

RESPONSE TO ENVIRIONMENTAL ASSESSMENT SUBMISSIONS MP06_0135 Proposed Tourist & Residential Development at Comberton Grange, South Nowra, NSW

Appendix 1:

Response from Kevin Mills & Associates on issues raised in DoPI and agencies' submissions (27 November 2013)

COMBERTON GRANGE SHAOLIN TEMPLE AND ASSOSIATED DEVELOPMENT RESPONSE TO ISSUES RAISED IN SUBMISSIONS TO THE CONCEPT PLAN

Kevin Mills & Associates

27 November 2013

1. Submission from OE&H dated 04.12.2012

The issues raised in this submission that are within our area of expertise are addressed below.

Riparian vegetation protected/ rehabilitated

The riparian areas are along Currambene Creek and the watercourses through the pine plantation, namely Georges Creek and its tributary. The development is well away from Currambene Creak and its 30 metre public reserve. The watercourses through the old pine plantation are integrated into the development across that land, each has a 40 metre setback on both sides, within which the native vegetation is proposed to be retained, where present, and enhanced through appropriate management activities. (Figure 1)



Figure 1: Wetlands & riparian corridors (Figure 4 in Biodiversity Assessment Report)

Saltmarsh and mangroves protected

These areas of saline habitat are well away from the development and will not be impacted in any way. It is proposed to manage these areas to improve their condition over time.

No significant disturbance to EECs

The EECs present are all types of wetland and are mostly away from the developed areas. The riparian areas through the pine plantation are likely to meet the criteria for Swamp Sclerophyll Forest; these areas are within a protected corridor through the developed land, as noted above. The key to maintaining and enhancing these EECs is through appropriate management.

Maintain habitat corridors, justify reduction in corridor width

The concept plan shows intrusion by the golf course into the mapped habitat corridor. The provision of an access road through the area will not seriously compromise the corridor if constructed sensitively.

Zone eastern section for national park (E1)

The objective is to ensure that this forested land is protected and managed appropriately for conservation values. As long as this objective is achieved in the long term, the zoning may not be so important. We recommend that at least a Voluntary Conservation Agreement covering the land be entered into.

Zone riparian areas as E2 (50 m width beside Currambene Creek and 30 m beside other creeks)

We understand from the proponent that these setbacks are achieved or exceeded in the proposed plans. Identifying the appropriate zoning for these areas is not within our area of expertise.

Proper plan of management required for the site to be prepared with appropriate funding arrangements

This proposal is currently at the concept stage. The preparation of such a management plan and identification of funding arrangements is more appropriate at the DA stage. Alternatively, it could be a condition of approval. As the details of the development are only know in outline, management plans are not appropriate at this stage.

2. Attachments 'A' to OE&H dated 04.12.2012

Attachment 'A' to the OE&H letter contains detailed notes on the biodiversity assessment report; the key matters are addressed below.

Biodiversity mapping should be over-layed with the development footprint

A map has been prepared and is attached hereto. Note that because of scale differences over-laying the vegetation map and the development has proved difficult. We are assured that the residential area above Currambene Creek and Hotel are on the cleared land and not in the forest nearby.

Refer to:

- Figure 2: Distribution of plant communities on the site (Figure 6 in Biodiversity Assessment Report)
- Figure 4: Biodiversity map overlayed into Masterplan.



Figure 2: Distribution of plant communities on the site

Additional background information on wildlife records and survey effort should be provided

Our report contains all of the threatened biota records we could find. It is unclear what is meant by 'background information'.

With regard to survey effort; we point the reader to the following information contained in our report.

- Table 10 in the report that sets out the survey effort for relevant threatened species during the surveys in 2009 and 2010.
- Appendix 1 that sets out the dates, times and activities undertaken during the survey period; this covered all surveys that were undertaken in 2009-2010.
- The graph at Figure 6 that indicates that the bird surveys have achieved a satisfactory level of survey.
- Page 32 that sets out the total number of species and individuals recorded; this is a high level of survey effort. We quote from the report: "The number of indigenous species recorded is large, and includes 28 species mammal, 103 species of bird, 9 reptiles and 6 frogs. During the surveys, a total of over 2,500 individual fauna records were made in and adjacent to the study area."
- Appendix 4 in the report summaries the orchid surveys. These 18 surveys were over 12 days at an appropriate time of year, employed methods approved by OE&H and covered the area of potential impact between the pine plantation and the cleared land above Currambene Creek.
- Appendix 6 contains the results of 39.9 hrs of dedicated observation over 47 bird surveys. Numerous other survey sheets are provided for the other fauna groups n this appendix.

For a concept plan, we believe that the amount of survey effort is more than enough to make a decision about whether the development should be permitted to proceed to the design and development application stages.

Table 13 in report too general, needs more detail

The proposal at present is at the concept stage. We would strongly recommend that the matters covered in Table 13, and indeed within the whole of Section 4.2 of the report, be revisited during the more detailed design and development application stages to address the impact on threatened species in more detail.

Survey effort to be detailed in Table 10

We have outlined above the various places in the report where survey effort has been documented. Table 10 along with this additional information surely provides enough information on survey effort.

Location of survey sites should be shown on map

A map has been prepared and is attached that shows the survey sites as recorded by GPS and documented in the report. Refer to Figure 3.



Figure 3: Location of recorded Threatened Animal Species (Figure 7 in Biodiversity Assessment Report).

Survey effort for following not detailed: Eastern Pygmy Possum, Green and Golden Bell Frog, Giant Burrowing Frog

These species were specifically targeted, even though they are not likely to occur on the development area. Frog searches were undertaken and trapping was used for the Pygmypossum.

Map and assess hollow-bearing trees in and adjacent to development

For the concept stage it is not considered necessary to document every single matter in relation to flora and fauna. In fact, until the final design of the development is known it would be of little value to go out and count hollow-bearing trees that may or may not be within the footprint of the development. We believe that this type of information is more appropriately gathered and assessed at the DA stage.

Map YBG feed trees in and adjacent to development

No feed trees were found on the property and no Yellow-bellied Gliders were found there; there was one record of calling gliders to the north-east of the pine plantation (in state forest). One feed tree was found along the entry road from the highway, but well away from the property. Grey Gum, a favoured feed tree, is almost completely absent from the property.

Survey for GGBF and GBF and need to determine if breeding by GBC or GGC occur on development site

The development area is very unlikely to support these species. The wetlands are all avoided by the development and are proposed to be protected and subject to a conservation management plan.

Camera traps better for White-footed Dunnart, Spotted-tailed Quoll, Eastern Pygmy-Possum

Targeted trapping was used for these species.

Detail orchid survey methods

Appendix 4 sets out the results of the orchid surveys and further formation is found in the report at Section 3.1.7; however, we did neglect to describe the methods, which are those approved by OE&H (see below).

The method involves identifying suitable habitat for the terrestrial orchids, i.e. generally no shrubs to low density of shrub cover, and walking transects back forth across the area five (5) metres apart. The surveys are undertaken every two weeks during the flowering season of the target orchids. The area searched in this case was the land between the pine plantation and the clearing above Currambene Creek and along the edge of the Spotted Gum Forest to the south.

Calochilus pulchellus to be assessed (listed since the original surveys)

This terrestrial orchid occurs in wet areas in heathland growing on sandstone (NSW Scientific Committee 2008; Stephenson 2011). There is no habitat suitable for this species on the development site and probably none on the whole property; see vegetation map in report.

Threatened orchids could still persist in the old pine plantation

The probability of these rare orchids occurring in highly disturbed land that has had a pine forest on it for decades appears slim. It seems even less likely given the dense shrub growth that dominates the land today. Good habitat adjacent to the pine area that was surveyed did not produce any of the rare orchids (see above).

3. Shoalhaven City Council submission dated 21 Dec. 2012 and other matters

The council raises very similar issues to the OE&H submission and these are dealt with above.

Council notes that further environmental assessment would be required for any future managed facilities within the eastern portion of the site as this area has not been surveyed and such activities and associated impacts have not yet been assessed.

Should the camping facilities proceed, it would require an investigation of the impacted portions of the site.

4. Letter from DP&I dated 13 May 2013

The letter from eh Dept. summaries their position on this development and mostly reflects the matters raised in the submissions dealt with above. We have dealt with the key issues here as DP&I is the determining authority and this letter is the critical document to gain approval for this development.

Eastern forest to be dedicated as national park

We have dealt with this matter above.

Prepare a plan of management for the above area and the wetlands, and address interface between development and the natural areas

As we have opined above, preparation of such a plan now is pre-mature; we certainly agree that the above matters should be covered and that the plan should be prepared as a part of the DA documentation.

Mapping of wetlands and riparian areas needs to be prepared

As noted above, the maps have been prepared and are attached. Refer to Figure 1.

The use of the land near the quarry needs to be clarified

Note our comment above about the gardens and the tracks shown on the plan; uses previously shown/described for the quarry area are now excluded from the current plans. Should this change, a detailed survey and assessment would need to be undertaken.

Supplementary report on biodiversity required, based on comments from OE&H and SCC

This report fulfils the end for the further information sought by OE&H and SCC.

References

NSW Scientific Committee (2008). Final Determination to list *Calochilus pulchellus*. The Committee, Hurstville.

Stephenson, A. W. (2011). Orchid species of the Shoalhaven. The Author, Nowra, 54 pp.



Figure 4: Biodiversity map overlayed into Masterplan.