

Our ref: DOC19/880523  
Senders ref: 1/2018/PLP

Ms Megan Munari  
Senior Town Planner  
The Hills Shire Council  
PO Box 7064  
NORWEST NSW 2153

Dear Ms Munari

**Subject:** Planning Proposal – 55 Coonara Avenue, West Pennant Hills – Further ecological and bushfire information

I refer to the email of 9 October 2019 from the proponent (Mirvac) which provides the following further ecological and bushfire information:

1. Advice from Keystone Ecological and appended vegetation maps and APZ overlay
2. Letter from the proponent's Bushfire consultant confirming that an APZ is not required around the proposed community facilities

The Environment, Energy and Science Group (EES) in the Department of Planning, Industry and Environment has reviewed this further information and provides the following comments.

EES assumes that Figure 4 (Vegetation Zones and Rapid Data Points) has been produced in response to one of the issues previously raised by the former OEH in its submission of 14 June 2019 that is, OEH requested a vegetation map of Blue Gum High Forest (BGHF) and Sydney Turpentine-Ironbark Forest (STIF) on site. Figure 4, however doesn't adequately address the OEH comment, for example:

- All vegetation (remnant, exotic, regrowth) across the remainder of the site should also be mapped and defined on this map. For example, it's not clear what the vegetation type and condition is in the 'managed areas' (shown in a grassy green colour on Figure 4). EES notes that the Biodiversity Assessment report indicates that of the 0.95 ha of BGHF that will be impacted by the APZ most of this (0.6 ha) is located within the two patches of 'managed land' where the fuel management can and is being achieved by an emphasis on weed control (see section 5.2, page 21).
- A description of each of the vegetation zones is also required.
- Data from the rapid data points should also be provided.

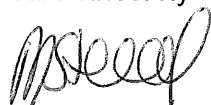
Figure 4 includes four shades of similar coloured blue which is meant to identify BGHF and its condition. For clarity, it is suggested the figure and the legend better differentiates between these. The figure also includes an APZ overlay but it is not clear what vegetation type and condition is located under the APZ overlay. The figure needs to be amended to clarify this as the OEH submission on the planning proposal advised that a map should be provided which shows the location of remnant vegetation where the proposal will impact and result in the loss or modification of the remnant vegetation, including BGHF and STIF. This information could be included in cross hatching on Figure 4.

EES is in receipt of the Powerful Owl Assessment (POA) - dated 17 September 2019 prepared by Keystone Ecological and is seeking internal expert advice on this assessment and will provide Council with advice on the POA once it has been internally reviewed.

Other issues raised by OEH in its submission on the planning proposal need to be addressed. EES seeks Council's views on the OEH submission and requests that Council provides a tabulated response to the OEH submission.

If you have any questions about this advice, please do not hesitate to contact Janne Grose, Senior Conservation Planning Officer, via email [janne.grose@environment.nsw.gov.au](mailto:janne.grose@environment.nsw.gov.au) or [REDACTED]

Yours sincerely



21/10/19

Marnie Stewart

**A/Senior Team Leader Planning  
Greater Sydney Branch  
Environment, Energy and Science**

CC Gina Metcalfe, A/ Director Central Western Department of Planning, Industry and Environment



Our ref: DOC19/857861  
Senders ref: 1/2018/PLP

Ms Megan Munari  
Senior Town Planner  
The Hills Shire Council  
PO Box 7064  
NORTHWEST NSW 2153

Dear Ms Munari

**Subject:** Planning Proposal – 55 Coonara Avenue, West Pennant Hills – EES outstanding issues

Following the OEH submission of 14 June 2019 on the planning proposal, the Environment, Energy and Science Group (EES) has received various additional information in relation to the planning proposal including:

1. Mirvac's response to the OEH submission of 14 June 2019 on the planning proposal with an attached letter from Keystone Ecological - dated 22 July 2019
2. Keystone Ecological letter - dated 9 October 2019 with appended vegetation map and overlay and letter from Bushfire consultant - dated 2 October 2019
3. Powerful Owl Assessment – dated 17 September 2019
4. Mirvac presentation to The Hills Shire Councillors - dated November 2019
5. Addendum letter from Keystone Ecological - dated 11 Nov 2019.

EES notes that the Mirvac presentation to Councillors states that Mirvac has addressed comments made by OEH. EES does not consider that Mirvac has adequately addressed key issues raised by OEH in its submission of 14 June 2019.

EES provided a further response to Council (dated 21 October 2019) on ecological and bushfire information. EES has also reviewed the Powerful Owl Assessment (POA) – dated 17 September 2019 and the Keystone Ecological letter - dated 11 November 2019.

EES provides additional and reiterated comments and recommendations in Attachment A.

If you have any questions about this advice, please do not hesitate to contact Janne Grose, Senior Conservation Planning Officer, via email [janne.grose@environment.nsw.gov.au](mailto:janne.grose@environment.nsw.gov.au) or [REDACTED]

Yours sincerely

*S. Harrison 19/11/19*  
Susan Harrison  
**Senior Team Leader Planning**  
**Greater Sydney Branch**  
**Environment, Energy and Science**

CC Gina Metcalfe, A/Director Central Western Department of Planning, Industry and Environment

## **EES comments on Planning Proposal – 55 Coonara Avenue, West Pennant Hills – EES outstanding issues – November 2019**

The Office of Environment and Heritage (OEH) submission of 14 June 2019 on the planning proposal for 55 Coonara Avenue site raised several issues. The Environment, Energy and Science group (EES) considers the following key issues previously raised by OEH have not been adequately addressed including:

- the protection of critically endangered Blue Gum High Forest (BGHF) and Sydney Turpentine Ironbark Forest (STIF) on the site
- adequacy of flora survey – it is preferable to undertake adequate threatened species surveys at the planning proposal stage
- the Powerful Owl and potential impacts on other native fauna
- the impact of increased residential population and companion animals needs to be assessed
- the draft DCP needs to be amended to use local native provenance species on the site
- future management and ownership of the bushland reserve.

### **Blue Gum High Forest and Sydney Turpentine Ironbark Forest**

The OEH submission raised concern that the development footprint allowed by the planning proposal will result in the modification of almost 1 ha of critically endangered BGHF and STIF. OEH recommended the Site Masterplan be amended to protect remnant BGHF and STIF.

The Mirvac response to the OEH submission advises approximately 0.95 ha of BGHF is proposed to be APZ but notes approximately 0.4 ha is already being managed as an APZ for the protection of existing residential neighbours. This implies that 0.55 ha of BGHF is not currently managed as an APZ on the site and is proposed to be cleared as an APZ.

It is noted that the Keystone letter of 22 July 2019 which is attached to the Mirvac response explains that the 0.95 ha of BGHF does not comprise one large expanse of vegetation but is made up of 14 small and disturbed patches. The Keystone letter states that the impacts on “important vegetation has been significantly reduced from the indicative figure of 0.95 hectares”, though it is noted that a final figure of the amount of vegetation to be impacted is not provided. In the absence of any more detail on the amount of vegetation to be impacted, EES reiterates the previous comment that the BGHF and STIF that is not currently being managed as an APZ on the site should be protected and rehabilitated.

The OEH submission advised a map of the extent of the BGHF and STIF on the site should have been provided. EES subsequently received a map in an email of 9 October 2019, however the map does not adequately address the OEH comment as outlined in the EES submission to Council (dated 21 October 2019) on the further ecological and bushfire information that was received for the site.

### **Adequacy of Flora Survey**

The Keystone Ecological letter of 22 Jul 2019 states that the level of threatened flora survey was considered adequate for the Masterplan. However, EES considers that it is preferable to undertake surveys as early as possible in the planning process, so that decision makers can be aware of all the constraints at the planning proposal stage. Although the Keystone report notes that none of the subject species have a high likelihood to occur, EES considers there are some species that could potentially occur given the habitats on site, in particular *Epacris purpurascens* var. *purpurascens*, *Pimelea curviflora* var. *curviflora* and *Syzygium paniculatum*.

## Powerful Owl

The OEH submission raised concern about potential impacts on the Powerful Owl. In response, a Powerful Owl Assessment (POA) prepared by Keystone Ecological (dated 17 September 2019) has been provided. The EES Powerful Owl expert has reviewed the POA and the following comments are provided:

1. The EES expert considers the survey carried out for Powerful Owls is adequate.
2. The EES expert supports the ameliorative measures in the POA to use of fast-growing species to create a dense canopy near roosting and nesting habitat and weed management following McNabb.

Issues that still need to be resolved:

3. The EES expert does not support the calculation of local population. The spatial analysis pools data from multiple years initially to assume 16 territories, however data from only a single year should be used due to birds moving about the habitat and territories boundaries always being in flux. The POA also states there would be 12 successful nests using 2015 data, but it has calculated 32 parents (page 48). However, using the POA methods would result in 12 pairs, 24 parents, 14.4 offspring, 10% mortality, leading to a total of 35 total birds (35.56) including 4 floaters (10% of total population).
4. Construction timing. The construction timing, which is identified as an ameliorative measure in the POA is incorrect and needs to be amended (page 16). The POA recommends restrictions are put in place around construction between September and February, however the breeding season is April to October. This could be addressed as a condition of consent for any future DAs.
5. Noise impacts. The ameliorative measure for a reduction in noise is supported by the EES expert, however it is unclear how Council proposes to effectively implement restricting activities in the recreational areas that have the potential to disturb the Powerful Owls through amplified noise. The ameliorative measure for a reduction in noise is necessary to assist with pairing, choosing a nest site, breeding and fledging. It is not as important over the summer. Alternatively, to ensure the nest is always protected from noise impacts, the EES expert recommends having the noise restriction (60 minutes prior to sunset through to 30 minutes after sunrise) in place all year. Council needs to advise how this could be implemented.
6. Sports Field. OEH raised concern that the Planning Proposal proposes to use the existing open grass area in the south-east corner of the site as a synthetic soccer field and advised that the proposed location of the soccer field should be assessed in terms of the potential impacts on the resident Powerful Owls including impacts from lighting and the use of synthetic turf. The Mirvac presentation to Councillors confirms that the Voluntary Planning Agreement (VPA) agreed with Council includes a FIFA standard synthetic turf soccer field.

The EES expert strongly supports the OEH comment that the impact of the sports field development needs to be taken into consideration as part of this proposal. The sports field is directly connected to this development and is a known future impact to the breeding territory in question and may result in the loss of the pair of Powerful Owls after completion of this development.

7. Buffer distance. It is agreed that the buffer distance of 100 metres for nest tree #2 is not currently met and yet it is still successful. However, this is in the context of a very quiet, day use business district, not a housing development. Modification of the buffer for this nest may be justified, but only provided strict noise restrictions are in place for duration of the development and established vegetation buffers are in place (i.e. 4-5m tall buffering vegetation) prior to occupation in this area.

8. Fencing of bushland reserve: OEH recommended that the bushland reserve is fenced. The EES expert supports the protected bushland area being fenced.
9. Pathways and walking trails: The EES expert also suggests there is some rationalisation in the number of the formed trails that exist at the site.

The OEH submission advised that details are required on the number of existing walking trails/pathways and their location within the bushland reserve and recommended that the existing pathways/walking trails are closed and re-vegetated and any new pathways/walking trails are located outside the bushland reserve to minimise impacts caused by people and companion animals disturbing the critically endangered ecological communities, native flora and fauna.

In terms of protecting biodiversity at the site, it is important that impacts caused by people and companion animals are minimised.

10. Control of cats and dogs – The OEH submission sought clarification on how the proposed ameliorative measures relating to the prohibition of free ranging cats and the control of dogs would be implemented and recommended the bushland reserve is fenced to prevent dogs and cats from having access.

The POA recommends as an ameliorative mechanism that dogs are always to be under control, but especially near the bushland areas. It notes there are currently no controls imposed on dogs on site, with locals using the bushland for leash-free exercise (page 16).

The EES expert considers controlling off-leash dogs as a means of protecting Powerful Owls could be applied, but it is a lower priority ameliorative measure and it should not take away from other measures. Fencing and restriction of animals from the reserve would provide greater protection than the regulation of leashed dog walking and cat ownership which would be difficult to enforce and likely to fail.

It should be noted that predation of Powerful Owl fledglings by foxes, dogs and cats is listed as a threat to Powerful Owls:

<https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10562>

### **Environmental Protection Zone**

The OEH submission recommended additional areas of the site are zoned Environmental Conservation (E2) to protect the critically endangered BGHF and STIF. EES recommends that no BGHF and STIF be cleared on site and is zoned E2. Any new APZs should be accommodated within the development area.

### **Draft DCP - Use of local native species**

The OEH submission recommended the draft DCP is amended to include provisions for the development site to use a diversity of native trees, shrubs and groundcover species from the BGHF and STIF where revegetation is required rather than use non-local native species and exotic plant species in the street planting, development lots and site landscaping.

### **Future ownership and management of bushland reserve**

EES considers the future ownership and management of the bushland reserve is an outstanding issue that needs to be resolved as part of the planning process for the site to ensure it will be adequately protected and conserved. The Mirvac response to the OEH submission states that the bushland reserve is to be dedicated to State ownership. The future ownership and management of this site should be resolved prior to finalisation of the planning proposal.

**END OF SUBMISSION**



Our ref: DOC20/132001  
Senders ref: 1/2018/PLP

Ms Gina Metcalfe  
A/Director, Central (Western)  
Place, Design and Public Spaces  
Department of Planning, Industry and Environment  
Level 4, 10 Valentine Avenue  
PARRAMATTA NSW 2150

Dear Ms Metcalfe

*Gina*

**Subject:** Planning Proposal – 55 Coonara Avenue, West Pennant Hills – updated vegetation zone mapping

Thank you for your email of 4 February 2020 seeking comments on the updated vegetation zone mapping for this planning proposal. The Environment, Energy and Science Group (EES) has reviewed this mapping and provides its comments and recommendations in Attachment A

EES notes in the email trail that Mirvac is preparing other responses/information. EES requests it is also provided with a copy of this information to review, including:

- Mirvac's response to the Powerful Owl issues raised by EES in the its submission of 19 November 2019 (DOC19/857861).
- the impacts on Blue Gum High Forest (BGHF) and Sydney Turpentine Ironbark Forest (STIF). Mirvac states that the impacts are less than previously estimated but no details on the area (ha)/location of the reduced impact have been provided
- an overlay of asset protection zones (APZs). Mirvac wants to reach a consensus on the vegetation mapping before it does this. EES requests it is provided with the APZ overlay
- a response to issues raised by EES with regards to the soccer field.

If you have any questions about this advice, please do not hesitate to contact Janne Grose, Senior Conservation Planning Officer, via email [janne.grose@environment.nsw.gov.au](mailto:janne.grose@environment.nsw.gov.au) or [REDACTED]

Yours sincerely

*S. Harrison 21/02/20*

Susan Harrison  
**Senior Team Leader Planning  
Greater Sydney Branch  
Environment, Energy and Science**



## EES comments on Planning Proposal – 55 Coonara Avenue, West Pennant Hills – updated vegetation zone mapping

The Environment, Energy and Science Group (EES) has reviewed the updated vegetation mapping and provides the following comments:

### Updated Vegetation Zone Mapping

EES comment (21 October 2019 correspondence)	EES comments on the adequacy of Keystone report (4 February 2020)
All vegetation across the site to be mapped	Adequate
Description of each of the vegetation zones	More detail should be provided on the BGHF and STIF vegetation zones, in addition to the information on sheet 2. This should include structural information including a list of the dominant species in each stratum, so the reasoning behind the classification of the vegetation zone as BGHF or STIF is clear. It should also include some description of each of the 'low', 'moderate' and 'good' condition types, e.g. by providing details on the degree of weed invasion and major weeds. The area of each vegetation zone should also be provided.
Data from the rapid data points	Not provided. Please provide

EES in its submission of 21 October 2020 to Council requested an overlay map be provided which shows the areas of native vegetation, that will be impacted by development or the APZ, the vegetation type and condition. EES repeats that a map should be provided which shows the location of remnant vegetation where the proposal will impact (both development and APZ) and result in the loss or modification of the remnant vegetation, including BGHF and STIF.

EES requests a copy of the methodology that was used to prepare the vegetation mapping.

EES repeats that the BGHF and STIF that is not currently being managed as an APZ on the site should be protected (see EES submission to Council of 19 November 2019). EES also reiterates its advice in relation to the adequacy of the threatened flora survey. As previously advised EES considers:

- it is preferable to undertake flora surveys as early as possible in the planning process, so decision makers can be aware of all the constraints at the planning proposal stage
- there are some threatened species that could potentially occur given the habitats on site, in particular *Epacris purpurascens* var. *purpurascens*, *Pimelea curviflora* var. *curviflora* and *Syzygium paniculatum*.

Mirvac needs to address this.

### Overlay of the final vegetation mapping with the proposed land use zoning

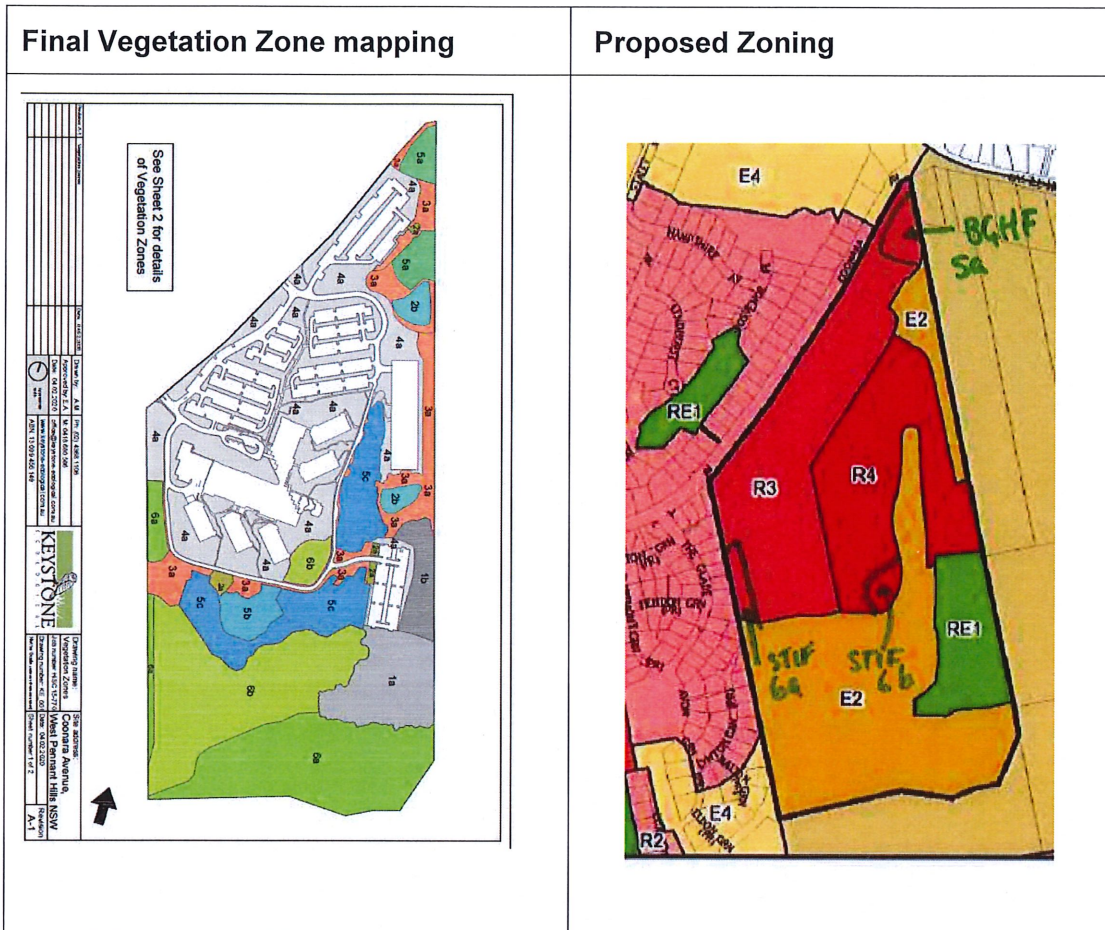
EES recommends Mirvac provides an overlay of the final vegetation map with the proposed land use zoning and provides details on the area (ha) of BGHF and STIF that is proposed to be zoned R3 (Medium Density Residential) and R4 (High Density Residential).



Comparing the proposed land zoning map from the Planning Proposal report with the final vegetation mapping:

- a patch of BGHF (mapped as 5a on the vegetation map) and patch of STIF (mapped as 6a on the vegetation) are proposed to be zoned R3
- a patch of STIF (mapped as 6b on the vegetation map) is proposed to be zoned R4 (see maps below).

Clarification is required as to whether Mirvac propose to amend the land use zoning based on the updated vegetation map. It appears that these three remnant patches could be included in the E2 zoning.



#### Future ownership and management of bushland reserve

EES repeats that it considers the future ownership and management of the bushland reserve is an outstanding issue that needs to be resolved as part of the planning process for the site to ensure it will be adequately protected and conserved.

It is noted that Mirvac in its email to DPIE of 4 January 2020, wants the matters of walking trails, public access and fencing resolved. These matters need to be negotiated with Forestry, or whichever public authority takes on the future ownership and management of site. EES expectation is that the site is primarily managed for conservation.

END OF SUBMISSION





Our ref: DOC20/132001

Ms Elizabeth Kimbell  
Place, Design and Public Spaces Group  
Department of Planning, Industry & Environment  
Level 4, 10 Valentine Avenue  
PARRAMATTA NSW 2150

Dear Ms Kimbell

**Subject:** Planning Proposal – 55 Coonara Avenue, West Pennant Hills – latest information provided by Mirvac on 27 March 2020

Thank you for your email of 30 March 2020 seeking comments on the latest information provided by Mirvac on 27 March 2020.

The Environment, Energy and Science Group (EES) has reviewed this additional information and its comments and recommendations are provided in Attachment A

If you have any questions about this advice, please do not hesitate to contact Janne Grose, Senior Conservation Planning Officer, via email [janne.grose@environment.nsw.gov.au](mailto:janne.grose@environment.nsw.gov.au) or [REDACTED]

Yours sincerely

A handwritten signature in black ink that reads 'S. Harrison'.

02/04/20

Susan Harrison  
**Senior Team Leader Planning**  
**Greater Sydney Branch**  
**Environment, Energy and Science**

**EES comments on Planning Proposal – 55 Coonara Avenue, West Pennant Hills – the latest information provided by Mirvac on 27 March 2020**

The Environment, Energy and Science Group (EES) has reviewed the latest information provided by Mirvac on 27 March 2020, including:

- Mirvac letter to DPIE (dated 27 March 2020)
- Attachment 1 – RDP – additional information
- Attachment 2 – Keystone Ecological letter to Mirvac (dated 27 March 2020)
- Attachment 3 – Land use Zone and APZ overlay on vegetation plan
- Attachment 4 – Land use zoning comparison.

EES in its submissions of 19 Nov 2019 and 21 February 2020 raised the following issues.

1. structural information, including a list of the dominant species in each stratum, a description of each of the 'low', 'moderate' and 'good' condition types, degree of weed invasion and major weeds had not been provided.

Attachment 1 of Mirvac's latest information provides this adequately, except for the following:

- Attachment 1 states that there is an associated table that explains the modified Braun-Blanquet scores. This associated table has not been provided. EES requests it is provided with a copy of this table. Once this has been provided, this matter can be closed.
- RDP4 (on fill with dense privet) has been mapped in 5c (good quality BGHF on natural ground) instead of for example zone 3a (planted and regrowth on non-natural ground). Similarly, RDP5 (on spoil/batter from road with dense privet) has been mapped in 6b (good quality STIF on natural ground) instead of for example zone 3a. EES assumes these areas have been categorised as 5c and 6b respectively in line with the comment in Attachment 2 'where ambiguity existed, areas were assigned to a higher environmental category'. This matter can be considered closed.

2. Threatened flora surveys need to be undertaken for 3 three threatened species, *Epacris purpurascens* var. *purpurascens*, *Pimelea curviflora* var. *curviflora* and *Syzygium paniculatum*.

Attachment 2 of Mirvac's latest information provides more discussion on this issue, and it was discussed in the meeting of 18 March 2020. EES still does not consider that the surveys for these species were 'targeted surveys' in the strict use of that term, but EES considers the risk of these species being impacted is low, if they are present, so EES considers this matter closed.

3. Impacts on Powerful Owl

EES is not convinced that the proposal will not have an impact on this species, particularly from:

- increased noise and light from the sports field and development
- the proposed buffer distance to nest tree number 2. Bain (2014) recommends a 100 m buffer around nest sites while Attachment 2 indicates a buffer distance of between 84-113 m is proposed (page 7).

EES does not consider this issue to be 'closed' (as stated in the Mirvac letter of 27 March 2020), EES considers the potential impact on the Powerful Owl is a significant issue and recommends the potential impacts be addressed by the planning proposal.

In terms of protecting the Powerful Owl, EES does not consider the proposed location of the sports field / RE1 zoned land is appropriate. EES recommends:

- the sports field / RE1 zoned land (shown as 1a on Attachment 3) is relocated elsewhere on the site. EES suggests this area of RE1 land is relocated to the north western side of the site, which is currently proposed to be zoned R3 and adjacent to existing residential development
- the '1a' section of RE1 zoned land (as shown on Attachment 3) is zoned E2. This area could be rehabilitated and revegetated with local native species from the relevant local native vegetation community EES notes the substrate of this proposed RE1 land is still natural ground which will assist in the rehabilitation of native species (Figure 1b in Attachment 2).

#### 4 Other issues: fencing the bushland reserve, ownership of the bushland, and paths within the remnant bushland

EES considers the issues such as fencing the bushland reserve, the restriction of pathways in the reserve and the ownership of the bushland, have been adequately addressed at the Planning Proposal stage.

#### 5. Overlay of vegetation map with zoning and provide details on areas to be zoned R3, R4 and E2

Attachment 3 (vegetation map with zoning/APZ overlay) indicates a total of 2319m<sup>2</sup> of critically endangered ecological community (CEEC) is proposed to be zoned R3 and R4 for residential development/APZ purposes including:

- 685m<sup>2</sup> and 623 m<sup>2</sup> (or 1308m<sup>2</sup> in total) of 5a (regrowth BGHF (post 1943 and/or 1961) on natural ground in very low condition) is to be zoned R3 / APZ
- 96m<sup>2</sup> of 5c (old regrowth/remnant BGHF on natural ground in moderate to good condition) is to be zoned R3/APZ
- 457m<sup>2</sup> of 5c (old regrowth/remnant BGHF on natural ground in moderate to good condition) is to be zoned R4/APZ
- 458 m<sup>2</sup> of 6b (old regrowth/remnant Sydney Turpentine-Ironbark Forest (STIF) on natural ground with natural understory in moderate condition) is to be zoned R4/APZ

EES recommends the proposed development footprint/ APZ be amended so it does not impact 0.23ha of CEEC.

#### 6. APZ impact on BGHF and STIF

The Biodiversity Assessment Report previously indicated 0.95 ha of Blue Gum High Forest (BGHF) would be impacted by the APZ. The EES submission of 21 February 2020 reiterated that the BGHF and STIF that is not currently being managed as an APZ on the site should be protected.

The Keystone letter of 27 March 2020 (Attachment 2) now confirms the total APZ impact on CEEC equates to 0.2314 ha, comprising:

- 1856m<sup>2</sup> (or 0.1856 ha) of BGHF located within the APZ which consists of:
  - 1303m<sup>2</sup> of regrowth BGHF (post 1943 and/or 1961) on natural ground in very low condition is proposed to be located within the APZ (5a)
  - 553m<sup>2</sup> of old regrowth/remnant BGHF on natural ground in moderate to good condition is proposed to be located within the APZ (5c)
- 458 m<sup>2</sup> (or 0.0458 ha) of old regrowth/remnant Sydney Turpentine-Ironbark Forest (STIF) on natural ground with natural understory in moderate condition (6b) located within the APZ.

Attachment 2 notes "the area of impact on the EEC's has been greatly reduced from the initial conservative estimate of 0.95ha to only 0.23ha within the edges of the APZ".

Attachment 2 includes a map previously requested by EES which shows the vegetation zone and its condition and the proposed location of the APZ. While the reduction in the potential impact of

the APZ on BGHF and STIF is noted, EES considers the APZ should be located within the development footprint and not impact 0.23ha of CEEC.

1. Amendment to land use zoning map based on updated vegetation map

In its submission of 21 February 2020, EES previously sought clarification as to whether Mirvac proposed to amend the land use zoning map based on the updated vegetation map. Attachment 4 shows additional areas on site are now proposed to be zoned E2 while other areas previously proposed to be zoned E2 are now to be zoned for residential purposes based on the updated vegetation mapping.

**EES recommendations to achieve protection of the biodiversity values on the site**

1. In terms of protecting the Powerful Owl, EES recommends:
  - the sports field / RE1 zoned land (shown as 1a on Attachment 3) is relocated elsewhere on the site, and EES suggests it is relocated to the north western side of the site which is currently proposed to be zoned R3 and adjacent to existing residential development
  - the '1a' section of RE1 zoned land (as shown on Attachment 3) is zoned E2 for consolidation with the adjoining bushland reserve lands. This would allow for the land to be rehabilitated and revegetated and provide a better area to boundary ratio. This would mean biodiversity values would be less prone to external effects.
2. The proposed development footprint/ APZ is amended so it does not impact 0.23ha of CEEC.

**END OF SUBMISSION**