

Appendix A

Indicative Plan of Proposed Subdivision

Appendix B

Preliminary Flora and Fauna Report

**Preliminary Environmental Assessment (Flora and Fauna) for
a Proposed Development at Lot 93 DP 1000055, Oakdale, NSW**

Prepared for:
Precise Planning
152 Sailors Bay Rd Northbridge NSW 2063

Prepared by:
G.J. Stone
Woodlands Environmental Management
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Wingello NSW 2579

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March, 2011

Preliminary Environmental Assessment (Flora and Fauna) for a Proposed Development at Lot 93 DP 1000055, Oakdale, NSW

Prepared by G.J. Stone, Woodlands Environmental Management, 133 Forest Road, Wingello, NSW 2579 for Precise Planning, 152 Sailors Bay Rd Northbridge NSW 2063.

Introduction

Precise Planning has applied for the rezoning of Lot 93 DP 1000055, Oakdale, NSW to allow for the establishment of a residential subdivision.

A preliminary assessment based on existing mapping, databases and literature has undertaken for the purpose of assessing potential restraints upon the proposed development in regard to flora and fauna at the site including threatened species, populations or ecological communities, or their habitats. No field work has been undertaken in association with the preparation of this report.

1. Site Description

1.1 Proposed development site

The property which includes the proposed development site presently supports building infrastructure (possibly poultry sheds) a residence and associated buildings, remnant woodland / open forest vegetation, land cleared of native overstorey and understorey vegetation, a large dam and a waterway.

1.2 Vegetation

The remnant woodland / forest vegetation at the property has been mapped as Shale – Sandstone Transition Forest, an Endangered Ecological Community listed under the NSW *Threatened Species Conservation Act 1995*.

The composition of the groundcover within areas cleared of native overstorey and understorey vegetation cannot be determined from aerial photography or existing mapping. The groundcover may be derived grassland, consisting of native grasses and herbs naturally occurring within the Shale – Sandstone Transition Forest, or improved pasture dominated by exotic species. Field surveying would be required to verify this.

Vegetation associated with the residence in the south-eastern corner appears to be comprised of exotic garden species.

1.3 Riparian and water features

An ephemeral watercourse runs from south to north through remnant woodland / open forest vegetation. A large dam constructed within the watercourse is surrounded on three sides by remnant woodland / open forest vegetation and by cleared land on one side. A small dam in the south is situated within remnant vegetation.

2. Key Attributes and Description of the Proposed Development

The development as proposed includes a residential subdivision within the eastern portion of the property. Approximately thirty residential lots and access roads are proposed.

The majority of the proposed development is located within the area of land cleared of native overstorey and understorey vegetation. Some remnant woodland / open forest vegetation is included in the land proposed for development e.g. in the south-western and at one location on the western boundary.

The watercourse, large dam and over 90% of the remnant woodland / open forest vegetation is excluded from the development site.

3. Threatened Species

3.1 Threatened Communities

Ten communities occurring in the Burratorang Sub-region of the Hawkesbury-Nepean CMA are listed by the NSW Department of Environment, Climate Change and Water as Endangered Ecological Communities.

Five communities occurring within 20km of the property are listed by the Department of Sustainability, Environment, Water, Population and Communities as Threatened Ecological Communities within the list of Matters of National Environmental Significance

3.2 Flora

The NSW Department of Environment, Climate Change and Water record the presence of thirty-two Threatened Species of flora within the Burratorang Sub-region of the Hawkesbury-Nepean CMA. The NPWS Atlas of NSW Wildlife records sixteen of these species as occurring within a 20km radius of the property.

The Department of Sustainability, Environment, Water, Population and Communities lists nineteen species of flora as Matters of National Environmental Significance within 20 km of the property.

3.3 Fauna

The NSW Department of Environment, Climate Change and Water record the presence of forty Threatened Species of fauna within the Burratorang Sub-region of the Hawkesbury-Nepean CMA. The NPWS Atlas of NSW Wildlife records twenty-seven of these species as occurring within a 20km radius of the property.

The Department of Sustainability, Environment, Water, Population and Communities lists thirty-one species of fauna as Matters of National Environmental Significance within 20 km of the property.

4. Environmental Assessment

Environmental assessment of the proposed development will be required in accordance with the *Environmental Planning and Assessment Act 1979*, *Threatened Species Conservation Act 1995* and *Commonwealth Environment Protection and Biodiversity Act 1999*.

Assessment of Threatened Species will be undertaken in accordance with: DEC (2004) *Threatened Species Survey and Assessment: Guidelines for developments and activities (working draft)*, New South Wales Department of Environment, Climate Change and Water, Hurstville, NSW.

This will include the preparation of Assessments of Significance (7 part tests) for Threatened Species.

5. Mitigation

The presence of an Endangered Ecological Community and habitat for Threatened Species at the property will require the development of mitigation measures to reduce the impacts of the proposed development on ecosystems.

This preliminary assessment indicates that measures to protect and conserve the waterway and remnant woodland / open forest vegetation will be necessary.

Prepared by:

Greg Stone

B. App.Sc. (Parks, Recreation and Heritage) (Charles Sturt University), Grad. Cert. Sci. Comm. (Australian National University), Adv.Dip. Land Management (University of Sydney), Ass.Dip. Land Management (University of New England)

Woodlands Environmental Management
March, 2011

Appendix C

Preliminary Water/Waste Water Management Advice



Jeff Bulfin
Precise Planning
PO Box 426 Northbridge NSW 1560

Dear Jeff,

Regarding the application to rezone 35 Egans Road Oakdale, I have viewed the aerial photograph and proposed plan for the subdivision of around 30 lots.

The proposed subdivision would be subject to approval by the Sydney Catchment Authority (SCA), in accordance with Regional Environment Plan No. 1. The REP requires an assessment known as a Water Cycle Management Study to demonstrate a Neutral or Beneficial Effects (NORBE). Using the Model for Urban Stormwater Improvement Conceptualisation (MUSIC), the WCMS must demonstrate that stormwater will be treated to a level that is lower than pre development levels.

I have prepared numerous WCMS for SCA assessment and can see from the plans that stormwater treatment for the subject site will require grass swales along the internal access road and a rainwater tank and raingarden on each allotment. It may also be necessary to provide a bioretention basin for the treatment of road runoff.

In summary, I can design a stormwater treatment train for residential development on this site that achieves the requirements of the SCA. This will require stormwater treatment measures that are typically used for developments such as this.

Regards

A handwritten signature in black ink, appearing to read "Sean Harris".

Sean Harris

16/03/2011

Appendix D

Preliminary Stormwater Management Advice



Jeff Bulfin
Precise Planning
PO Box 426 Northbridge NSW 1560

Dear Jeff,

Regarding the application to rezone 35 Egans Road Oakdale, I have viewed the aerial photograph and proposed plan for the subdivision of around 30 lots.

The proposed subdivision would be subject to approval by the Sydney Catchment Authority (SCA), in accordance with Regional Environment Plan No. 1. The REP requires an assessment known as a Water Cycle Management Study to demonstrate a Neutral or Beneficial Effects (NORBE). Using the Model for Urban Stormwater Improvement Conceptualisation (MUSIC), the WCMS must demonstrate that stormwater will be treated to a level that is lower than pre development levels.

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In summary, I can design a stormwater treatment train for residential development on this site that achieves the requirements of the SCA. This will require stormwater treatment measures that are typically used for developments such as this.

Regards

A handwritten signature in black ink, appearing to read "Sean Harris", is written over a light blue horizontal line.

Sean Harris

16/03/2011

Appendix E

Initial Traffic Management Advice

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES



A division of Monvale Pty Ltd ACN 060 653 125
ABN 44 060 653 125

16 March 2011
Ref 11031

Mr Jeff Bulfin
Precise Planning
PO Box 426
NORTHBRIDGE 1560

(Email: jeff@deeprivergroup.com.au)

Dear Jeff

Proposed Rezoning for Residential Subdivision 35 Egans Road, Oakdale

It is understood that it is proposed to commence a planning process seeking approval to rezone part of the subject site to permit a residential subdivision. Further it is understood that:

- * the site currently has a poultry farm use
- * the potential subdivision would yield some 30 residential lots involving a cul-de-sac access road connection to Egans Road and some limited direct lot access (the indicative plan of subdivision is attached).

The site is adjoined to the south by contemporary residential lots in a precinct accessed by Moore Road and Blatman Avenue. There are also numerous residential frontages extending Egans Road to the east and west.

Egans Road is a minor collector road route providing access for the area north of Burragorang Road. Burragorang Road is a Regional Road and collector road route providing connection between Nattai/Lake Burragorang and Camden. The existing traffic flows along Burragorang Road are relatively minor even during the peak morning and afternoon peak traffic periods and there are no adverse traffic delay or safety circumstances at the Burragorang Road/Egans Road intersection.

Transportation, Traffic and Design Consultants

Suite 502 Level 5 282 Victoria Avenue PO Box 1160 Chatswood NSW 2067 ph (02) 9411 5660 Fax (02) 9904 6622
Email ttpa@ttpa.com.au

Transport and Traffic Planning Associates

There is a 60 kmph speed restriction on Burraborang Road (80 kmph westbound) and a 50 kmph restriction on Egans Road at the intersection. Both Burraborang Road and Egans Road are relatively straight and level at this location and there are satisfactory sight distance circumstances. Burraborang Road has one traffic lane in each direction with a widened shoulder on the northern side facilitating left-turn movements into and out of Egans Road.

The site is located within 400 metres of Burraborang Road and there is a bus service Route 40 operated by Busways running along Burraborang Road providing connection to Camden and beyond.

The RTA Guide to Traffic Generating Development suggests a traffic generation characteristic for single dwellings in the outer urban areas of 0.85 vph in the morning and afternoon peak periods. This would suggest a total peak generation of some 25 vph for envisaged 30 lots.

The subdivision proposal will require an appropriate Traffic Impact Assessment to be undertaken which would include:

- * establishing the peak traffic generation characteristics of new single dwellings in the area
- * establishing the total traffic generation and distribution of development on the subdivided lots and its distribution
- * establishing the existing peak traffic movements at the Burraborang Road/Egans Road intersection
- * assessing the operational performance of the intersection with the additional development volumes
- * assessing whether any upgrading works are required at the intersection
- * assessing the suitability of the proposed subdivision access road and its intersection with Egans Road.

However, it is my preliminary assessment that there is no traffic related impediment to proposal or any inability to undertake any upgrading works which may be required to ensure a satisfactory traffic outcome.

Yours faithfully



Ross Nettle
Director

Transport and Traffic Planning Associates





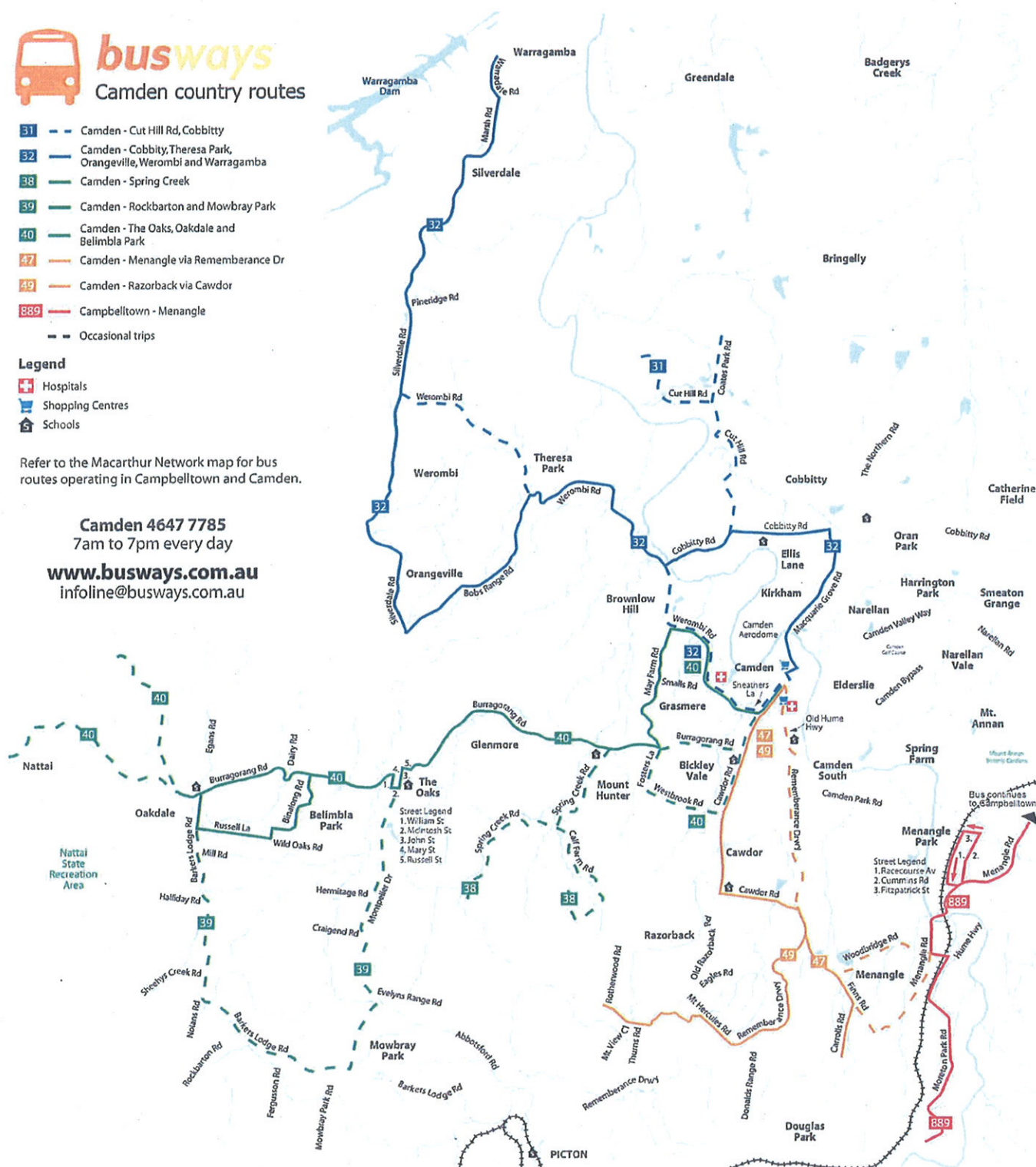
- ### Legend

-  Hospitals
-  Shopping Centres
-  Schools

Refer to the Macarthur Network map for bus routes operating in Campbelltown and Camden.

Camden 4647 7785
7am to 7pm every day

www.busways.com.au
infoline@busways.com.au



Appendix F

Preliminary Site Contamination Management Advice



Aargus
AUSTRALIA

Environmental - Remediation - Engineering - Laboratories - Drilling

10th March 2011

Mr Jeff Bulfin
Precise Planning
152 Sailors Bay Road
PO Box 426
NORTHBRIDGE NSW 1560
By Email: jeff@deepriver.com.au

Dear Jeff,

Re: Environmental Works
Property – 35 Egans Road, Oakdale NSW

We refer to our recent communiqué and provide the following letter that sets out our proposed works for the above property.

Aargus Pty Ltd conducts environmental and geotechnical services throughout Australia. The group is a fully owned and operated Australian organisation that has conducted over 16,500 projects throughout the world and has offices in 4 Australian states and 4 overseas countries.

Aargus has reviewed the planning proposal to rezone the aforementioned site to permit for a 35 lot residential subdivision.

HEAD OFFICE: PO Box 398 Drummoyne NSW 1470

Telephone: 1300 137 038 Facsimile: 1300 136 038 Email: admin@aargus.net Website: www.aargus.net

Aargus Pty Ltd ACN 063 579 313 Aargus Engineering Pty Ltd ACN 050 212 710 Aargus Laboratories Pty Ltd ACN 086 993 937

Other office locations in NSW - QLD - VIC - SA and 4 overseas countries

Based on the sites current use as a poultry farm, it is recommended that the following works are undertaken within the site:

1. Stage 1 – Preliminary Investigation
2. Stage 2 – Detailed Investigation
3. Stage 3 – Remedial Action Plan
4. Stage 4 – Validation

Based on our experience with poultry farming sites, it is recommended that a combined Stage 1 & 2 investigation is undertaken within the site. Should this assessment determine that contaminants are present above the proposed site assessment criteria, a Stage 3; followed by Stage 4 assessment will be recommended.

We trust the above is of assistance and if you require any further information please do not hesitate to contact the writer.

For and on behalf of
Aargus Pty Ltd



Mark Kelly
Environmental Manager