

PO Box 1020
Penrith NSW 2750
Tel: 02 4744 5800
Mob: 0425 833 893
info@bfcs.com.au
www.bfcs.com.au

Date of Issue: 26 February 2020

Bush Fire Assessment Report

in relation to the proposed alterations and additions and conversion of an existing garage to a detached games room

at:



Lot 2 Section 74 DP 758566
3 Drumcliff Avenue Killarney Heights
(subject site)

Document Tracking

Item	Detail	
Project Name	Bush Fire Assessment Report, alterations and	
	additions and detached games room	
Project Address	Lot 2 Section 74 DP 758566, 3 Drumcliff Avenue	
	Killarney Heights	
Client Name	Cad Draft P/L	
Project Number	20/0102	
Plan Reference	Plans by Cad Draft P/L numbered 19-62, dated	
	18/02/2020	
Prepared by	Laura Richards	
Approved by	Catherine Gorrie	
BAL	AS3959-2009 BAL FZ to the southeast, southwest	
	and northwest and BAL 40 to the northeast	

Bushfire Consulting Services Pty Ltd Contact Details		
Catherine Gorrie	Managing Director	
Office Number	02 4744 5800	
Mobile Number	0425 833 893	
Email	info@bfcs.com.au	

Document Control

Version	Primary Author	Description	Date Completed
1	Laura Richards	Draft	26/02/2020
2	Catherine Gorrie	Final	26/02/2020

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It should be borne in mind that the measures recommended in this report cannot guarantee that a building will survive a bushfire event on every occasion. This is due to the degree of vegetation management, the unpredictable behaviour of bushfires and extreme weather conditions. As such, the author is not liable to any person for any damage or loss whatsoever which has occurred or may occur in relation to the person taking action or not taking action based on the recommendations of this report.

NOTE: This bush fire assessment shall remain valid for 12 months from the date of issue.

Executive Summary

Bushfire Consulting Services was commissioned by Cad Draft Pty Ltd to provide a bush fire assessment for alterations and additions and a conversion of a garage to a detached games room at Lot 2 Section 74 DP 758566, 3 Drumcliff Avenue Killarney Heights. The subject site is mapped as designated bush fire prone land by Northern Beaches Council and has bush fire prone (hazardous) vegetation adjoining the southern corner of the lot. The bush fire attack level (BAL) associated with the development of the subject building has been assessed as BAL FZ to the southeast, southwest and northwest and BAL 40 to the northeast.

The proposal is a form of infill development and, as such, this report makes recommendations in accordance with the aim, objectives, and performance criteria of section 4.3.5 of the NSW RFS document 'Planning for Bush Fire Protection' (PBP) (NSWRFS 2006). The recommendations address the required bush fire protection measures, including:

- establishment and maintenance of asset protection zones (APZs)
- siting and design of the development
- construction requirements under AS3959-2009 (Standards Australia 2009),
 and section A3.7 of PBP Addendum: Appendix 3 (NSWRFS 2010)
- adequate access for emergency personnel
- adequate water supply, and utility requirements to reduce the risk of ignition by electrical or gas supplies
- landscaping to reduce the risk of ignition by embers, and to minimise flame contact and radiant heat on the proposed development

Where all recommendations are implemented, the report concludes that the proposal can comply with the aim, objectives and performance criteria of PBP.

Compliance Summary

This Assessment has been Certified by:		
Catherine Gorrie	OMYour	
BPAD-Level 3 Accredited Practitioner	Englis	
FPAA Cert No: BPAD20751	•	
What is the recommended level of compliance	AS3959-2009 BAL FZ to the	
with AS3959-2009?	southeast, southwest and	
	northwest and BAL 40 to the	
	northeast	
Can this proposal comply with AS 3959-2009	Yes	
and Addendum to Appendix 3 of Planning for		
Bush Fire Protection (PBP)?		
Does this development comply with the aim and	Yes	
objectives of PBP?		
Is referral to the NSW Rural Fire Service (RFS)	Yes, Flame Zone	
required?		

List of Abbreviations

APZ Asset Protection Zone

AS3959 Australian Standard 3959 – 2009 including Amendment 3

BAL Bushfire Attack Level

BPAD Bushfire Planning and Design (Accreditation Scheme)

BPMs Bushfire Protection Measures

BPLM Bushfire Prone Land Map

Council Northern Beaches Council

DA Development Application

EP&A Act Environmental Planning and Assessment Act – 1979

FPAA Fire Protection Association of Australia

IPA Inner Protection Area

LPMA Land & Property Management Authority

PBP Planning for Bush Fire Protection 2006

RF Act Rural Fires Act – 1997

RFS NSW Rural Fire Service

SEPP State Environmental Planning Policy

SIX Spatial Information Exchange

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1. Introduction

This report has been commissioned by Cad Draft P/L to provide a bush fire assessment for alterations and additions and conversion of a garage to a detached games room at Lot 2 Section 74 DP 758566, 3 Drumcliff Avenue Killarney Heights.

The subject property is "bushfire prone land" as per the local Council bushfire prone land map (Figure 4) as defined by section 10.3 (s10.3) of the *Environmental Planning & Assessment Act (EP&A) 1979* and therefore the requirements stipulated by legislation apply to any new development on the site.

Planning for Bush Fire Protection 2006 (Chapter 4.3.5) describes this type of development as "infill development" and therefore the requirements of section 4.14 (s4.14) of the EP&A Act are applicable.

The bush fire assessment and recommendations are derived from the NSW *EP&A Act*, the Rural Fire Service document *Planning for Bush Fire Protection 2006* and Australian Standard 3959-2009 'Construction of Buildings in Bushfire Prone Areas'.

2. Purpose of this Report

The purpose of this report is to provide the owners, the Consent Authority, the Certifier and the Rural Fire Service with a description of the proposed development as well as the vegetation type, slope and any other factors influencing the likely bushfire behaviour, sufficient to show that the development will be protected from the likely bushfire threat as outlined in current legislation.

This assessment includes an analysis of the hazard, threat and subsequent risk to the development and provides recommendations that satisfy the aim and objectives of Planning for Bush Fire Protection.

3. Location

The site is located and known as Lot 2 Section 74 DP 758566, 3 Drumcliff Avenue Killarney Heights. The property is part of the Northern Beaches local government area.

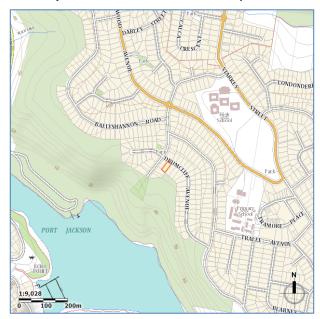


Figure 1. Location Map. Source: LPMA SIX Viewer (NSW Government 2019a)

Site location outlined in red



Figure 2. Aerial Map. Source: LPMA SIX Viewer (NSW Government 2019a)

Site location outlined in red

Figure 3. Bushfire Prone Land Map. Source: Northern Beaches Mapping (NSW Government 2019b)

Site location outlined in red

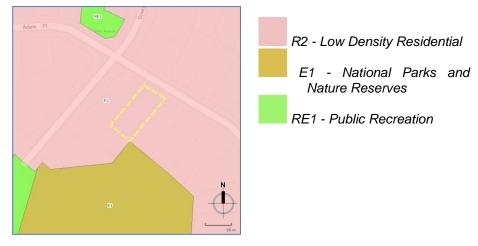
3.1 Property Description

The property is comprised of Lot 2 Section 74 DP 758566, 3 Drumcliff Avenue Killarney Heights, covering approximately 729m² in area (Figure 2). It is bounded by Drumcliff Avenue to the approximate northeast with private allotments to the southeast, southwest and northwest, and a public reserve at the southern corner of the lot. It currently contains a single occupancy development, comprising a of a single storey dwelling, swimming pool and detached garage.

3.2 Zoning

The land is zoned R2: Low Density Residential under Warringah Local Environmental Plan 2011. Adjacent lands to the northeast, southwest and northwest are similarly zoned. Adjacent lands to the southern corner are zoned E1 - National Parks and Nature Reserves (Figure 4).

Figure 4. Zoning Map. Source: NSW Government Planning Viewer (NSW Government 2019b)



Site location outlined in yellow

4. The Proposal

The proposal is for alterations and additions to the existing dwelling and a conversion of an existing detached garage into a games room. The additions comprise of a porch, alfresco, two decks, proposed new windows and doors, a carport and a first floor addition with two balconies. In terms of the NCC, the classification of the building is Class 1a and 10a.

5. Site Assessment

Bushfire Consulting Services Pty Ltd attended the site on 20 January 2019. The assessment relates to site plans (reference Appendix 1 below). The NSW Spatial Services mapping website has also been used as a reference (NSW Government 2019a), and 'Ocean Shores to Desert Dunes' by David Keith (Keith 2004), in determining the vegetation type.

5.1 Vegetation Classification for Site and Surrounds

The bushfire threat emanates from bushland located to the south and southwest of the subject building on adjoining land. Hazardous vegetation was classified for a distance of 140m from the subject building according to the methodology of PBP Appendix 2 and PBP Addendum: Appendix 3 section A3.5.

Predominant vegetation is classified by structure or formation using the system adopted by Keith (2004). Based on a site visit and determination of vegetation formation using the Keith (2004) Identification Key and conversion to Specht classifications, the primary bushland vegetation having the potential to affect the subject building is most representative of Forest in both directions.

Key
Subject Site
Forest Vegetation
140m Buffer

0 25 50 75 100 m

Figure 5. Hazardous vegetation affecting the subject building. Source: NearMap (2019) with overlays by BFCS P/L

The following separation distances are measured between the dwelling and the hazard, noting that the entire lot is to be managed as an APZ.

Table 1. Hazardous vegetation affecting the subject building

Direction	Vegetation Classification
Northeast	Absence of Classified Vegetation for >140m
Southeast	Absence of Classified Vegetation for 10m then Forest
Southwest	Absence of Classified Vegetation for 74m then Forest
Northwest	Absence of Classified Vegetation for >140m

5.2 Slope

The effective slope has been measured manually on site over a distance of 100m from the proposed development where accessible, under the classified vegetation community constituting the hazard. The slope was found to be consistent with the topographical information from NSW Spatial Services LiDAR data.

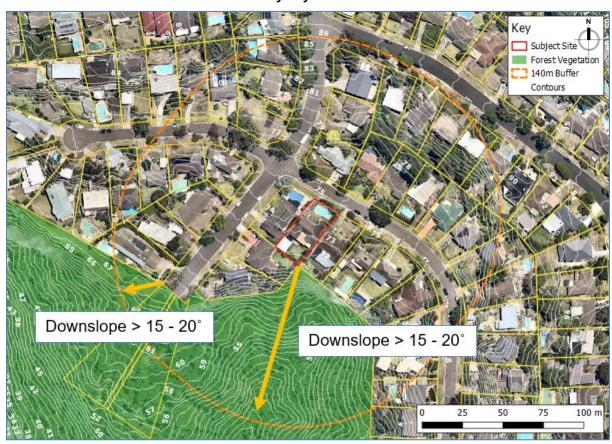


Figure 6. Slope Diagram. Source: NearMap (2019) and LiDAR (NSW Government 2019a) with overlays by BFCS P/L

Direction from Building Footprint	Slope Description
Northeast	N/A
Southeast	Downslope >15- 20°
Southwest	Downslope >15- 20°
Northwest	N/A

Note: Effective 'slope' refers to the slope under the classified vegetation in relation to the building, not the slope between the building and the classified vegetation.

5.3 Fire Weather

The development is located in the Northern Beaches Council area, a part of the Greater Sydney Region, which has a Fire Danger Index of 100.

5.4 Access and Egress

The lot has direct access to Drumcliff Avenue, which is a public road. Suitable access for fire-fighting vehicles and evacuation is available.

5.5 Water Supply

The area has a reticulated water supply and a fire hydrant is located approximately 33m from the lot to the northeast, within the distance prescribed by PBP.

5.6 Biodiversity Values

A search of the NSW Office of Heritage and Environment and Heritage's Biodiversity Values Map (NSW Government 2019c) has been carried out and has not revealed any high biodiversity values on the land.

5.7 Environmental Features

In this instance, there are no features on or adjoining the site which may mitigate the impact of a high intensity bushfire on the proposed development. The proposed bushfire protection measures will not adversely impact on the environment. It should be noted that this report has not focused on environmental issues and as such they may require further specialist investigation.

5.8 Asset Protection Zones

An Asset Protection Zone (APZ) is a fuel-reduced area surrounding a built asset or structure. An APZ provides a buffer zone between a bush fire hazard and an asset and an area of reduced bush fire fuel that allows suppression of fire. It also provides an area from which backburning or hazard reduction can be conducted, and allows emergency services access as well as providing a relatively safe area for firefighters and home owners to defend their property.

Potential bush fire fuels should be minimised within an APZ. This is so that the vegetation within the planned zone does not provide a path for the transfer of fire to the asset either from the ground level or through the tree canopy. PBP has minimum specifications for APZs to be established around a dwelling to be managed as an Inner Protection Area (IPA).

An IPA should provide a tree canopy cover of less than 15% and should be located greater than 2 metres from any part of the roofline of a dwelling. Garden beds or flammable shrubs are not to be located under trees and should be no closer than 10m from an exposed window or door. Trees should have lower limbs removed up to a height of 2m above the ground.

In this instance the entire lot is to be managed as an IPA. Selective limb removal is to be carried out to ensure there is no vegetation touching or overhanging the building. Otherwise, the site is already consistent with APZ requirements.

6. Assessment of Bushfire Risk

The bushfire risk to the subject building was assessed by considering the classification of the vegetation threats, the effective slope under the classified vegetation, the separation distance between the building and the classified vegetation, and the potential fire weather typical of the area which is represented as a Fire Danger Index (FDI) of 100 for a 1 in 50 year event. The information shown in Table 2 is derived from AS3959-2009 and the simplified method for determining the Bushfire Attack Level – Method 1, as outlined in AS3959-2009.

Table 2 - Bushfire Risk Assessment to the Subject Building

Aspect	Possible	Vegetation	Slope Under Classified	Anticipated	Bushfire
	APZ	Classification	Vegetation	Radiant	Attack Level
				Heat Flux	(BAL)
				kW/m²	required
Northeast	>100m	N/A	N/A	N/A	BAL 40
Southeast	10m	Forest	Downslope >15- 20°	>40	BAL FZ
Southwest	74m	Forest	Downslope >15- 20°	<29	BAL FZ
Northwest	>100m	N/A	N/A	N/A	BAL FZ

The assessment indicates that the subject building would experience radiant heat levels of >40 kW/m² as a result of foreseeable local bushfires under conditions of an FDI of 100. FDI 100 represents catastrophic fire conditions and is therefore a worst-case scenario. The expected radiant heat levels translate to a Bushfire Attack Level (BAL) on the building of BAL FZ according to Table 2.4.2 of AS3959-2009 'Construction of buildings in bushfire-prone areas'. Construction of any new development to BAL FZ specifications is 'primarily concerned with protection from flame contact together with ember attack and radiant heat of more than 40kW/m²'.

7. Reduction in BAL due to Shielding

Under normal circumstances a proposed development approval would be issued with the same construction level for each elevation of the dwelling. According to the RFS Fast Fact 2/10, it is acceptable to recommend a lower construction level on the elevation furthest from the hazard. Facades of the dwelling directly exposed to the hazard (in line of sight from the hazard), still require the assessed level of construction.

The construction requirements for the next lower BAL than determined for the site may be applied to an elevation of the building where the elevation is not exposed to the source of the bushfire attack (AS3959-2009 clause 3.5). An elevation is deemed to be not exposed to the source of the bushfire attack if all the straight lines between that elevation and the source of bushfire attack are obstructed by another part of the building.

In this instance, the northeast aspect of the dwelling will be fully shielded from exposure to the source of the greatest bushfire attack by the building itself. Therefore the BAL for the northeast elevation can be reduced by one level to BAL 40. The BAL is only permitted to be reduced by one level.

8. Assessment of Compliance with PBP

The development conforms to PBP as follows:

Performance	Meets	Comment	
Criteria	or not		
APZs	N	According to PBP Table A2.4 the minimum APZ required is	
		50m. It is proposed that the entire lot continue to be managed	
		as an Asset Protection Zone, and the 50m APZ is not	
		attainable on the lot. As the required APZ cannot be met, the	
		specific objectives of PBP must be met as discussed below	
Defendable	Y	Adequate defendable space is available to the front of the	
Space		subject building and pedestrian firefighter access is available	
		to the rear	
Siting and	Υ	Siting and design is in accordance with local council	
Design		requirements for the allotment	
Landscaping	Υ	Any future landscaping is to comply with PBP 2006	
		Appendix 5	
Construction	Υ	Must comply with AS3959-2009 BAL FZ to the southeast,	
Standards		southwest and northwest and BAL 40 to the northeast	
Access and	Υ	Safe operational access is available to emergency services	
egress personnel while re		personnel while residents are seeking to relocate in advance	
		of a bushfire	
Water		The area has a reticulated water supply and hydrants are	
Supply		spaced at regular intervals along Drumcliff Avenue. The	
		nearest street hydrant is located approximately 33m from the	
		lot to the northeast which is within the distance prescribed by	
		PBP	
Electricity	Υ	Any proposed bottled gas supply location will comply with	
and Gas PBP where it is located so as to		PBP where it is located so as to not lead to ignition of the	
Supply surrounding bushland or the building		surrounding bushland or the building. Where practicable,	
		electrical transmission lines will be located underground	

Performance	Meets	Comment
Criteria	or not	
Emergency	Y	The need to formulate an emergency evacuation is
and		suggested. To do so, occupants can complete a Bush Fire
Evacuation		Safety Plan on the NSW RFS Website
Planning		http://www.rfs.nsw.gov.au/ under publications / bushfire
		safety

9. Specific Objectives of PBP where APZs cannot be met

While the proposed development does not meet the minimum APZ for residential development, it complies with the aim and objectives of PBP for infill development. The Specific Objectives for infill development and a comment as to how they are achieved by the proposed development is provided below:

<u>Specific Objective 1</u> for infill development is to "ensure that the bushfire risk to adjoining lands is not increased".

The development does not increase the bushfire risk to adjoining lands. The bushfire risk to adjoining lands will be decreased as the dwelling will be provided with a formalised APZ which does not currently exist on the lot, which satisfies this objective.

<u>Specific Objective 2</u> for infill development is to "provide a minimum defendable space". The proposed development will have defendable space of at least $10m^2$ at the front of the dwelling. Pedestrian access is available to both sides of the dwelling and a further defendable space of at least $10m^2$ is available at the rear of the dwelling, which satisfies this objective.

<u>Specific Objective 3</u> for infill development is to "provide a better bushfire protection outcome, and should not result in new works being exposed to greater risk than the existing building".

The proposal extends closer to the hazard in the form of a non-combustible deck and is otherwise contained within the existing building footprint, which is reasonable in this case.

<u>Specific Objective 4</u> for infill developments is to "ensure that the footprint of the proposed building does not extend towards the hazard beyond existing building lines on neighbouring land".

The proposed development has setbacks to the hazard which are consistent with adjoining lots, which satisfies this objective.

<u>Specific Objective 5</u> for infill development is to "not result in an increased bushfire management and maintenance responsibility on adjoining land owners unless they have agreed to the development".

The development does not increase or offset bushfire management onto neighbouring lands.

<u>Specific Objective 6</u> for infill development is to "ensure building design and construction enhances the chances of occupant and building survival".

The new development will comply with construction standards for bushfire protection, which satisfies this objective.

10. Recommendations

The following recommendations are made for the bushfire measures for the proposed residential development of alterations and additions and conversion of a garage to a detached games room at Lot 2 Section 74 DP 758566, 3 Drumcliff Avenue Killarney Heights, and are based upon the relevant provisions of the NSW Rural Fire Service Guideline entitled *Planning for Bush Fire Protection 2006*.

1. <u>Design and Construction</u>

New construction on the southeast, southwest and northwest elevations and the entire roof shall comply with Sections 3 and 9 (BAL FZ) of Australian Standard AS3959-2009 'Construction of buildings in bush fire-prone areas' or NASH Standard (1.7.14 updated)

'National Standard Steel Framed Construction in Bushfire Areas – 2014' as appropriate. Except for windows, flaming of the specimen is not permitted and there shall be no exposed timber.

New construction on the northeast elevation shall comply with Sections 3 and 8 (BAL 40) of Australian Standard AS3959-2009 'Construction of buildings in bush fire-prone areas' and Section A3.7 of the NSW Rural Fire Service Addendum to Appendix 3 of Planning for Bush Fire Protection 2006, or NASH Standard (1.7.14 updated) 'National Standard Steel Framed Construction in Bushfire Areas – 2014' as appropriate.

2. Asset Protection Zones

At the commencement of the development, and in perpetuity, the entire lot shall continue to be managed as an IPA, as outlined in PBP 2006 Appendix 5 and the NSW RFS document 'Standards for Asset Protection Zones' (NSW RFS undated).

The following points are a guide to Asset Protection Zone Area requirements. The Asset Protection Zone Area should comprise the following:

- Minimal fine fuel on the ground.
- Vegetation that does not provide a continuous path to the building for the transfer of fire.
- Shrubs and trees that do not form a continuous canopy and vegetation is planted in clumps, rather than continuous rows.
- Species that retain dead material or deposit excessive quantities of ground fuel are avoided.
- Shrubs and trees are pruned so that they do not touch or overhang the building.
- Vegetation is located far enough away from the building so that plants will not ignite the building by direct flame contact or radiant heat emission.

3. Emergency and Evacuation Planning

The need to formulate an emergency evacuation plan is suggested. To do so, occupants can complete a Bush Fire Safety Plan on the NSW RFS Website http://www.rfs.nsw.gov.au/ under publications / bushfire safety.

11. Summary

This report consists of a bush fire assessment for the proposed residential development of alterations and additions and conversion of a garage to a detached games room at Lot 2 Section 74 DP 758566, 3 Drumcliff Avenue Killarney Heights. The report concludes that the proposed development is on designated bushfire prone land and the legislative requirements for development in bushfire prone areas are applicable.

This report has considered all the elements of bushfire attack and finds that the development has a Bushfire Attack Level of BAL FZ to the entire roof and the southeast, southwest and northwest and BAL 40 to the northeast. The development satisfies the Objectives and Performance requirements of 'Planning for Bush Fire Protection' 2006, subject to implementation of the recommendations made by this report.

Notwithstanding 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 bushfire attack on every occasion.

This report is a bush fire assessment that provides the required information to assist local Council and the Rural Fire Service in determining compliance in accordance with Planning for Bush Fire Protection 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.

Catherine Gorrie

Accredited Bushfire Consultant

Fire Protection Association Australia BPAD- LEVEL 3 (BPAD20751)



Grad Dip Bushfire Protection (UWS 2010)

Diploma Environmental Health & Building Surveying (TAFE 2005)

Corporate Bronze Member Fire Protection Association Australia

Bushfire Consulting Services Pty Ltd

Mob: 0425 833 893

12. References

Keith D 2004, Ocean Shores to Desert Dunes, the Native Vegetation of NSW and the ACT, Department of Environment and Conservation, Sydney

NearMap 2019, NearMap Photomap Aerial Imagery, NearMap Australia, Barrangaroo, NSW

NSW Government 2019a, *NSW Spatial Services*, NSW Department of Finance, Services and Innovation.

NSW Government 2019b, NSW Planning Portal, NSW Department of Planning and Environment.

NSW Government 2019c, *Biodiversity Values Map*, NSW Department of Environment and Heritage.

NSW RFS 2006, Planning for Bush Fire Protection, NSW Rural Fire Service, Sydney.

NSW RFS 2010, Addendum: Appendix 3 - Planning for bush fire protection, NSW Rural Fire Service, Sydney, Australia

NSW RFS undated, *Standards for Asset Protection Zones*, NSW Rural Fire Service, Sydney.

Standards Australia 2009, Australian Standard AS 3959-2009 'Construction of Buildings in Bushfire Prone Areas', SAI Global, Australia.

Watson, P 2012, Fuel Load Dynamics in NSW Vegetation Part 1: Forests and Grassy Woodlands, University of Wollongong.

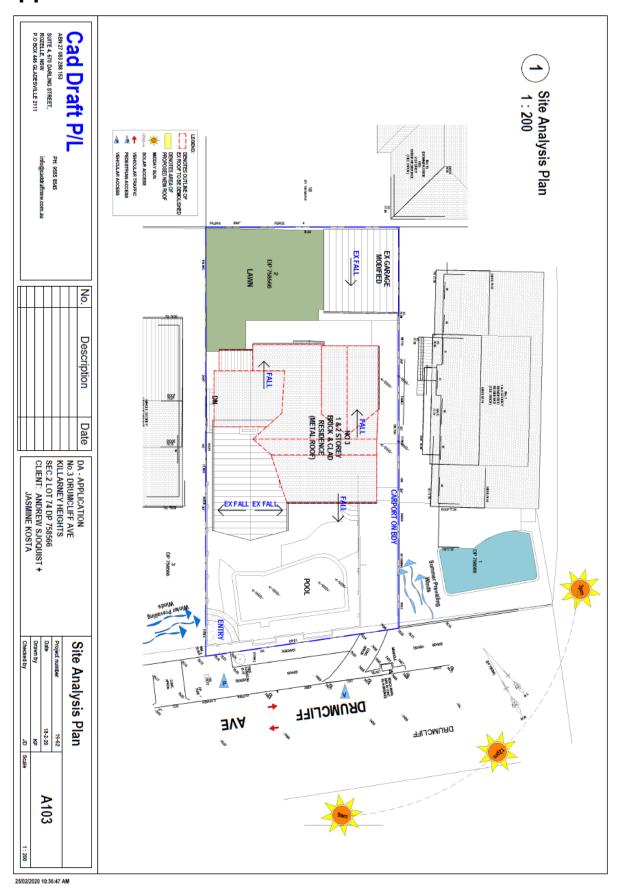
13. Legislation

Environmental Planning & Assessment Act 1979

Rural Fires Act 1997

Rural Fires Regulation 2013

Appendix 1 - Site Plan



Appendix 2 – Photos of Site and Surrounds

Source: BFCS P/L 20/01/2020



Subject site



The northeast elevation of the existing dwelling



The rear elevation of the existing dwelling



The garage to be converted into a games room



Typical vegetation to the south of the lot taken from Downpatrick road



Vegetation to the southwest approximately 57m from the subject site

Appendix 3 - Bushfire Risk Assessment Certificate

This form is completed by a recognized consultant in bushfire risk assessment in accordance with section s4.14 of the Environmental Planning and Assessment Act 1979 No 203

PROPERTY ADDRESS:	Lot 2 Section 74 DP 758566 3 Drumcliff Avenue Killarney Heights	
DESCRIPTION OF PROPOSAL:	Alterations and additions and conversion of a garage to a detached games room	
PLAN REFERENCE: (relied upon in report preparation)	Plans by Cad Draft P/L numbered 19-62, dated 18/02/2020	
BAL RATING	BAL FZ to the entire roof and the southeast, southwest and northwest and BAL 40 to the northeast (If the BAL rating is FZ the application is to be referred to NSW RFS for assessment.)	
DOES THE PROPOSAL RELY ON	YES (Circle the relevant response)	
ALTERNATE SOLUTIONS:	(If YES the application is to be referred to NSW RFS for assessment.)	

I, Catherine Gorrie, of Bushfire Consulting Services Pty Ltd, have carried out a bushfire risk assessment on the above mentioned proposal and property. A detailed Bushfire Assessment Report is attached which includes the submission requirements set out in Appendix 4 of Planning for Bushfire Protection 2006 together with recommendations as to how the relevant specifications and requirements are to be achieved.

REPORT REFERENCE:	20/0102
REPORT DATE:	26/02/2020
CERTIFICATION NO/ACCREDITED	BPAD-Level 3 Accredited Practitioner
SCHEME:	FPAA Cert No: BPAD20751

Note: this certificate must be completed and signed by a person recognised by the NSW Rural Fire Service as a qualified consultant in bush fire risk assessment in accordance with s4.14 of the EP&A Act 1979 No 203.

I hereby certify, in accordance with Section 4.14 of the Environmental Planning and

Assessment Act 1979 No 203:

1. That I am a person recognised by the NSW Rural Fire Service as a qualified

consultant in bushfire risk assessment; and

2. That subject to the recommendations contained in the attached Bushfire Risk

Assessment Report the proposed development conforms to the relevant

specifications and requirements*.

* The relevant specifications and requirements being; specifications and requirements

of the document entitled *Planning for Bush Fire Protection* prepared by the NSW Rural

Fire Service in co-operation with the Department of Planning and any other document

as prescribed by Section s4.14 of the Environmental Planning and Assessment Act

1979 No 203.

I am aware that the bush fire assessment report, prepared for the above mentioned

site is to be submitted in support of a development application for this site and will be

relied upon by Council as the basis for ensuring that the bushfire risk management

aspects of the proposed development have been addressed in accordance with

Planning for Bush Fire Protection 2006.

Attachments:

Bushfire Risk Assessment Report



Recommendations



Statement of vegetation impact in relation to APZ

SIGNATURE:

DATE: 26/02/2020