 and “Highly disturbed areas with no or limited native vegetation”, including “road verges, ploughed paddocks etc that are generally devoid of native vegetation” - Grevillea juniperina subsp. juniperina was excluded because “The presence of this species was not identified (conspicuous species) and it was determined that the habitat is substantially disturbed such that this species is unlikely to utilise the development site.” (page 37). However, the BDAR states no targeted surveys were carried out (for example, see page 19) and this species can occupy disturbed sites as “Physical disturbance of the soil appears to result in an increase in seedling recruitment. Has a tendency to colonise mechanically disturbed areas.” Also, the distribution of this species includes “outlier populations at Kemps Creek and Pitt Town”.	ELA will submit final shapefiles as required. Three ecologists inspected the cleared areas and validated vegetation on site as well as undertaking six BAM plots. The listed species are not cryptic and can be relatively easily identified. There was no evidence of these threatened species and the ecologists concluded that none were likely to be found on site.

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• The <i>Marsdenia viridiflora</i> subsp. <i>viridiflora</i> endangered population was excluded because “Habitat features associated with this species were not present on the development site” (page 38). However, this species is associated with PCT 835 and PCT 850, both of which occur within the development footprint. • <i>Meridolum corneovirens</i> was excluded because “It was determined that the habitat within associated PCT 850 is substantially disturbed such that this species is unlikely to occur within the development site” (page 39). However – this species is also associated with PCT 835 – this species “will persist in degraded environments provided that ground cover of logs or rubbish is available” and it “can be found under logs and other debris, amongst leaf and bark accumulations around bases of trees and sometimes under grass clumps. Where possible it will burrow into loose soil. It can also be found sheltering under virtually any form of human made ground cover, including rubbish, building materials, old car parts etc.” – Appendix B of the BDAR (Table 37) shows plots 1 and 2 (in PCT 835) had 50m of fallen logs and 39% litter cover, respectively. • <i>Pimelea spicata</i> was excluded because “It was determined that the habitat (PCT 850) is substantially disturbed such that this species is unlikely to occur within the development site.” (page 41). However, as with <i>A. pubescens</i>, this species is associated with PCT 850 and “Highly disturbed areas with no or limited native vegetation”	
Species polygon – The species polygon for the Green and Golden Bell Frog needs to be revised because there is some inconsistent information within the BDAR, and with the Aldington Road Kemps Creek Riparian Assessment (Eco Logical Australia, 15 October 2020) (hereafter referred to as the ‘riparian assessment’), which makes it difficult to determine the area of habitat that will be impacted. This is because: • the BDAR states (page 38) “Habitat features associated with this species were present within the development site (3 dams containing <i>Typha</i> spp.)” • the BDAR also states (page 43) “Habitat features associated with this species consist of any dam containing <i>Typha</i> spp” • the BDAR also notes that the habitat for this species includes (page 94) “Marshes, dams and stream-sides, particularly those containing <i>Typha</i> sp. (bullrushes) or <i>Eleocharis</i> sp. (spikerushes)” • the riparian assessment describes five dams with <i>Typha</i> (Table 6) i.e. dams 2, 3, 4, 10 and 11, and one dam with <i>Eleocharis</i> i.e. dam 6 and • Table 23 of the BDAR indicates 0.598ha will be directly impacted, while Table 33 shows 0.342ha and Appendix D shows 0.9ha	Ecologists assessed the dams on site, including those that contained typha. The ecologists concluded that only one dam provided suitable habitat for GGBF. The inconsistency in Tables 23, 33 and Appendix D is acknowledged. The hectares of impact around the potential GGBF dam was 0.598 ha, however the BAM calculations used 0.9 to also account for impacts to the same PCT in the north east corner. Given this is the more conservative approach, the 0.9ha can continue to be used. No change required to the BAM calculations.
Furthermore, it should be noted that EES considers buffers should be applied in accordance with the Commonwealth significant impact guidelines for this species, which states that a 200m buffer must be applied around waterbodies, and that terrestrial corridors require a 100m buffer.	Ecologists assessed the habitat potential of the site and concluded that the potential habitat did not extend 200m from the dam identified as having potential GGBF habitat. The potential habitat was assessed as including the PCT surrounding the dam.

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Prescribed impacts – Prescribed biodiversity impacts are discussed on pages 47 and 52 of the BDAR. Section 2.1.2 of the BDAR states that prescribed biodiversity impacts are detailed in Table 19, but only very general information is given; the types of human-made structures and non-native vegetation occurring on the site are not discussed, and a list of candidate species using these habitats is not given. Also, while potential foraging habitat (fruit trees) for Grey-headed Flying-foxes is mentioned in Table 19, other foraging habitat for other species has not been recognised e.g. pastures for different species of microbats and birds. As such, sections 6.7.1.3(b) and 9.2.1.3 of the BAM need to be applied.	Ecologists assessed potential habitat on site. Whilst there are farm buildings on site, these are generally in use and reasonable condition. The consent can condition the preparation of a Fauna Management Plan to ensure demolition of buildings is undertaken in a manner that minimises risk of injury to native fauna.
In conjunction with this, reconsideration of the types of habitat available for microbats on the site is needed. For example, Table 15 of the BDAR states for <i>Miniopterus orianae oceanensis</i> (page 34) “Foraging habitat features associated with this species were identified within the development site” but human-made structures can also provide habitat for this species because “Caves are the primary roosting habitat, but also use derelict mines, storm-water tunnels, buildings and other manmade structures”	See above
Assessment of impacts – It is not clear if all impacts associated with the proposal have been assessed in the BDAR. This is because: • Figure 16 of the riparian assessment shows the “unmapped wetland” (as shown on Figure 3 of the BDAR) to be part of the construction site, but Figure 3 of the BDAR shows it to be outside of the development footprint • the riparian assessment states that the actual works within the riparian corridor have not been fully documented, and that a crossing is proposed (see page 27), but neither of these points are referred to in the BDAR and it seems that the location of the crossing has not been shown • from a comparison of Figure 3 of the BDAR, Figure 16 of the riparian assessment and Appendix A of the riparian assessment, it is not clear if vegetation zones 1 and 4 will be impacted by the bio-retention basin in the north eastern corner of the development site (on proposed Lot D) • the SSDA Estate Masterplan (drawing no. MP04, date 01/10/2020) and the Fencing Management Plan (drawing no. MP11, date 01/10/2020) show several retaining walls on Lot D but it is not clear if these will impact the “unmapped wetland” (as shown in Figure 3 of the BDAR) or PCTs 1232 or 835 • it is not clear if the 5m construction buffer (as shown in Figure 3 of the BDAR) is compatible with the construction of the retaining walls and bio-retention basin (as shown on drawing no. 19-609-C1020 of the 200 Aldington Kemps Creek 1000-Series Infrastructure Civil Works Package State Significant Development Application (at&I, 30-09-20)).	The proponent has redesigned stormwater infrastructure and habitat retention in the north east corner of the site in order to improve riparian outcomes. The proposal will re-create a watercourse through the site to join the first order stream to the unmapped wetland which will be retained. See attached diagram. A creek crossing is no longer proposed. Figure 10 and 11 of the BDAR show impacts to vegetation. The redesign mentioned above does not increase these impacts. Attached diagram shows redesigned concept for the north east corner.
As such, all impacts of the proposed development must be made clear in the BDAR and assessed in accordance with Stage 2 of the BAM.	Impacts have been assessed in accordance with the BAM
Avoiding and minimising impacts – The ways in which the proposal has been located and designed to minimise and avoid impacts to biodiversity values are outlined in Tables 18 and 20 of the BDAR. However: • Table 18 states “The impact of the proposal on native vegetation has been reduced by locating the sediment dam in a way that minimises impact to PCT 835” but no mention has been made of other	The design of the stormwater infrastructure and riparian corridors has been updated. See attached.

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impacts within the riparian corridor, including clearing of a portion of PCT 1232, which forms part of an endangered ecological community and Table 20 states “The dam in the northern-most section of the site had moderate levels of aquatic habitat and was representative of a wetland environment. This dam will be retained after development, and the surrounding vegetation managed to maintain habitat values.” But no mention is made of infilling dam 10, which also occurs within the riparian corridor and provides habitat for the GGBF (as inferred by the riparian assessment, which notes that <i>Typha orientalis</i> was observed on the edges of the dam).	
As such, in accordance with section 8 of the BAM, more information is needed to document and justify the location and design of the project.	See above. Stormwater infrastructure has been redesigned in the north east corner.
Mitigation measures – The proposed mitigation measures are outlined in Table 27 of the BDAR (starting on page 53). However, more information is needed because the following are not addressed or explained in this table: - the 5m construction buffer identified in Figures 3 and 9 of the BDAR is not mentioned in this table and its purpose has not been explained - the processes for staged clearing, pre-clearance surveys and clearance surveys have not been explained; section 9.3.1.2(a) of the BAM states that proposed techniques must be documented - only PCT 835 has been included in the Vegetation Management Plan (VMP) but the unnamed local wetland (referred to in section 1.3.5 of the BDAR), PCT 1232, the bio-retention basin and any remaining exotic/cleared areas in this area, should also be included - processes for the removal of habitat associated with prescribed impacts have not been addressed, including de-watering dams and searching human-made structures for fauna, before they are demolished.	The 5m construction buffer is a direct impact that has been assumed. This provides an area in which equipment can access the outer edge of the development to enable construction activities. C A Pre-clearing management plan / procedure will be provided as a post-approval Plan A VMP will be prepared post-approval and will cover the riparian vegetation in the north-eastern corner of the property. A Dam Dewatering Plan and Fauna Management Plan can be conditioned as a post-approval plan.
Furthermore, clarity is needed on: - what is meant by “Client” for the responsibility of preparing the VMP (page 56) and - the location of the 5m construction buffer (the BDAR and riparian assessment show it in different locations).	Client refers to the developer or contracted project manager.
Prescribed impacts on habitat for species credit species – The Biodiversity Assessment Method Operational Manual Stage 2 (DPIE 2019) discusses direct and prescribed impacts on species credit species. It is recommended that the approach described in Box 3 (page 20) of this manual is considered for GGBF and Southern Myotis.	Direct impacts to GGBF habitat have been assessed and assumed to occur. Besides the purchase and retirement of biodiversity credits, the prescribed impact (removal of waterbodies) will also be mitigated though the recreation of the watercourse channel through the site in the north east corner.

