

BUSHFIRE PROTECTION ASSESSMENT

FOR THE

PROPOSED REZONING OF LAND

AT

BRIMBIN



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Assessment Number	Document	Preparation Date	Issue Date	Directors Approval
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EXECUTIVE SUMMARY

Australian Bushfire Protection Planners Pty Limited, at the request of Roche Group Pty Ltd, has been commissioned to prepare a Bushfire Protection Assessment for the proposed rezoning of land at Brimbin, located north of Taree.

The land proposed for rezoning consists of 3,763 hectares of land located to the north of the township of Kundle Kundle and south of the settlement of Melinga. Lansdowne Road bisects the land into east and west precincts.

The eastern precinct contains the North Coast Railway Perway and consists of the following lots:

- Lots 1, 2 & 3 in DP 14182;
- Lot 28 in DP 14182;
- Lots 1 & 2 in DP 530846;
- Lots 4, 5 & 7 in DP 6031;
- Lot 1 in DP 314748;
- Lots 8 & 9 in DP 667626;
- Lots 37 – 47 in DP 754409;
- Lot 111 in DP 754409;
- Lots 121 & 122 in DP 882912;
- Lot 1 in DP 168200;
- Lots 23 & 24 in DP 182474;
- Lots 1 & 2 in DP 170558; and
- Lot 1 in DP 965109.

The western precinct contains the following lots:

- Lot 27 in DP 6081;
- Lots 1, 3, 4, 6, 7, 12, 13 & 14 in DP 10304;
- Lot 18 in DP 413456;
- Lots 63 & 140 in DP 754410;
- Lots 1 & 2 DP 1084130;
- Lot 1 in DP 78136;
- Lot 81 in DP 848750;
- Lots 149, 152, 154 & 155 in DP 75449;
- Lot 1 in DP 1084305; and
- Lot 1 in DP 174722.

The majority of the land within the eastern precinct is grazed pasture land with bushland on the land along the southern and eastern portions of this precinct. The western precinct also contains grazed pasture land with bushland within the south-western portion of the precinct.

The rezoning proposes to set aside the mainly bushland areas in the eastern precinct as potential conservation land with the land adjacent to Lansdowne Road designated as Employment Lands with a primary production/future employment precinct to the east of the Employment Lands precinct. Primary production is planned to the east of the primary production/future employment precinct.

The western precinct contains proposed residential zoned land, mixed use, a proposed Local Centre, Private Recreation, Neighbourhood Centres and School precincts.

The bushland area in the south-west of the precinct contains land which is proposed to be set aside as conservation land. This precinct also contains proposed Conservation - Riparian within the creeks and watercourses and areas of proposed Conservation - Steep Land in the northern part of the precinct.

The land in the southern portion of the western precinct is proposed to be zoned Rural Landscape whilst the land to the west of Lansdowne Road is proposed to be zoned for large lot residential development.

The Greater Taree City Council Bushfire Prone Land Map records that the vegetated areas of the land contain Category 1 Bushfire Prone Vegetation with the 100 metre wide buffer zone to this vegetation extending across the cleared land.

The land proposed for rural and residential zoning impacted by the Bushfire Prone Land Map will be required to address the provisions of Sections 79BA, 79C and Section 91 of the *Environmental Planning & Assessment Act 1979* and the provisions of Section 100B of the *Rural Fires Act 1997* [for the future subdivision of the land].

Whilst some of the land zoned for future residential development is not impacted by the Bushfire Prone Land Map, this report examines the whole of the site and undertakes an assessment of the bushfire protection measures required to address the bushfire risk to the future rural residential and residential development, such as the nomination of Asset Protection Zones on the land, consistent with the Residential Development specifications of *Planning for Bushfire Protection 2006*, and the requirements of Section 44 of the Rural Fires Regulation 2008.

A similar approach has been adopted for the development of the Employment Lands precinct with an examination of the bushfire protection measures, including determination of Defendable Spaces required under Section 79BA of the *Environmental Planning & Assessment Act 1979*.

Given the characteristics of the site, as discussed in this report, together with the fire protection measures recommended, conclude that the proposed rezoning is suitable in terms of its intended land use.



Graham Swain
Managing Director,
Australian Bushfire Protection Planners Pty Limited.

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SECTION 1

INTRODUCTION

1.1 Development Proposal.

Australian Bushfire Protection Planners Pty Limited, at the request of *Roche Group Pty Ltd*, has been commissioned to prepare a Bushfire Protection Assessment for the proposed rezoning of land at Brimbin.

The land proposed for rezoning consists of 3,763 hectares of land located to the north of the township of Kundle Kundle and south of the settlement of Melinga. Lansdowne Road bisects the land into east and west precincts.

The rezoning proposes to set aside the mainly bushland areas in the eastern precinct as potential conservation land with the land adjacent to Lansdowne Road designated as Employment Lands with a primary production/future employment precinct to the east of the Employment Lands precinct. Primary production is planned to the east of the primary production/future employment precinct.

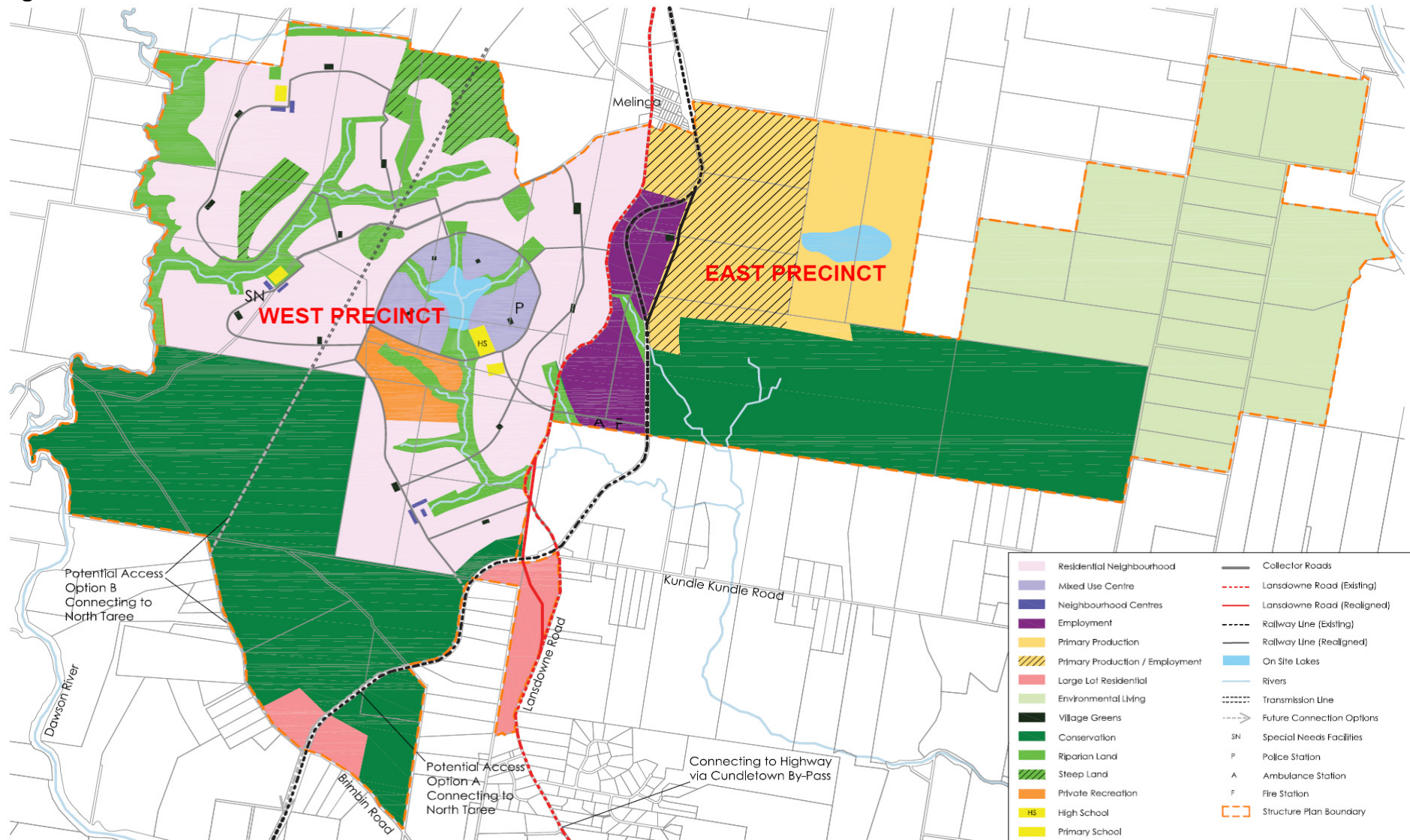
The western precinct contains proposed residential zoned land, mixed use, a proposed Local Centre, Private Recreation, Neighbourhood Centres and School precincts.

The bushland area in the south-west of the precinct contains land which is proposed to be set aside as conservation land. This precinct also contains proposed Conservation - Riparian within the creeks and watercourses and areas of proposed Conservation - Steep Land in the north part of the precinct.

The land in the southern portion of the western precinct is proposed to be zoned Rural Landscape whilst the land to the west of Lansdowne Road is proposed to be zoned for large lot residential development.

A copy of the Draft Brimbin Structure Plan is shown in Figure 1 below.

Figure 1 – Plan of Draft Brimbin Structure Plan.



1.2 Statutory Requirements.

This report has been prepared having regard to the following legislative and planning requirements:

1.2.1 Legislation.

(a) *Environmental Planning and Assessment Act 1979 (EPA Act 1979)*

Planning and development within NSW is regulated by the *Environmental Planning & Assessment Act, 1979 (EPA Act)*.

In relation to the rezoning of land and the protection against the impacts of bushfires, Ministerial Direction No. 4.4 – *Planning for Bushfire Protection* issued 1st July 2009 [under Section 117 of the *EPA Act*] applies to all Councils that are required to prepare a bushfire prone land map under Section 146 of the *EPA Act*.

Pursuant to Ministerial Direction No. 4.4 – Planning for Bushfire Protection, the relevant planning authority must consult with the Commissioner of the NSW Rural Fire Service following receipt of a gateway determination under Section 56 of the *EPA Act*, and prior to undertaking community consultation in satisfaction of Section 57 of the *EPA Act*, and take into account any comments so made:

A planning proposal must:

- Have regard to *Planning for Bushfire Protection 2006*;
- Introduce controls that avoid placing inappropriate developments in hazardous areas, and;
- Ensure that bushfire hazard reduction is not prohibited within the Asset Protection Zone.

A planning proposal must, where development is proposed, comply with the following provisions, as appropriate:

(a) Provide an Asset Protection Zone [APZ] incorporating at a minimum:

- An Inner Protection Area bounded by a perimeter road or reserve which circumscribes the hazard side of the land intended for development and has a building line consistent with the incorporation of an APZ, within the property, and
- An Outer Protection Area managed for hazard reduction and located on the bushland side of the perimeter road.

- (b) For infill development [that is development within an already subdivided area], where an appropriate APZ cannot be achieved, provide for an appropriate performance standard in consultation with the NSW Rural Fire Service. If the provisions of the draft LEP permit Special Fire Protection Purposes [as defined under Section 100B of the *Rural Fires Act 1997*], the APZ provisions shall be complied with;
- (c) Contain provisions for two-way access roads which link to perimeter roads and/or to fire trail networks;
- (d) Contain provisions for adequate water supply for fire fighting purposes;
- (e) Minimise the perimeter of the area of land interfacing the hazard which may be developed;
- (f) Introduce controls on the placement of combustible materials in the Inner Protection Area, and;

A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director General of Planning [or an officer of the Department nominated by the Director-General] that Council has obtained written advice from the Commissioner of the NSW Rural Fire Service, to the effect that, notwithstanding the non-compliance, the NSW Rural Fire Service does not object to the progression of the planning proposal.

Note: This report forms part of a development strategy and structure plan which will inform the rezoning application [planning proposal].

1.2.2 Planning Policies.

Planning for Bushfire Protection – 2006. (NSW Rural Fire Service)

This document provides guidance on the planning and development control processes in relation to bushfire protection measures for residential subdivision, Special Fire Protection and Industrial Developments in bushfire prone areas. The Commissioner may determine, under Section 100B of the *Rural Fires Act*, additional measures that are considered necessary to protect the development against the impact of bushfire.

1.3 Documentation reviewed in this assessment.

- Greater Taree City Council Bushfire Prone Land Map;
- Brimbin Flora and Fauna Assessment prepared by Niche Environmental & Heritage;
- Brimbin Structure Plan May 2013;
- Aerial Photograph.

1.4 Site Inspection.

Graham Swain of *Australian Bushfire Protection Planners Pty Limited* inspected the site on the 12 & 13 of November 2010.

1.5 Advice from the NSW Rural Fire Service.

The NSW Rural Fire Service provided a response on the 24 June 2010 to the request from Roche Group Pty Ltd seeking advice in the preparation of the development strategy and structure plan for the rezoning of land at Brimbin.

This advice included the requirement for the provision of the following bushfire protection measures:

- Asset Protection Zones in accordance with Appendix 2 of *Planning for Bushfire Protection 2006*;
- Public access in accordance with Section 4.1.3 and 4.2.7 of *Planning for Bushfire Protection 2006*;
- Water supply for fire-fighting operations in accordance with Section 4.1.3 and 4.2.7 of *Planning for Bushfire Protection 2006*;
- Construction of future dwellings in accordance with Addendum Appendix 3 of *Planning for Bushfire Protection 2006* and A.S. 3959 – *Construction of Buildings in Bushfire Prone Areas*;
- Landscaping in accordance with Appendix 5 of *Planning for Bushfire Protection 2006*;
- Emergency evacuation measures in accordance with Section 4.2.7 of *Planning for Bushfire Protection 2006*.

These requirements are examined in this report.

SECTION 2

PROPERTY DESCRIPTION

2.1 Location.

The land proposed for rezoning consists of 3,763 hectares of land located to the north of the township of Kundle Kundle and south of the settlement of Melinga. Lansdowne Road bisects the land into west and east precincts.

The eastern precinct contains the North Coast Railway Perway and consists of the following lots:

- Lots 1, 2 & 3 in DP 14182;
- Lot 28 in DP 14182;
- Lots 1 & 2 in DP 530846;
- Lots 4, 5 & 7 in DP 6031;
- Lot 1 in DP 314748;
- Lots 8 & 9 in DP 667626;
- Lots 37 – 47 in DP 754409;
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- Lots 121 & 122 in DP 882912;
- Lot 1 in DP 168200;
- Lots 23 & 24 in DP 182474;
- Lots 1 & 2 in DP 170558; and
- Lot 1 in DP 965109.

The western precinct contains the following lots:

- Lot 27 in DP 6081;
- Lots 1, 3, 4, 6, 7, 12, 13 & 14 in DP 10304;
- Lot 18 in DP 413456;
- Lots 63 & 140 in DP 754410;
- Lots 1 & 2 DP 1084130;
- Lot 1 in DP 78136;
- Lot 81 in DP 848750;
- Lots 149, 152, 154 & 155 in DP 75449;
- Lot 1 in DP 1084305; and
- Lot 1 in DP 174722.

2.2 Existing Land Use.

With the exception of the bushland areas on the site the majority of the land is used for cattle grazing with the cleared land pasture improved.

An existing rural dwelling and associated sheds is located on Lot 1 in DP 530846, within the Eastern Precinct and is accessed via a driveway off Lansdowne Road. An existing rural dwelling and associated sheds is located on Lot 18 in DP 413456, to the west of Lansdowne Road, within the Western Precinct.

2.3 Surrounding Land Use.

(1) East Precinct:

(a) North –

The adjoining land to the north of the East Precinct consists of agricultural land.

(b) East

The adjoining land to the east of the East Precinct consists of agricultural land.

(c) South

The land adjoining the southern boundary of the East Precinct consists of rural and rural residential land which has access to Kundle Kundle Road.

(2) West Precinct:

(a) North –

The adjoining land to the north of the West Precinct consists of vacant land with a quarry operation on the land to the north of the north-eastern corner; agricultural land on Lot 38 in DP 786610, to the north of the central portion of the West Precinct and a rural residential allotment within Lot 61 in DP 754410, adjoining the north-western corner of the precinct.

(b) West

The adjoining land to the west of the West Precinct consists of vacant land which is covered in forest vegetation.

(c) South

The land adjoining the southern boundary of the West Precinct consists of rural and rural residential land which has access to Brimbin Road.

The land adjoining Lot 1 in DP 174722 consists of rural residential development to the west, on Oakvale Road with similar landuse to the east, beyond Lansdowne Road.

Figure 3 – Aerial Photograph of the site and surrounding areas.



2.4 Topography.

Appendix 2 of *Planning for Bushfire Protection 2006* states that slopes should be assessed, over a distance of at least 100 metres, from a development site and that the gradient of the land should be determined which will most significantly influence the fire behaviour to the site.

a) Within the East Rezoning Precinct.

The topography of the land within the east rezoning precinct consists of a broad ridgeline with falls west to east with its apex approximately in the centre of the precinct. The land to the north of the apex falls gently to the north whilst to the south a saddle extends to the south with the land falling to the west and east at < 5 degrees.

The land within the eastern portion of the East Precinct falls at less than one degree to the east to the flood plain of the Lansdowne River.

b) Within the West Rezoning Precinct.

The topography of the land within the west rezoning precinct consists of a number of broad ridgelines, knolls and valleys which fall to the east, across Lansdowne Road or to the west into the Dawson River.

The land along the central part of the northern portion of the precinct rises at more than 15 degrees to a ridgeline which occupies the adjacent land.

The south-western portion of the West Precinct contains level land which falls locally into the various watercourses found in this part of the precinct.

c) Within 100 metres of the proposed development within the East Rezoning Precinct.

(a) North

The topography of the land to the north of the Employment Lands and future Residential development within the east rezoning precinct falls to the north across the adjacent agricultural land at 1 – 2 degrees.

(b) East

The topography of the land to the east of the future Residential development falls to the east at 1 degree across the adjoining land.

(c) South

The topography of the land to the south of the Employment Lands and future Residential development within the east rezoning precinct falls to the south at < 5 degrees, south of the Employment Lands and 3 degrees to the southeast of the future Residential land.

d) Within 100 metres of the proposed development within the West Rezoning Precinct.

(a) North

The topography of the land to the north of the future Residential development within the west rezoning precinct rises to the north at 5 – 20 degrees along the central portion of the northern boundary. The land to the north of the western section of the northern boundary falls to the north at < 5 degrees whilst the land to the north of the eastern section of the northern boundary falls to the northeast across the adjacent vegetated land at 10 - 15 degrees.

(b) West

The topography of the land to the west of the Dawson River, which forms the western boundary of the rezoning precinct, rises at less than 5 degrees to the west and northwest.

(c) South

The topography of the land to the south of the Rural Zoned Lands within the south-western section of the West Precinct, being the land beyond Brimbin Road, generally falls to the southwest at less than 5 degrees towards the Dawson River corridor.

(d) East

The topography of the land to the east of the southern section of the West Precinct, being the land to the west of Oakvale Road, falls to the east at < 5 degrees.

The topography of the land to the west of that section of the West Precinct located between Oakvale Road and Lansdowne Road rises to the west at less than 5 degrees, across the adjacent rural residential land and falls to the east beyond Lansdowne Road.

Figure 4 – Topographic Map – East Precinct.

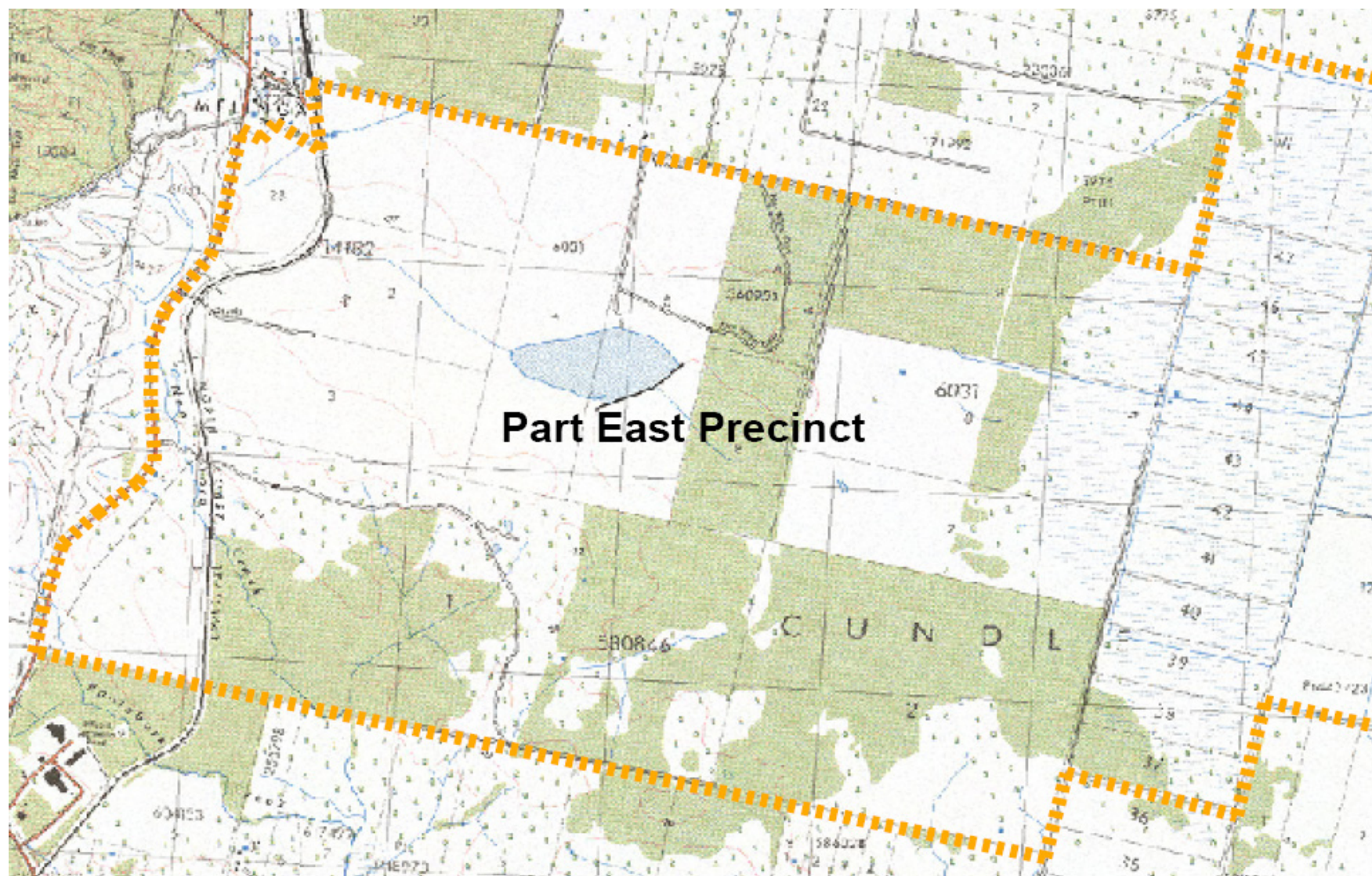
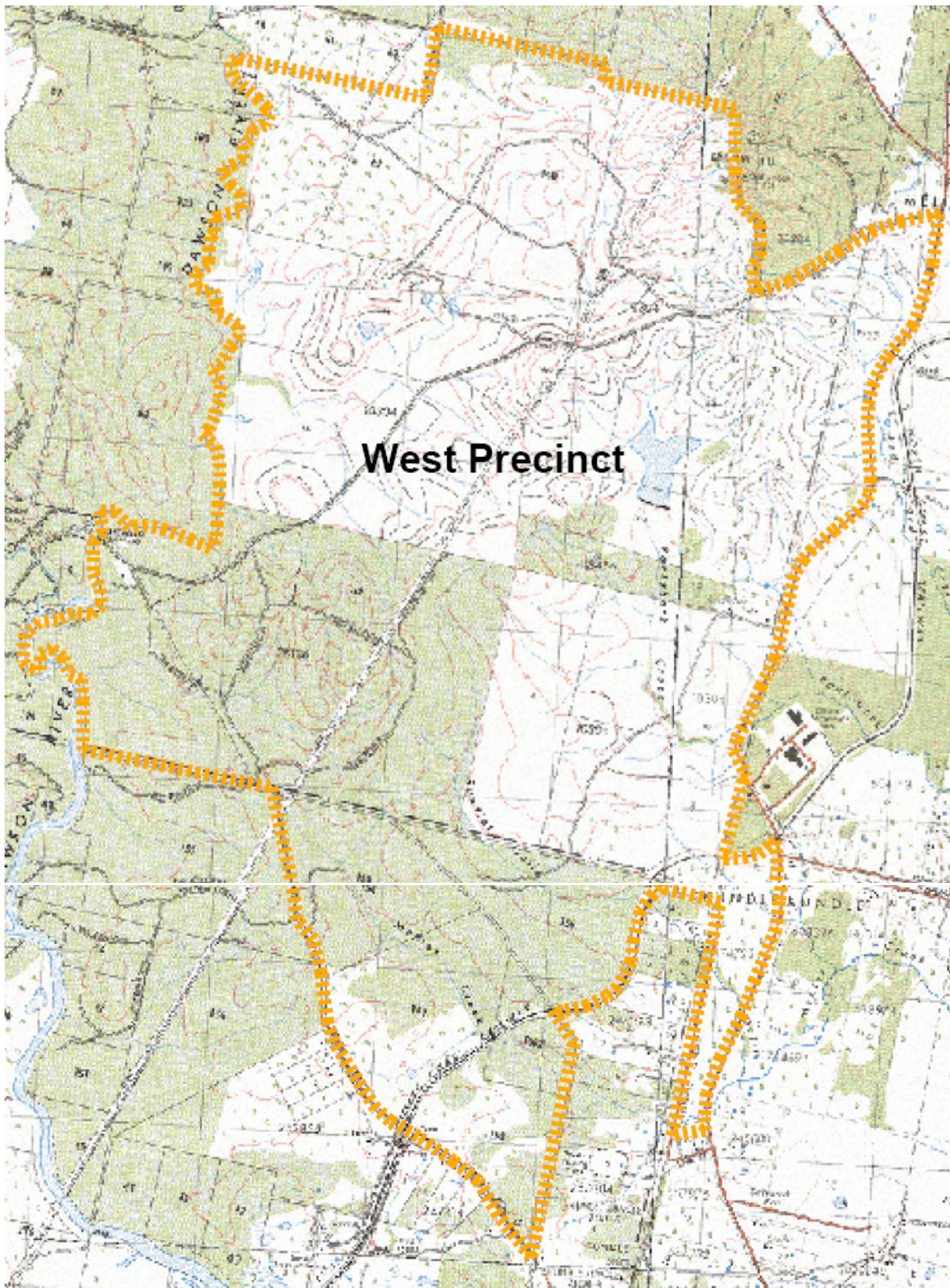


Figure 5 – Topographic Map – West Precinct.



2.5 Vegetation.

Appendix A2.3 of *Planning for Bushfire Protection 2006* provides a methodology for determining the predominant bushfire prone vegetation for at least 140 metres in all directions from the future development on the site. Vegetation is classified using Table A2.1 of *Planning for Bushfire Protection 2006*, which classifies vegetation types into the following groups:

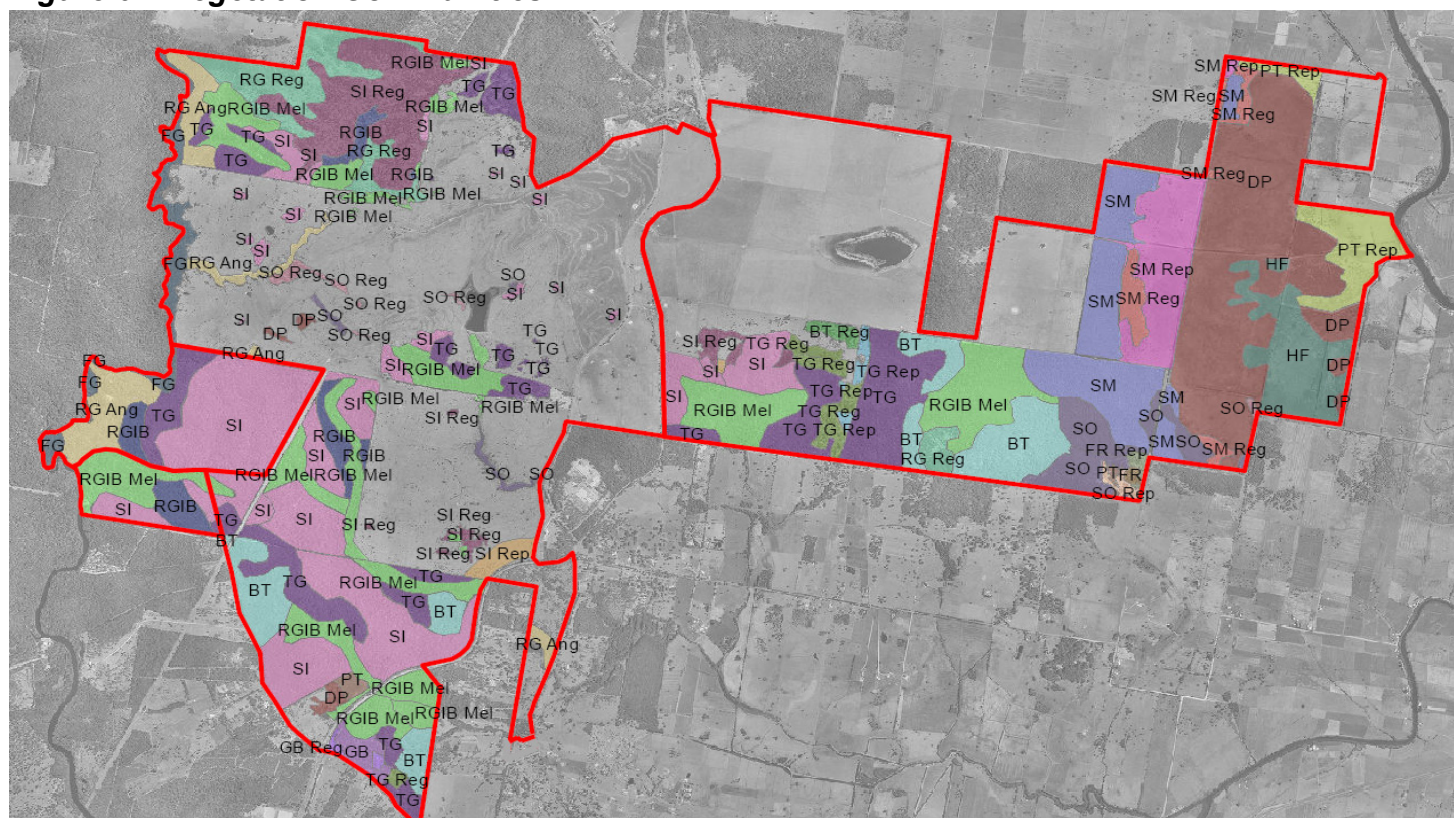
- (a) *Forests [wet & dry sclerophyll forests];*
- (b) *Woodlands;*
- (c) *Plantations – being pine plantations not native plantations;*
- (d) *Forested Wetlands;*
- (e) *Tall Heaths;*
- (f) *Freshwater Heaths;*
- (g) *Short Heaths;*
- (h) *Alpine Complex;*
- (i) *Semi – arid Woodlands;*
- (j) *Arid Woodlands; and*
- (k) *Rainforests.*

2.5.1 Vegetation within the Rezoning Precinct.

The vegetation within the rezoning precinct has been examined by Niche Environmental. Figures 6 & 7 below are extracts of the Niche Report showing the vegetation communities within the East and West Rezoning Precincts.

Those areas not identified as containing native vegetation contain pasture grass which is grazed.

Figure 6 – Vegetation Communities.



Study Area



Establishment 3 Dec 2011

- BT Reg, Blackbutt Tallowwood Regrowth
- BT, Blackbutt Tallowwood Tall Open Forest
- DP, Derived Swamp Paperbark Thicket
- FG, Flooded Gum Brush Box Tall Forest
- FR Rep, Forest Redgum Regplanting
- FR, Forest Redgum Regrowth
- GB Reg, Grey Box Red Gum Grey Ironbark Regrowth
- GB, Grey Box Red Gum Grey Ironbark Woodland

- | | |
|--|--|
| HF, Herbfield | SM Reg, Swamp Mahogany Regrowth |
| PT Rep, Swamp Paperbark Replanting | SM Rep, Swamp Mahogany Replanting |
| PT, Swamp Paperbark Thicket | SM, Swamp Mahogany Forest |
| RG Ang, Red Gum Angophora Mahogany Woodland | SO Reg, Swamp Oak Forest Regrowth |
| RG Reg, Red Gum Grey Ironbark Paperbark Regrowth | SO Rep, Swamp Oak Replanting |
| RGIB Mel, Red Gum Grey Ironbark Paperbark Forest | SO, Swamp Oak Forest |
| RGIB, Narrow-leaved Red Gum Ironbark Woodland | TG Reg, Grey Gum Stringybark Tallowwood Regrowth |
| SI Reg, Spotted Gum Ironbark Regrowth | TG Rep, Grey Gum Stringybark Tallowwood Replanting |
| SI Rep, Spotted Gum Ironbark Replanting | TG, Grey Gum Stringybark Tallowwood Tall Open Forest |
| SI, Spotted Gum Ironbark Forest | |

2.5.2 Vegetation within 140 metres of the development within the East Rezoning Precinct.

(a) North

The vegetation to the north of the future Employment Lands development in the east rezoning precinct consists of grazed grassland/agricultural crops and Tall Open Forest on the land to the north.

(b) East

The vegetation to the east of the future Employment Lands in the east rezoning precinct consists of Tall Open Forest beyond the primary production landuse.

(c) South

The vegetation to the south of the future Employment Lands in the east rezoning precinct consists of Grey Gum Stringybark Tallowwood Tall Open Forest/Red Gum Grey Ironbark Paperbark Forest.

2.5.3 Vegetation within 140 metres of the development within the West Rezoning Precinct.

(a) North

The vegetation to the north of the future residential development in the west rezoning precinct consists of Tall Open Forest on the vacant land to the north. The Quarry site to the north of the north-eastern corner is devoid of vegetation whilst Lot 37 in DP 786610 contains a tree canopy which has a managed understorey of grass which is grazed.

Lot 62 in DP 754410, to the north of the north-western corner of the west precinct contains regrowth forest vegetation.

(b) West

The vegetation to the west of the future residential development in the west rezoning precinct consists of Tall Open Forest within and to the west of the Dawson River corridor and Spotted Gum Ironbark and Grey Gum Stringybark Tallowwood Tall Open Forest within the proposed conservation area.

(c) South

The vegetation to the south of the future residential development in the west rezoning precinct consists of Spotted Gum Ironbark and Grey Gum Stringybark Tallowwood Tall Open Forest within the proposed conservation area.

The proposed Rural Landscape precinct within the southern corner of the west rezoning precinct is adjoined to the north by Spotted Gum Ironbark and Grey Gum Stringybark Tallowwood Tall Open Forest within the proposed conservation area.

The vegetation to the southwest of this precinct, on the land beyond Brimbin Road, consists of managed vegetation on the rural residential land and unmanaged Open Forest on those parts of the land which is not cleared or managed.

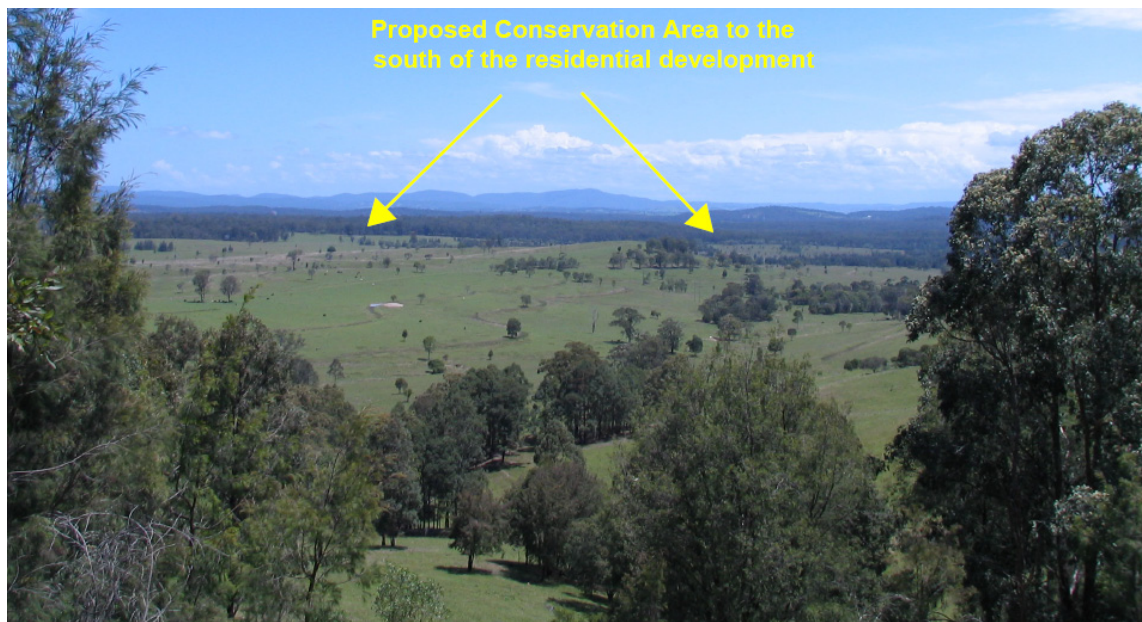
The vegetation on the land to the east of the Rural Landscape precinct consists of grassland which is grazed; managed vegetation on the rural residential land and unmanaged Tall Open Forest on those parts of the land which is not cleared or managed.

The proposed Large Lot Residential precinct located between Oakvale Road and Lansdowne Road is adjoined to the west by managed vegetation on the existing rural residential development, except for unmanaged forest vegetation in the creek corridor. This precinct is adjoined to the east by managed vegetation on the rural/rural residential development to the east of Lansdowne Road, except for the forest vegetation on Lot 6 in DP855410.

2.6 Site Photographs.



Photograph No. 1 – View looking southeast across the west rezoning precinct showing landform and grazing land.



Photograph No. 2 – View looking southwest across west rezoning precinct showing proposed conservation area to the south of the proposed residential precinct.



Photograph No. 3 – View looking west along northern boundary of the west rezoning precinct showing vegetation on the land to the west of the Quarry.



Photograph No. 4a & 4b – View looking east and southeast across the west rezoning precinct showing landform, land use in the east and west rezoning precincts.



Photograph No. 5 – View northwest across adjoining Lot 62 in DP 754410, to the north of the northwest corner of the west rezoning precinct showing regrowth forest vegetation.



Photograph No. 6 – View of managed vegetation on Lot 38 in DP 786610, to the north of the west rezoning precinct.



Photograph No. 7 – View of Forest vegetation on the land to the east of the future residential land within the east rezoning precinct.



Photograph No. 8 – View of agricultural land to the north of the future residential land within the east rezoning precinct.



Photograph No. 9 – View of Tall Open Forest on the proposed conservation land to the southeast of the future residential land within the east rezoning precinct.



Photograph No. 10 – View of Open Forest on the proposed conservation land to the south of the future Employment Lands within the east rezoning precinct.

SECTION 3

BUSH FIRE PROTECTION ASSESSMENT

3.1 Introduction.

Planning for Bushfire Protection 2006 provides specifications on the deemed-to-satisfy bushfire protection measures to development located in a bushfire prone area. The document identifies six core bushfire protection requirements. These are:

- Provision of Asset Protection Zones / Defendable Spaces in accordance with the specific landuse, the predominant bushfire prone vegetation type within 140 metres of the development and the topography of the land containing the bushfire prone vegetation;
- Access for fire fighting operations;
- Water Supplies for fire fighting operations;
- Construction standards of buildings located within 100 metres of the bushfire hazard interface, dependant on specification landuse, the predominant bushfire prone vegetation type within 140 metres of the development and the topography of the land containing the bushfire prone vegetation;
- Emergency Planning;
- Landscape Management – in particular the management of the Asset Protection Zones / Defendable Spaces and residual bushfire prone vegetation.

The following sections of this report examine these requirements for the proposed landuses within the Brimbin rezoning precinct.

3.2 Asset Protection Zones – Residential & Rural Residential Development.

Appendix 2 of *Planning for Bushfire Protection 2006* provides the following procedure for determining setback distances (Asset Protection Zones) for residential development located in a bushfire prone area:

- (a) *Determine vegetation formations as follows:*
- Identify vegetation from the site for a distance of 140 metres;
 - Consult Table A2.1 to determine the predominant vegetation type; and
 - Select the predominant vegetation formation as described in Table A2.1.

- (b) *Determine the effective slope of the land under the predominant vegetation Class.*
- (c) *Determine the appropriate fire [weather] area in Table A2.2.*
- (d) *Consult Table A2.4 and determine the appropriate setback [Asset Protection Zone] for the assessed land use, vegetation formation and slope range.*

Table 1 provides a summary of the assessment to determine the Asset Protection Zones for the future residential development in the west rezoning precinct. The Fire Danger Index [FDI] for the site is 80.

Table 1. Determination of Asset Protection Zones to the future residential development in the west rezoning precinct

Aspect	Vegetation within 140m of development	Predominant Vegetation Class (Table A2.1 of P&BFP 2006)	Average Slope of Land	Recommended Width of Asset Protection Zone (Table A2.5 of P&BFP 2006)
North	Open Forest & grazing land [on Lot 38 in DP 786610]	Forest	> 5 degrees upslope to the north	20 metres, measured from the unmanaged vegetation on adjacent land [Refer to Note 1 below]
North	Forest regrowth on Lot 62 in DP 754410	Forest	> 5 degrees downslope to the north	30 metres, measured from the unmanaged vegetation on adjacent land
West	Tall Open Forest west of Dawson River & in proposed Conservation area	Forest	< 5 degrees upslope & downslope to the west	20 metres, measured from the unmanaged vegetation on the adjacent land [Refer to Note 1 below]
South	Tall Open Forest in proposed Conservation area	Forest	< 5 degrees upslope & downslope to the south	20 metres, measured from the unmanaged vegetation on the adjacent conservation land

Note 1:

The bushfire risk to the future residential development within the west rezoning precinct will emanate from the unmanaged bushfire prone vegetation on the land to the north and west of the west rezoning precinct and from the vegetation retained in the proposed Conservation area.

Due to the topography of the land and the potential fire paths, especially through the vegetation to the northwest, along the Dawson River, it is considered that the recommended widths of Asset Protection Zones to these aspects may not address the potential bushfire risk to these edges of the new Brimbin community.

Consideration should therefore be given to an increase in the width of the Asset Protection Zone to these aspects. This can be achieved through the following planning mechanisms:

1. Provide a minimum 8.0 wide perimeter road and managed road reserve with deeper residential allotments that provide for a minimum separation of 35 metres between the unmanaged vegetation and the future dwellings. This alternate shall also provide for road with links to the internal road network within the new community.
2. Provide a perimeter gravel 'rural road' with a formed width of 4.0m + passing bays all within an 8.0 metre wide carriageway with perimeter rural residential development and/or large lot residential development that provides a minimum 42 metre wide separation between the unmanaged vegetation and the future dwellings. This alternative shall also provide for an 'internal' perimeter road with links to the internal road network within the new community.

Figures 7 & 8 below provide a graphical representation of the potential northwest, west and southwest fire paths.

Figure 7 – Northwest & West fire paths

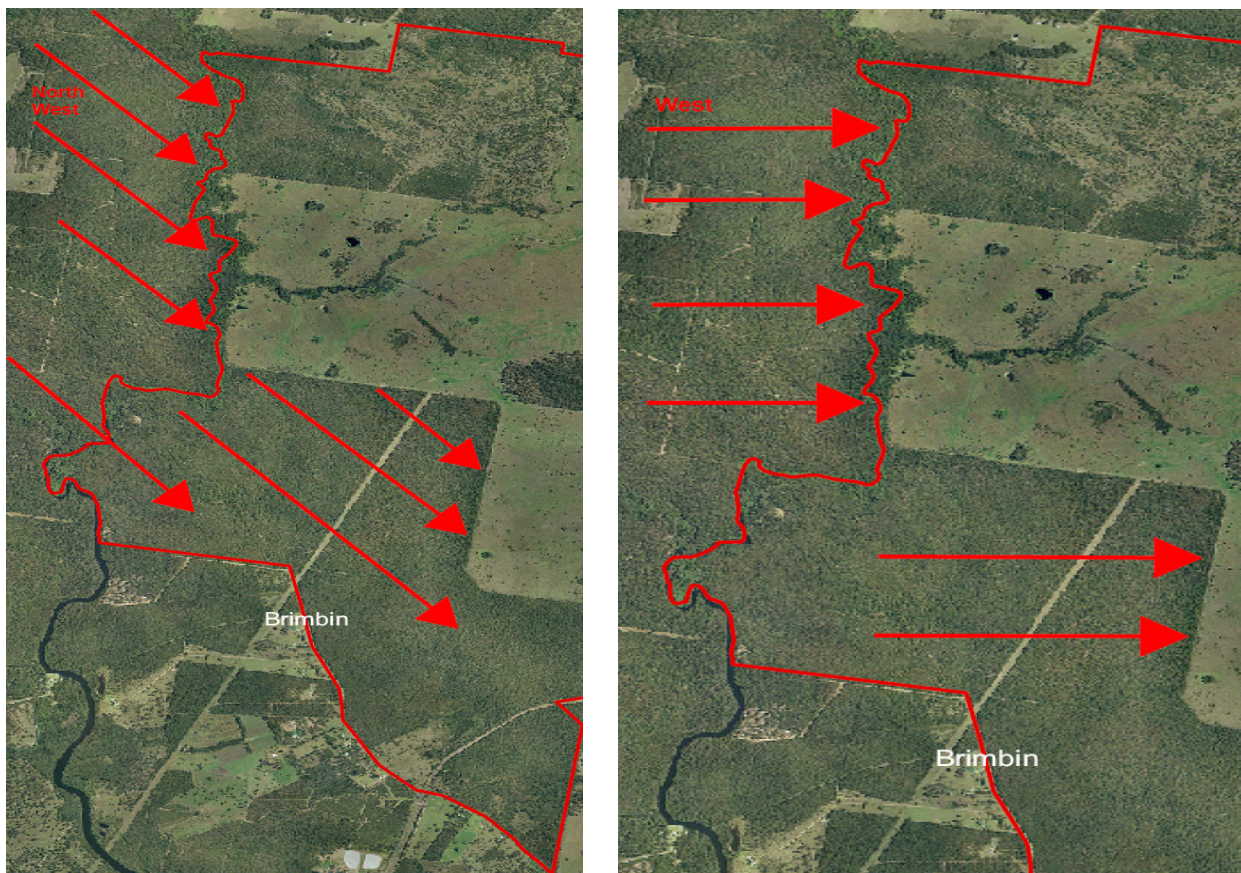


Figure 8 – Southwest fire paths

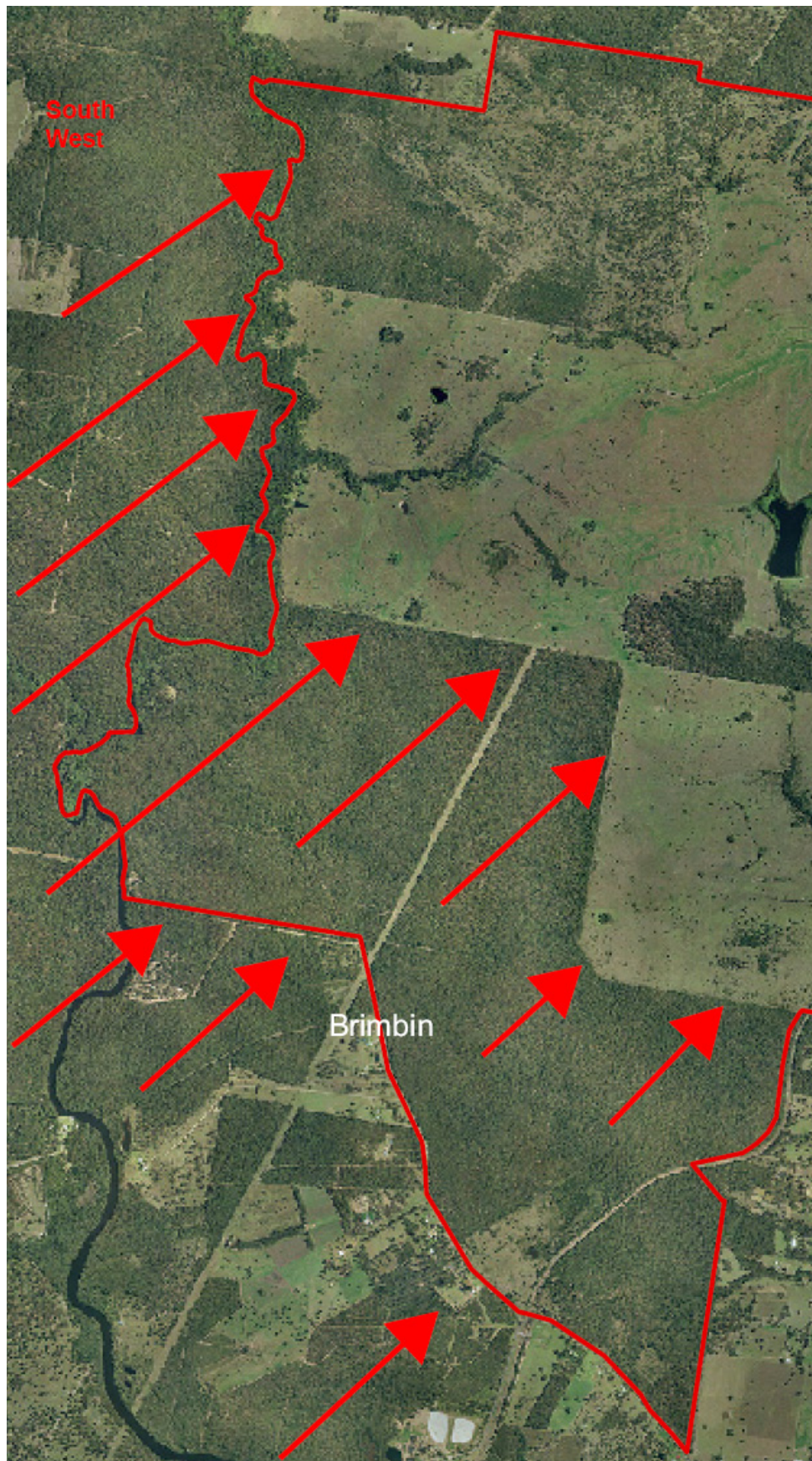


Table 2 provides a summary of the assessment to determine the Asset Protection Zones for the future rural residential development in the west rezoning precinct [on Brimbin Road].

Table 2. Determination of Asset Protection Zones to rural residential development in the Rural Landscape precinct on Brimbin Road [in the west rezoning precinct]

Aspect	Vegetation within 140m of development	Predominant Vegetation Class (Table A2.1 of P/BFP 2006)	Average Slope of Land	Recommended Width of Asset Protection Zone (Table A2.5 of P/BFP 2006)
<i>North</i>	Tall Open Forest	Forest	< 5 degrees downslope to the north, northeast & northwest	20 metres, measured from the unmanaged vegetation on the proposed Conservation Land [Refer to Note 1 below]
<i>East</i>	Tall Open Forest & managed vegetation on rural residential development	Forest on unmanaged lands	< 5 degrees downslope to the east	20 metres, measured from the unmanaged vegetation on the adjacent land.
<i>South & southwest</i>	Tall Open Forest & managed vegetation on rural residential development	Forest on unmanaged lands	< 5 degrees downslope to the southwest	20 metres, measured from the unmanaged vegetation on the adjacent land, beyond Brimbin Road. [Refer to Note 1 below]

Note 1:

The bushfire risk to the rural residential development within the Rural Landscape precinct will emanate from the unmanaged bushfire prone vegetation within the proposed Conservation land to the north and from the unmanaged vegetation on the land to the southwest of Brimbin Road.

Whilst the Asset Protection Zone identified in Table 2 above provide complying setback widths it is recommended that, due to the topography of the land and the potential fire paths, it is considered that the recommended widths of Asset Protection Zones to these aspects do not address the potential bushfire risk to the proposed rural residential allotments. In order to reduce the potential bushfire risk to the future dwellings within the rural residential along Brimbin Road at 42 metre wide Asset Protection Zone setback shall apply to the northern aspect to the future dwellings and also to the southwest, where the vegetation on the south-western side of Brimbin Road is not managed to reduce the bushfire risk.

Table 3 provides a summary of the assessment to determine the Asset Protection Zones for the future large lot residential development on Lot 1 in DP 174722 – located between Oakvale Road and Lansdowne Road [in the west rezoning precinct].

Table 3. Determination of Asset Protection Zones to the future large lot residential development on Lot 1 in DP 174722 [in the west rezoning precinct]

Aspect	Vegetation within 140m of development	Predominant Vegetation Class (Table A2.1 of P/BFP 2006)	Average Slope of Land	Recommended Width of Asset Protection Zone (Table A2.5 of P/BFP 2006)
<i>North</i>	Managed band of remnant Tall Open Forest	Nil – managed vegetation	< 5 degrees upslope to the north	Nil
<i>West</i>	Open Forest in creek corridor & managed vegetation on rural residential development	Forest on unmanaged lands	< 5 degrees upslope to the west	20 metres, measured from the unmanaged vegetation on the adjacent land, west of Oakvale Road.
<i>East</i>	Managed vegetation on rural residential development + Open Forest in creek corridor to the east of Lansdowne Road	Nil to managed vegetation – Forest on unmanaged lands	< 5 degrees downslope to the east	20 metres, measured from the unmanaged vegetation on the adjacent land, east of Lansdowne Road.

3.3 Asset Protection Zones to riparian corridors within the west rezoning precinct.

The west rezoning precinct contains riparian corridors and areas of private open space. If these areas contain vegetation which is unmanaged, Asset Protection Zones and potentially perimeter roads will be required to future residential development adjoining this vegetation. In most circumstances the minimum width of Asset Protection Zone will be 20 metres.

3.4 Asset Protection Zones to future Local Centre within the west rezoning precinct.

The west rezoning precinct contains a Local Centre in which it is proposed to develop Commercial / Retail / Neighbourhood Shops / Schools and Community Facilities. This development precinct is proposed to be located more than 100 metres from the closest unmanaged bushfire prone vegetation, therefore addressing the maximum separation width required by the NSW Rural Fire Service.

3.5 Defendable Spaces to future Employment Lands Development.

Planning for Bushfire Protection 2006 provides a methodology to determine the Asset Protection Zones [defendable space] and Bushfire Attack [Construction Standards] required for **habitable buildings** in development for **residential purposes** that are designated as bushfire prone.

The document does not provide deemed to satisfy solutions for Class 5 – 10 buildings constructed in bushfire prone areas but states that where the aim and objectives of the document are not met, then the construction requirements for bushfire protection will need to be considered on a case by case basis.

In reference to the construction of future buildings in the Employment Lands precinct in the east rezoning precinct the future buildings are classified as Class 7 buildings as defined by the Building Code of Australia [BCA].

Chapter 1, Section 1.3 of *Planning for Bushfire Protection 2006* states that the construction of Class 5 – 10 buildings on bushfire prone land, or land impacted by bushfire prone vegetation, must meet the aim and objectives of the document.

Chapter 4, Section 4.3.6(f) discusses the bushfire protection to buildings of Class 5 to 8 and 10b of the Building Code of Australia and states:

“The Building Code of Australia does not provide for any bushfire specific performance requirements and as such AS 3959 -2009 does not apply as a set of “deemed-to-satisfy” provisions.

The general fire safety construction provisions [of the BCA] are taken as acceptable solutions, but the aim and objectives of Planning for Bushfire Protection 2006 apply in relation to other matters such as access, water and services, emergency planning and landscaping/vegetation management”.

“Where the aim and objectives of PfPFP [Section 1.1] are not met, then the construction requirements for bushfire protection will need to be considered on a case-by-case basis”.

“In many cases, these types of developments will require on-site parking and loading areas. In such cases, it is prudent to place these facilities in the most appropriate location in order to establish defendable space for fire-fighting purpose”.

The objectives of *Planning for Bushfire Protection 2006* are:

- (i) Afford occupants of any building adequate protection from exposure to a bushfire;
 - (ii) Provide for a defensible space to be located around buildings;
 - (iii) Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent direct flame contact and material ignition;
 - (iv) Ensure that safe operational access and egress for emergency service personnel and residents is available;
 - (v) Provide for ongoing management and maintenance of bushfire protection measures, including fuel loads in the asset protection zones;
- and
- (vi) Ensure that utility services are adequate to meet the needs of fire-fighters and others assisting in bushfire fighting.

This section of the report examines the provision of a suitable “defensible space” between the bushfire hazard and the proposed buildings and the protection against the potential impacts of a future fire occurrence in the vegetation in the proposed Conservation area to the south and east and the vegetation on the land to the north.

Table 4 examines the width of defensible space requirements based on the widths required to provide a separation distance which is sufficient to minimise flame contact with the buildings and to provide a fire-fighting platform wide enough to permit the safe extinguishment of a bushfire, after the fire front has passed.

**Table 4. Determination of Defendable Space to the future Employment Lands buildings [east rezoning precinct].
Fire Danger Index for the site is 80**

Aspect	Vegetation within 140m of development	Predominant Vegetation Formation Class [Table A2.1 Planning for Bushfire Protection 2006]	Effective Slope of Land for 100 metres from buildings	Flame Zone width determined by calculation	Construction standard to buildings [AS 3959 – 2009] Bushfire Attack Level – BAL
North	Open Forest on land to the north of the 'Employment Lands' precinct	Forest	< 5 degrees downslope to the north	20 metres	Minimum BAL 40 for 20 metre wide Defendable Space setback to buildings
East	Managed primary production grassland	Nil	< 5 degrees downslope to the east	None required	Minimum BAL 12.5 & 10 metre wide Defendable Space setback to buildings
South	Tall Open Forest within proposed Conservation area	Forest	< 5 degrees downslope to the south	20 metres	Minimum BAL 40 for 20 metre wide Defendable Space setback to buildings

Note:

The final assessment to determine the required level of bushfire construction standards on the future buildings within the Employment Lands precinct shall be undertaken at the time of submission of the Development Application for the buildings and will vary depending on the width of the available Defendable Space.

3.6 Construction Standards to the future residential & rural residential dwellings located within 100 metres of bushfire prone vegetation.

The rezoning precinct is located in an area which will be subject to radiant heat and ember attack from fires that occur in the bushfire vegetation on land adjoining the future residential development.

Therefore, construction standards shall be applied to the future dwellings on the lots located adjacent to the bushfire hazard with the minimum construction level of BAL 12.5 applying to all dwellings located within 100 metres of the unmanaged bushfire prone vegetation. Final determination of the construction standards to those residential buildings located within 100 metres of unmanaged bushfire prone vegetation shall be undertaken prior to the submission of the Development Application for the erection of the dwellings and shall be undertaken to address the requirements of Appendix 3 [Amended 2010] of *Planning for Bushfire Protection 2006* and Australian Standard A.S. 3959 – 2009 – 'Construction of Buildings in Bushfire Prone Areas'.

3.7 Construction Measures to Industrial/Commercial Buildings located in the Employment Lands rezoning precinct.

Table 5 identifies that the minimum Defendable Space widths required between the future buildings and the bushfire prone vegetation adjoining the Employment Lands rezoning precinct and have been established so as to minimise flame contact with the adjacent buildings and therefore reduce the likely radiant heat exposure on the buildings to less than 40kW/m².

Should the minimum Defendable Space widths prevail, the construction of that portion of the future buildings that are exposed to the hazard shall be constructed to BAL 40, as defined by A.S. 3959 – 2009.

In addition, there is the possibility that burning embers from a bushfire event may impact upon the buildings, therefore the following construction standards are recommended:

- Any operable windows shall be fitted with aluminium/stainless steel mesh flyscreens having a maximum mesh aperture size of 2mm;
- Access doors [PA and Vehicle] to the buildings shall be fitted with seals that seal the bottom, stiles and head of the door against the opening/frame to prevent the entry of embers into the building. Particular attention shall be paid to the gap at the head of the curtain of the roller doors, where mohair type seals can be used;
- Any external vents, grilles and ventilation louvres shall have stainless steel mesh with a maximum aperture of 2mm square fitted to prevent the entry of embers into the building or be fitted with a louvre system which can be closed in order to maintain a maximum aperture or gap of no more than 2mm.
- Roof ventilators shall be fitted with stainless steel flymesh [2mm aperture] to prevent the entry of embers into the building or be fitted with a louvre system which can be closed in order to maintain a maximum aperture or gap of no more than 2mm.

3.8 Access for Firefighting Operations.

The future public roads shall comply with the deemed-to-satisfy provisions of Section 4.1.3(1) of *Planning for Bushfire Protection 2006*, with an 8.0 metre wide perimeter road provided between the bushfire prone vegetation and the future dwellings. Internal public roads shall have a minimum paved width of 6.5 metres and 'No Parking' to one side. Cul-de-sac design shall incorporate a turning circle of 24 metres for Category 1 NSW Rural Fire Service Tankers and NSW Fire Brigade Composite Appliances.

3.9 Water Supplies for Firefighting Operations.

A reticulated water supply shall be provided complete with fire Hydrants which comply with the spacing, sizing and pressure specifications of Australian Standard A.S 2419.1 - 2005.

Hydrant locations shall be delineated by blue markers placed on the hydrant side of the centreline of the road pavement.

3.10 Landscape Management.

Landscape Management – in particular the management of the Asset Protection Zones / Defendable Spaces and residual bushfire prone vegetation shall be undertaken in compliance with Appendix 5 of *Planning for Bushfire Protection* and the NSW Rural Fire Service's '*Specifications for Asset Protection Zones*'.

Temporary Asset Protection Zones/Defendable Spaces shall be provided to the edges of development stages and the management of the land shall be undertaken to reduce the bushfire hazard within future development stages.

A Fire Management Plan shall be prepared for the vegetation within the proposed Conservation areas.

3.11 Provision of Fire Service Coverage to the new Community.

The NSW Fire Brigade do not service the proposed new community as it is located beyond the limits of the Taree Fire Brigade District however the Brigade have recommended the provision of a suitable site for the construction of a Fire Station.

However, as the development of the proposed new community will occur over many years it is recommended that negotiations occur with the NSW Rural Fire Service, which has jurisdiction over the rezoning precinct, in order to ensure adequate structural and bushfire fighting services are provided to the Employment Lands and residential development.

3.12 Emergency Planning.

Emergency planning will be necessary for the future development located adjacent to the bushfire prone vegetation to the west of the west rezoning precinct and adjacent to the vegetation in the proposed conservation areas in the south-western corner of the west rezoning precinct.

The Emergency Planning shall take the form of Bushfire Survival Plans prepared by the future owners of the land adjacent to these hazards.

SECTION 4

RECOMMENDATIONS

4.1 Asset Protection Zones – Residential Development:

The following Asset Protection Zones shall be provided to the future residential development within the rezoning precinct:

Table 5. Asset Protection Zones to the future residential development in the west rezoning precinct

Aspect	Vegetation within 140m of development	Predominant Vegetation Class (Table A2.1 of P/BFP 2006)	Average Slope of Land	Recommended Width of Asset Protection Zone (Table A2.5 of P/BFP 2006)
North	Open Forest & grazing land [on Lot 38 in DP 786610]	Forest	> 5 degrees upslope to the north	20 metres, measured from the unmanaged vegetation on adjacent land [Refer to Note 1 below]
North	Forest regrowth on Lot 62 in DP 754410	Forest	> 5 degrees downslope to the north	30 metres, measured from the unmanaged vegetation on adjacent land
West	Tall Open Forest west of Dawson River & in proposed Conservation area	Forest	< 5 degrees upslope & downslope to the west	20 metres, measured from the unmanaged vegetation on the adjacent land [Refer to Note 1 below]
South	Tall Open Forest in proposed Conservation area	Forest	< 5 degrees upslope & downslope to the south	20 metres, measured from the unmanaged vegetation on the adjacent conservation land

Note 1:

Consideration should be given to an increase in the width of the Asset Protection Zone to these aspects. This can be achieved through the following planning mechanisms:

1. Provide a minimum 8.0 wide perimeter road and managed road reserve with deeper residential allotments that provide for a minimum separation of 35 metres between the unmanaged vegetation and the future dwellings. This alternate shall also provide for road with links to the internal road network within the new community.
2. Provide a perimeter gravel 'rural road' with a formed width of 4.0m + passing bays all within an 8.0 metre wide carriageway with perimeter rural residential development and/or large lot residential development that provides a minimum 42 metre wide separation between the unmanaged vegetation and the future dwellings. This alternative shall also provide for an 'internal' perimeter road with links to the internal road network within the new community.

Table 6. Asset Protection Zones to rural residential development in the Rural Landscape precinct on Brimbin Road [in the west rezoning precinct]

Aspect	Vegetation within 140m of development	Predominant Vegetation Class (Table A2.1 of P/BFP 2006)	Average Slope of Land	Recommended Width of Asset Protection Zone (Table A2.5 of P/BFP 2006)
<i>North</i>	Tall Open Forest	Forest	< 5 degrees downslope to the north, northeast & northwest	20 metres, measured from the unmanaged vegetation on the proposed Conservation Land [Refer to Note 1 below]
<i>East</i>	Tall Open Forest & managed vegetation on rural residential development	Forest on unmanaged lands	< 5 degrees downslope to the east	20 metres, measured from the unmanaged vegetation on the adjacent land.
<i>South & south west</i>	Tall Open Forest & managed vegetation on rural residential development	Forest on unmanaged lands	< 5 degrees downslope to the southwest	20 metres, measured from the unmanaged vegetation on the adjacent land, beyond Brimbin Road. [Refer to Note 1 below]

Note 1:

In order to reduce the potential bushfire risk to the future dwellings within the rural residential along Brimbin Road a 42 metre wide Asset Protection Zone setback shall apply to the northern aspect to the future dwellings and also to the southwest, where the vegetation on the south-western side of Brimbin Road is not managed to reduce the bushfire risk.

Table 7. Asset Protection Zones to the future Large Lot Residential development on Lot 1 in DP 174722 [in the west rezoning precinct]

Aspect	Vegetation within 140m of development	Predominant Vegetation Class (Table A2.1 of P/BFP 2006)	Average Slope of Land	Recommended Width of Asset Protection Zone (Table A2.5 of P/BFP 2006)
<i>North</i>	Managed band of remnant Tall Open Forest	Nil – managed vegetation	< 5 degrees upslope to the north	Nil
<i>West</i>	Open Forest in creek corridor & managed vegetation on rural residential development	Forest on unmanaged lands	< 5 degrees upslope to the west	20 metres, measured from the unmanaged vegetation on the adjacent land, west of Oakvale Road.
<i>East</i>	Managed vegetation on rural residential development + Open Forest in creek corridor to the east of Lansdowne Road	Nil to managed vegetation – Forest on unmanaged lands	< 5 degrees downslope to the east	20 metres, measured from the unmanaged vegetation on the adjacent land, east of Lansdowne Road.

Table 8. Defendable Space to the future Employment Lands buildings [east rezoning precinct].

Aspect	Vegetation within 140m of development	Predominant Vegetation Formation Class <i>[Table A2.1 Planning for Bushfire Protection 2006]</i>	Effective Slope of Land for 100 metres from buildings	Flame Zone width determined by calculation	Construction standard to buildings [AS 3959 – 2009] Bushfire Attack Level – BAL
North	Open Forest on land to the north of the 'Employment Lands' precinct	Forest	< 5 degrees downslope to the north	20 metres	Minimum BAL 40 for 20 metre wide Defendable Space setback to buildings
East	Managed primary production grassland	Nil	< 5 degrees downslope to the east	None required	Minimum BAL 12.5 & 10 metre wide Defendable Space setback to buildings
South	Tall Open Forest within proposed Conservation area	Forest	< 5 degrees downslope to the south	20 metres	Minimum BAL 40 for 20 metre wide Defendable Space setback to buildings

4.2 Asset Protection Zones to riparian corridors/private open space within the west rezoning precinct.

If these areas contain vegetation which is unmanaged, Asset Protection Zones and potentially perimeter roads will be required to future residential development adjoining these areas. In most circumstances the minimum width of Asset Protection Zone will be 20 metres.

4.3 Construction Standards to the future residential & rural residential dwellings located within 100 metres of bushfire prone vegetation:

Bushfire construction standards shall be applied to the future dwellings on the lots located adjacent to the bushfire hazard with the minimum construction level of BAL 12.5 applying to all dwellings located within 100 metres of the unmanaged bushfire prone vegetation. Final determination of the construction standards to those residential buildings located within 100 metres of unmanaged bushfire prone vegetation shall be undertaken to address the requirements of Appendix 3 [Amended 2010] of *Planning for Bushfire Protection 2006* and Australian Standard A.S. 3959 – 2009 – '*Construction of Buildings in Bushfire Prone Areas*'.

4.4 Construction Measures to Industrial/Commercial Buildings located in the Employment Lands rezoning precinct:

That portion of the future Type 5 – 10 buildings that are exposed to the bushfire hazard shall be constructed to BAL 40, as defined by A.S. 3959 – 2009.

The following construction standards are recommended to protect against burning ember attack:

- Any operable windows shall be fitted with aluminium/stainless steel mesh flyscreens having a maximum mesh aperture size of 2mm;
- Access doors [PA and Vehicle] to the buildings shall be fitted with seals that seal the bottom, stiles and head of the door against the opening/frame to prevent the entry of embers into the building. Particular attention shall be paid to the gap at the head of the curtain of the roller doors, where mohair type seals can be used;
- Any external vents, grilles and ventilation louvres shall have stainless steel mesh with a maximum aperture of 2mm square fitted to prevent the entry of embers into the building or be fitted with a louvre system which can be closed in order to maintain a maximum aperture or gap of no more than 2mm.
- Roof ventilators shall be fitted with stainless steel flymesh [2mm aperture] to prevent the entry of embers into the building or be fitted with a louvre system which can be closed in order to maintain a maximum aperture or gap of no more than 2mm.

4.5 Access for Firefighting Operations:

The future public roads shall comply with the deemed-to-satisfy provisions of Section 4.1.3(1) of *Planning for Bushfire Protection 2006*, with an 8.0 metre wide perimeter road provided between the bushfire prone vegetation and the future dwellings. Internal public roads shall have a minimum paved width of 6.5 metres and 'No Parking' to one side. Cul-de-sac design shall incorporate a turning circle of 24 metres for Category 1 NSW Rural Fire Service Tankers and NSW Fire Brigade Composite Appliances.

4.6 Water Supplies for Firefighting Operations:

A reticulated water supply shall be provided complete with fire Hydrants which comply with the spacing, sizing and pressure specifications of Australian Standard A.S 2419.1 - 2005. Hydrant locations shall be delineated by blue markers placed on the hydrant side of the centreline of the road pavement.

4.7 Landscape Management:

Management of the Asset Protection Zones / Defendable Spaces and residual bushfire prone vegetation shall be undertaken in compliance with Appendix 5 of *Planning for Bushfire Protection* and the NSW Rural Fire Service's '*Specifications for Asset Protection Zones*'.

Temporary Asset Protection Zones/Defendable Spaces shall be provided to the edges of development stages and the management of the land shall be undertaken to reduce the bushfire hazard within future development stages.

A Fire Management Plan shall be prepared for the vegetation within the proposed Conservation areas.

4.8 Provision of Fire Service Coverage to the new Community.

It is recommended that negotiations occur with the NSW Rural Fire Service, which has jurisdiction over the rezoning precinct, in order to ensure adequate structural and bushfire fighting services are provided to the Employment Lands and residential development.

4.9 Emergency Planning.

Bushfire Survival Plans shall be prepared by the future owners of the land adjacent to the bushfire hazard from the west of the west rezoning precinct and from the proposed Conservation area in the south-western section of the west rezoning precinct.

SECTION 5

CONCLUSION

This report examines the extent and type of the vegetation within 140 metres of the rezoning precinct and has determined that the Forest vegetation on the land adjoining the rezoning precinct and the vegetation proposed to be retained within the Conservation Areas and riparian corridors is bushfire prone vegetation, after having been assessed in accordance with the definition so described by the NSW Rural Fire Service's '*Guideline for Bushfire Prone Land Mapping*' and in accordance with the determination of bushfire prone vegetation as defined by *Planning for Bushfire Protection 2006*.

The site inspection confirmed the accuracy of this determination, therefore Asset Protection Zones will be required to the proposed rural residential and residential development and Defendable Spaces provided to the future development located adjacent to the bushfire hazard in the Employment Land precinct.

This report also recommends that the width of the Asset Protection Zones to development located adjacent to the bushfire prone vegetation west of the west rezoning precinct and adjacent to the proposed Conservation area in the southern corner of the west rezoning precinct be increased to over-come the level of bushfire risk likely to occur should a fire spread through this vegetation under north-westerly, westerly and south-westerly winds.

A recommendation has also been made on alternate mechanisms which address the additional width required for the Asset Protection Zones for future development in the western precinct and future rural residential development on Brimbin Road.

The provision of access and water supplies for fire-fighting operations shall satisfy the deemed-to-comply provisions of *Planning for Bushfire Protection 2006* and the minimum level of construction of the future buildings within 100 metres of the bushfire hazard interface shall be BAL 12.5 with the final determination of the construction levels being assessed as part of the future development application for the erection of the buildings.

As the proposed new community will evolve over time, a recommendation has been made on the provision of a suitable fire-fighting resource, pending the population/development reaching a state that will initiate a review by the NSW Fire Brigade/NSW Rural Fire Service of their coverage of the community.

REFERENCES:

- N.S.W Rural Fire Service – *Planning for Bushfire Protection 2006*;
- *Environmental Planning & Assessment Act – 1979*;
- *Rural Fires Act – 1997*;
- *Rural Fires Regulation 2008*;
- NSW Rural Fire Service – *Guideline for Bushfire Prone Land Mapping 2006*;
- *Threatened Species Conservation Act 1995*;
- *Native Vegetation Act*;
- *Bushfire Environmental Assessment Code 2006*;
- Building Code of Australia;
- Australian Standard A.S 3959 - 2009 “*Construction of Buildings in Bushfire Prone Areas*”;
- *Greater Taree City Council Bushfire Prone Land Map*.