BLACKASH
BUSHFIRE CONSULTING

5 September 2024

Megan Naylor
H&E Architects
Suite 04.02, 80 Cooper Street,
SURRY HILLS NSW 2010
By email: megann@h-e.com.au

Dear Ms Naylor,

Re: Bushfire Assessment – 40 Myoora Road, Terrey Hills

Blackash Bushfire Consulting has been engaged by H&E Architects to assess the bushfire requirements associated with the proposed establishment of a licenced premises at 40 Myoora Road, Terrey Hills.

The proposal seeks approval for the establishment of a licensed premises development including the following elements:

- three artisan licensed restaurants;
- outdoor dining courtyard;
- dining terrace;
- picnic lawn;
- children's playground;
- at grade car park; and
- additional basement Car Parking

The proposed operating hours of the project are 8am to 12am, seven days a week.

The proposed licensed premises is located within the northwestern end of the site near Myoora Road. The surrounding locality comprises of residential, commercial and industrial land uses, including Myoora Road in the northwest and Mona Vale Road in the southeast. The nearest bushfire prone land is an area of Category 1 Vegetation to the east of the site on the opposite side of Mona Vale Road. The Vegetation Buffer associated with this bushland extends slightly over the eastern corner of the site.

For new development on land that is identified as being bushfire prone it must comply with the NSW RFS document *Planning for Bush Fire Protection* (PBP 2019) under s.4.14 of the *Environmental Planning and Assessment Act, 1997* (EPA Act). The new development however is NOT located on 'bush fire prone land' (see Attachment 1) and the legislative requirements for building on bush fire prone lands are therefore not applicable.

The expression 'bush fire prone land' is defined with reference to the *Environmental Planning and Assessment Act 1979* (EPA Act) as follows:

> *'Land recorded for the time being as bush fire prone land on a bush fire prone land map for an area is bush fire prone land for the area for the purposes of this or any other Act.'*

Considering the above definition, and the mapping shown in Figure 1, the word 'land' in the expression 'bush fire prone land' means 'area of land' and not 'lot of land'. 'Land' is a reference to a physical area and not a legal allotment of land in the context of Bush Fire Prone Land.

Accordingly, the proposed development is not 'development of bush fire prone land' within the meaning of section 4.14 of the EPA Act.

Notwithstanding the fact the development is not located on bushfire prone land, an assessment of the proposal and the bushfire hazard has been undertaken to determine the suitability of the proposal in the context of the bushfire risk. Based on this assessment (see Attachment 2), the development is greater than 160 metres from the nearest bushfire hazard and there is insufficient bushfire risk to warrant specific bushfire protection.

The two main reference documents that underpin the bushfire regulatory framework are the planning guideline *Planning for Bush Fire Protection* 2019 and the construction standard Australian Standard 3959 – 2018 *Construction of buildings in bushfire-prone areas*. Neither of these two documents have any requirements beyond 100 metres.

Planning for Bush Fire Protection 2019 clearly states in its methodology (page 80 – A1.1. Step 2) that its scope of reference is 100 metres. The methodology does not include any further guidance beyond **100 metres**.

APPENDIX 1

SITE ASSESSMENT METHODOLOGY

This appendix sets out the methodology to undertake a site bush fire attack assessment in relation to the application of appropriate APZs and associated construction levels.

A1.1 Application

The following methodology must be used to determine BALs and appropriate APZs. It is the acceptable solutions methodology applicable in NSW.

For further details on each of the steps below, see the related sections or tables in this document.

This Appendix replaces Section 2 of AS 3959 for the purposes of NSW G5.2(a)(i) of Volume One and NSW 3.10.5.0(c)(i) of Volume Two of the NCC . It must also be used to determine the relevant BAL for the purposes of the NASH Standard under NSW 3.10.5.0(d)(i) of Volume Two of the NCC.

Identify APZs

Step 1: Determine vegetation formation in all directions around the building to a distance of 140 metres (refer to A1.2);

Step 2: Determine the effective slope of the land from the building for a distance of 100 metres (refer to A1.4 and A1.5);

Step 3: Determine the relevant FFDI for the council area in which the development is to be undertaken (refer to A1.6); and

Step 4: Match the relevant FFDI, vegetation formation and effective slope to determine the APZ required from the appropriate table of this Appendix (refer to A1.7).

Identify construction requirements

Step 1: Follow steps 1 - 3 above;

Step 2: Determine the separation distance by measuring from the edge of the unmanaged vegetation to the closest external wall;

Step 3: Match the relevant FFDI, appropriate vegetation, distance and effective slope to determine the appropriate BAL using the relevant tables at the end of this section (A1.12.5, A1.12.6 and A1.12.7); and

Step 4: Refer to Section 3 in AS 3959 and NASH Standard to identify appropriate construction requirements for the calculated BAL.

A1.2 Determine vegetation formation

Identify all the vegetation formations for each aspect of the development within 140 metres of the development site or asset as per Keith (2004). This includes vegetation both within and external to the site boundaries.

Where mixes of vegetation formations are located together, the vegetation formation providing the greater hazard shall be used for the purpose of assessment. The combination of vegetation and slope that yields the worst case scenario shall be used.

The determination of the BALs is based on a worst case scenario and a calculation derived from maximum fuel loads. Consideration should also be given to any clearing, re-vegetation or landscaping likely to occur.

A1.2.1 About the classification system

The vegetation classification system used within this document is based on the Keith (2004) framework. Available fuel loads are based on recent information provided by:

- The University of Wollongong's (UoW) Fuels Modelling Project;
- The University of Melbourne (UoM) which reference the fuel classifications found in Keith (2004); and
- CSIRO Ecosystems Sciences and Bushfire Dynamics and Applications.

For the purposes of bush fire assessment in NSW, vegetation formations are as per Keith (2004) (excepting heathlands which includes two sub-formations rather than one, and are based largely on vegetation height).

All references to 'Keith (2004)' within this Appendix is a reference to the publication '*Ocean Shores to Desert Dunes*' – David Keith (2004).

Australian Standard 3959 – 2018 *Construction of buildings in bushfire-prone areas* consistently refers to **100 metres** as the limit of its consideration: page 15 – 2.2.3.2 *Exclusions – Low threat vegetation and non-vegetated areas.*

2.2.3.2 *Exclusions—Low threat vegetation and non-vegetated areas*

The following vegetation shall be excluded from a BAL assessment:

(a) Vegetation of any type that is more than 100 m from the site.

(b) Single areas of vegetation less than 1 ha in area and not within 100 m of other areas of vegetation being classified vegetation.

(c) Multiple areas of vegetation less than 0.25 ha in area and not within 20 m of the site, or each other or of other areas of vegetation being classified vegetation.

(d) Strips of vegetation less than 20 m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20 m of the site or each other, or other areas of vegetation being classified vegetation.

(e) Non-vegetated areas, that is, areas permanently cleared of vegetation, including waterways, exposed beaches, roads, footpaths, buildings and rocky outcrops.

(f) Vegetation regarded as low threat due to factors such as flammability, moisture content or fuel load. This includes grassland managed in a minimal fuel condition, mangroves and other saline wetlands, maintained lawns, golf courses (such as playing areas and fairways), maintained public reserves and parklands, sporting fields, vineyards, orchards, banana plantations, market gardens (and other non-curing crops), cultivated gardens, commercial nurseries, nature strips and windbreaks.

NOTES:

1 Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack (recognizable as short-cropped grass for example, to a nominal height of 100 mm).

2 A windbreak is considered a single row of trees used as a screen or to reduce the effect of wind on the leeward side of the trees.

The property is captured by the BFPL map, however the location of the proposed development is not.

CONCLUSION

The proposed licenced premises is not located on bushfire prone land and therefore no formal assessment / legislative requirements apply from a bushfire perspective. Notwithstanding, based on an assessment of the plans and the site, the proposed development is considered adequate and appropriate in the context of bushfire risk.

As a person recognized by the NSW RFS as a qualified consultant, this assessment constitutes a 'certificate' and confirms that the proposed development conforms to all the relevant legislative requirements. Given this, there is no further assessment or consideration required in the context of bushfire.

If there are any questions or concerns, please don't hesitate to give me a call on 0418 412 118.

Yours sincerely

Corey Shackleton | Principal Bushfire & Resilience
Blackash Bushfire Consulting
B.Sc., Grad. Dip. (Design for Bushfire Prone Areas)
Fire Protection Association of Australia BPAD Level 3 – 34603

BPAD Bushfire Planning & Design Accredited Practitioner Level 3

Attachment 1: Bushfire Prone Land

Legend

- Watercourse
- Subject Land

BushfireProne Land

- Vegetation Buffer
- Vegetation Category 1
- Vegetation Category 2

N

DKGIS

Date: 24/06/2024

0 100 200

Meters

Coordinate System: GDA2020 MGA Zone 56

Imagery: © Nearmap

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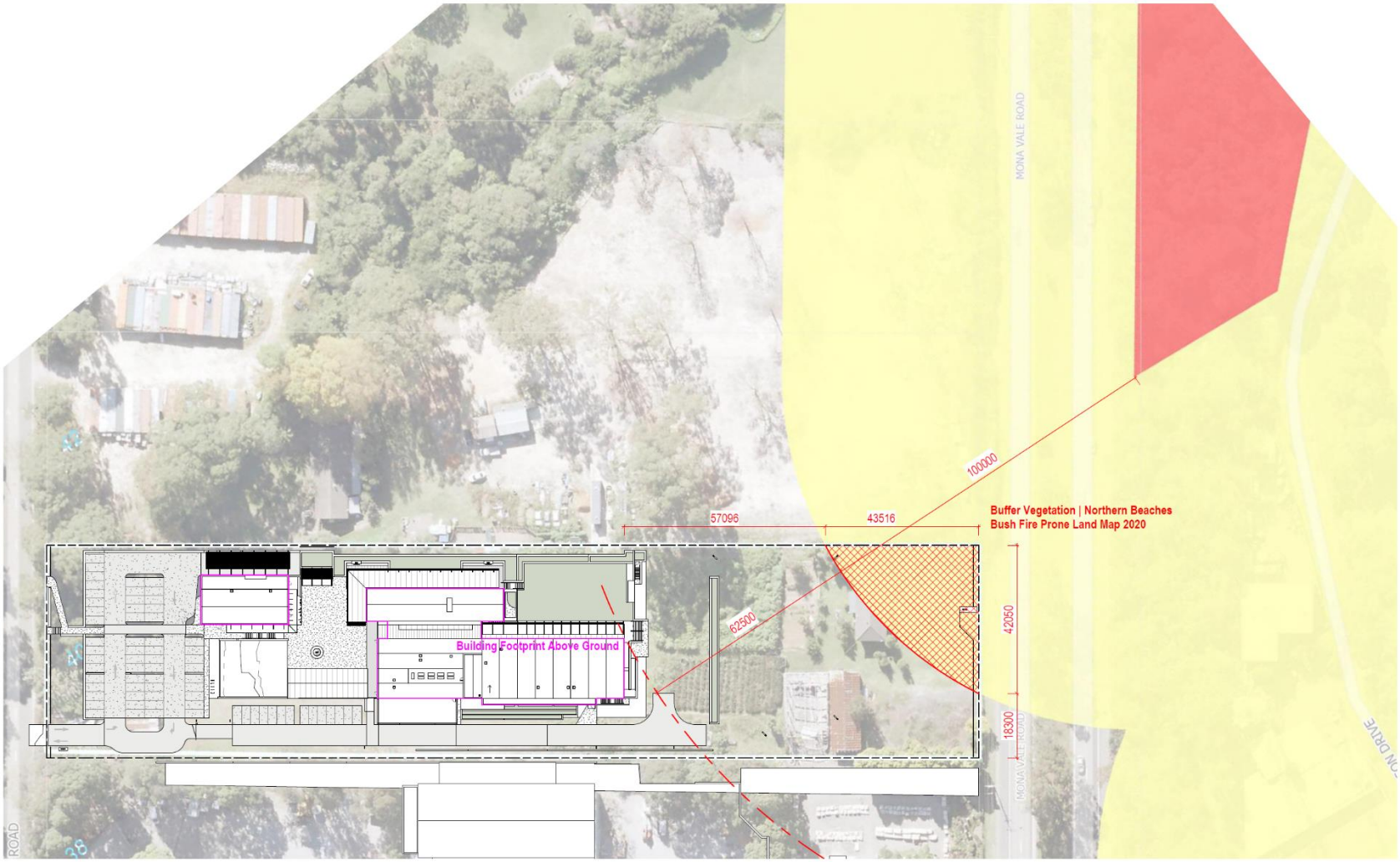
Attachment 2: Detailed Analysis of location of Bush Fire Prone Land within the site.



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Humphrey & Edwards Pty Ltd | ABN 89056638227
Nominated Architect: Glenn Cunnington #5415

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Site Map - Bushfire Protection

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