



Building Code & Bushfire Hazard Solutions

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Brett Lewthwaite
36 Watkins Road,
AVALON BEACH NSW 2107

18th July 2022
Our Ref. 190425B

RE: APPROVED ALTERATION AND ADDITION TO A DWELLING HOUSE LOT 31 DP 21756, 36 WATKINS ROAD, AVALON BEACH NSW 2107 PROVISION OF UPDATED BUSHFIRE ASSESSMENT REPORT

Dear Brett,

We understand that you are compiling the submission documents for a section 4.55 application seeking modifications to the approved alterations and additions at 36 Watkins Road, Avalon Beach under development consent DA2020/0055, dated 30/04/2020.

It is understood that the proposed modifications relate to the following:

- 1 **external screens** - change from bifold to fixed and sliding screens, with operable vertical louvres, not horizontal louvres, refer to plans & elevations, reduced extent
- 2 **adjustment to new windows** - change from bifold windows with external bushfire shutters to sliding windows - not change to size or extent of windows
- 3 **delete pizza oven** - minor update to exterior joinery
- 4 **change to vergola** - additional new post & downpipe to vergola, convert approved planter to privacy screen,

Building Code & Bushfire Hazard Solutions P/L (BCBHS) prepared a Bushfire Assessment Report (ref: 190425, dated 16th December 2019) addressing the relevant specifications and requirements of Planning for Bush Fire Protection 2006 for the original development application.

It is acknowledged that since the time the original development application was lodged Planning for Bush Fire Protection 2019 has come into effect and is applicable to all applications lodged on or after 1st March 2020.

We have reviewed the proposed modifications and the recommendations should be updated to the following:

Asset Protection Zones

1. That all grounds within the subject property are to continue 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 shall comply with Sections 3 & 7 (BAL 29) 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 proposed new deck, stairs and retaining walls be constructed from non-combustible materials.

Landscaping

4. That any new landscaping is to comply with Section 3.7 'Landscaping' under *Planning for Bush Fire Protection* 2019.

Emergency management

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

New Fencing

6. That all new fencing shall be non-combustible in accordance with section 7.6 of *Planning for Bush Fire Protection* 2019.

With the above updated recommendations, we are therefore in support of the proposed section 4.55 modifications.

Should you have any questions please do not hesitate in contacting our office.

Prepared by
Building Code & Bushfire Hazard Solutions P/L



Andrew Muirhead

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



Bushfire Assessment Report

Proposed:
**Alterations and
Additions**

At:
**36 Watkins Road,
Avalon Beach**

Reference Number: 190425

Prepared For:
Brett & Lisa Lewthwaite

16th December 2019



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

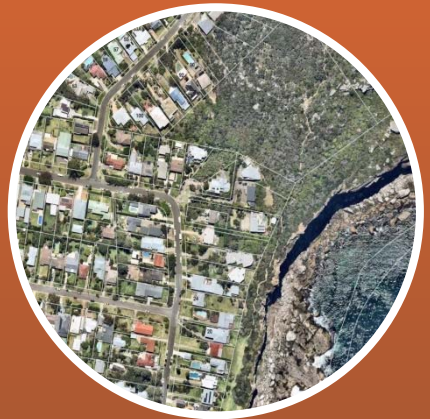
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**SILVER
MEMBER**
Fire Protection
Association Australia



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Legal status:

This report has been prepared as a submission document in support of a development application to Council and in instances may rely upon information provided by a number of external sources including Councils, State Government Agencies and it is assumed that the information provided was accurate at the time. This report cannot be relied upon for commencement of works or construction until such time as it has been endorsed or otherwise included within the consent conditions issued by Council as part of the DA determination.

S4.14 applications (under the Environmental Planning and Assessment Act 1979) and all infill development applications *may 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 *must 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.

Where any discrepancy between this document and the development approval or the NSW Rural Fire Service requirements is found, the conditions of consent always take precedence until such time as an application to review, amend or vary these conditions is approved.

Disclaimer:

This report has been prepared with due care and diligence by Building Code and Bushfire Hazard Solutions Pty. Ltd and the statements and opinions contained in this report are given in good faith and in the belief on reasonable grounds that such statements and opinions are correct and not misleading bearing in mind the necessary limitations noted in previous paragraphs.

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Version Control				
Version	Date	Author	Reviewed by	Details
1	16/12/2019	Duncan Armour	David McMonnies BPAD Accreditation No. 2354	Report

List of Abbreviations:

APZ	Asset Protection Zone
AS3959	Australian Standard 3959 – 2009 as amended.
BAL	Bushfire Attack Level
BCA	Building Code of Australia
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
IPA	Inner Protection Area
NCC	National Construction Code
NSP	Neighbourhood Safer Place
NSWFR	NSW Fire & Rescue
OPA	Outer Protection Area
PBP	Planning for Bush Fire Protection – 2006
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 to an existing sole occupancy dwelling within an existing residential allotment located at 36 Watkins Road, Avalon Beach (Lot 31 DP 21756).

The subject property is a battle-axe style allotment with street access to Watkins Road to the west, abuts private residential allotments to the north and south and a small strip of scrub followed by The Tasman Sea to the east. The vegetation identified as being the hazard is within neighbouring private allotments and Bangalley Head Reserve to the north and east of the proposed works.

Northern Beaches Council's Bushfire Prone Land Map identifies the subject property as containing the 100 metre buffer zone from Category 1 Vegetation therefore the application of Planning for Bush Fire Protection - 2006 (PBP) must apply in this instance.

2.0 Purpose of Report

The purpose of this Bushfire Assessment Report is to provide the owners, and Council with an independent bushfire hazard determination 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.

3.0 Scope of this Report

The scope of this report is limited to providing a bushfire hazard 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.

Where Council considers a bushfire risk is associated with surrounding private lands or lands owned by an authority, Council could seek to issue notice under Section 66 of the Rural Fires Act on any or all surrounding properties for the purposes of reducing and maintaining safe levels of vegetation and thus reducing the possibility of bushfire impact to the subject property and any adjoining properties.

4.0 Referenced Documents and Persons

Comments provided are based on the requirements of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act), the RFS document known as 'Planning for Bush Fire Protection – 2006' for the purposes of bushfire hazard determination and Australian Standard AS3959 – 2009 titled 'Construction of buildings in bushfire-prone areas' as amended for building/structural provisions.

A company representative has made a site inspection of the subject property and the surrounding area. The plans prepared by Michelle Walker Architects, Job No. 1819, Issue F, Dated 17th December 2019 have been relied upon for this assessment.

5.0 Compliance Tables & Notes

The following table sets out the projects compliance with *Planning for Bush Fire Protection – 2006*.

	North	East	South	West
Vegetation Structure	Scrub	Scrub	Maintained curtilages	Maintained curtilages
Vegetation Width	N/A	N/A	N/A	N/A
Slope	0 degrees & up	0 degrees & up	N/A	N/A
Asset Protection Zone	>17 metres	>17 metres	N/A	N/A
Significant Environmental Features	Neighbouring residential allotments	Large escarpment / Tasman Sea	Neighbouring residential allotments	Neighbouring residential allotment / Watkins Road
Threatened Species	APZ Existing	APZ Existing	APZ Existing	APZ Existing
Aboriginal Relics	APZ Existing	APZ Existing	APZ Existing	APZ Existing
Bushfire Attack Level	BAL 29	BAL 29	N/A	N/A
Required Construction Level	BAL 29	BAL 29	BAL 29	BAL 29

Asset Protection Zones Compliance

The subject property was found to consist of built upon and hard stand areas surrounded by maintained lawns and gardens and urban landscaping. The separation from the hazard interface to the proposed alterations and additions includes maintained land within the subject property and land “equivalent to an Asset Protection Zone” within neighbouring private residential allotments.

Construction Level Compliance

The highest Bushfire Attack Level to the proposed alterations and additions was determined from Table 2.4.2 of AS3959 - 2009 to be ‘BAL 29’. The proposed works are required to comply with section 3 and BAL 29 section 7 under AS 3959 – 2009 and Appendix 3 under PBP 2006.

The proposed new deck, stairs and retaining walls will be located within the APZ and will be constructed from non-combustible materials.

A copy of these requirements has been provided to the client.

Access and Services

Guideline Ref.	Proposed Development Determinations
Property Access (Driveway)	The most distant external point of the subject dwelling is greater than 70 metres of a public road supporting a hydrant network and therefore the Property Access requirements detailed in section 4.1.3 (2) of PBP are applicable. The existing access will not be altered as part of this DA.
Water Supply	The most distant external point of the building footprint will be greater than 70 metres from a public road supporting a hydrant network and therefore a Static Water Supply is required. The existing swimming pool will satisfy this requirement.
Evacuation	Evacuation is possible by utilising existing road infrastructure. It is encouraged that the occupants complete a Bush Fire Safety Plan addressing "Prepare, Act, Survive" as advocated by the NSW RFS http://www.rfs.nsw.gov.au/ under publications / bushfire safety.
Electrical Supply	Supply provided.

6.0 Aerial view of the subject allotment



Image 01: Aerial view of the subject area C/- Nearmap

7.0 Bushfire Hazard Assessment

7.01 Preface

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 - 2006' (PBP). Set back distances for the purpose of creating Asset Protection Zones (APZ's) must be applied and any buildings must then conform to corresponding regulations detailed in Australian Standard 3959 – 2009 'Construction of buildings in bushfire prone areas'.

Planning for Bush Fire Protection – 2006, (PBP) formally adopted on the 1st March 2007 and amended May 2010 (Appendix 3) provides for the protection of property and life (including fire-fighters and emergency service personnel) from bushfire impact.

The thrust of the document is to ensure that developers of new properties or sub-divisions include the constraints associated with the construction of buildings in bushfire prone areas within their proposed development sites. PBP is applicable to proposed development inside a determined Category 1 or 2 areas and also inside a buffer zone radius of 100m from a Category 1 bushfire area or 30m from a Category 2 bushfire area.

The document also acknowledges 'infill' developments associated with re-development of existing properties and allows some higher levels of building safety where the increased 'set backs' (APZ's) may not be achievable.

The subject development relates to the alterations and additions to an existing sole occupancy dwelling within an existing residential allotment. To accord with PBP the development is classified as infill development and assessed as a s4.14 application under the Environmental Planning and Assessment Act 1979.



Image 02: Extract from NSW Planning Portal of Northern Beaches Councils Bushfire Prone Land Map

7.02 Location

The subject property is known as 36 Watkins Road, Avalon Beach (Lot 31 DP 21756) and is a residential allotment located within Northern Beaches Councils Local Government Area. The subject property is a battle-axe style allotment with street access to Watkins Road to the west, abuts private residential allotments to the north and south and a small strip of scrub followed by The Tasman Sea to the east.

The vegetation identified as being the hazard is within neighbouring private allotments and Bangalley Head Reserve to the north and east of the proposed works.



Subject property

Photograph 01: View east from Watkins Road toward the subject property's access drive



Location of the subject property

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

7.03 Vegetation

The predominant vegetation found within the subject property, neighbouring private residential allotments to the north and south was found to consist of landscaped gardens and mown lawns.

The properties to the north have maintained areas around the built assets however it appears that there is a possible path for fire along the edge of the escarpment.

The vegetation posing a hazard to the east and north was found to consist of shrubs >2 metres in height. It was noted that there is a high percentage of rock outcrops scattered throughout this vegetation, restricting fuel connectivity.

For the purpose of this assessment the vegetation posing a hazard to the subject property has been determined to be the Scrub.



Scrub

Photograph 02: View into the vegetation posing a hazard to the subject site



Scrub
hazard

Photograph 03: View into the vegetation posing a hazard to the subject site

7.04 Slope and Topography

The slope that would most significantly affect bushfire behaviour must be assessed for at least 100 metres from within the hazard.

The most significant bushfire impact from the north and east is expected to be from a bushfire burning down slope toward the subject site. It was noted that the high presence of rock outcrops throughout the hazard would restrict fire progression toward the site.

The slope that would **most significantly** influence bushfire impact was determined onsite using an inclinometer and verified from topographic imagery to be:

- 0 degrees & up slope within the hazard to the north
- 0 degrees & up slope within the hazard to the east

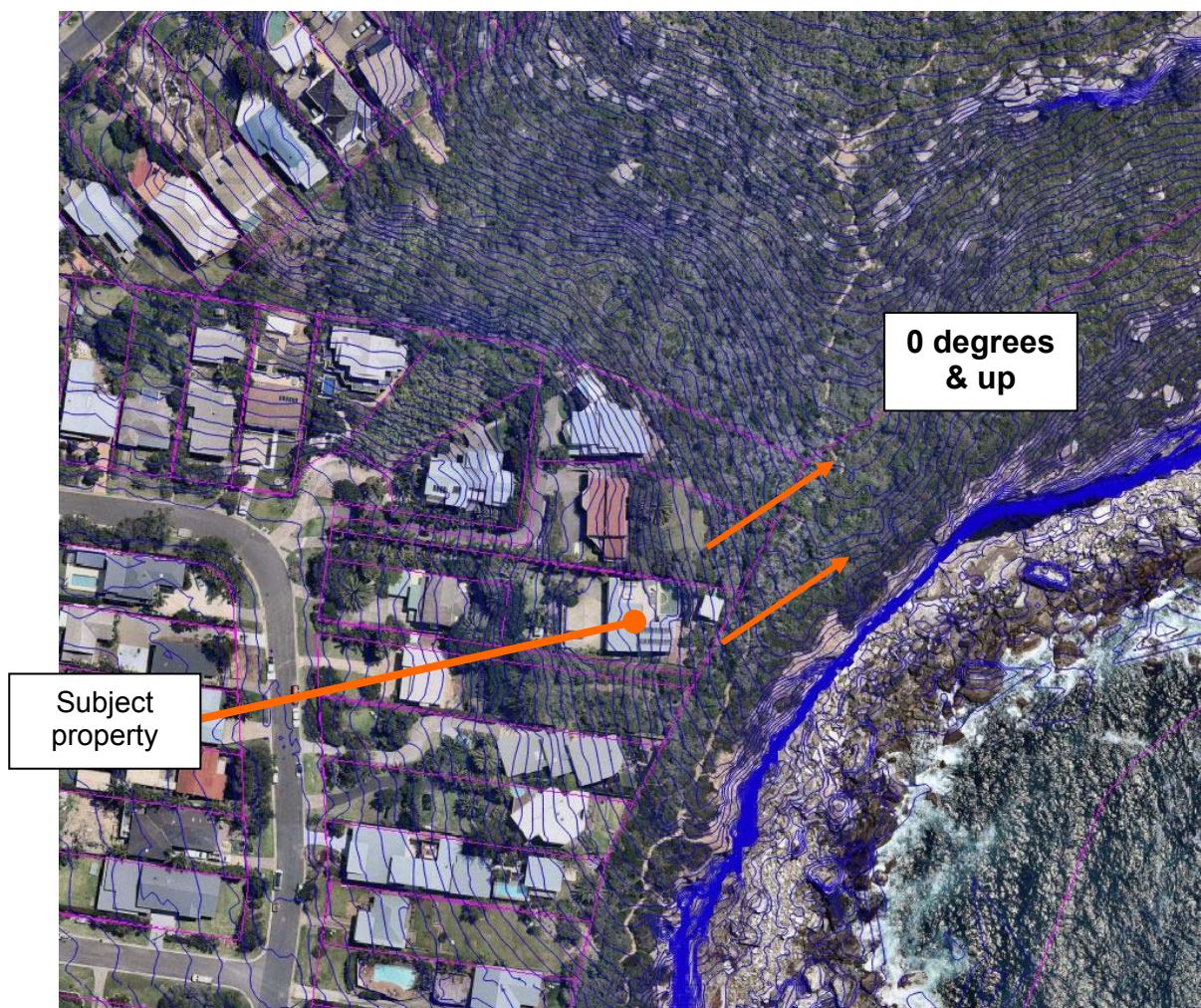


Image 04: Extract from ELVIS – Geoscience Australia (1 metre Contours)

7.05 Asset Protection Zones

The proposed alterations and additions are within the existing pattern of development and were found to be located >17 metres from the hazard interface to the north and east. The Asset Protection Zone includes maintained land within the subject property and land “*equivalent to an Asset Protection Zone*” within neighbouring private residential allotments.

All grounds within the subject property not built upon will 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’. Note: This will allow for gardens (including native trees and shrubs) in the APZ managed as clumps or islands, covering no more than 20% of the area.



Photograph 04: View west across the maintained rear yard of the subject property

7.06 Property Access – Fire Services & Evacuation

The subject property has street access to Watkins Road to the west. Persons seeking to egress the subject dwelling will be able to do so via the existing access drive and existing road infrastructure.

The most distant external point of the building footprint will be greater than 70 metres of a public road supporting a hydrant network and therefore the Property Access requirements detailed in section 4.1.3 (2) of PBP are applicable. The existing access will not be altered as part of this DA.

Fire services have free pedestrian access around the building footprint. Attending fire crews can access the hazard via the subject and neighbouring private allotments for hazard reduction or fire suppression activities.

Access for fire services and opportunities for occupant evacuation are considered adequate for this property.

7.07 Fire Fighting Water Supply

The existing dwelling is connected to the reticulated town's water main in Watkins Road for its domestic needs. Existing in ground hydrants are available along Watkins Road and surrounding streets for the replenishment of attending fire services.

The most distant external point of the building footprint will be greater than 70 metres from a public road supporting a hydrant network and therefore a Static Water Supply is required. The existing swimming pool satisfies this requirement.

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



Photograph 06: View north from an existing hydrant toward the subject property

8.0 Site & Bushfire Hazard Determination

8.01 Planning for Bush Fire Protection - 2006

'Planning for Bush Fire Protection – 2006' (PBP) is applicable to those lands determined as being within a 'bushfire prone area' in accordance with a local Bushfire Prone Land Map as provided by the Rural Fire Service and Council.

The most appropriate method of determining site bushfire hazard under the terms of PBP is to consider the site in a singular form.

Bushfire prone areas are defined as those areas;

- *within or within 100m of high or medium bushfire hazards; or*
- *within or within 30m of low bushfire hazards.*

In this instance the subject property has been identified as being bushfire prone land therefore it is appropriate to apply PBP as follows:

Northern and eastern aspects:

- a) Vegetation Structure Scrub
- b) Slope 0 degrees & upslope
- c) A >17 metre APZ is available
- d) The Bushfire Attack Level was determined to be 'BAL 29'

8.02 Australian Standard AS 3959 – 2009 'Construction of buildings in bushfire –prone areas'

Australian Standard 3959 – 2009 'Construction of buildings in bushfire-prone areas' provides for six (6) levels of building construction these being BAL - Low, BAL - 12.5, BAL - 19, BAL - 29, BAL - 40 and BAL - FZ. The Australian Standard 3959 specifies construction standards for buildings within various Bushfire Attack Levels as determined by the Planning for Bush Fire Protection – 2006 document. The NSW Rural Fire Service will not accept deemed to satisfy provisions for BAL Flame Zone and therefore have a NSW variation to the listed standard provisions of BAL FZ under AS3959 - 2009.

8.03 Correlation between bushfire impact and AS3959

Bushfire Attack Level	Maximum radiant heat impact (kW/m ²)	Level of construction under AS3959-2009
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

8.04 Site Specific Bushfire Hazard Determination

All property development must be assessed on an individual basis as broad-brush approaches of documents such as PBP may not be applicable in every instance. The proposed development located at 36 Watkins Road, Avalon Beach was assessed against the requirements of Planning for Bush Fire Protection 2006 noting the following:

- a) Existing water supplies for firefighting purposes are adequate for of this development.
- b) Access to the subject property is available from Watkins Road and the existing access drive.
- c) Access to the hazard is available via the subject and neighbouring private allotments.
- d) The proposed development is within the existing pattern of development.
- e) Recommendations to maintain the Asset Protection Zones within the subject property will be included.

8.05 Viable Construction Method

The objectives of Planning for Bush Fire Protection – 2006 are for the protection of life including fire fighters. Provided these objectives can be met the construction of buildings is feasible and both the Rural Fire Service and Council should be in a position to consider such applications.

The highest Bushfire Attack Level to the proposed works was determined from Table 2.4.2 of AS3959 – 2009 to be 'BAL 29'. The proposed works are required to comply with section 3 and BAL 29 section 7 under AS 3959 – 2009 and the Addendum to Appendix 3 of PBP.

The proposed new deck, stairs and retaining walls will be located within the APZ and will be constructed from non-combustible materials.

9.0 Recommendations

The following recommendations are provided as the minimum necessary for compliance with Planning for Bush Fire Protection – 2006 and Australian Standard 3959 'Construction of buildings in bushfire-prone areas' - 2009. Additional recommendations are provided to supplement these minimum requirements where considered necessary.

Asset Protection Zones

1. That all existing maintained grounds not built upon within the subject property continue 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 2 of Planning for Bush Fire Protection 2006.

Construction

2. That the proposed alterations and additions be constructed to that of section 3 and BAL 29 under section 7 of AS3959 – 2009.
3. That the proposed works be constructed to that of the 'Additional Construction Requirements' detailed in A3.7 of the Addendum to Appendix 3 of Planning for Bush Fire Protection.
4. The proposed new deck, stairs and retaining walls be constructed from non-combustible materials.

Landscaping

5. That all new landscaping is to comply with Appendix 5 'Landscaping and Property Maintenance' under Planning for Bush Fire Protection 2006.

New Fencing

6. Where a fence does not connect to a dwelling and has a minimum of 1 metre separation from the dwelling then the fence may be constructed from hardwood, or non-combustible material.
7. Where a fence connects directly to or has less than 1 metre separation from a dwelling it should be constructed from non-combustible materials only.
8. In all cases where timber fences are proposed, care should be taken in the selection, location and maintenance of landscaping adjoining the fence. Unmanaged landscaping could promote fire activity due to ember, radiant heat and direct flame contact and then further impact timber fencing.

10.0 Conclusion

Given that the property is deemed bushfire prone under Northern Beaches Council's Bushfire Prone Land Map any development would need to meet the requirements of Planning for Bush Fire Protection – 2006 and of the construction requirements of Australian Standard 3959 'Construction of buildings in bushfire-prone areas' - 2009. The determination of any bushfire hazard must be made on a site-specific basis that includes an assessment of the local bushland area and its possible impact to the subject property.

The subject property is a residential allotment within an area of similar properties. The vegetation identified as being the hazard is within neighbouring private allotments and Bangalley Head Reserve to the north and east of the proposed works. The vegetation posing a hazard was determined to be Scrub.

The proposed alterations and additions were found to be located >17 metres from the hazard interface. The Asset Protection Zone includes land within the subject property and land "*equivalent to an Asset Protection Zone*" within neighbouring private allotments.

The highest Bushfire Attack Level to the proposed works was determined from Table 2.4.2 of AS3959 – 2009 to be 'BAL 29'. The proposed works are required to comply with BAL 29 as detailed within section 3 and BAL 29 section 7 within AS 3959 – 2009 and the Addendum to Appendix 3 of PBP. The proposed new deck, stairs and retaining walls will be located within the APZ and will be constructed from non-combustible materials.

Existing access and water supply is considered adequate for this development.

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



Duncan Armour
Bushfire Consultant

Reviewed and endorsed by
Building Code & Bushfire Hazard Solutions



David McMonnies, AFSM. / M I Fire E
Masters of Const. Mgt. / G. D. Design in
Bushfire Prone Areas
Managing Director.
FPA Australia BPAD Level 3 Accredited Practitioner
BPAD Accreditation No. BPAD2354



11.0 Annexure 01

List of Referenced Documents

- a) Environmental Planning and Assessment Act - 1979
- b) 'Planning for Bush Fire Protection' - 2006 - NSW Rural Fire Services & Planning NSW
- c) 'Construction of buildings in bushfire prone areas' - AS 3959 – 2009 (as - amended) – Standards Australia
- d) 'Northern Beaches Council's Bushfire Prone Land Map'
- e) Acknowledgements to:
 - Geoscience Australia
 - NSW Department of Lands – Sixmaps
 - Street-directory.com.au
- f) Plans prepared by Michelle Walker Architects, Job No. 1819, Issue F, Dated 17th December 2019

Attachments

Attachment 01: s4.14 Certificate



Building Code & 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:	36 Watkins Road, Avalon Beach
DESCRIPTION OF PROPOSAL:	Alterations and Additions
PLAN REFERENCE: (relied upon in report preparation)	Plans prepared by Michelle Walker Architects, Job No. 1819, Issue F, Dated 17 th December 2019
BAL RATING:	BAL 29 <small>(If the BAL rating is FZ the application is to be referred to NSW RFS for assessment)</small>
DOES THE PROPOSAL RELY ON ALTERNATE SOLUTIONS:	YES <input checked="" type="radio"/> NO <input type="radio"/> <small>(Circle the relevant response)</small> <small>(If YES the application is to be referred to NSW RFS for assessment)</small>
BUSHFIRE ASSESSMENT REPORT REFERENCE:	190425
REPORT DATE:	16 th December 2019
CERTIFICATION NO/ACCREDITED SCHEME	BPAD2354

I David McMonnies 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 Bushfire Protection 2006*.

Signature: 

Date: 16th December 2019

