

Major Project 05_0038
Preferred Project Report
Rural Residential Subdivision



Lots 53 & 54 DP 836998 and Lot 156 DP 753202,
The Bucketts Way, Tinonee

Prepared For
Tinonee Joint Venture

5 June 2008



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Environmental Planning, Assessment and Management

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Introduction

1.1 Background

The Tinonee Rural Residential Subdivision Environmental Assessment was placed on exhibition during August 2007 and referred to a number of Government Authorities for review and comment. During the exhibition and referral period the following submissions were received:

- Department of Environmental and Climate Change, dated 21 August 2006;
- Department of Lands, dated 10 August 2007;
- Department of Primary Industries, dated 8 August 2007;
- Department of Water and Energy, dated 11 September 2007;
- Roads and Traffic Authority, dated 13 September 2007;
- Taree City Council, dated 7 September 2007;
- Greater Taree City Council, dated 11 October 2007;
- Greater Taree City Council, email dated 29 November 2007;
- Mid Coast Water, dated 31 October 2007;
- NSW Rural Fire Service, dated 27 September 2007;
- Hunter – Central Rivers Catchment Management, dated 3 October 2007; and
- Private submission communicated in DOP email, dated 21 November 2007.

During the exhibition period the Department of Planning also commissioned the following reviews of the Environmental Assessment.

- Review of Ecological Assessment undertaken by Benchmark Environmental Management dated 31 October, 2007; and
- Engineering Assessment undertaken by Greater Taree City Council Investigation and Design dated 31 October 2007.

On 26 September 2007 the Department of Planning provided a copy of the submissions to comply with Section 75H of the EP&A Act 1979.

1.2 Scope of this Report

This report constitutes the Preferred Project Report (PPR) as required by the Director –General as indicated in the letter from the Department of Planning dated 26 September 2007. This PPR includes:

- A detailed response to the issues raised in the submissions;
- A detailed response to the recommendations of the Benchmark Ecological Report Review;
- A response to the matters raised in the meeting held on 20 November 2007;
- Plans of the proposed development with design variations to minimise its environmental impact;
- An Ecological Offsets and Management Report; and
- Revised Statement of Commitments.

Keys Issues

2.1 Key Issues Identification

On 20 November 2007, a meeting was held with the proponents, Department of Planning, Greater Taree City Council and Benchmark Environmental Consultants. This meeting identified a number of issues that were required to be addressed in determining the preferred project. A copy of the minutes of this meeting are provided at **Appendix A**.

In addressing the various issues and matters raised in the minutes and submissions, consideration of appropriate subdivision design outcomes have been made and implemented. The revised Development Plans are included at **Appendix B**.

The key issues identified in this meeting and other key issues raised in submissions are addressed in detail below.

2.2 Endangered Ecological Communities

Subtropical Coastal Floodplain Forest of the NSW North Coast bioregion is the name given to the Endangered Ecological Community (EEC) associated with clay-loams and sandy loams, on periodically inundated alluvial flats, drainage lines and river terraces associated with coastal floodplains. Floodplains are level landform patterns on which there may be active erosion and aggradation by channelled and overbank stream flow with an average recurrence interval of 100 years or less (adapted from Speight 1990). Subtropical Coastal Floodplain Forest (EEC) generally occurs below 50 m, but may occur on localised river flats up to 250 m elevation in the NSW North Coast bioregion. The structure of the community may vary from tall open forests to woodlands, although partial clearing may have reduced the canopy to scattered trees. Typically these forests and woodlands form mosaics with other floodplain forest communities and treeless wetlands, and often they fringe treeless floodplain lagoons or wetlands with semi-permanent standing water (e.g. Pressey 1989a).

The drainage corridor in the eastern part of the site has the potential to regenerate to comprise this EEC. This is the only location of this potential EEC on the site. The proposed development will enable the promoted regeneration of the EEC in the drainage corridor and no adverse impacts upon the EEC will occur.

The Catchment Management Authority (CMA) did not identify any impact of clearing this EEC during application of the PVP Developer for the site.

2.3 Species Movement Corridors

The need to ensure the retention of species movement corridors within the site was raised in a number of submissions. Of particular concern was the potential impact upon Koala movement between vegetated areas on the ridgeline of Lot 54 DP 836998. In response to this issue the following measures have been implemented.

- The subdivision design was changed in the ridgeline area to remove the road between Lot 54 and Lot 156. This has the effect of enabling continued connectivity between vegetated areas and significantly reduces the potential with Koala and other species.
- Vegetation was retained on the southern boundary of Lot 54 on the ridgeline as requested by the CMA to retain vegetation connectivity in this location. This provision satisfied the requirements of the PVP Developer.

2.4 Threatened Flora

Orogen Pty Ltd was commissioned to undertake additional ecological field work to satisfy submission requirements prescribed by the NSW Department of Environment and Climate Change (DECC) for the proposed subdivision. The additional field work undertaken by Orogen comprised a targeted search for 'Threatened' plants listed under the NSW *Threatened Species Conservation Act 1995* and Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* that have been previously record and known to occur in the locality (10 km radius) of the subject site at Tinonee, these being *Diuris flavescens*, *Eucalyptus glaucina* and *Eucalyptus seeana*. Taxonomic descriptions, habitat, distributional data and conservation status of the three (3) Threatened plants subject of the additional field work is summarised below.

A targeted survey for the Threatened plants was undertaken by Orogen Senior Botanist, Isaac Mamott, and Field Ecologist, William Steggall, on 18 September and 4-5 October 2007, to coincide with the known flowering period of *Diuris flavescens*. Liaison with the Hunter-Central Rivers CMA (Andrew Paget) and Greater Taree City Council's Natural Environmental Planner, Tanya Cross, was undertaken to determine known flowering periods for the sole known *Diuris flavescens* population

A total of 36 personnel hours was spent searching the Tinonee site for the three (3) Threatened plants in areas proposed for disturbance in fine weather conditions. Search methods comprised both Random Meander and Parallel Line Transects (per Cropper 1993). Data on Threatened plants were recorded on field proformas and included information on habitat type and area, patch size, plant morphology, presence of reproductive material and bio-physiography. Threatened plants were marked with a hand held 12 channel Garmin GPS unit for subsequent mapping.

A population of *Diuris flavescens* was recorded during the Tinonee site survey, comprising a total of approximately 150 plants from 19 patches. [REDACTED]

All plants recorded were flowering with an average of 4 flowers per plant. The *Diuris flavescens* population co-occurred with a population of *Diuris sulphurea*, with the *D. flavescens* distinguishable from the latter species by its 2 rows of calli, small lateral lobes of the labellum, minimal sepal and labellum markings and pale yellow colouring relative to *D. sulphurea*. [REDACTED]

A total of two (2) additional orchids were recorded opportunistically across the Tinonee site in Pasture Grassland and Dry Sclerophyll Woodland habitats, these being *Thelymitra pauciflora* and *Microtis parviflora*. These two ground orchids are considered by the author to be relatively ubiquitous in the North Coast bioregion and are not listed as Threatened under State or Commonwealth legislation.

Eucalyptus seeana and *E. glaucina* were not recorded on the Tinonee site during the targeted survey. [REDACTED]

The *D.flavescens* population on the Tinonee site as shown in the plan in Appendix B has been protected and conserved in its entirety. As such, building envelopes and roads have been re-aligned to avoid the population.

The seed has been harvested from the *D. flavescens* population on the Tinonee site in early-mid November 2007 by the Royal Botanic Garden's specialist terrestrial orchid division and stored for future propagation trials. Plant propagation may assist in maintaining the local gene pool should a portion of the population require removal.

Methods for the protection of the *D.flavescens* population would be included in the Vegetation Management Plan prepared for the proposed development.

2.5 Osprey

In response to the site meeting of the 20th November 2007 a proposal for the habitat provision for the Osprey within the study area has been developed. This proposal has been formulated with consideration of the input of the local Osprey expert Mr Brian Crisp and evaluation of the safety risks currently posed by the stability of the nesting tree in the development area.

The proposal is to provide a more secure nesting platform for the resident pair to reduce the current risks to the future nesting success.

Assessment of Nest site safety and longevity

The inspections of the current nesting stag have determined that the expected standing life of this tree is limited such that it poses an extreme risk to the safety of nestlings or fledglings during the nesting period. This nest site has previously been observed to fail in part (upper trunk portion) which has resulted in the loss of a season's nestlings (B. Crisp pers. comm.). The remaining trunk is considered extremely unstable and has recently been determined to demonstrate movement when small forces are applied. It is the combined assessment of Mr Brian Crisp, Dr Stephen Debus and Brett Campbell that the stag has an extremely life short expectancy in its current erect state due to natural decay and as such is likely to fall in any substantial storm event. Should this happen during the nesting period, a clutch of nestlings would be lost and at present there are no alternate nest sites in the locality for subsequent years nesting attempts.

Provision of an Artificial Nesting Platform.

It is proposed to provide an artificial nesting platform at another location to maintain the nesting opportunities for the resident pair within the proposed Tinonee Rural residential development. The design of the platform is generally in accordance with the recommendations stated in the report contained within the Environmental Assessment prepared by Stephen Debus (2004). This design or similar designs have also been used successfully by Brian Crisp for other relocations in the Manning and Forster/Tuncurry area.

The proposed location of the nesting platform has been determined with consideration of the Osprey requirements and these reflect the recommendations of Dr Stephen Debus. The considerations in the selection of the site included:

- The platform must be higher than surrounding vegetation;
- Vegetation surrounding the platform must be maintained in perpetuity so as not to obstruct the nest or, be of species which will not at maturity be of a height that obstructs the nest;
- The distance from the Manning River is minimised; and
- Clear of other obstacles in the flight path such as telecommunication towers and power lines.

The site chosen as suitable occurs on the western side of the Manning River which maximises the height of the nesting pole and should be highly appropriate for the resident pair of Osprey. This site is also located at the one of the locations which is the shortest distance from the Manning River.

This location also has the advantage that after the development of the rural residential estate that the pair will not have to traverse over dwellings or infrastructure associated with the development. The proposed location of the platform has been approved by Dr Stephen Debus. His letter of approval is provided in **Appendix C**.

Timing and Methods

The artificial nesting platform is to be erected as soon as possible following approval of the EA.

Immediately after the erection of the nest site the existing nest will be carefully removed from the stag and transferred to the artificial platform to encourage the use of the new site.

The stag that is currently used will then be removed to discourage any further attempts to nest at this site and as such, reduce any risk to the safety of nestlings /fledglings in future breeding seasons.

It is considered that the new platform would provide a security of the nesting site for large number of years and would be a large improvement in terms of security to the continuing breeding success of the resident pair. The selected site will also reduce the potential for conflicts with the future development of the site. Based on the success of similar nest relocation and the successful use of nesting platforms the proposal is considered to have a very limited risk largely outweighed by the advantages of the secure artificial site.

2.6 Asset Protection Zones

In reviewing the subdivision design, the APZ requirements as outlined in the RFS submission were taken into account. The revised APZ's and the compliance with the Planning for Bushfire Protection (2006) is shown the revised development plan (**Appendix B**) and discussed more in Section 3.1.

2.7 Vegetation Clearing Offsetting

An Ecological Offsets and Management Report was prepared and provided to CMA for use with the PVP Developer assessment process. This report and the CMA approval letter is provided at **Appendix D**.

The report outlines the proposed Clearing Offsets package that has been accepted by the CMA.

2.8 Vegetation and Habitat Management

An Ecological Offsets and Management Report was prepared and provided to CMA for use with the PVP Developer assessment process. This report and the CMA approval letter is provided at **Appendix D**.

The report outlines the proposed Management of the vegetation, habitat and conservation areas of the site that will be retained in the proposed Project.

2.9 Building Design

House Design Guidelines will be prepared for the proposed subdivision. These guidelines will outline the preferred building materials, colours and schemes that would form part of future dwellings on the site. The provision of the guidelines has been included in the revised Statement of Commitments for the project (**Appendix G**).

2.10 Urray Road Access

The internal design change to remove the internal road link along the ridgeline resulted in the requirement for Urray Road to be upgraded to provide a second access to the subdivision. This second access has been agreed to by GTCC.

2.11 Water and Sewer Infrastructure

A revised Water and Sewer Strategy was prepared for the project following consultation with Mid Coast Water. This Strategy has been approved by Mid Coast Water. The Strategy and letter of approval is provided in **Appendix E**.

Response to Authority Submissions

3.1 General Submissions

As indicated in Section 1.1, the following submissions were received during the exhibition and referral of the Environmental Assessment.

- Department of Environmental and Climate Change, dated 21 August 2006;
- Department of Lands, dated 10 August 2007;
- Department of Primary Industries, dated 8 August 2007;
- Department of Water and Energy, dated 11 September 2007;
- Roads and Traffic Authority, dated 13 September 2007;
- Taree City Council, dated 7 September 2007;
- Greater Taree City Council, dated 11 October 2007;
- Greater Taree City Council, email dated 29 November 2007;
- Mid Coast Water, dated 31 October 2007;
- NSW Rural Fire Service, dated 27 September 2007;
- Hunter – Central Rivers Catchment Management, dated 3 October 2007; and
- Private submission communicated in DOP email, dated 21 November 2007.

Each of these submissions has been reviewed. The responses to the matters raised in the submissions is provided in **Appendix F**.

3.2 Review Submissions

During the EA exhibition process, the Department sought the reviews of components of the EA.

Benchmark Ecological Review

Benchmark Environmental Management (October 2007) undertake a detailed review of the Ecological Assessment components of the EA. A summary of this review and the responses to the issues raised is provided in **Appendix G**.

GTCC Engineering Assessment

GTCC Investigation and Design (October 2007) undertook a review of the engineering components of the EA and provided recommendations to the Department. Those recommendations have been included in the revised Statement of Commitments for the project included in **Appendix H**.

Design Changes and Staging

4.1 Subdivision Design

The subdivision design has been amended from the original design in the EA to specifically respond to the following:

- *Diuris flavescens* The minimisation of clearing through the determination of building envelopes in locations where least clearing is required;
- Deletion of the original lots 206 and 207 to meet the requirements of DPI;
- Protecting the *Diuris flavescens* population;
- Establishing a sewer strategy that retained the location of the existing sewer main as much as possible;
- The requirements of GTCC for design changes as outlined in their letter dated 11 October 2007; and
- Providing a second access to the subdivision from Urray Road.

A Detailed Subdivision Plan is provided in **Appendix B**.

4.2 Subdivision Staging

The Subdivision will be constructed in ?? stages. The plans of the stages in provided in **Appendix B**.

Infrastructure for each stage will be constructed as follows:

- Roads and Drainage in accordance with the design requirements of Greater Taree City Council and in accordance with the engineering requirements set out in the Revised Statement of Commitments (**Appendix H**);
- Water and Sewer infrastructure in accordance with the design requirements of MidCoast Water and the requirements set out in the Revised Water and Sewer Strategy (**Appendix E**);
- Electricity infrastructure in accordance with the requirements of Country Energy; and
- Telecommunications infrastructure in accordance with the requirements of Telstra.