# Bushfire Assessment Report

Proposed:
Alterations and
Additions

At:
5 Barrabooka Street,
Clontarf

Reference Number: 240783

1st October 2024



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# **Contents**

		Page No	
Соруг	Copyright and Disclaimer		
List of Abbreviations			
1.0	Introduction	4	
2.0	Legislative Requirements	5	
3.0	Purpose of Report	6	
4.0	Scope of Report	6	
5.0	Compliance Table and Notes	6 - 7	
6.0	Aerial view of the subject allotment	8	
7.0	Site Assessment	9 - 12	
8.0	Bushfire Protection Measures	13 - 17	
9.0	Recommendations	18	
10.0	Conclusion	19	
11.0	Annexure	20	
-	List of referenced documents and attachments		
_	Attachments		

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S4.14 applications (under the Environmental Planning and Assessment Act 1979) and all infill development applications <u>may</u> be referred by Council to the NSW Rural Fire Service for review and concurrence during the DA process. S100B applications under the Rural Fires Act 1997 (subdivisions and Special Fire Protection Purpose Developments), Flame Zone determinations and Alternate Solutions <u>must</u> be referred by Council to the NSW Rural Fire Service for review and receipt of a Bushfire Safety Authority (BSA) or other such recommended conditions from the NSW Rural Fire Service before the consent can be granted.

The onus is on the applicant to cross reference this document with any conditions of consent issued by Council or any requirements supplied by the NSW Rural Fire Service following development approval. BCBHS can review and cross reference these documents however the onus is on the applicant to provide them to us and request this review — Building Code and Bushfire Hazard Solutions Pty. Ltd. is not in a position to track every DA through Council and we rely upon the applicant to undertake this role as project co-ordinator.

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Version Control				
Version	Date	Author	Reviewed by	Details
1	01/10/2024	Duncan Armour	Andrew Muirhead	Final Report

### **List of Abbreviations:**

APZ Asset Protection Zone

AS3959 Australian Standard 3959 – 2018

BAL Bushfire Attack Level

BPMs Bushfire Protection Measures

BPLM Bushfire Prone Land Map

Council Northern Beaches Council

DA Development Application

ELVIS Elevation and Depth Foundation Spatial Data

EP&A Act Environmental Planning and Assessment Act - 1979

ESD Ecologically Sustainable Development

FRNSW Fire and Rescue NSW

IPA Inner Protection Area

NASH National Association of Steel-framed Housing

NCC National Construction Code

NP National Park

NSP Neighbourhood Safer Place

OPA Outer Protection Area

PBP Planning for Bush Fire Protection - 2019

ROW Right of Way

RF Act Rural Fires Act - 1997

RFS NSW Rural Fire Service

SEPP State Environmental Planning Policy

SFPP Special Fire Protection Purpose

SWS Static Water Supply

#### 1.0 Introduction

The development proposal relates to the alterations and additions of a sole occupancy dwelling within an existing residential allotment located at 5 Barrabooka Street, Clontarf (Lot 15 Section K DP 2610). The subject property has a street frontage to Barrabooka Street to the east, abuts similar residential allotments to the north and south and a vegetated allotment and Sydney Harbour National Park to the west.

The vegetation identified as being the hazard is located within the vegetated allotment and Sydney Harbour National Park to the south, east and west of the subject property.

Properties considered to be affected by possible bushfire impact are determined from the local Bushfire Prone Land Map as prepared by Council and or the Rural Fire Service. All property development within affected areas is subject to the conditions detailed in the document 'Planning for Bush Fire Protection - 2019' (PBP).

PBP formally adopted on the 1<sup>st</sup> March 2020 provides for the protection of property and life (including fire-fighters and emergency service personnel) from bushfire impact.

Northern Beaches Council's Bushfire Prone Land Map identifies the subject property as containing the Vegetation Buffer.

As the application relates to the alterations and additions of a sole occupancy dwelling within an existing residential allotment the relevant specifications and requirements under PBP are the aim and objectives detailed in Chapter 1 'Introduction' and specific objectives and bushfire protection measures detailed in Chapter 7 'Residential Infill Development'.



Figure 01: Extract from Northern Beaches Council's Bushfire Prone Land Map

# 2.0 Legislative Requirements

The subject site is designated as Bushfire Prone Land (Figure 01).

In accordance with section 4.14 of the *Environmental Planning and Assessment Act* 1979 development consent cannot be granted for the carrying out of development for any purpose (other than a subdivision of land that could lawfully be used for residential or rural residential purposes or development for a special fire protection purpose) on bush fire prone land unless the consent authority:

- (a) is satisfied that the development conforms to the specifications and requirements of the version (as prescribed by the regulations) of the document entitled Planning for Bush Fire Protection, or
- (b) has been provided with a certificate by a person who is recognised by the NSW Rural Fire Service as a qualified consultant in bush fire risk assessment stating that the development conforms to the relevant specifications and requirements.
- (1A) If the consent authority is satisfied that the development does not conform to the relevant specifications and requirements, the consent authority may, despite subsection (1), grant consent to the carrying out of the development but only if it has consulted with the Commissioner of the NSW Rural Fire Service concerning measures to be taken with respect to the development to protect persons, property and the environment from danger that may arise from a bush fire.

This Bushfire Assessment Report and accompanying certificate has been prepared by a person who are recognised by the NSW Rural Fire Service (RFS) as qualified in bushfire risk assessment and has been accredited by the Fire Protection Association of Australia as a Level 3 BPAD qualified practitioner.

In addition, the National Construction Code 2022 includes the following provisions:

# **NSW H7D4 Construction in bushfire prone areas** [2019: NSW 3.10.5.0]

- (1)The requirements of (2) only apply in a designated bushfire prone area. (2)Performance Requirement H7P5 is satisfied for a Class 1 building, or a Class 10a building or deck associated with a Class 1 building, if it is constructed in accordance with—(a)AS 3959 except—(i)as amended by Planning for Bush Fire Protection; and (ii)for Section 9 Construction requirements for Bushfire Attack Level FZ (BAL-FZ); or
- (b)NASH Standard Steel Framed Construction in Bushfire Areas except— (i)as amended by Planning for Bush Fire Protection; and (ii)for buildings subject to Bushfire Attack Level FZ (BAL-FZ); or
- (c)(a) or (b) as modified by development consent following consultation with the NSW Rural Fire Service under section 4.14 of the Environmental Planning and Assessment Act 1979 if required; or
- (d)(a) or (b) as modified by development consent with a bushfire safety authority issued under section 100B of the Rural Fires Act 1997 for the purposes of integrated development.

# 3.0 Purpose of Report

The purpose of this Bushfire Assessment Report is to provide the owners and Council with an independent bushfire assessment together with appropriate recommendations for both new building construction and bushfire mitigation measures considered necessary having regard to construction within a designated 'bushfire prone' area.

The recommendations contained within this report may assist in forming the basis of any specific construction conditions and/or bushfire mitigation measures that Council and/or the NSW Rural Fire Service may elect to place within any consent conditions issued for the subject Development Application.

# 4.0 Scope of this Report

The scope of this report is limited to providing a bushfire assessment and recommendations for the subject property. Where reference has been made to the surrounding lands, this report does not purport to directly assess those lands; rather it may discuss bushfire impact and/or progression through those lands and possible bushfire impact to the subject property.

# **5.0 Compliance Tables & Notes**

The following table sets out the project's compliance with *Planning for Bush Fire Protection* – 2019.

	North	South	East	West
Vegetation Structure	Managed Land	Forest	Forest	Forest
Slope	N/A	15 - 20 degrees down	0 - 5 degrees down	15 - 20 degrees down
Available Asset Protection Zone	N/A	>21 metres	>20 metres	>8 metres
Significant Landscape Features	Neighbouring residential allotment	Neighbouring residential allotment	Barrabooka Street	Vegetated allotment and Sydney Harbour National Park
Bushfire Attack Level	N/A	BAL FZ	BAL FZ	BAL FZ
Required Construction Level	BAL FZ	BAL FZ	BAL FZ	BAL FZ

Compliance Summary of Bushfire Protection Measures					
Bushfire Protection Measure (s7 PBP)	Acceptable Solution	Performance Solution	Report Section		
Asset Protection Zones			8.02		
Construction Standards		×	8.03		
Access	$\boxtimes$		8.04		
Water Supplies	$\boxtimes$		8.05		
Electricity and Gas Services			8.05		
Landscaping	$\boxtimes$		8.07		

# 6.0 Aerial view of the subject allotment



Figure 02: Aerial view of the subject area C/- Nearmap – July 2024

#### 7.0 Site Assessment

A representative of Building Code & Bushfire Hazard Solutions completed a site inspection of the subject site and surrounding area on 6<sup>th</sup> September 2024.

In addition, the following external data sources have been relied upon for this assessment:

- Aerial imagery of the subject area (NSW Spatial Services & Nearmap);
- 1 metre contour mapping of the subject area (Elevation and Depth Foundation Spatial Data

   Geoscience Australia)
- NSW Planning Portal Spatial Viewer
- Vegetation mapping (NSW State Vegetation Type Map)
- NSW Bush Fire Prone Land (NSW Rural Fire Service)

#### 7.01 Location

The subject property is known as 5 Barrabooka Street, Clontarf (Lot 15 Section K DP 2610) and is a residential allotment (zoned C3: Environmental Management) located within Northern Beaches Council's Local Government Area.

The subject property has a street frontage to Barrabooka Street to the east, abuts similar residential allotments to the north and south and a vegetated allotment and Sydney Harbour National Park to the west.

The vegetation identified as being the hazard is located within the vegetated allotment and Sydney Harbour National Park to the south, east and west of the subject property.



Figure 03: Extract from street-directory.com.au

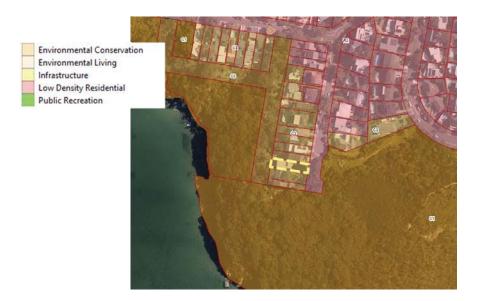


Figure 04: Land zoning of subject area (source NSW Planning Portal).

# 7.02 Vegetation

In accordance with Appendix 1 'Site Assessment Methodology' of PBP an assessment of all vegetation formations within 140 metres of the subject site for each aspect as per Keith (2004) has been undertaken.

The vegetation identified as being the hazard is located within the vegetated allotment and Sydney Harbour National Park to the south, east and west of the subject property.

The vegetation posing a hazard was found to consist of trees 10 - 20 metres in height with 50 - 70% foliage cover, the understorey consisted of low trees, shrubs and grasses. The NSW Vegetation mapping identifies the vegetation as Sydney Coastal Sandstone Foreshores Forest (PCT: 3594), Sydney Coastal Enriched Sandstone Forest (PCT: 3592) and Sydney Coastal Sandstone Headland Heath (PCT: 3812).

For the purpose of assessment under 'Planning for Bush Fire Protection' the vegetation posing a hazard to the south, east and west has been determined to be Forest.



Photograph 01: View of the vegetation to the west of the subject dwelling.



Photograph 02: View of the vegetation to the east of the subject dwelling.



Figure 05: Extract from Vegetation Mapping NSW, showing the vegetation types to the south, east and west of the subject property.

# 7.03 Slope and Topography

The slope of the land under the classified vegetation has a direct influence on the forward rate of spread, fire intensity and radiant heat exposure. The effective slope is considered to be the slope under the classified vegetation which will most significantly influence bushfire behaviour toward the development site.

In accordance with A1.4 'Determine slope' of PBP the slope assessment is to be derived from the most detailed contour data available.

The slope that would most significantly influence bushfire behaviour was determined from topographic imagery in conjunction with site observations to be:

- > 15 20 degrees down slope within the hazard to the south and west
- 0 5 degrees down slope within the hazard to the east



Figure 06: Extract from ELVIS - Geoscience Australia

#### 7.04 Fire Weather

All development which attracts an Asset Protection Zone under PBP requires the identification of the relevant Forest Fire Danger Index (FFDI). The FFDI required to be used for development assessment purposes is based on the local government boundaries, being Northern Beaches Council in this instance.

In accordance with the NSW Rural Fire Service publication 'NSW Local Government Areas FDI' (2017) Northern Beaches Council forms part of the Greater Sydney Region Fire Weather District and attracts an FFDI of 100.

#### 8.0 Bushfire Protection Measures

# 8.01 Planning for Bush Fire Protection - 2019

Planning for Bush Fire Protection – 2019 (PBP) is applicable to development located on land determined as being 'bushfire prone' in accordance with the local Bushfire Prone Land Map.

Bushfire prone land are defined as those areas;

- containing or within 100m of Category 1 Vegetation; or
- containing or within 30m of Category 2 or 3 Vegetation.

Northern Beaches Council's Bushfire Prone Land Map identifies the subject property as containing the Vegetation Buffer therefore PBP must apply in this instance.

The application of Planning for Bush Fire Protection requires satisfactory demonstration of the aim and objectives and the following bushfire protection measures (BPMs):

- Asset Protection Zones
- Building construction, siting & design
- Access arrangements
- Water supply & utilities
- Landscaping

As the proposal relates to the alterations and additions of a sole occupancy dwelling the proposal must comply with the bushfire protection measures detailed within Chapter 7 'Residential Infill Development' of PBP.

#### 8.02 Asset Protection Zones

An Asset Protection Zone (APZ) is an area between the development (in this instance the building footprint) and the identified bushfire hazards where the fuels are maintained to a minimum to prevent the spread of fire between a hazard and an asset.

The width of the APZ is determined by the vegetation structure of the identified hazard, Forest Fire Danger Index, effective slope and the type of development (residential development or Special Fire Protection Purpose).

The Acceptable Solution under Table 7.4a of PBP requires APZs be provided in accordance with Table A1.12.2, consistent with that for residential subdivisions. The minimum required APZ was determined to be 56 metres from the bushfire hazard to the south and west and 29 metres from the bushfire hazard to the east.

The existing building footprint and allotment configuration precludes the ability to provide APZs achieving compliance with the minimum required APZs, with an available APZ of >21 metres to the bushfire hazard to the south, >20 metres to the bushfire hazard to the east and >8 metres to the bushfire hazard to the west. Compliance with the Performance Criteria is therefore necessary. The corresponding Performance Criteria being;

- APZs are provided commensurate with the construction of the building; and
- A defendable space is provided.

Section 7.1 of PBP recognises the expectation of building in pre-existing subdivisions even though the ability to provide for APZs or access requirements now required for residential development may not be possible.

It is proposed that all grounds not built upon within the subject property be maintained in accordance with an APZ (Inner Protection Area). This will result in the provision of a defendable space for attending fire services and in conjunction with the application of the recommended construction provisions will provide APZs commensurate with the construction.

In this instance the subject works will comply with a Bushfire Attack Level of Flame Zone being the relevant BAL. The proposed balconies are located within the western APZ and will be constructed from non-combustible materials.

In consideration of the attributes of the hazard and surrounding landscape the available APZs are considered to provide an adequate defendable space.

It is therefore my opinion that the application satisfies the Performance Criteria as detailed above.

# 8.03 Building construction, siting & design

Australian Standard 3959 – 2018 'Construction of buildings in bushfire-prone areas' (AS3959) specifies construction standards for buildings within various Bushfire Attack Levels as determined by Planning for Bush Fire Protection – 2019.

AS3959 provides for six (6) levels of building construction these being BAL - Low, BAL - 12.5, BAL - 19, BAL - 29, BAL - 40 and BAL - FZ.

Bushfire Attack Level	Maximum radiant heat impact (kW/m²)	Level of construction under AS3959-2018
Low		No special construction requirements
12.5	≤12.5	BAL - 12.5
19	12.6 to 19.0	BAL - 19
29	19.1 to 29.0	BAL - 29
40	29.1 to 40.0	BAL - 40
Flame Zone	>40.0	BAL FZ No deemed to satisfy provisions

Table 01: Correlation between bushfire impact and AS3959

The highest Bushfire Attack Level to the proposed works was determined from Table A1.12.5 of PBP to be 'Flame Zone'.

While the NSW variation to the National Construction Code (NCC) excludes both AS3959 and the NASH Standard as a Deemed to Satisfy solution for buildings in the Flame Zone, they should still be used as a basis for a performance-based solution.

The proposed works will be constructed to sections 3 (excluding section 3.5) & 9 (BAL FZ) under AS 3959 – 2018 and the additional construction requirements detailed in section 7.5 of PBP or the relevant BAL-FZ requirements of the NASH Standard - *Steel Framed Construction in Bushfire Areas* 2021.

It is acknowledged that the balconies are within the APZ and therefore will be constructed entirely out of non-combustible materials.

# 8.04 Property Access

The subject property has street access to Barrabooka Street to the east. Persons seeking to egress from the subject dwelling are able to do so via the existing access drive and along existing public roads.

The most distant external point of the proposed footprint is less than 70 metres from a public road supporting the operational use of fire fighting vehicles and therefore the Access requirements detailed in Table 7.4a of PBP are not applicable.

Access to the hazard is available via subject property, Barrabooka Street or surrounding roads for hazard reduction or for fire suppression activities.

The existing access is considered adequate for the proposed works.

# 8.05 Water Supply & Utilities

Hydrants are available throughout Barrabooka Street and surrounding streets for the replenishment of fire service vehicles. The most distant external point of the subject dwelling is <70 metres from a hydrant and therefore Static Water Supply is not required in consideration of AS2419.1 and section 7.4 of PBP.

The existing water supply is considered adequate for the replenishment of attending fire services.

The existing dwelling is connected to the existing electrical network.

Any new gas connections must comply with Table 7.4a of PBP.

# 8.06 Emergency management arrangements

Evacuation is possible by utilising existing road infrastructure.

It is encouraged that the occupants complete a Bush Fire Survival Plan. The template for this plan is available at https://www.rfs.nsw.gov.au/resources/bush-fire-survival-plan.

# 8.07 Landscaping

Any new landscaping must comply with Table 7.4a of *Planning for Bush Fire Protection* 2019.

# 8.08 Aim & Objectives of PBP

The following table details the aim and objectives of *Planning for Bush Fire Protection* 2019 and the proposal's ability to comply.

#### Aim / Objective

#### Comment

The aim of PBP is to provide for the protection of human life and minimise impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment.

With the inclusion of the recommendations made herein it is of our opinion that the aim of PBP has been satisfied.

(i) afford buildings and their occupants protection from exposure to a bush fire;

The works will be constructed to the applicable BAL providing occupants protection from the exposures of a bushfire.

(ii) provide for a defendable space to be located around buildings;

The Asset Protection Zones within the subject property will be maintained in accordance with an Inner Protection Area, providing a defendable space.

(iii) provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings;

The proposed works being constructed to the applicable BAL will minimise potential material ignition.

(iv) ensure that appropriate operational access and egress for emergency service personnel and occupants is available;

The access drive and road network provide appropriate access and egress for emergency services and occupants.

(v) provide for ongoing management and maintenance of bush fire protection measures, (BPMs); and

The existing APZ shall be maintained in accordance with an Asset Protection Zone / Inner Protection Area as detailed in Appendix 4 of Planning for Bush Fire Protection 2019 and the NSW Rural Fire Service publication 'Standards for Asset Protection Zones'.

Any new landscaping is to comply with the provisions of Table 7.4a and Appendix 4 of PBP.

#### **Objective** Comment

(vi) ensure that utility services are adequate to meet the needs of firefighters.

Hydrants are available throughout Barrabooka Street and surrounding streets for the replenishment of fire service vehicles.

The existing water supply is considered adequate for the replenishment of attending fire services.

It is therefore of our opinion that the proposal can satisfactorily comply with the aim and objectives of *Planning for Bush Fire Protection* 2019.

#### 9.0 Recommendations

The following recommendations are provided as the minimum necessary for compliance with *Planning for Bush Fire Protection* – 2019 and Australian Standard 3959 'Construction of buildings in bushfire-prone areas - 2018. Additional recommendations are provided to supplement these minimum requirements where considered necessary.

#### **Asset Protection Zones**

 At the commencement of construction and in perpetuity all grounds within the subject property shall be maintained as an Asset Protection Zone (Inner Protection Area) as detailed in the NSW Rural Fire Service's document 'Standards for Asset Protection Zones' and Appendix 4 of *Planning for Bush Fire Protection* 2019.

#### Construction

- 2. That all new works shall comply with Section 3 and Section 9 (BAL FZ) of the Australian Standard AS3959-2018 Construction of buildings in bushfire-prone areas or the relevant BAL-FZ requirements of the NASH Standard Steel Framed Construction in Bushfire Areas 2021.
- 3. The all new works shall comply with the construction requirements in Section 7.5 of *Planning for Bush Fire Protection 2019.*

# Landscaping

4. That any new landscaping is to comply with Table 7.4a of *Planning for Bush Fire Protection* 2019.

# **Emergency management**

5. That the occupants of the subject dwelling complete a Bush Fire Survival Plan.

# Gas (where applicable)

- 6. That any new gas services are to comply with Table 7.4a of *Planning for Bush Fire Protection* 2019 as follows:
  - reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and metal piping is used;
  - all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side;
  - connections to and from gas cylinders are metal;
  - polymer-sheathed flexible gas supply lines are not used; and
  - above-ground gas service pipes are metal, including and up to any outlets.

#### 10.0 Conclusion

Northern Beaches Council's Bushfire Prone Land Map identifies the subject property as containing the Vegetation Buffer therefore the site is considered 'bushfire prone'.

As the subject site is bushfire prone in accordance with section 4.14 of the Environmental Planning and Assessment Act 1979 development consent cannot be granted unless the proposal satisfies the relevant specifications and requirements of Planning for Bush Fire Protection 2019 (PBP) or the consent authority has consulted with NSW RFS.

As the proposal relates to the alterations and additions of a sole occupancy dwelling the proposal must comply with the bushfire protection measures detailed within Chapter 7 'Residential Infill Development' of PBP.

The highest Bushfire Attack Level to the proposed works was determined from Table A1.12.5 of PBP to be 'Flame Zone' and construction requirements within NSW are therefore outside the scope of AS 3959 – 2018. The proposed works will be constructed to sections 3 (excluding section 3.5) & 9 (BAL FZ) under AS 3959 - 2018 or the relevant BAL-FZ requirements of the NASH Standard - Steel Framed Construction in Bushfire Areas 2021 and the additional construction requirements detailed in section 7.5 of PBP.

In accordance with the bushfire safety measures contained in this report, and consideration of the site-specific bushfire risk assessment it is our opinion that when combined, they will provide a reasonable and satisfactory level of bushfire protection to the subject development.

We are therefore in support of the development application.

Should you have any enquiries regarding this project please contact me at our office.

Prepared by Building Code & Bushfire Hazard Solutions

Reviewed and endorsed by Building Code & Bushfire Hazard Solutions

Duncan Armour

**Bushfire Consultant** 

Andrew Muirhead

Bushfire Consultant Graduate Certificate in Bushfire Protection Diploma of Engineering. FPA Australia BPAD Level 2 Accredited Practitioner BPAD Accreditation No. BPAD46966

#### **11.0 Annexure 01**

#### **List of Referenced Documents**

Australian Building Codes Board (2022). National Construction Code Volume Two - Building Code of Australia. ABCB

*ELVIS* -Elevation -*Foundation Spatial Data*. Elevation.fsdf.org.au. Available at: http://elevation.fsdf.org.au/

Keith, D. (2004). "Ocean Shores to Desert Dunes" Department of Environment and Conservation, Sydney

NSW Department of Planning and Environment (2019). *Planning Portal*. Accessed at: https://www.planningportal.nsw.gov.au/

NSW Rural Fire Service (2019). *Planning for Bush Fire Protection. A Guide for Councils, Planners, Fire Authorities and Developers.* 

Rural Fire Service NSW (2005). Standards for Asset Protection Zones

Plans prepared by Squillace, Job No. BAT-2309

Standards Australia (2018). AS3959 Construction of buildings in bushfire-prone areas.

Standards Australia (2014). AS/NZS 1596 The storage and handling of LP Gas

Acknowledgements to:

Geoscience Australia Nearmap Street-directory.com.au

#### **Attachments**

Attachment 01: s4.14 Compliance Certificate



**Property Details and Description of Works** 



# **Bush Fire Certificate**

Certificate issued unders4.14(1)(b) of the *Environmental Planning & Assessment Act, 1979* and *Planning for Bush Fire Protection 2019* 

This Certificate has been issued by a person accredited by Fire Protection Association Australia (FPA Australia) under the Bush Fire Planning and Design (BPAD) Accreditation Scheme and who is recognised by the NSW Rural Fire Service as a qualified consultant in bushfire risk assessment within the meaning of section 4.14(1)(b) of the *Environmental Planning and Assessment Act 1979* (NSW).

	Unit no	Street no 5				<b>Lot/Sec/DP</b> 15/K/2610	
Address Details	Suburb Clontarf					Postcode 2093	
Local Government Area	Northern Beaches						
BCA class of the building	1a						
Description of the proposal	Alterations and Additions						
Development Application Reference							
Bush Fire Assessme	Bush Fire Assessment Report						
A detailed Bush Fire Assessment Report is attached, which includes the relevant submission requirements set out in <i>Appendix</i> 2 of <i>Planning for Bush Fire Protection</i> 2019 together with recommendations as to how the relevant specifications and requirements are to be achieved.					□NO		
Report Reference and	date						
Bush	Bushfire Assessment Report 240783			1st October 2024			
BPAD Certification							
Name Andrew Muirhead Company Details & A Bushfire Hazard So 19 057 337 774  BPAD Accreditation 46966	olutions						
	Accredited Practiti	oner					