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Our Ref: 17029-50B:MD

Date: 11 February 2011

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

Dear James,

RE: BUSHFIRE ATTACK LEVELS FOR STAGE 50B 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 50B, North Lakes 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 50B 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 north stage 24 occurs.
- To the east an APZ of 45m occurs with forest vegetation thereafter.
- To the south Stage 21 occurs.
- To the west stage 50A occurs.

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 50B. Any lessening of the BAL would require a Performance Based Assessment to be undertaken.

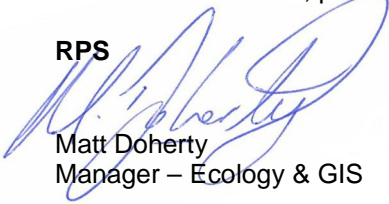
Table 1: Deemed to Satisfy Bushfire Attack Levels (BAL) for Future Dwellings in Stage 50B.

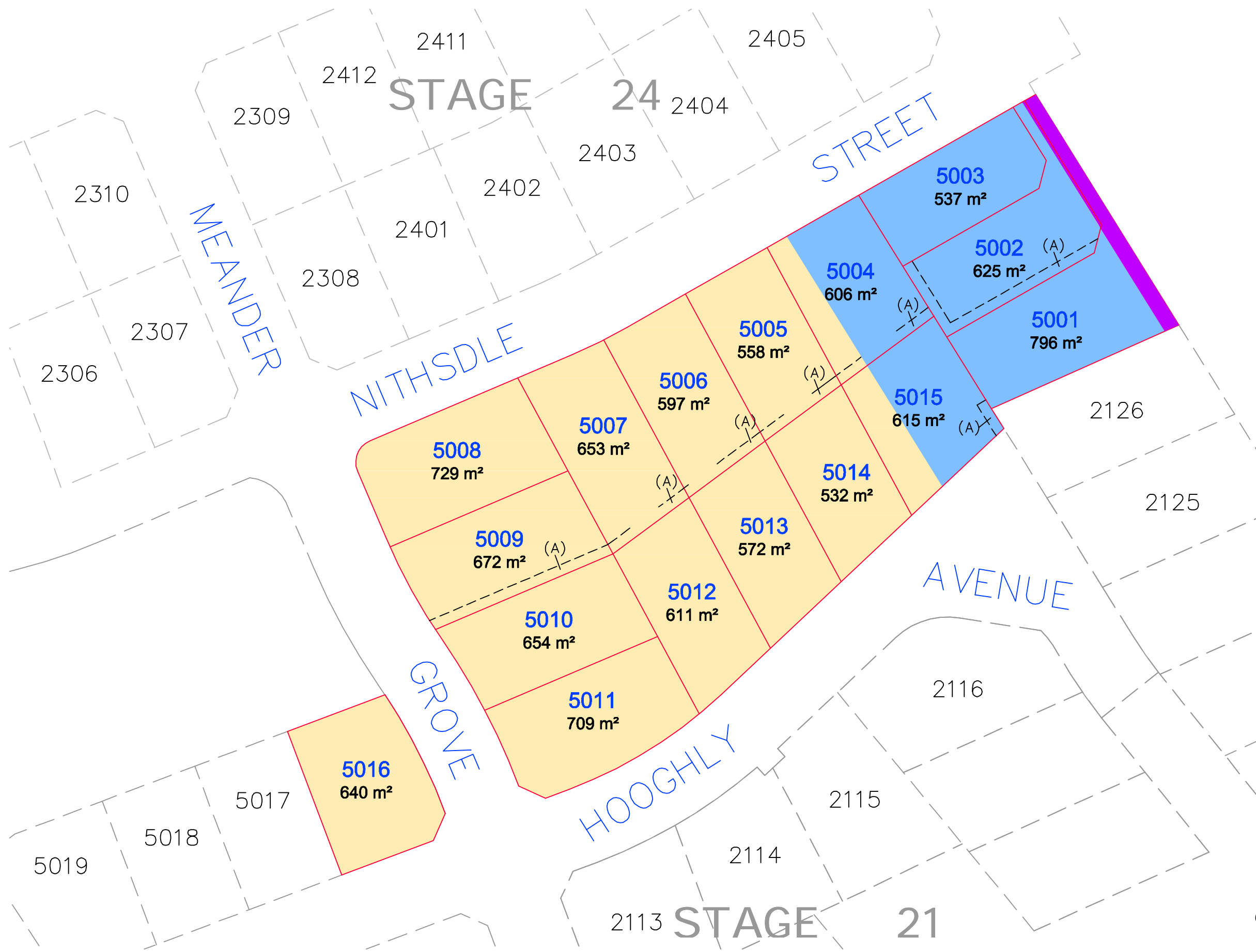
Lot	Direction	Vegetation Type	Average Slope of Land (degrees)	Separation Distance	Bushfire Attack Level (BAL)	Construction Section				
5001	East	Forest	Upslope	45-48m	BAL-19	Sect 4 - 6 of AS3959-2009 and Sect A3.7 of PBP Addendum Appendix 3				
				48-83m	BAL-12.5					
5002	East	Forest	Upslope	45-48m	BAL-19					
				48-83m	BAL-12.5					
5003	East	Forest	Upslope	48-83m	BAL-12.5					
5004	East	Forest	Upslope	83-100m	BAL-12.5					
				>100m	BAL-Low					
5005										
5006										
5007										
5008										
5009	East	Forest	Upslope	>100m	BAL-Low					
5010										
5011										
5012										
5013										
5014										
5015						East	Forest	Upslope	83-100m	BAL-12.5
5016									>100m	BAL-Low

To Note: 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.

This assessment is correct at the time of Stage 50B release. All users of this information should undertake their own due diligence assessment to determine their individual building requirements.

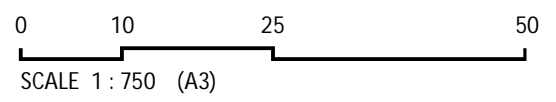
We trust this information is sufficient for your purposes, however should you require any further details or clarification, please do not hesitate to contact the writer.

RPS

 Matt Doherty
 Manager – Ecology & GIS



Legend
Bushfire Attack Levels

- Bal - 19
- Bal - 12.5
- Bal - Low



TITLE: BUSHFIRE ATTACK LEVELS

LOCATION: NORTHLAKES ESTATE (STAGE 50B)

DATUM: N/A
PROJECTION: MGA ZONE 56 (GDA 94)

DATE: 11/02/2011
PURPOSE: BUSHFIRE THREAT ASSESSMENT

AUTOCAD REF: J:\JOBS\17029-50B BUSHFIRE
VERSION (PLAN BY): B A3 (N.W.)

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CLIENT: NORTHLAKES
JOB REF: 17029

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