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PO Box 363 Balgowlah NSW 2093

Bush Fire Assessment Report

In relation to a proposed development at:

6/128 Old Pittwater Road, Brookvale, NSW

This assessment has been prepared and

certified by: Matthew Toghill. BPAD certified practitioner

FPAA Accreditation No: BPAD31642

Report No: 6-1280ld-01 Date: 23/02/2020

Milla.

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Executive Summary

The purpose of the report is to provide a bush fire assessment for the proposed indoor recreational facility in Unit 6/128 Old Pittwater Road, Brookvale, NSW.

The site had been identified as 'bush fire prone land' for the purpose of Section 146 of the *Environmental Planning and Assessment Act 1979* and the Legislative requirements for building on bush fire prone lands are applicable.

The National Construction Code (NCC) does not provide for any bushfire specific performance requirements for the proposed development and as such AS3959 and the NASH Standard are not considered as a 'deemed to satisfy' provisions. PBP accepts the general fire safety construction provision of the NCC are taken as acceptable solutions, however, the Aims and Objectives of PBP must be considered.

This assessment includes an analysis of the hazard, threat and subsequent risk of the development proposal and provides recommendations that satisfy the Aims and Objectives of *Planning for Bushfire Protection 2006 (PBP)*.

1. Description of the subject property

Property address: 6/128 Old Pittwater Road, Brookvale

Lot 1 DP 163214

Local Government Area: Northern Beaches

The development site is a large industrial building complex on the western side of Old Pittwater Road. The following sections 4-8 describe in detail the vegetation, slope, access and egress, availability of water supplies and environmental considerations for the site.



Figure 1: Location of the subject site

2. Development Proposal and Building Classification

The development proposal is for in indoor recreation facility in Unit 6. With reference to Planning for Bushfire Protection 2006, this development will be assessed as per Section 4.3.6 (f) *Buildings of Class 5-8 of the BCA*.

3. Classification of the Vegetation on and surrounding the site

The site is located within an existing subdivision. For the purpose of assessing the bushfire hazard to the Unit, there is an area of Category 1 vegetation to the west, which is of significance. This is an area of 'Forest' vegetation that runs upslope towards Allenby Park Parade.



Figure 2: Aerial photo of the subject site showing the location of Unit 6 and surrounding vegetation.



Figure 3: Bushfire prone land map showing an area of Category 2 vegetation to the north of the site.



Figure 4: Photo showing the Unit 6 on the right, with 'Forest' vegetation beyond.



Figure 5: Photo showing 'Forest' vegetation to the west of the exiting industrial building complex.

4. Access and Egress

The site has direct access to Old Pittwater Road, which is a public road, access and egress for emergency vehicles appears adequate.

5. Adequacy of water supply

The area has reticulated water supply and hydrants are spaced at a regular distance along Old Pittwater Road.

6. Features that may mitigate the impact of a high intensity bushfire

There are no significant features on or adjoining the site that may mitigate the impact of a high intensity bushfire on the proposed development.

7. Environmental impact of any proposed bushfire protection measures.

The scope of this assessment has not been to provide an environmental assessment. However, the bushfire protection measures that are proposed will have no adverse environmental effects. All protection measures are either within the boundaries of the allotment or part of the constructed building.

8. Assessment of the extent to which the development can conform to the Aim and Objectives of 'Planning for Bushfire Protection 2006' (PBP).

Aim	Meets Criteria	Comment
The aim of PBP is to use the NSW development assessment system to provide for the protection of human life (including fire fighters) and to minimise impacts on property from the threat of bushfire, while having due regard to development potential, onsite amenity and the protection of the environment.	Yes	This threat assessment has determined that the category of bushfire attack is not within the flame zone. Landscaping, access, egress, emergency risk management and construction standards are in accordance with the requirements of PBP and the Aims of PBP can be achieved with this development.
Objectives	Meets Criteria	Comment
Afford occupants of any building adequate protection from exposure to bushfire.	Yes	The maximum exposure to a bushfire for the building would be <12.5kW/m2.
Provide for defendable space to be located around buildings	Yes	Defendable space can be provided on all sides of the buildings.
Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent direct flame contact and material ignition	Yes	Appropriate separation can be provided by a combination of onsite APZ and adjoining developed sites and public roads.
Ensure that safe operational access and egress for emergency services personnel and occupants is available.	Yes	The site has direct access to public roads. Existing property access allows for safe access and egress for emergency services vehicles and evacuation appears adequate
Provide for ongoing management and maintenance of bushfire protection measures, including fuel loads, in the asset protection zone.	Yes	The area of the site which is currently developed does not require any ongoing maintenance.
Ensure that utility services are adequate to meet the needs of firefighters (and others assisting in bushfire fighting).	Yes	The area is serviced by a reticulated water supply. Water supply for firefighting appears adequate.

9. Recommendations

The following recommendations are made for the bushfire protection measures for the proposed indoor recreational facility in Unit 6/128 Old Pittwater Road, Brookvale, NSW and are based upon the relevant provisions of the NSW RFS guideline entitled *Planning for Bushfire Protection 2006*.

1) Construction standard.	The National Construction Code (NCC) does not provide for any bushfire specific performance requirements for the proposed development and as such AS3959-2018 and the NASH Standard are not considered as a 'deemed to satisfy' provisions. PBP accepts the general fire safety construction provisions of the NCC are taken as acceptable solutions.
2) Emergency Risk Management	It is advised a bushfire emergency management and evacuation plan is prepared consistent with the NSW RFS document 'A guide to developing a Bushfire Emergency Management and Evacuation Plan'.

10. Summary

This report consists of a bushfire risk assessment for the proposed indoor recreational facility in Unit 6/128 Old Pittwater Road, Brookvale, NSW.

The report concludes that the proposed development is on designated bushfire prone land and the legislative requirements for development of bushfire prone areas are applicable. Although there are no bushfire specific construction requirements, this assessment has shown the proposed development can comply with the aims and objectives of *Planning for Bushfire Protection 2006*.

This report has considered all of the elements of bushfire attack and provided the proposed development is constructed in accordance with the recommendations of section 9 of this report, it is my considered opinion that the development satisfies the Aims and Objectives of *Planning for bushfire Protection 2006*.

Note: Not withstanding the precautions adopted, it should always be remembered that bushfires burn under a wide range of conditions and an element of risk, no matter how small always remains, and although the standard is designed to improve the performance of such buildings, there can be no guarantee, because of the variable nature of bushfires, that any one building will withstand a bushfire attack on every occasion. This report is a Bushfire Hazard Assessment that provides the required information to assist Local Councils and the Rural fire Service in determining compliance in accordance with Planning for Bushfire Protection 2006 and AS3959, 2009. The local Council is the final consenting authority and the construction of the building must comply with the recommendations included in the council's conditions of consent.

Mille.

Matthew Toghill- Bushfire Consultant

Accreditation No: BPAD31642

Grad Cert in Bushfire Protection, UWS 2012

Certificate IV Building and Construction

Certificate III in Public Safety (firefighting and emergency operations)



11. References

Australian Building Codes Board

Building Code of Australia

Volume 1 & 2

Canprint

Australian Building Codes Board [2001]

Fire Safety Engineering Guidelines

Edition 2001

ABCB Canberra

D. Drysdale D. [1998]

Introduction to Fire Dynamics 2nd Edition

John Wiley & Sons Ltd

NSW Government Environmental Planning and Assessment Act [1979]

Part 79BA-Consultation and development consent- Certain bushfire prone land

NSW Government Printer

Planning NSW [2006]

Planning for Bushfire Protection 2006

A guide for Councils, Planners, Fire Authorities, Developers and Home Owners

This document provides the necessary planning considerations when developing areas for residential use in residential, rural residential, rural and urban areas when development sites are in close proximity to areas likely to be affected by bushfire events and replaces Planning for Bushfire Protection 2001.

This document is essential reading. Download a copy from the RFS website or purchase a copy through the NSW Government online shop or phone 9228 6333.

Ramsay C & Rudolph L [2003]

Landscape and building design for bushfire prone areas

CSIRO Publishing

Standards Australia [2009]

Australian Standards 3959

Australian Building Code Board