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Our Ref: 17029-41:SJ:MD

Date: 03 December 2010

Attn: James Goode
Development Manager
North Lakes Pty Ltd
PO Box 2214
Dangar NSW 2309

Dear James,

RE: BUSHFIRE ATTACK LEVELS FOR STAGE 41A NORTHLAKES, CAMERON PARK

The following has been prepared to provide the key information relating to the construction requirements for future dwellings within lots in Stage 41A, Northlakes Estate, Cameron Park.

The site assessment methodology used for determining the construction requirements for dwellings has been undertaken in accordance with the Building Code of Australia (BCA) and Appendix 3 Addendum of PBP. BCA formally adopted AS3959-2009 as the national standard on 1 May 2010.

The determinations of the appropriate Bushfire Attack Levels (BAL) in accordance with AS3959-2009 are based upon parameters such as weather modelling, fire-line intensity, flame length calculations, as well as vegetation and fuel load analysis. The determination of the construction level is derived by assessing the:

- Relevant FDI = 100
- Flame temperature
- Slope
- Vegetation classification; and
- Building location.

Assessment of the site – Stage 41A and the surrounding land for a distance of 140m has shown that after development of the site and surrounding land the following vegetation and slope this vegetation occurs on is as follows:

- To the immediate north lies Stage 51A and Stage 40.
- To the east is forest vegetation and a 45m APZ.
- To the south is forest vegetation and a 45m APZ.
- To the west is stage 51B.

Using a Forest Danger Index (FDI) of 100, the information relating to vegetation, slope and according to Table 2.4.2 of AS3959-2009, Table 1 and Figure 1 illustrates the required BAL in accordance with AS3959-2009 for future dwellings within Stages 41A. Any lessening of the BAL would require a Performance Based Assessment to be undertaken.

Table 1: Deemed to Satisfy BAL for Future Dwellings in Stage 41A.

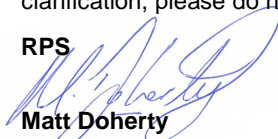
Lot	Direction	Vegetation Type	Average Slope of Land (degrees)	Separation Distance	Bushfire Attack Level (BAL)	Construction Section
4101	North West	Forest	Upslope 0-5°	48-<100m	BAL-12.5	
				>100m	BAL-Low	
4103	East	Forest	Downslope 5-10°	83-<100m	BAL-12.5	
				>100m	BAL-Low	
4104	East	Forest	Downslope 5-10°	69-<100m	BAL-12.5	
4105	East	Forest	Downslope 5-10°	45-<53m	BAL-29	
				53-<69m	BAL-19	
4106	East	Forest	Downslope 5-10°	45-<53m	BAL-29	
	South			53-<69m	BAL-19	
4107	East	Forest	Downslope 5-10°	53-<69m	BAL-19	Sect 4, 5 & 6 of AS3959-2009 and Sect A3.7 of PBP Addendum Appendix 3
				69-<100m	BAL-12.5	
	South	Forest	Downslope 5-10°	45-<53m	BAL-29	
				53-<69m	BAL-19	
4108	South	Forest	Downslope 5-10°	69-<100m	BAL-12.5	
				45-<53m	BAL-29	
				53-<69m	BAL-19	
4109	South	Forest	Downslope 5-10°	69-<100m	BAL-12.5	
				45-<53m	BAL-29	
				53-<69m	BAL-19	
4110	South	Forest	Downslope 5-10°	45-<53m	BAL-29	
				53-<69m	BAL-19	
				69-<100m	BAL-12.5	

To Note:

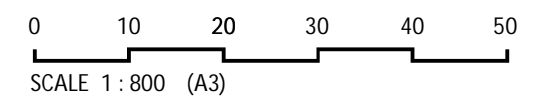
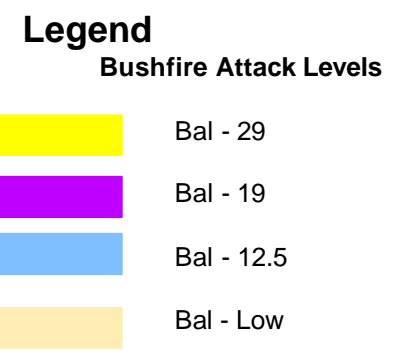
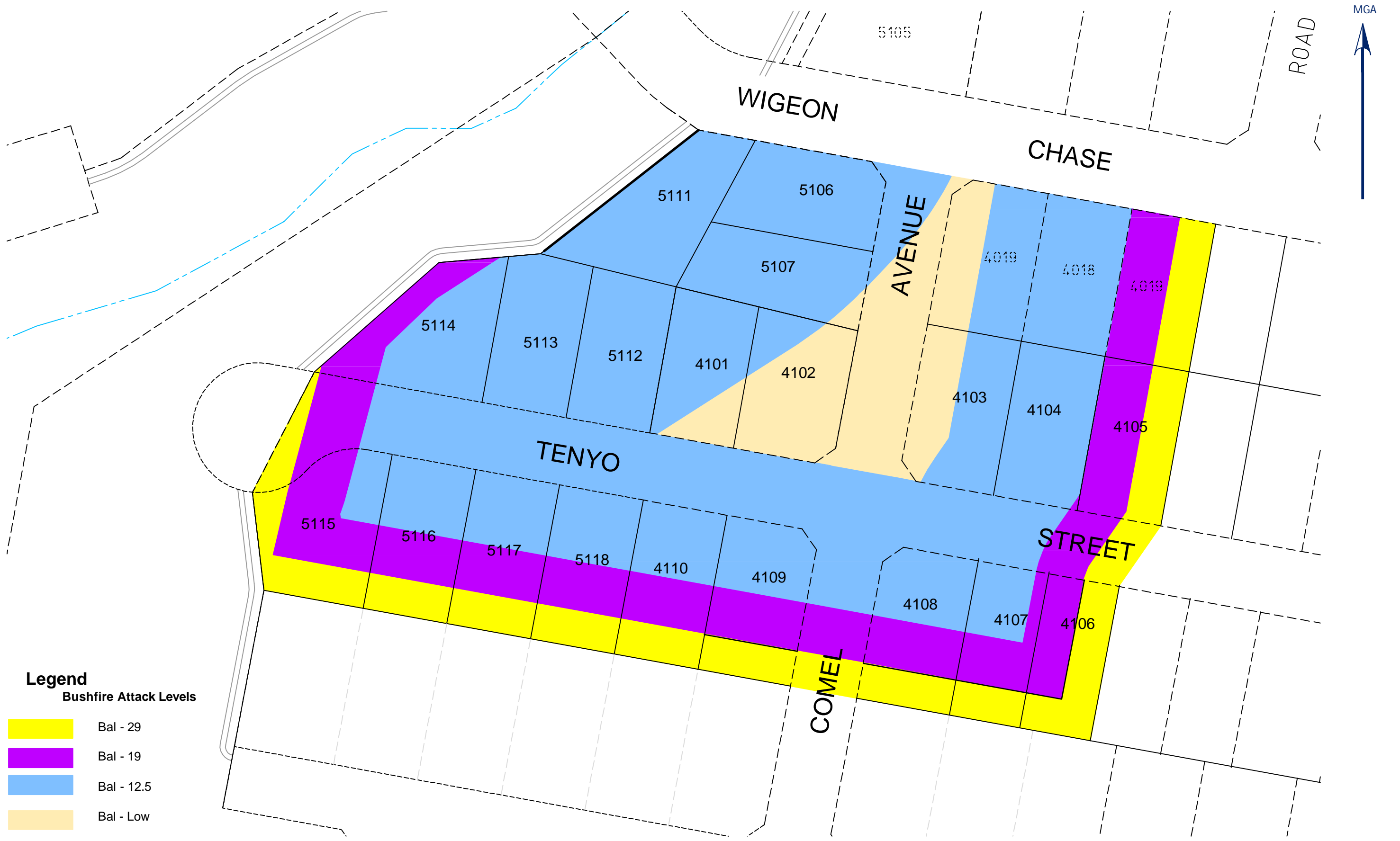
1. The construction requirements for the next lower BAL than that determined for the lot may be applied to an elevation of the building where the elevation is not exposed to the source of bushfire attack. An elevation is deemed to be not exposed to the source of bushfire attack if all straight lines between that elevation and the source of bushfire attack are obstructed by another part of the building.
2. The abovementioned BALs will remain in force until such time that a change in the nature or extent of vegetation within 100m of a subject lot changes. At this time a revised BAL may apply following reassessment.

We trust this information is sufficient for your purposes, however should you require any further details or clarification, please do not hesitate to contact the writer.

RPS



Matt Doherty
Manager – Ecology & GIS



TITLE: FIGURE BUSHFIRE ATTACK LEVELS	LOCATION: NORTHLAKES ESTATE (STAGE 41 A & 51 B)	DATUM: N/A PROJECTION: MGA	DATE: 3/12/2010 PURPOSE: BTA	AUTOCAD REF: 17029-51B BUSHFIRE ZONES VERSION (PLAN BY): A A3 (NW - MD)	Copyright This document and the information shown shall remain the property of RPS Australia East Pty Ltd. The document may only be used for the purpose for which it was supplied and in accordance with the terms of engagement for the commission. Unauthorised use of this document in any way is prohibited.
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