

Bushfire Assessment Report

Proposed:
**Alterations and
Additions**

At:
**9 Hyde Avenue,
Killarney Heights**

Reference Number: 230694

16 February 2023



Prepared By:
**Building Code & Bushfire
Hazard Solutions Pty Limited**

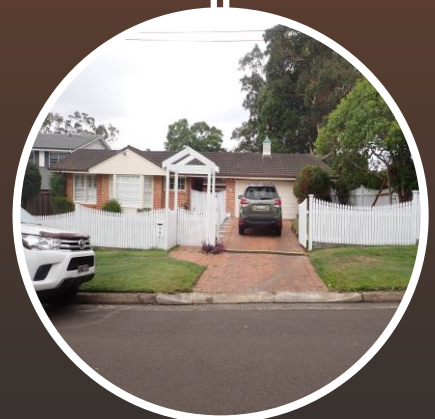
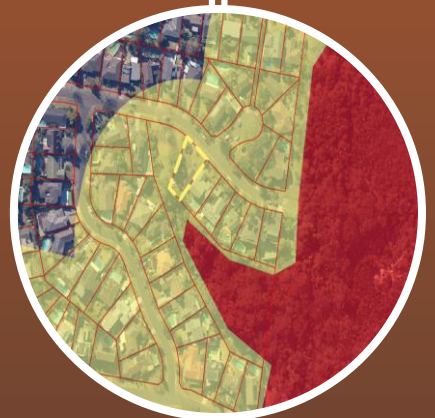
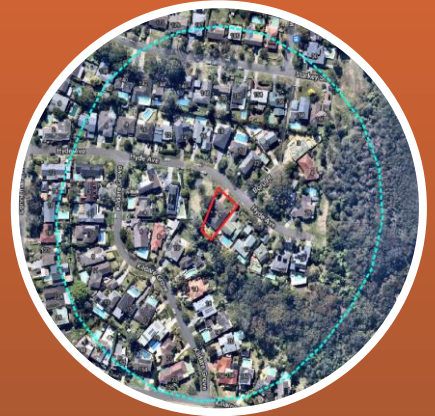
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Version Control				
Version	Date	Author	Reviewed by	Details
1	16/02/2023	Andrew Muirhead	Stuart McMonnies	Final Report

Executive Summary

The development proposal relates to the alterations and additions to an existing sole occupancy dwelling within an existing residential allotment located at 9 Hyde Avenue, Killarney Heights.

As the subject site is bushfire prone land Planning for Bush Fire Protection - 2019 (PBP) must apply in this instance.

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

The subject site and surrounding area present unique characteristics which warrant special consideration when applying the assessment methodology described in PBP.

The vegetation identified as being the potential hazard is a narrow corridor (<40 metre fire run towards the dwelling) to the south which runs parallel to an existing watercourse. This corridor has direct link to a larger hazard further east.

The vegetation was found to consist of trees 10 - 20 metres in height with 50 - 70% foliage cover and an understorey of low trees, shrubs and grasses. There was a high concentration of known hard to burn species to the south. Conservatively the vegetation was determined to be Forest.

The applicant wishes to improve bushfire protection at the property and in this regard rather than achieving compliance with BAL Flame Zone for the new works only, they have expanded their scope of works to now include upgrades to the dwelling to achieve the intent of BAL 40.

Should the development not proceed then obviously occupation of a dwelling not built to any bushfire codes and in a perceived high risk location would continue, and no better outcome would be provided to the inhabitants.

It has been brought to our attention that the NSW Rural Fire Service are applying a discretionary approach to some applications. The concept being that, where altering an existing dwelling that was constructed prior to the bushfire regulations and a significantly improved bushfire safety outcome is being achieved by upgrade of the dwelling with additional works, then a downgrade in the Bushfire Attack Level applied by DA consent may be possible.

Upgrade works are encouraged by the RFS in section 7.8 of PBP 'Better bush fire outcomes' and we also advocate and encourage compliance with this section of PBP. The fact that upgrade works are combined with new works should not be used to apply a blanket FZ determination, instead the RFS and Council should seek a better outcome than if the development did not proceed.

The provision of the upgrade package will provide a much better bushfire safety outcome than if the development proceeded and the Flame Zone provisions were applied to the original scope of works only.

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	<i>Environmental Planning and Assessment Act - 1979</i>
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	<i>Planning for Bush Fire Protection – November 2019</i>
ROW	Right of Way
RF Act	<i>Rural Fires Act - 1997</i>
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 alterations and additions of a sole occupancy dwelling within an existing residential allotment located at 9 Hyde Avenue, Killarney Heights (Lot 623 DP 217209).

The subject site has street access to Hyde Avenue to the north, and abuts private residential allotment to the east and public reserve to the south and west.

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 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 therefore PBP must apply in this instance.

The subject development relates to the alterations and additions of a sole occupancy dwelling within an existing residential allotment. The development is classified as infill development and captured under section 4.14 of the *Environmental Planning and Assessment Act 1979*. Chapter 7 'Residential Infill Development' of PBP is applicable.



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 Andrew Muirhead, Bushfire Consultant at Building Code & Bushfire Hazard Solutions Pty Ltd who is 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 2 BPAD qualified practitioner (BPAD46966).

In addition, the National Construction Code 2019 includes the following provisions:

3.10.5.0 is replaced with the following clause in New South Wales:

Performance Requirement P2.7.5 is satisfied, for—

(a) a Class 1 building; or

(b) a Class 10a building or deck associated with a Class 1 building, located in a designated bushfire prone area, if it is constructed in accordance with the following:

(c) AS 3959 except—

- (i) as amended by Planning for Bush Fire Protection; and*
- (ii) for Section 9 for Bushfire Attack Level FZ (BAL-FZ).*

(d) 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).*

(e) the requirements of (c), or (d) above as modified by the development consent following consultation with the NSW Rural Fire Service under section 4.14 of the Environmental Planning and Assessment Act 1979 if required;

3.0 Purpose of Report

The purpose of this Bushfire Assessment Report is to provide the owners, Council and the NSW Rural Fire Service 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 projects compliance with *Planning for Bush Fire Protection – 2019*.

	North	East	South	West
Vegetation Structure	Maintained Curtilages	Forest	Forest	Maintained Curtilages
Slope	N/A	0 - 5 degrees down	5 - 10 degrees down	N/A
Asset Protection Zone	N/A	>82 metres	8 metres	N/A
Significant Landscape Features	Hyde Avenue	Neighbouring private allotment	Hyde Avenue Park	Hyde Avenue Park
Threatened Species	APZ Existing	APZ Existing	APZ Existing	APZ Existing
Aboriginal Relics	APZ Existing	APZ Existing	APZ Existing	APZ Existing
Bushfire Attack Level	N/A	N/A	BAL FZ	N/A
Recommended Construction Level	BAL 40 Consultation with RFS required	BAL 40 Consultation with RFS required	BAL 40 Consultation with RFS required	BAL 40 Consultation with RFS required

Asset Protection Zones

The available Asset Protection Zones (APZs) were measured to be 8 metres to the south and >82 metres to the east. The separation from the hazard includes maintained grounds within the subject site and maintained neighbouring allotments.

The APZ to the east is further supported by a 4-10 metre wide managed area within the adjacent reserve. As the ongoing management of this area cannot be guaranteed it has not been included within the available APZ.

Construction Level

The highest Bushfire Attack Level to the proposed works was determined to be 'Flame Zone' and construction requirements within NSW are therefore outside the scope of AS 3959 – 2018 as 'BAL FZ' has not been adopted as a set of deemed to satisfy provisions.

The proposed better outcome includes:

- All new works to be constructed to BAL 40,
- Existing windows and external doors to be upgraded to BAL 40,
- Ember upgrade to the entire dwelling,

In accordance with A1.7 BAL 40 mitigates the radiant heat flux (not greater than 40kW/m²) threatens building integrity and the potential flame contact is possible. The proposed works are required to comply with section 3 and BAL 40 section 8 under AS 3959 – 2018 and the additional construction requirements under section 7.5 of PBP.

It is of our opinion that the application of BAL 40 is commensurate with the bushfire threat posed to the subject dwelling.

Compliance Summary of Bushfire Protection Measures			
Bushfire Protection Measure (s7.4 PBP)	Acceptable Solution	Performance Solution	Report Section
Asset Protection Zones	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8.02
Construction Standard	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8.03
Access	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.04
Water Supply	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.05
Gas and Electrical Supplies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.05

6.0 Aerial view of the subject allotment



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

7.0 Site Assessment

A representative of Building Code & Bushfire Hazard Solutions completed a site inspection of the subject site and surrounding area on 27th January 2023.

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 & Sydney Metro v3)
- NSW Bush Fire Prone Land (ePlanning Portal)

7.01 Location

The subject property is known as 9 Hyde Avenue, Killarney Heights (Lot 623 DP 217209) and is a residential allotment (R2: Low Density Residential) located within Northern Beaches Councils Local Government Area.

The subject site has street access to Hyde Avenue to the north, and abuts private residential allotment to the east and public reserve to the south and west.

The vegetation identified as being the potential hazard is located within the narrow reserve (Hyde Avenue Reserve) to the south and Garrigal National Park to the east.



Photograph 01: View from Hyde Avenue towards the dwelling



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

7.02 Vegetation

The predominant vegetation within the subject property and the neighbouring private residential allotments consists of landscaped gardens and mown lawns.

The vegetation identified as being the potential hazard is located within the narrow (<40 metre fire run towards the dwelling) vegetated allotment to the south, however the vegetation does link to a larger vegetated allotment. It should however be noted that a fire burning from the east would be running parallel to the subject site and therefore be a flanking fire to the subject dwelling.

The vegetation to both aspects was found to consist of trees 10 - 20 metres in height with 50 - 70% foliage cover and an understorey of low trees, shrubs and grasses. There was a high concentration of known hard to burn species to the south.

For the purpose of assessment under PBP the vegetation posing a hazard to south and east has been conservatively assessed as Forest.



Photograph 02: View into the hazard to the south



Forest

Photograph 03: View into the hazard to the south



Forest

Photograph 04: View within the hazard to the east

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 impact was determined onsite using an inclinometer and verified from topographic imagery to be:

- 5 - 10 degrees downslope within the hazard to the south
- 0 - 5 degrees downslope within the hazard to the east



Figure 04: Extract from ELVIS - Geoscience Australia - 1m contours
(Blue Line 140m vegetation assessment limit)

7.04 Fire Weather

All development which attracts an Asset Protection Zone and Bushfire Attack Level 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 an existing 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

The subject property is a residential allotment located in an area of similar properties.

The available Asset Protection Zones (APZs) were measured to be 8 metres to the south and >82 metres to the east. The separation from the hazard includes maintained grounds within the subject site and maintained neighbouring allotments.

All grounds within the subject property not built upon are to continue to be maintained in accordance with an Inner Protection Area (IPA) as detailed in the NSW Rural Fire Service's document 'Standards for Asset Protection Zones'.

At the time of our inspection, the APZs were existing and no tree removal or vegetation modification is required to implement the aforementioned APZs.

It is recommended that no additional planting within the site is undertaken, as additional planting will compromise the performance of the APZ.

It should be noted that the APZ to the east is further supported by a 4-10 metre wide managed area within the adjacent reserve. As the ongoing management of this area cannot be guaranteed it has not been included within the available APZ.

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/m ²)	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 to be 'Flame Zone' and construction requirements within NSW are therefore outside the scope of AS 3959 – 2018 as 'BAL FZ' has not been adopted as a set of deemed to satisfy provisions.

The proposed better outcome includes:

- All new works to be constructed to BAL 40,
- Existing windows and external doors to be upgraded to BAL 40,
- Ember upgrade to the entire dwelling,

In accordance with A1.7 BAL 40 mitigates the radiant heat flux (not greater than 40kW/m²) threatens building integrity and the potential flame contact is possible. The proposed works are required to comply with section 3 and BAL 40 section 8 under AS 3959 – 2018 and the additional construction requirements under section 7.5 of PBP.

It is of our opinion that the application of BAL 40 is commensurate with the bushfire threat posed to the subject dwelling.

8.04 Property Access

The subject property has street access to Rickard Avenue to north. Persons seeking to egress from the subject property are able to do so via the existing access drive and public roads.

The most distant external point of the existing dwelling and proposed works is <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 is not applicable.

The existing access arrangements are considered acceptable.

8.05 Water Supply & Utilities

Hydrants are available throughout Hyde Avenue and surrounding streets for the replenishment of fire service vehicles. The most distant external point of the building footprint is <90 metres from an operational hydrant and therefore a Static Water Supply is not required in consideration of AS2419.1 – 2021 (Section 3.5.3.2) and section 7.4 of PBP.

The proposed swimming pool will provide a static water supply within the subject site.

The existing dwelling has an aerial connection 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 Appendix 4 'Landscaping' 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 proposals 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 proposed works will be constructed to BAL 40 being an appropriate Bushfire Attack Levels and along with the available APZ and proposed upgrade measures will protect occupants from exposures to a bushfire.
(ii) provide for a defensible space to be located around buildings;	There is a defensible space available to the identified hazards, being maintained neighbouring allotments.

Aim / Objective	Comment
(iii) provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings;	The existing APZs were measured to be 8 metres to the south and >82 metres to the east. The APZ in conjunction with construction measures will prevent the likely fire spread to the building.
(iv) ensure that appropriate operational access and egress for emergency service personnel and occupants is available;	The existing access, road network and trails provide appropriate operational access and egress for emergency services.
(v) provide for ongoing management and maintenance of bush fire protection measures, (BPMs); and	<p>All grounds within the subject site will continue 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'.</p> <p>Any new landscaping is to comply with the provisions of Table 7.4a and Appendix 4 of PBP.</p>
(vi) ensure that utility services are adequate to meet the needs of firefighters.	<p>Hydrants are available throughout Rickard Avenue and surrounding streets for the replenishment of fire service vehicles.</p> <p>The existing water supply is adequate for the needs of the firefighters.</p>

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

1. That all grounds within the subject property not built upon are to 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 construction and the existing windows and doors shall comply with sections 3 and 8 (BAL 40) Australian Standard AS3959-2018 'Construction of buildings in bush fire-prone areas' and section 7.5 of "Planning for Bush Fire Protection - 2019".
3. The existing building to be upgraded to improve ember protection. This is to be achieved by enclosing all openings (excluding roof tile spaces) or covering openings with a non-corrosive metal screen mesh with a maximum aperture of 2mm. Where applicable, this includes openable windows, vents, weepholes and eaves. External doors are to be fitted with draft excluders.
4. The proposed pool will be constructed from non-combustible materials.

Landscaping

5. That any new landscaping is to comply with Section 3.7 'Landscaping' under *Planning for Bush Fire Protection* 2019.
6. That all new pool fencing be constructed from non-combustible materials.

Gas (where applicable)

7. 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

The development proposal relates to the alterations and additions to an existing sole occupancy dwelling within an existing residential allotment located at 9 Hyde Avenue, Killarney Heights.

As the subject site is bushfire prone land Planning for Bush Fire Protection - 2019 (PBP) must apply in this instance.

The subject site and surrounding area present unique characteristics which warrant special consideration when applying the assessment methodology described in PBP.

The applicant wishes to improve bushfire protection at the property and in this regard rather than achieving compliance with BAL Flame Zone for the new works only, they have expanded their scope of works to now include upgrades to the entire dwelling to achieve the intent of BAL 40.

It has been brought to our attention that the NSW Rural Fire Service are applying a discretionary approach to some applications. The concept being that, where altering an existing dwelling that was constructed prior to the bushfire regulations and a significantly improved bushfire safety outcome is being achieved by upgrade of the dwelling with additional works, then a downgrade in the Bushfire Attack Level applied by DA consent may be possible.

Upgrade works are encouraged by the RFS in section 7.8 of PBP 'Better bush fire outcomes' and we also advocate and encourage compliance with this section of PBP. The fact that upgrade works are combined with new works should not be used to apply a blanket FZ determination, instead the RFS and Council should seek a better outcome than if the development did not proceed.

The provision of the upgrade package will provide a much better bushfire safety outcome than if the development proceeded and the Flame Zone provisions were applied to the original scope of works only.

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
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Andrew Muirhead

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BPAD Accreditation No. BPAD9400



11.0 Annexure 01

List of Referenced Documents

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

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

Acknowledgements to:

Geoscience Australia
Nearmaps
NSW Department of Lands – SIXMaps
Street-directory.com.au

Attachments

Attachment 01: s4.14 Compliance Certificate



Bushfire Hazard Solutions

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BUSHFIRE RISK ASSESSMENT CERTIFICATE UNDER PART 4 DIVISION 4.3 SECTION 4.14 OF THE EP&A ACT 1979 NO 203

PROPERTY ADDRESS:	9 Hyde Avenue, Killarney Heights
DESCRIPTION OF PROPOSAL:	Alterations and Additions
PLAN REFERENCE: (relied upon in report preparation)	Site plan prepared by Rapid Plans, Revision -, Date 9/12/22
BAL RATING:	BAL 40
BUSHFIRE ASSESSMENT REPORT REFERENCE:	230694
REPORT DATE	16 February 2023
CERTIFICATION NO/ACCREDITED SCHEME	BPAD46966

I, Alvin, of Building Code and Bushfire Hazard Solutions Pty Ltd hereby certify, in accordance with Part 4 Division 4.3 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 Bushfire Risk Assessment Report the proposed development conforms specifications and requirements of the documents entitled *Planning for Bush Fire Protection* prepared by the NSW Rural Fire Service in co-operation with the Department of Planning and any other documents as prescribed by Part 4 Division 4.3 Section 4.14 of the *Environmental Planning and Assessment Act 1979 No 203*.

I am aware that the Bushfire 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 2019*.

Signature: Alvin Date: 16 February 2023

