



Office of
Environment
& Heritage

Our reference: DOC12/28279
Your reference: MP09_0131
Contact: Liz Peterson 9995 6841

Mr Michael Woodland
Director
Metropolitan and Regional Projects South
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Att: Mr Robert Byrne

Dear Mr Woodland

I refer to your letter received by the Office of Environment and Heritage (OEH) on 11 July 2012 inviting comments on exhibition of the Preferred Project Report for a mixed use development consisting of residential (approximately 1,010 lots, together with 200 retirement dwellings), commercial, industrial (approximately 40ha) and retail development (approximately 16ha), public open space areas, new recreational facilities, internal road network, environmental management, conservation areas and riparian corridors for the Tallawarra Lands (MP09_0131) at Yallah.

As the Department of Planning and Infrastructure (DoP&I) is aware, OEH has provided detailed advice on the Concept Plan application in correspondence dated 22 September 2009, 22 March 2011 and 7 November 2011.

OEH has reviewed the Preferred Project Report and revised Statement of Commitments and provides detailed comments in Attachment 1 in regard to the biodiversity, floodplain risk management and Aboriginal cultural heritage.

In regard to floodplain risk management, OEH has previously provided detailed flood related advice to Wollongong City Council and DoP&I to assist in addressing complex flood related issues. Many of OEH's issues still remain unaddressed. As explained in our last submission, OEH has significant concerns with the current proposal as it is unclear whether there is adequate information regarding flood behaviour to enable the DoP&I to be satisfied that the:

- proposal will ensure that future development will be protected from flood damage to a reasonable flood standard;
- risks to future occupants of the floodplain and development have been adequately considered and managed; and
- proposal is being considered in a manner consistent with the NSW Government's flood prone land policy as set out in the *Floodplain Development Manual* (2005).

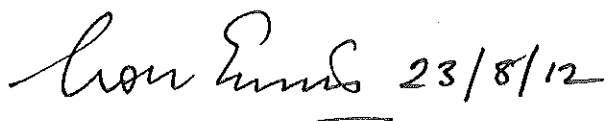
OEH reiterates that DoP&I should be satisfied that it has satisfactorily considered all relevant matters relating to development on flood prone land in line with the NSW Governments *Floodplain Development Manual 2005* prior to approval of the proposed development.

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In relation to biodiversity, OEH reiterates that the certain elements of the proposal should be re-evaluated to avoid impacts on Illawarra Lowlands Grassy Woodland EEC and *Chorizema parviflorum*. OEH is also of the view that the security and management arrangements for the proposed offset areas has still not been resolved and therefore remains unable to support the offset proposal as currently proposed.

If you have any queries, please contact Liz Peterson, Senior Regional Operations Officer on 9995 6841.

Yours sincerely

A handwritten signature in black ink that reads "Lou Ewins" followed by the date "23/8/12". The signature is written in a cursive style.

LOU EWINS
Manager Planning and Aboriginal Heritage
Conservation and Regulation, Metropolitan
Office of Environment and Heritage

Attachment 1 - OEH comments on the Preferred Project Report for the Tallawarra Lands Concept Plan

Threatened Biodiversity Assessment

Avoidance of impacts on Illawarra Lowlands Grassy Woodland EEC

As outlined in OEH's previous submissions, Illawarra Lowlands Grassy Woodland is endemic to the Illawarra, with an estimated 5-15 per cent of its original extent remaining. Consequently, this vegetation type is listed as an endangered ecological community (EEC) under the *Threatened Species Conservation Act 1995* (NSW) (TSC Act). With only 47ha currently represented within conservation reserves, Illawarra Lowlands Grassy Woodland EEC is the highest priority vegetation type in the Illawarra, as identified in regional studies such as the *Illawarra NRM Action Plan* (SRCMA 2010) and the *Illawarra Biodiversity Strategy* (Illawarra Councils 2011).

Illawarra Lowlands Grassy Woodland EEC on the subject site is known to provide habitat for a number of threatened species and populations listed under the TSC Act and *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) including, but not necessarily limited to, *Chorizema parviflorum*, Illawarra greenhood orchid (*Pterostylis gibbosa*), scarlet robin (*Petroica boodang*), grey-headed flying fox (*Pteropus poliocephalus*) and six threatened microchiropteran bat species.

The *Ecological Assessment* (ELA 2011) and ELA letter dated 22 February 2012 indicates that the proposed development will result in the removal of 4.37 ha of endangered ecological communities. Of this direct impact, 75 per cent or 3.28 ha will be from Illawarra Lowlands Grassy Woodland EEC, for the development of access roads (1.50 ha), residential lots (1.01 ha) and employment land (0.75 ha).

In its last submission, OEH recommended the EA should canvass and evaluate all reasonable alternatives to the proposed precinct boundaries in the south-western edge of the Northside Precinct to demonstrate that impacts on Illawarra Lowlands Grassy Woodland EEC have been avoided.

OEH notes the amendments to the development footprint in the Preferred Project Report along the north western boundary and north eastern edge of the Central Precinct which has reconfigured the layout of residential lots in these areas and resulted in a wider area of open space to the north of the Duck Creek corridor and a small addition to the Mt Brown landscape retention area. However, amendments to the development footprint on the south western side of the North Shore Precinct appear to have reconfigured/increased residential lots in this area so that they now impinge on the Mt Brown landscape retention area and, in particular, on an area which is mapped as part of the Illawarra-Yallah-Calderwood linkage corridor. These amendments do not appear to improve the outcome for the Illawarra Lowlands Grassy Woodland EEC, which will suffer a local loss of over 10% as a result of this development.

OEH again recommends all reasonable alternatives to the proposed precinct boundaries in the south-western edge of the Northside Precinct to demonstrate that impacts on Illawarra Lowlands Grassy Woodland EEC have been avoided.

Illawarra Lowlands Grassy Woodland EEC within the Lakeside Precinct is known to provide habitat for *Chorizema parviflorum*, an endangered population listed under the TSC Act. OEH reiterates its earlier advice that the *Chorizema parviflorum* population is of significant conservation value. Only a small number of remnant sites remain in the Wollongong and Shellharbour local government areas, with few individuals known from each site. The *Chorizema parviflorum* population of the Lakeside Precinct represents the most easterly limit to its distribution in Wollongong.

The proposed access road into the enterprise / business zone of the Lakeside Precinct is sited north of the identified *Chorizema parviflorum* population, with enterprise / business zones proposed to the south and east of the population. As such, the proposed access road will isolate the *Chorizema*

parviflorum population from other areas of contiguous *Chorizema parviflorum* habitat, as well as remove Illawarra Lowlands Grassy Woodland EEC and *Chorizema parviflorum* habitat. OEH again raises significant concern regarding the *Chorizema parviflorum*'s ability to sustain a viable population should the proposed access road be constructed along the proposed alignment.

OEH considers that a better outcome can be achieved for the western corridor of the Central and Southern Precincts which avoids the loss of the Illawarra Lowlands Grassy Woodland and provides a continuous connected landscape along the eastern edge of the freeway. Rehabilitation and revegetation works in this area would greatly enhance the long term viability of both the Illawarra Lowlands Grassy Woodland remnants and the endangered *Chorizema parviflora* population by allowing them a greater area to expand in response to active management and by providing a better buffer to adjoining development.

OEH acknowledges that the proponent has attempted to respond to OEH's request to clarify measures to avoid or mitigate impacts associated with the proposal on Illawarra Lowlands Grassy Woodland EEC, however OEH's view is that no evaluation of alternatives has been provided to justify that impact on Illawarra Lowlands Grassy Woodland EEC and *Chorizema parviflorum* cannot be avoided or mitigated.

OEH strongly recommends that the need for the entry road to the Lakeside Precinct business park be re-evaluated in light of the number of other proposed entry points to the Tallawarra lands to avoid impacts on Illawarra Lowlands Grassy Woodland EEC and *Chorizema parviflorum*.

OEH also requests the proposed cycle routes through this area be re-evaluated and rationalised to minimise fragmentation of the area and the associated edge effects.

Security of offsets

In previous correspondence OEH has sought clarification of the measures to be put in place as part of the proposal to compensate for the permanent loss of 4.37 ha of EECs. OEH acknowledges that the Proponent has included a new SoC (18a) as a proposed approach to satisfy the OEH's previous advice that offsets should be managed under effective and secure long term management arrangements. As explained below, OEH does not agree that the proposed offsetting approach does constitute an effective offset and therefore remains unable to support the proposed approach.

OEH is aware that the EA outlines a proposal to compensate for the permanent loss of biodiversity through the retention and management of native vegetation elsewhere in the study area. It is understood that the retained vegetation is proposed to be managed through a *Vegetation Management Plan* (ELA 2011), at a cost of \$3,881,538 for a five year period.

OEH reiterates that while active management of EECs will contribute to the long-term viability of biodiversity on the Illawarra Coastal Plain, active management in the absence of effective and secure long term management arrangements does not constitute an effective offset under the *Principles for the use of Biodiversity Offsets in NSW*, nor the *NSW OEH Interim Policy on Assessing and Offsetting Biodiversity Impacts of Part 3A, State Significant Development (SSD) and State Significant Infrastructure (SSI) Projects* (OEH 2011).

The revised Statement of Commitments (SoC 18a) states that TRUenergy commits to entering into discussions with relevant authorities or recognised private conservation managers to arrange for the transfer of ownership of these lands and lists a series of potential mechanisms that could be used to secure them. The timeframes for entering into these discussions and securing the long-term management of these lands are open-ended and are proposed to occur in a staged process prior to completion of relevant works under the *Vegetation Management Plan*. However, implementation of the *Vegetation Management Plan* may rely on the proponent entering into a Voluntary Planning Agreement with the relevant authorities prior to determination of the superlot subdivision DA (SOC No. 18b) or it may be staged as part of consent conditions for future DAs (SOC No. 19). Either way, it

is not certain who will implement the *Vegetation Management Plan* and how or when it will be implemented across the site.

It is noted the Preferred Project Report states that TRUenergy has commenced discussions with relevant public authorities who will ultimately own and/or manage the corridors zoned E2 Environmental Conservation on site. However, it is not clear whether those relevant public authorities are interested or able to undertake management of these lands (or other significant vegetation outside of the E2 Environmental Conservation corridors) and if so under what circumstances.

OEH understands that it may be difficult at this stage to be definitive about the specific legal mechanism/s to be used to secure these conservation lands, but considers that the commitments in the SOC are far too vague for OEH to be certain that the areas proposed as an offset for the permanent loss of endangered vegetation will be adequately secured and managed in perpetuity. Furthermore, the benefits of measures outlined in the *Vegetation Management Plan* could be lost if works cease before the vegetation is self-sustaining. Typically, this entails maintaining a site for more than a five year period. Given there is no evidence that a public authority has expressed an interest in accepting these areas and the responsibility for the security and management of these areas in perpetuity has still not been resolved, OEH remains unable to support the offset proposal as currently proposed.

OEH recommends that TRUenergy undertake negotiations with potential land managers now, at the development concept stage, to ascertain their interest/willingness to manage these lands, the conditions under which they would consider managing the lands and the most appropriate conservation mechanisms under these circumstances. If they have no interest in managing these lands, then TRUenergy will need to consider alternatives such as establishing a BioBank agreement over the conservation areas to offset development losses. This information can then be used to develop a much tighter SOC or conditions of approval which are clear, time-limited and enforceable.

Licensing

OEH notes that Ecological Australia Report (letter dated 22 February, 2012) acknowledges and agrees that if seed collection utilises an Endangered Ecological Community offsite, a section 91 Licence under the *Threatened Species Conservation Act* will be required.

Aboriginal Cultural Heritage

The Preferred Project Report does not provide any evidence that OEH's advice in relation to Aboriginal cultural heritage provided to DoP&I in letter dated 7 November 2011 on the exhibited Environmental Assessment for the Concept Plan has been addressed. OEH notes that Statement of Commitment 17 (a) commits to preparing a Heritage Management Plan but defers the provision of detail to a stage by stage basis. The Aboriginal Cultural Heritage issues that have been raised by OEH are key issues that require resolution prior to determination.

As outlined in OEH's previous comments, six areas within the Tallawarra Lands have been identified as 'Defined Area of Aboriginal Cultural Sensitivity'. Those areas are Mount Brown, Duck Creek, Fig Tree, Lake Illawarra Foreshore, Wollingurly Point and Ridgeline Access – Mt Brown to the Lake. OEH recommended that DoP&I require the proponent to clarify what activities will be undertaken in the vicinity of these areas and how it plans to conserve the cultural values of these areas. OEH's view is that detail of how the cultural values of these areas will be conserved should be resolved prior to determination and not deferred to a later stage.

OEH considers that continued consultation with the local Aboriginal community is essential throughout the proposed development, particularly in relation to the protection and management of the cultural values of those areas identified as 'Defined Area of Aboriginal Cultural Sensitivity'.

Floodplain Risk Management

OEH has provided advice to Wollongong City Council and the DoP&I in response to floodplain risk management issues associated with the Tallawarra Lands since 2006. Throughout this process, OEH has encouraged the preparation of a catchment based Floodplain Risk Management Study and Plan (FRMS&P) for the Duck Creek catchment as the appropriate basis to manage future development on the floodplain consistent with the approach outlined in the NSW Government's *Floodplain Development Manual 2005* (FDM). This approach would enable thorough consideration of the existing and future flood risk considerations to address the complexity of flood related issues on a whole of catchment basis.

As the proposed development is on flood prone land, DoP&I as the approval authority should be satisfied that floodplain risk management matters have been appropriately considered in line with the NSW Government's *Flood Prone Land Policy* and the principles of the FDM, prior to approval of the development.

Fundamentally, in considering development on flood prone land, an approval authority should be satisfied that it has adequately considered:

1. the impact of flooding on development;
2. the impact of the development on flood behaviour; and
3. the impact of flooding on people and their safety.

These considerations should be over the full range of possible floods up to the probable maximum flood (PMF) and consider planning for future flood risk whilst being cognisant of regional planning constraints.

OEH's most recent advice to DoP&I dated 7 November 2011 on the exhibited Environmental Assessment for the Concept Plan, included a series of issues recommended for further consideration. The issues raised in this response were discussed in detail at a meeting held in the DoP&I offices on the 31 January 2012 which included representatives of DoP&I, the proponent's Planning and Floodplain Management Consultants and OEH.

The key issues discussed at the meeting were based on OEH's November 2011 advice which included:

- Estimation of appropriate design flood levels and reporting of flood planning levels
- Consideration of Council's then draft (now adopted) Lake Illawarra FRMS&P (2011)
- Consideration of impacts of existing infrastructure upstream of the site; and
- Emergency management considerations including evacuation and access to flood prone areas.

At the meeting OEH also recommended that the DoP&I as the approval authority, consult with Wollongong City Council as the local authority responsible for decisions made with respect to floodplain risk management, with particular regard to relevant information contained in the flood study being undertaken for the Duck Creek catchment.

Subsequent to the 31 January 2012 meeting, a Preferred Project Report & Updated Statement of Commitments was prepared by Don Fox Planning dated 28 June 2012 as part of the Concept Plan application to address the issues previously raised throughout the planning process. In relation to floodplain risk management, several commitments have been documented which attempt to address previous issues raised throughout the planning process including the timing of implementation and the authority responsible for the commitments.

Given the process for determination of floodplain risk management issues to date, OEH remains unclear how the commitments have been developed and how they will be implemented particularly given the lack of post developed flood modelling and mapping for the full range of flood events in line with the FDM with respect to:

- determination of fill levels;
- determination of flood planning levels; and
- consideration of emergency risk management.

Further, the proposed timing for implementation of the flood risk management commitments is based on a stage by stage approach with detail to be determined in future applications to be approved by the relevant development assessment authority. Given this proposed stage by stage approach, it is also unclear as to how the flood related risks will be managed on a strategic basis and therefore how this approach meets the principles of the FDM.

In summary, the DoP&I should be satisfied that it has satisfactorily considered all relevant matters relating to development on flood prone land in line with the FDM prior to approval of the proposed development.

