

Robert Bennett
Planning Manager
Delfin Lend Lease
Via email: *Robert.Bennett@lendlease.com.au*

9 February 2011

Dear Robert,

Re. Calderwood Stage 1, Assessment of ecological and riparian impacts

Eco Logical Australia has completed a detailed assessment of the revised stage 1 proposal for the Calderwood Urban Development Project as outlined by;

- Subdivision Drawing and Tree Removal Plan: A - DOP Part 3a APP H, dated 8/2/11.

This review has found that the revised Stage 1 development will cause minor impacts to a section of Riparian River Oak Forest, an endangered ecological community listed under the NSW Threatened Species Conservation Act, 1995. The revised stage 1 proposal will not increase the impacts beyond what was identified in the initial stage 1 proposal.

Impacts to Riparian River Oak Forest will occur as a result of:

1. Road and sewerage infrastructure crossings
2. Floodplain regrading

The total area to be impacted is approximately 2.3 hectares. The vegetation and associated habitat that will be impacted is confined to linear strips on the banks of Macquarie Rivulet. This vegetation is of low to moderate quality, with a generally intact overstorey and varying levels of weed infestation in the understorey. The impact as a result of these works was considered as part of the impact assessment calculations within the concept plan application (see Eco Logical Australia, 2010).

Notwithstanding that the loss of this vegetation is a minor impact and consistent with the overall impact assessment previously undertaken, the following mitigation measures are recommended to limit impacts, and progressively improve the biodiversity value of this site:

1. Preparation and implementation of a Vegetation Management Plan (VMP) that identifies revegetation works that will result in long term enhancement of biodiversity values at the site
2. Consideration of non-trenching technologies for the construction of the sewerage rising main
3. Preparation of a detailed Environmental Management Plan to limit impacts during the construction period

The proposed Stage 1 development is also consistent with the recommendations of the Riparian Consistency Report (Eco Logical Australia 2010a) for the broader Calderwood Urban Development Project. This includes the application of a minimum riparian corridor of 92 metres total width to Macquarie Rivulet, and the application of a minimum riparian corridor of 48 metres total width to the second order stream that extends from Macquarie Rivulet to Johnston's Spur.

I trust this information confirms that the proposed development is consistent with the detailed assessment prepared as part of the concept plan application and that the proposed mitigation measures will contribute to the long term improvement of the biodiversity values at this site.

If you have any questions or require further information please contact me on (02) 8536 8600 or 0405 125 701.

Yours Faithfully

A handwritten signature in black ink, appearing to be 'S. House', written over a light blue rectangular background.

Steven House

References

Eco Logical Australia, 2010. CALDERWOOD URBAN DEVELOPMENT PROJECT. *Flora and fauna assessment* under Part 3A of the Environmental Planning and Assessment Act, 1979. Final Report.

Eco Logical Australia, 2010a. CALDERWOOD URBAN DEVELOPMENT PROJECT. *Riparian Consistency Report* under Part 3A of the Environmental Planning and Assessment Act, 1979. Final Report.



Stage/Phase
Stage 1 Preferred Project

Project
Calderwood

Drawing Title
Draft Tree Removal Plan

Development Team
Asst. Manager/Project Designer
Customer/Project Designer



Review for Subdivision Lots
08/02/2011



Scale	1:1000
Drawn	JD
Checked	PD
Job No	W5112
Drawing Number	App H

Issue
A - DOP Part 3a

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App H