



Office of  
Environment  
& Heritage

Your reference: MP10\_0230  
Our reference: DOC13/7848  
Contact: Richard Bonner, 9995 6833

Ms Karen Jones  
Director – Metropolitan & Regional Projects South  
Department of Planning & Infrastructure  
GPO Box 39  
SYDNEY NSW 2001

Attn: Mark Brown

Dear Ms Jones

I refer to your letter of 5 March 2013 inviting comments from the Office of Environment and Heritage (OEH) on the Environmental Assessment (EA) for the Woollooware Bay Town Centre Stage 1 – Retail/Club Precinct project, 461 Captain Cook Drive, Woollooware.

OEH's previous (22 November 2011) advice noted the Concept Plan EA was primarily based on a desktop analysis which acknowledged the need for further assessment during subsequent stages of the project to more accurately determine the potential impacts on adjacent sensitive habitats from light spill, increased access, noise and stormwater runoff.

OEH recommended a range of approval conditions to ensure these impacts were adequately assessed and managed. Most of these were included in the Planning Assessment Commission's 27 August 2012 Concept Plan approval.

OEH also recommended that baseline surveys be undertaken over 12 months in the estuarine areas along the northern boundary of the site to determine the significance of this area as habitat for threatened/migratory birds and microbats prior to any further development applications being submitted. The Town Centre EA includes a Microbat Monitoring Report which outlines additional surveys undertaken for microbats in the adjoining mangroves, however, no bird surveys were undertaken, despite the Director-General's Requirement (DGR) that the EA *'include a detailed survey of migratory bird habitat, and determine whether and how they are using the site and adjoining areas, and assess any potential impact or threat to the population.'*

The following comments are provided in relation to some of the Town Centre EA report appendices:

**Microbat Monitoring Report (Appendix S)**

- Surveys were time limited (3 days involving 1.5 hours in the morning and 1.5 hours in the evening) and would not have detected the full range of species and number of animals using the estuarine area.
- Anabat detectors were not located in areas of greatest potential microbat activity within the mangroves.
- Contrary to DEC's 2004 *draft Threatened Biodiversity Survey and Assessment Guidelines*, no trapping was undertaken.

- It is not clear whether the aerial extent of the visual searches and hollow watching undertaken as part of this study was adequate to accurately detect the level of microbat use of this habitat.
- While the importance of the habitat is likely to have underestimated, the surveys confirmed microbats are roosting and possibly breeding in the estuarine areas immediately to the north of the site.
- OEH supports the proposed mitigation measures and recommends they be incorporated into any approval conditions.

#### **Vegetation Management Plan (Appendix U) and Landscape Master Plan (Appendix H)**

- Within the required 35 to 40m buffer is proposed a 3m wide shared foreshore pathway, timber deck benches, seating terraces, part of a raised spillout deck, picnic facilities, bike racks, a runoff bio swale and areas of turf. In addition, access into the mangroves from the foreshore pathway is proposed to be upgraded. These developments will increase human activity and the subsequent disturbance of adjoining estuarine areas. OEH recommends the recreational uses proposed within the buffer area be reduced and the upgrade of the mangrove boardwalk be reconsidered.
- Species which occur within the Swamp Oak Floodplain Forest Endangered Ecological Community and would naturally occur adjacent to estuarine areas, are proposed to be planted within the buffer area. The Landscape Master Plan indicates the 'vegetated riparian buffer' will comprise of low ground cover vegetation. OEH recommends the planting scheme be reviewed so that the buffer area is more densely planted with suitable trees and shrubs that can screen additional noise and light generated by activities associated with the development. This would more effectively enable this area to function as a buffer to the adjoining estuarine environment.

#### **Review of Noise, Light and Bird Strike Potential (Appendix T) and Noise Impact Assessment (Appendix V)**

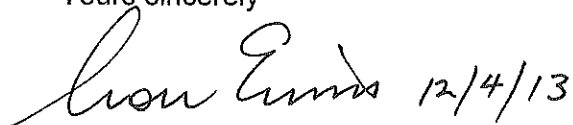
- OEH considers the impacts of construction and operational noise from the Town Centre proposal on fauna habitat in the adjoining estuarine area is uncertain because there has not been sufficient survey work in the estuarine area to ascertain its importance as fauna habitat and the effects of noise on animals is poorly understood.
- Noise levels on the northern side of the Town Centre proposal closest to the estuarine area have not been approximated (not measured). With the additional absence of meaningful data on the biodiversity values of the adjoining area, OEH recommends a precautionary approach to managing construction and operational noise.
- OEH supports the recommendations of the Noise, Light and Bird Strike Potential (section 2.5) and the Noise Impact Assessment (sections 10.3 – 10.4 and 10.6) reports for managing construction noise and recommends they be incorporated into any approval conditions and into an Noise Management Plan (NMP) as part of the Construction Environmental Management Plan.
- OEH also recommends the treatments proposed in section 7 of the Noise Impact Assessment be included in an NMP as part of an Operational Management Plan to reduce any impacts of operational noise on the adjoining estuarine areas. This together with a denser screen of plantings in the proposed buffer area should assist to ameliorate operational noise impacts from plant and equipment at the Town Centre.
- Light spill from the Town Centre has the potential to impact on nocturnal animals such as the Large-footed Myotis and other fauna using the estuarine habitats adjacent to the site. The Review of Noise, Light and Bird Strike Potential (RNLBSP) report only considers the impacts of artificial light on microbats. OEH recommends that the measures to reduce light spill outlined in section 3.2 of the RNLBSP report be incorporated into a Lighting Management Plan required as part of any approval for this proposal. As discussed above,

OEH's recommendation regarding the buffer area could assist in more effectively screening light impacts from the Town Centre.

- OEH supports the measures outlined in section 4 of the RNLBSP report to reduce the potential for bird strike and recommends they also be included in any approvals for this proposal. Given the scale of the development and its proximity to important migratory/shorebird habitat, OEH reiterates the need for a Bird Management Plan to monitor and respond to any ongoing impacts from the Town Centre proposal on this habitat.

If you have any queries regarding this advice please contact Richard Bonner on 9995 6833.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Lou Ewins', followed by the date '12/4/13'.

**LOU EWINS**  
**Manager Planning & Aboriginal Heritage**  
**Regional Operations, Metropolitan**  
**Office of Environment and Heritage**