35 CANTY LANE, PAKENHAM

EXPERT WITNESS STATEMENT OF BRETT LANE

Prepared on behalf of
Auscare Commercial Pty Ltd
And Earldean Pty Ltd

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1. WITNESS INFORMATION

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Brett Lane is qualified in ecology and has over 40 years' experience in ecology and related legislation and policies. His qualifications and experience are summarised in Appendix 1.

2. WORK UNDERTAKEN

I was commissioned by Hall and Wilcox Lawyers on behalf of Auscare Commercial Pty Ltd and Earldean Pty Ltd to provide advice on the ecological attributes and significance of the property at 53 Canty Lane, Pakenham. In addition, I was asked to review the proposed Precinct Structure Plan, particularly as it relates to this property and the future protection and management of the ecological values of the area. Specifically, I was asked to respond to the questions below.

- Describe the current ecological condition and values of the property and comment on the impact of past and current land use and works on these values;
- Review the Native Vegetation Precinct Plan (NVPP) as it applies to the property and comment on its findings;
- Review the Precinct Structure Plan (PSP) as it applies to the property and advise on the basis for the extent of the proposed conservation reserve relative to the current ecological values;
- Provide advice on the future opportunities for maintenance and enhancement of ecological values on the property;
- Provide comment on the indicative waterway cross-section for a modified Deep Creek prepared by Water Technology Pty Ltd from en ecological perspective.

To these address requirements, I reviewed the following documents:

- Ecology & Heritage Partners 2017. *Ecological Investigations for the Pakenham East Precinct Structure Plan.* Consultant's Report to Cardinia Shire Council
- Victorian Planning Authority and Cardinia Shire Council 2017. *PSP 1210 Pakenham East Precinct Structure Plan, Victoria*. VPA, Melbourne.
- Victorian Planning Authority and Cardinia Shire Council 2017. *PSP 1210 Pakenham East Native Vegetation Precinct Plan*. (NVPP) VPA, Melbourne.
- Cardinia Shire Council 2017. *Pakenham East Precinct Structure Plan, Victoria – EPBC Act Referral.* Department of Environment and Energy, Canberra.

I also undertook a site inspection on 18th May 2018 and visited all scattered trees and remnant native vegetation on the property mapped in the NVPP and walked the length of the Deep Creek vegetation corridor on the property. During this inspection, I documented the dominant canopy and sub-canopy plant species in all areas mapped as native vegetation and examined evidence of previous land use and works on the property.

A description of the property is provided in the next section of this statement. This is followed by responses to the matters I was asked to address.

3. RESPONSE TO QUESTIONS

3.1. Site characteristics

The site comprises 24.7 hectares of low-lying land encompassing the Deep Creek between the Princes Highway and Canty Lane and land to the east of the creek comprising low-lying alluvial soils. The land parcel excludes two small allotments on the north side of Canty Lane.

The property was originally cleared many decades ago for agriculture and has been subject to extensive pasture improvement. It has been used consistently since then for cattle grazing. This has resulted in the removal of most of the original native vegetation of the site, which the Department of Environment, Land, Water and Planning's (DELWP) historical Ecological Vegetation Class (EVC) mapping shows was once Swampy Riparian Woodland and Swampy Woodland. Based on the EVC Benchmarks prepared by DELWP for the Gippsland Plain bioregion, the dominant tree species for these EVC's is:

- Swampy Riparian Woodland (EVC 83):
    - Swamp Gum (*Eucalyptus ovata*);
    - Narrow-leaf Peppermint (*E. radiata*);
    - Blackwood (*Acacia melanoxylon*); and
    - Swamp Paperbark (*Melaleuca ericifolia*).
- Swampy Woodland (EVC 937):
    - Swamp Gum;
    - Narrow-leaf Peppermint;
    - Messmate (*E. obliqua*);
    - Mealy Stringybark (*E. cephalocarpa* s.s.); and
    - Blackwood.

Areas of treed vegetation on the property along Deep Creek and on land to the east of the creek within the property had been subject to revegetation in the last 40 years or so judging by the size of planted trees, which were up to 15 to 18 metres tall with a diameter at breast height (DBH) of up to 40 cm. The extent of revegetation is approximately 15 metres either side of the modified Deep Creek channel and within the title boundary of the subject property.

These areas had been fenced to exclude grazing and supported a ground cover of introduced grasses and forbs, an understorey of self-seeded Swamp paperbark and planted wattles (including Silver and Black Wattle, and Blackwood) and a tree canopy comprising self-seeded Swamp Gum and Yarra Gum near a few large old remnant specimens that had been retained, and planted Swamp Gum, Narrow leaf Peppermint, Manna Gum (*E. viminalis*) and Blue Gum (*E. globulus*). In places Blue Gum and Manna Gum and sub-canopy wattle species dominated the revegetation, all species not characteristic of the original Ecological Vegetation Classes in the area. The photographs on the following page show this area of revegetation.

Photographs of revegetation areas along Deep Creek

Inspection of the Deep Creek corridor revealed that it had been extensively modified by earthworks. This has comprised straightening the creek and channelizing it with the excavated soil placed in a low levee (up to 0.5 m high) parallel with and set back about five metres from the creek bank. This is shown in the photograph below.

Based on my inspection, I concluded that the Deep Creek and its vegetated corridor were not in their original condition, with the creek highly modified by 'drainage improvement' work some time ago and with most of the original vegetation along it having been cleared. Subsequent replanting has been with an artificial mix of tree species. Mapping the entire creek corridor as Swampy Riparian Woodland over-estimates the extent of treed vegetation consisting of the original species mix of the former EVC. More thorough

mapping of remnant native vegetation in these revegetation areas would result in a smaller, more patchy area of this EVC being mapped.

In the eastern part of the site, planting of vegetation within a fenced area around an old dam has occurred. This area is mapped as remnant native vegetation in the NVPP (defined as Swampy Woodland EVC). The canopy species here includes species characteristic of this EVC, although dense stands of Swamp Paperbark that have colonised of their own accord after inundation are more characteristic of Swampy Riparian Woodland or Swamp Scrub EVC's. Ground cover is exclusively exotic grasses and forbs. Photographs of this revegetation are provided below.

It is not known if the revegetation areas on the property were planted with government funding. If not, then much of the vegetation would not require a planning permit or an approved NVPP to be removed as it qualifies as exempt under Cl. 52.17-7 of the Shire of Cardinia Planning Scheme.

A number of indigenous scattered trees occur across the property, mapped accurately in the NVPP. These are remnant indigenous and would have been left after the land was originally cleared for agriculture. Their removal would require a permit. Their protection within the NVPP accords appropriate recognition of their indigenous status.

3.2. Review of the NVPP and PSP

The Native Vegetation Precinct Plan (NVPP) has identified two revegetation areas within the property as remnant native vegetation: the zone along Deep Creek and a patch in the eastern part of the property. As described above, a substantial proportion of these areas does not qualify as the original EVC in the area based on the planted mix of tree species. Furthermore, if the revegetation was not undertaken with government funding then it does not qualify for protection (i.e. a permit would not be required for its removal) under the state's native vegetation clearing controls (Cl. 52.17). On this basis, the status and extent of mapped native vegetation on the property in the NVPP must be reviewed and amended to reflect a detailed assessment and having regard to the exemptions under Cl. 52.17-7.

Only after such an assessment could the Precinct Structure Plan for this part of the Precinct be finalised to reflect the true ecological values of the property. The current extent of the proposed conservation reserve encompasses:

- The artificially altered drain in which Deep Creek now flows;
- Extensive areas of cleared agricultural land that will require substantial outlays and work to create new environmental values;
- A narrow (30m) corridor along Deep Creek of revegetation made up of tree species that include many not indigenous to the area; and

- Small, isolated areas of revegetation that include some native tree species that are not characteristic of the original native vegetation of the area.

It is relevant that this area lies outside the area of the Melbourne Growth Areas covered by the Melbourne *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Strategic Assessment. Whereas in this area substantial developer habitat compensation payments are required to support the protection and restoration of biodiversity conservation reserves, including those along waterways, away from this area, no such formal requirement exists. Accessing adequate resourcing to create an area of rehabilitated native vegetation along the waterway of the size proposed may be problematic.

The findings of the ecological assessments that have been undertaken for the EPBC Act Referral of the precinct structure plan are also relevant to the size of the waterway reserve. Whereas in Melbourne's Growth Areas, waterway conservation reserves have been set aside for the Growling Gras Frog, this species was not considered by EHP (2017) to occur in the area. In the Referral, it is stated (section 3.1) that:

"...although a small number of waterbodies (i.e. farm dams) superficially support suitable breeding habitat for the species, based on available data (e.g. extensive surveys over several seasons) it is unlikely that an extent population of the species currently exists within the precinct. All surveys were undertaken during optimal surveys conditions when males are known to be calling (October and November) and are readily detectable, and over an appropriate duration to maximise detection (i.e. surveys were undertaken in accordance with the minimum survey requirements to detect the species)."

Furthermore, the Referral goes on to state:

"There is a low potential for the species to colonise any suitable habitat in the Precinct in the future given that there are no known extant populations of the species within close proxim[it]y *(i.e. within one kilometre of the precinct)."*

Based on this and evidence in relation to other matters of national environmental significance, the Commonwealth Minister for the Environment has decided that the development of the Pakenham East Precinct is 'not a controlled action' under the EPBC Act. This means that it was not considered to have a significant impact on any matter of national environmental significance, including the Growling Grass Frog.

In view of these findings, the maintenance of a 100-metre wide corridor along the Deep Creek is not warranted, particularly having regard to the lack of specific environmental contributions for the rehabilitation and maintenance of such a large area compared with more targeted waterway reserves elsewhere in Melbourne's Growth Areas.

3.3. Opportunities for maintenance and enhancement of environmental values

I have been provided with a copy of an indicative waterway cross-section prepared by Mr Warwick Bishop of Water Technology Pty Ltd (see Appendix 2). This has indicated that a 50 m set back of development from the Deep Creek may be adequate to cater for hydraulic requirements of flows along the creek. Based on the foregoing findings, a waterway corridor 50 metres from the top of the Deep Creek bank would be adequate to protect the existing revegetation areas along the creek, which currently extend between 15 and 30 metres from the creek bank. A 50-metre set-back from the creek bank complies with

Melbourne Water's guidelines for waterway set-backs in greenfields property development areas (Melbourne Water 2013).[1]

Such a corridor would encompass all current creek-side revegetation areas, many of the scattered trees identified for protection within the NVPP and provide for an additional 35 metres, or approximately an extra 2.6 hectares of environmental rehabilitation land along the eastern bank of the Deep Creek channel east of the current revegetation area. This would provide for a Creekside environmental corridor of over five hectares on the property when combined with the existing 15-30-metre wide revegetation corridor along the Deep Creek. This represents a significant improvement over current conditions, particularly if the entire retained area were to be planted with the correct mix of tree and understorey species of the former EVC's.

Given my observations and conclusions in relation to the state of the vegetation in the revegetation areas on the property, I have been instructed to undertake a thorough native vegetation assessment of revegetation areas to map the exact extent of remnant native vegetation and to habitat score it.

[1] Melbourne Water Corporation (2013) *Waterway Corridors – Guidelines for greenfield development areas within the Port Phillip and Westernport region.* Melbourne Water, Docklands.

4. DECLARATION

I have made all the inquiries that I believe are desirable and appropriate and no matters of significance which I regard as relevant have to my knowledge been withheld from the Panel.

Signed:

Brett Alexander Lane
Director
Brett Lane & Associates Pty Ltd
Suite 5, 61–63 Camberwell Road
Hawthorn East, VIC 3123

28th May 2018

Appendix 1: Qualifications and experience of Brett Lane

BL&A Brett Lane & Associates Pty. Ltd.
Ecological Research & Management

Brett Lane
Principal Consultant and Director

Profile

Brett has over 35 years' experience in ecological research and management. He has worked in a range of positions with environmental consultancies in Melbourne and Brisbane and with non-government environmental groups in Australia and East Asia. He has specialist knowledge in birds and wetlands, and extensive experience in ecological impact assessment, including in the infrastructure, renewable energy, property development and mining industries. Brett has undertaken and managed many hundreds of ecological assessments and prepared and reviewed documents that have accompanied development applications on behalf of private companies, government infrastructure agencies and private individuals. His extensive experience has given him an excellent knowledge of the regulatory environment relevant to native vegetation, flora and fauna and he can advise on the scope of scientific information needed to inform the development assessment and decision-making process. He has also defended his scientific work as an expert witness in courts and tribunals. Brett founded BL&A in 2001.

Biography

Working in industry since 1979

Qualifications

BA (Zoology & Physical Geography) *Monash University*

Certificates and Licenses

Management Authorisation – Salvage and Translocation
Victorian Animal Ethics Approval

Employment History

2001 – present
Director, *Brett Lane & Associates Pty Ltd, Melbourne*

1999 – 2000
Natural Resource Specialist, *PPK Environment & Infrastructure Pty Ltd, Melbourne*

1996 – 1998
Senior Ecologist, Ecology Australia Pty Ltd, *Melbourne*

1993 – 1996
Principal Terrestrial Ecologist, *WBM Oceanics Australia, Brisbane*

1991 – 1993
Assistant Director (East Asia), *Asian Wetland Bureau, Kuala Lumpur, Malaysia*

1987 – 1991
Director, *Brett A Lane Pty Ltd (Melbourne)*

1980 – 1986
Wader Studies Co-ordinator, *Royal Australasian Ornithologists' Union (now Birdlife Australia, Melbourne*

1979
Research Assistant, Kinhill Planners Pty Ltd., Melbourne

Key Skills

- Experienced advisor on state and federal biodiversity legislation and policy
- EPBC Act and EES Referrals
- Preparation of environmental assessment reports (preliminary documentation, public environmental report and environmental impact statement)
- Preparation of native vegetation planning permit applications
- Design of developments to comply with biodiversity legislation and policies
- Expert witness for VCAT, planning panels and courts
- Ecological risk assessment
- Native vegetation assessment
- Terrestrial fauna assessment and wetland ecology
- Ornithologist specialising in wetland and migratory shorebirds
- Wind energy development specialist and minimizing impacts on wildlife including collision risk modelling

Project Examples

Property Development

Eynesbury Township, Eynesbury, Victoria: Flora, Fauna and Habitat Hectare Assessment, Targeted Flora Surveys, Growling Grass Frog Survey, Plains-wanderer Survey and Development of an Offset Tracking Tool. Net Gain Analysis for Planning Permit Applications of subsequent stages and advice on offset management (2003 – present)

Taylors Rd, Sydenham, Victoria (Broadcast Australia): EPBC Act Referral, preparation of EPBC Act Public Environment Report (PER), Offset Site Search and Offset Management Plan, Spiny Rice-flower Propagation and Translocation Plans, Seed Collection (2006 – present)

Somerfield Estate, Keysborough, Victoria: Flora, Fauna and Growling Grass Frog Survey and Offset Plan Preparation, preparation of offset tracking reports for each stage of development (2008 – present)

Modena Estate, Burnside, Victoria: Flora and Fauna Assessment, targeted threatened species surveys, EPBC Act referrals and assessment approvals, development of offset and mitigation plans (2002 – present)

Renewable Energy

Dundonnell Wind Farm, Dundonnell, Victoria: Overview and Targeted Assessments including Brolga, bat, migratory bird, Striped Legless Lizard, Flora Surveys, assessment of powerline route and road access options, EPBC Act Referral, Input to EES Referral, preparation of EES technical appendix on flora and fauna, Brolga impact assessment, collision risk modelling (2009 – present)

Granville Wind Farm, Granville Harbour, Tasmania: Overview Assessment, targeted surveys including Orange-bellied Parrot and bat surveys, EPBC Act Referral and advice for regulator negotiations (2011 – present)

MacArthur Wind Farm, MacArthur, Victoria: Overview assessment, detailed flora and fauna surveys, impact assessment, input to EPBC Act Referral and state EES, assessment of powerline and road rout options, appearance at state Planning Panel hearings as expert witness, preparation of pre-construction and operational flora and fauna management plans, net gain analysis and identification of suitable offsets (2004 – 2012)

Cherry Tree Wind Farm, Victoria: Overview assessment, native vegetation and threatened flora surveys, targeted threatened fauna surveys, assessment of powerline and road route options, offset site sourcing and assessment, preparation of expert witness statement and appearance at VCAT (2010 - 2015)

Mt Gellibrand Wind Farm, Mt Gellibrand, Victoria: Overview assessment, detailed flora and fauna surveys, including targeted Brolga and migratory bird surveys, and Striped Legless Lizard tile grid surveys, input to state planning permit application, preparation of witness statement and appearance at state Planning Panel hearing, preparation and early implementation of pre-construction flora and fauna management plans, including bat and avifauna management plan, native vegetation mapping, offset mapping, development of Brolga monitoring and mitigation strategies (2004 – present).

Road and Rail Infrastructure

Avalon Airport Rail Link, Little River, Victoria: Flora and Fauna Mapping, Constraint Analysis and Net Gain Analysis (2011 – 2013)

Dingley Bypass, Keysborough, Victoria: Flora and Fauna Assessment, including targeted flora surveys, habitat hectare assessment and Net Gain analysis, expert witness at VCAT case (approved) (2008 – 2014)

Nagambie bypass, Nagambie Victoria: Flora and Fauna Assessment, including habitat hectare assessment and Net Gain analysis (2008)

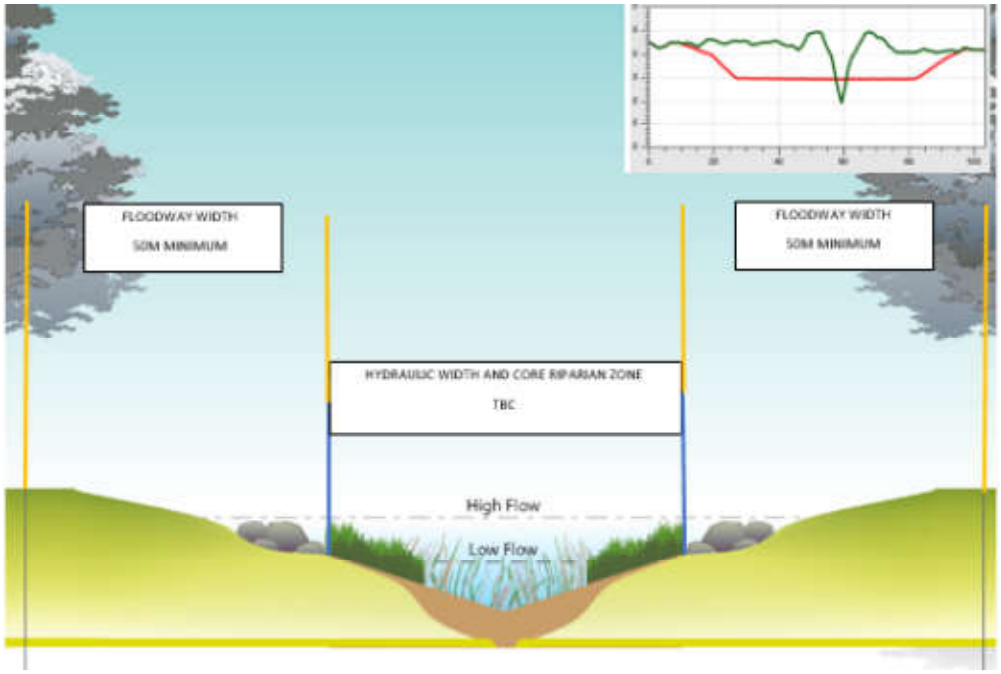
Second Murray River Bridge Crossing at Echuca-Moama: Detailed Flora Assessment, Targeted Flora Survey (2008 – present)

Ecosystem Monitoring and Management

Scientific Review Panel, Kerang Lakes Bypass project (North Central Catchment Management Authority, Goulburn Murray Water): Scientific review of detailed technical reports to inform decisions of water savings plans and associated watering plans for five wetlands that form part of the Ramsar-listed Kerang Lakes wetlands system. (2013)

Northern Victoria Irrigation Renewal Program (NVIRP): Assessed the impact of a major federal water industry investment project on Matters of National Environmental Significance, including threatened flora, threatened fauna and listed migratory birds using wetlands located in the potential impact area. (2009-2011)

Appendix 2: Indicative cross-section of Deep Creek on the subject property prepared by Mr Warwick Bishop, Water Technology Pty Ltd


FLOODWAY WIDTH
50M MINIMUM
FLOODWAY WIDTH
50M MINIMUM
HYDRAULIC WIDTH AND CORE RIPARIAN ZONE
TBC
High Flow
Low Flow