

Accreditation No.

1869

Notice to council of determination of application for a complying development certificate

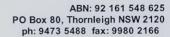
Date 13/03/2014

Council and address) DV



NOTICE TO (Insert council's details and address) Council name Pittwater Council SECTION A. NOTICE As required by clause 130(4) of the EP&A Regulation 2000 (the Regulation), notice is hereby given of the determination of the following application for the issue of a complying development certificate (CDC): Applicants name Marilyn Kramer Development address Lot 18 - DP 17177 - No. 1 William Street Avalon NSW 2107 20/02/2014 Date determined 13/03/2014 Date received SECTION B. Attachments (tick appropriate box(es)) Record of inspection made under clause 129B of the Other endorsed documents Application for CDC Determination of Complying Development lodged with the application for application Certificate the CDC or received under clause 127 of the Regulation Regulation SECTION C. Certifying Authority Signature Domenic Di Matteo

936 Ec: 357981 17/3





COMPLYING DEVELOPMENT CERTIFICATE

Signature:

Dom Di

Complying Development Certificate Number: XC2014-/00260

Approval Date:

13/03/2014

The Development is Complying Development and (if carried out as specified in this Certificate) will comply with all Development Standards applicable to the development and with such other requirements prescribed by this Clause 134 of the EP & A Act Regulation concerning the issue of this Certificate. I certify that the proposed development is complying development and if carried out as specified will comply with all development standards applicable to the development and with all requirements prescribed by the Environmental & Assessment Act Regulation 2000 concerning the issue of this Certificate. This Certificate authorises the applicant (or the person having the benefit of this Certificate) to carry out the development in accordance with the conditions set out in the Certificate and the plans and specifications that have been approved.

Date Application Received:

20/02/2014

Date of Lapse of Certificate:

Dom Di Matteo

13/03/2019

Application Date:

20/02/2014

\$2000.00

Council:

Pittwater Council

Name of Certifying Authority:

Accreditation No: Accreditation Body:

1869

BUILDING PROFESSIONALS BOARD

Applicant:

Marilyn Kramer

Address:

1 William Street Avalon Beach NSW 2107

Contact Number:

9839 1312

Owner:

Marilyn & Wesley Kramer

Address:

1 William Street Avalon Beach NSW 2107

Contact Number:

9839 1312

Site Address:

Lot 18 - DP 17177 - No. 1 William Street Avalon Beach NSW 2107

Description of Development:

Construction of a metal roof carport

Building Code of Australia Classification:

10a

Zonina:

R2

Value of Work:

Builder Details

Name:

Licence / Permit Number:

Not Nominated

Address: Contact Number:

Approved Plans and Documents

Plans Prepared By **Drawing Nos.** Dated Kurt Kramer 20/02/2014 Sheet 1 of 1 Kurt Krame Sheet 1 of 1 Undated Planning for Bushfire Protection Pty Ltd Pages 1 to 15 of 15 20/09/2011

> This Certificate is approved subject to the prescribed conditions listed under Division 3 of the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 under the : Environmental Planning & Assessment Act 1979 as attached.

Conditions of Consent

(State Environmental Planning Policy - Exempt and Complying Development Codes 2008)

Conditions applying before works commence

Protection of adjoining areas

- (1) A temporary hoarding, fence or awning must be erected between the work site and the adjoining lands before the works begin and must be kept in place until after the completion of works if the works:
- (a) could cause a danger, obstruction, or inconvenience to pedestrian or vehicular traffic, or
- (b) could cause damage to adjoining lands by falling objects, or
- (c) involve the enclosure of a public place or part of a public place

All demolition work must also comply with Australian standard AS 2601 - The demolition of structures.

Note, See the entry in the General Exempt Development Code for scaffolding, hoardings, and temporary construction fences.

Toilet Facilities

- (1) Toilet facilities must be available or provided at the work site before works begin and must be mainainted until the works are completed at a ratio of one toilet plus one additional toilet for every 20 persons employed at the site
- (2) Each toilet must:
- (a) be a standard flushing toilet connected to a public sewer, or
- (b) have an on-site effluent displosal system approved under the Local Government Act 1993, or (c) be a temporary chemical closet approved under the Local Government Act 1993.

- <u>Garbage Receptacle</u>
 (1) A garbage receptacle must be provided at the work site before works begin and must be maintained until the works are completed.
- (2) The garbage receptacle must have a tight fitting lid and be suitable for the reception of food scraps and papers.

Notification to Neighbours
The person having benefit of the complying development certificate must give at least 2 days notice in writing of the intention to commence the works to the owner or occupier of each dwelling that is situated within 20m of the lot on which the works will be carried out.

<u>Conditions applying during the works</u>

Note. The protection of the Environment Operations Act 1997 and the Protection of the Environment Operations (Noise Control) Regulation 2008 contain provisions relating to noise.

<u>Hours of Contruction or Demolition</u>

Construction or demolition may only be carried out between 7.00am and 5.00pm on Monday to Saturday and no construction or demolition is to be carried our at any time on a Sunday or a public holiday

Compliance with Plans

Works must be carried out in accordance with the plans and specifications to which the complying development certificate relates.

<u>Sedimentation and Erosion Controls</u>
Run-off and erosion controls must be effectively maintained until the site has been stabilised and landscaped.

Maintenance of Site

- (1) Building materials and equipment must be stored wholly withing the work site unless an approval to store them elsewhere is held.
- (2) Demolition materials and waste materials must be disposed of at a waste management facility.
- (3) The work site must be left clear of waste and debris at the completion of works

Construction Requirements

Staging Construction

- (1) If the complying development is the erection of, or alterations or additions to, a dwelling house, the roof stormwater drainage system must be installed and connected to the drainage system before the roof covering is installed
- (2) Any approval that is required for connection to the drainage system under the Local Government Act 1993 must be held before the connection is carried out.
- (3) If the complying development involves the contruction of a vehicular access point, the access point must be completed before the occupation certificate for the complying development on the site is obtained.

If the complying development requires alteration to, or the relocation of, utility services on the lot on which the complying development is carried out, the complying development until all such works are carried out. Note. A contributions plan setting out the contribution requirements towards the provision or improvement of public amenities or public services may specify that an accredited certifier must, under section 94EC of the Act, impose a condition on a complying development certificate requiring the payment of a monetary contribution in accordance with that plan. Condition Relating to shoring and adequacy of adjoining property

If the development involves an excavation that extends below the level of the base of the footings of a building on adjoining land, the person having the benefit of the certificate must at the person's own expense

(a) protect and support the adjoining premises from possible damage from the excavation, and

(b) where necessary, underpin the adjoining premises to prevent any such damage.

Compliance with Building Code of Australia and Insurance Requirements

(a) The work must be carried out in accordance with the requirements of the Building Code of Australia
(b) In the case of residential building work for with the Home Building Act 1989 requires there to be a contract of insurance in force in accordance with Part 6 of the Act, that such a contract of insurance must be entered into and be in force before any building work authorised to be carried out by the certificate commences.

Erection of Signs

sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out:

(a) Showing the name, address and telephone number of the principal certifying authority for the work, and

(b) showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and

(c) stating that unauthorised entry to the site is prohibited.

Any such sign is to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.

Development involving asbestos material

(a) work involving bonded asbestos removal work (of an area of more than 10sqm) or friable asbestos removal work must be undertaken by a person who carries on a business of such removal work in accordance with the licence under clause 318 of the *Ocupational Health and Safety Regulations 2011*, (b) the person having the benefit of the complying development certificate must provide the principal certifying authority with a copy of a signed contract with such a person before any development persuant to the complying development certificate commences,

(c) any such contract must indicate wether any bonded asbestos material or friable asbestos material will be removed, and if so, must specify the landfill site (that may lawfully receive asbestos) to which the bonded asbestos material or friable asbestos material is to be delivered, (d) if the contract indicates that bonded asbestos material or friable asbestos material will be removed to a specific landfill site, the person having the benefit of the complying development certificate must give the principal certifying authority a copy of a receipt from the operator of the landfill site stating that all the asbestos material referred to in the contract has been received by the operator.

<u>Fulfilment of Basix Commitments</u>
If the development is BASIX affected, each commitment listed must be fulfilled prior to the issue of an occupation certificate.

Notification of Home Building Act 1989 Requirements
Residential building work within the meaning of the Home Building Act 1989 must not be carried out unless the principal certifying authority for the development to which the work relates has given the council written notice of the following information:

(a) in the case of work for which a principal contractor is required to be appointed: (i) the name and licence number of the principal contractor, and

(ii) the name of the insurer by which the work is insured under Part 6 of that Act, (b) in the case of work to be done by an owner-builder:

(i) the name of the owner builder, and

(ii) if the owner builder if required to hold an owner builder permit under that Act, the number of the owner-builder permit.

If the builder's details are changed while the work is in progress then works are to stop until the principal certifying authority has been advised of this updated information and once counce has been notified.

Advice to Neighbours - Works Commencing

This is to notify you that it is intended that work will soon be commenced on a development at a property near you. The work has been authorised by a complying development certificate issued under the provisions of the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

Particulars relating to the work and the complying development certificate are set out below.

Development Address

Lot 18 - DP 17177 - No. 1 William Street Avalon Beach NSW 2107

Name of Applicant

Marilyn Kramer

Description of Development

Construction of a metal roof carport

Council Area

Pittwater Council

Details of Complying Development Certificate

Issued By:
Accreditation Body:
Complying Development Certificate No:
Date of Certificate:

DM Certifiers Pty. Ltd. BUILDING PROFESSIONALS BOARD XC2014-/00260 13/03/2014

Date from which works can commence:

Note: A copy of the complying development certificate, including related plans and specifications, is available	for
inspection at the Councils Principal office free of charge, during the Councils ordinary office hours.	

Signed:	Date:	



□ Construction Certificate

Council

1-3 Thornleigh St, Thornleigh NSW 2120 P: 9473 5488 F: 9980 2166

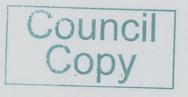
SECTION 1: APPLICATION FORM

1. APPLICATION FOR CONSTRUCTION/COMPLYING DEVELOPMENT CERTIFICATE 2. CONTRACT FOR THE PERFORMANCE OF BUILDING CERTIFICATION WORK 3. PRINCIPAL CERTIFYING AUTHORITY AGREEMENT

Privacy policy – The information you provide in this application will enable your application to be assessed by the certifying authority under the Environmental Planning and Assessment Act 1979. If the information is not provided, your application may not be accepted. The application can potentially be viewed by members of the public. Please contact D.M. Certifiers if the information you have provided in your application is incorrect or requires modification.

	Complying Development Certificate Contract agreement for the performance of Building Engagement as Principal Certifying Authority	g Certification Work
	Date of Receipt of Application:	
	Development Consent No:	Approval Date:
	Name of Consent Authority:	Related Development Consent No:
	APPLICANT (This MUST be the Owner/Authorised Age Name/s: Manlyn Kran	er.
(Postal Address: / William	St amla March
	Ph: 98391312 Email: MKRAME LAND TO BE DEVELOPED No. Street: WILLIAM ST	AVALON BEACH
	DETAILS OF DEVELOPMENT (particulars) Description of work: Open Car Por Estimated Cost of Works: \$2,000 C	rt-Aretal Roof
	DETAILS OF BUILDER Name: NOT Nominated	
,	Address: , ,	Phone No:
0	Owners/applicants signature(s):	
1	Dated: 20/2/2014	

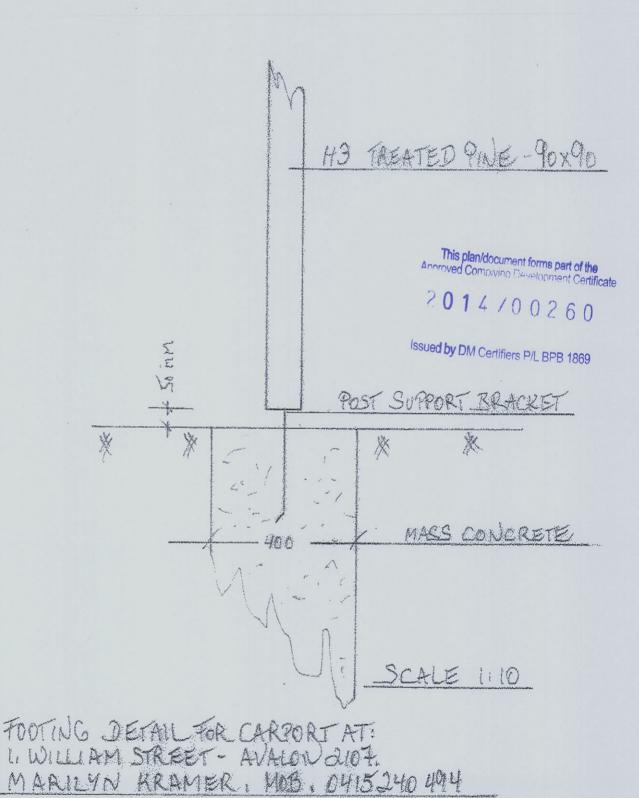




1-3 Thornleigh St, Thornleigh NSW 2120 P: 9980 2155 F: 9980 2166

INCDECTION DEDODT FORM

INSPECTI	ION REPORT FORM	
Applicant:	Inspection Type: Site	
	Date Of Inspection: 7.3.14	
	Contact on Site: Marily	
	Ph: 9839 1312 Fax:	
Booked By: Kathavine	Email:	
Address: 1 William St	, Avalon Beach	
Notes:		
Result:		
The work is satisfactory		
Complete the works below an	d proceed with construction	
Complete the works below an	d request a re-inspection	
Contact us immediately prior	to proceeding	
Provide certificate for		
Comments:		
Comments.		
Inspector: Sean Curtis	Date: 7 · 3 · 14	
Accreditation No: 1796	Signature:	1
110010d1tttion 1101790	Signature.	
	VI .	
DM l	BUILDING CERTIFIERS	



This Report has been prepared and submitted by R Coffey, FPA Australia, Certified Practitioner Practitioner Certification No-PBD-PA-09328

Planning For Bushfire Protection Pty Ltd



ABN: 52 136 652 296 Ronald Coffey 0408220443

Email: roncoffey@optusnet.com.au Web: www.bushfireconsultants.com.au

Reference: 558 20th September 2011

Bushfire Risk Assessment

In relation to proposed development at:

This plan/document forms part of the Approved Complying Development Certificate

2014/00260

No 1 William Street, Avalon

Issued by DM Certifiers P/L BPB 1869

This Assessment has been prepared and Certified by: Ronald Coffey BPAD – A Certified Practitioner FPAA Cert. No: BPD-PA 09328	RE Gff
Can this proposal comply with AS3959, 2009 + addendum to Appendix 3 of PBP?	YES
What is the recommended level of compliance AS3959, 2009?	AS3959, 2009 BAL 12.5
Does this development comply with the requirements of PBP?	YES
Does this development comply with the Aims and objectives of PBP?	YES
Is referral to the NSW RFS required?	<u>NO</u>

Contents

Introduction

- 1) Location
- 2) Development Proposal and Building Classifications
- 3) Description of the Subject Property
- 4) Classification of the Vegetation on and surrounding the Site
- 5) Assessment of Effective Slope
- 6) Access and Egress
- 7) Water Supplies
- 8) Environment considerations
- 9) Bushfire Threat Assessment
- 10) Assessment of the extent to which the development proposal Conforms or Deviates with Chapter 4 of Planning for Bushfire Protection
- 11) Recommendations
- 12) Summary
- 13) References
- 14) Fences and Gates

Introduction

The purpose of this report is to determine the category of bushfire attack and subsequent construction standard for the proposed development of refurbishment and alterations to an existing class 1A dwelling at No 1 William Street, Avalon.

The site is identified as 'bush fire prone land' for the purposes of Section 146 of the *Environmental Planning and Assessment Act 1979* and the legislative requirements for building on bushfire prone lands are applicable.

The proposed development is an infill development as defined within Chapter 4.3.5 of Planning for Bushfire Protection 2006 and this report has been prepared in accordance with the requirements of section 79BA of the Environment Planning and Assessment Act. This assessment includes an analysis of the hazard, threat and subsequent risk to the development proposal and provides recommendations that satisfy the Objectives and Performance requirements of the Building Code of Australia, Planning for Bushfire Protection 2006 [PBP] and Australian Standard AS3959, 2009.

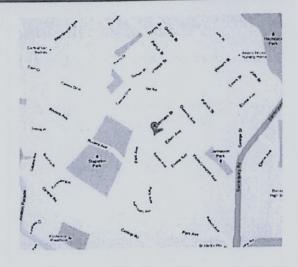
The site was inspected: 21st September 2011



This Report has been prepared and submitted by R Coffey, FPA Australia, Certified Practitioner
Practitioner Certification No-PBD-PA-09328

1) Location

No 1 William Street, Avalon Lot 18, DP 17177 LGA - Pittwater



2) Development Proposal and Building Classifications

The proposal is for refurbishment and alterations to an existing class 1A dwelling.

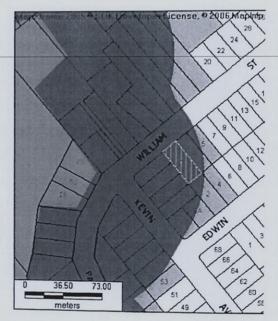
3) Description of the Subject Property

The development site is a residential lot facing north-west onto William Street.

The following sections 4-8 describe in detail the vegetation, slope, access and egress, availability of water supplies and environmental considerations for the site.

The adjacent image is the bushfire prone land map for the area.

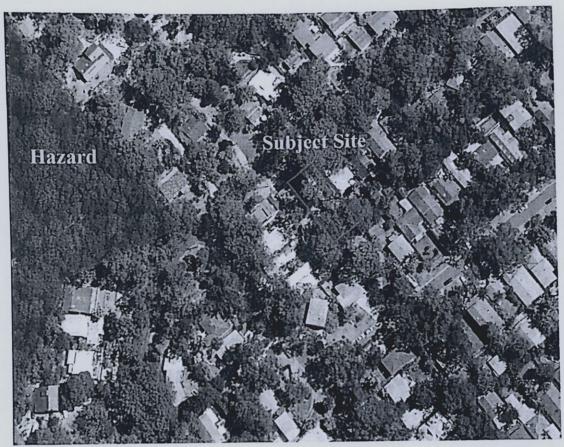




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4) Classification of the Vegetation on and surrounding the Site

The site is developed and maintained and there is no threat from bushfire attack on the site.



North, south & East: Properties north, south and east of the subject site are developed and maintained and there is no threat of bushfire attack from these directions for more than 100m.

<u>West</u>: 61m west of the subject site is an area of bushland that is considered a threat from bushfire attack to the site. With reference to PBP and the bushfire prone land map for the area the classification of vegetation for this hazard is Forest

5) Assessment of Effective Slope

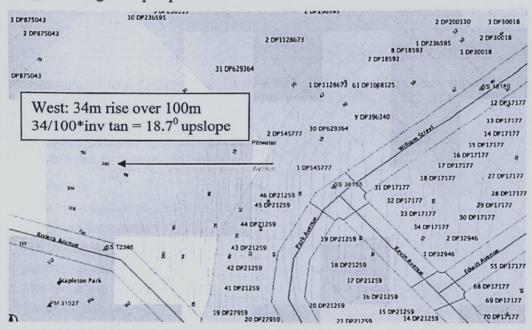
Effective slope away from the development site:

North: No hazard for >100m

South: No hazard for >100m

East: No hazard for >100m

West: 18.7 degrees upslope



6) Access and Egress

The site has direct access to William Street, which is a public road, and access and egress for emergency vehicles and evacuation is in opposite directions and appears adequate.

7) Adequacy of water supply

The area has reticulated water supply and hydrants are spaced at regular distances along William Street.

8) Environmental Considerations

The scope of this assessment has not been to provide an environmental assessment; however, the subject site is a small residential lot that has been developed for many years and it appears that the proposed development will have no adverse environmental effect.

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9) Bushfire Risk Assessment

Table 1; Reference AS3959, 2009 Table 2.4.2

Determination of category of bushfire attack for the site and subsequent required building standards

Bushfire Attack

Direction	Distance of APZ	Vegetation Classification	Assessment of Effective Slope	Anticipated Radiant heat	Bushfire Attac Level (BAL)
			n/a	-	-
North	>140m	Developed sites	n/a	-	-
outh	>140m	Developed sites	n/a	-	-
Vest	>140m	Developed sites Forest	18.7 degrees upslope	<12.5kw/m2	BAL 12.5
ummary: Bas	ed upon the re	evant provisions of	f PBP the anticipated rad truction standard is BAL	iant heat attack is 12.5 AS3959, 20	s for the site is 009.
Inputs:	nd me subsequ	· ·			
Site Address	<u>::</u>	1 William	Street, Avalon	\$ C	
Assessed By	<u>:</u>	R Coffey			
Local Govern	ment Area:	Pittwate	er	<u> </u>	
Located In A	Alpine Areas:				
Fire Weather	Area/FFDI:	Greater	Sydney Region / 100	0	areas a
Vegetation C	class:		(Wet & Dry Sclerophyll)		Y
Effective Slo	pe:	All upslo	pes and flat land (0 degre	ees) 💙	
Separation D	istance:	61		metres	
Commands:					
		Calculate	Print Reset	Help	
Outputs:					
Bushfire Atta	ck Level (BAL):	BAL-12.	5		
Radiant Heat	Exposure Thre	shold: <=12.5	(W/sqm		
Description o	f Exposure Leve	heat. Ra elements requirem	y burning debris is signific diant heat is unlikely to t s (eg unscreened glass). ents for ember protection e warranted.	hreaten building Specific construc	ction
Construction	Section:	Sect 3 8	5 of AS3959 and Sect A	3.7 of PBP Adder	ndum App

10) Assessment of the extent to which the construction conforms or deviates from Chapter 4 of 'Planning for Bushfire Protection 2006'

The proposed development conforms to the requirements of PBP for bushfire protection measures for infill development in relation to:

<u>Performance</u> Criteria	Meets Performance	<u>Comment</u>
	Criteria?	in the stielly on site and by
Asset Protection Zones	Yes	Asset protection zones are provided partially on site and by adjoining development and public roads.
Defendable	Yes	Defendable space is provided on all sides of the building
Space Siting and design	Yes	The siting of the building has been previously determined in accordance with local council requirements and the proposed additions and alterations will not involve a re-siting of the building [no advantage could be gained by recommending a re siting of the building].
Landscaping	Yes	This assessment shall include recommendations that the site is managed in accordance with Inner Protection Area requirements of PBP.
Construction Standards	Yes	Construction standards have been recommended in accordance with the requirements of PBP
Access and Egress	Yes	The access and egress requirements have been designed to provide safe and effective evacuation from the subject site and appear to be adequate for fire brigade personnel and fire fighting equipment.
Water Supplies	Yes	The area has reticulated water supply and the nearest street hydrant is within the minimum required distance from the most distant point of the subject site in accordance with the requirements of PBP and AS2419.1 2005
Electricity & Gas supplies	Yes	This report shall recommend compliance with PBP 4.1.3 for services including electricity and gas.
Emergency and Evacuation Planning	Yes	An emergency evacuation plan is not recommended as a condition of consent.

10) Assessment of the extent to which the construction conforms or deviates from Chapter 4 of 'Planning for Bushfire Protection 2006'

The proposed development conforms to the requirements of PBP for bushfire protection measures for infill development in relation to:

Performance	Meets	Comment	
Criteria	Performance Criteria?		
Asset Protection Zones	Yes	Asset protection zones are provided partially on site and by adjoining development and public roads.	
Defendable Space	Yes	Defendable space is provided on all sides of the building	
Siting and design	Yes	The siting of the building has been previously determined in accordance with local council requirements and the proposed additions and alterations will not involve a re-siting of the building [no advantage could be gained by recommending a re siting of the building].	
Landscaping	Yes	This assessment shall include recommendations that the site is managed in accordance with Inner Protection Area requirement of PBP.	
Construction Standards	Yes	Construction standards have been recommended in accordance with the requirements of PBP	
Access and Egress	Yes	The access and egress requirements have been designed to provide safe and effective evacuation from the subject site and appear to be adequate for fire brigade personnel and fire fighting equipment.	
Water Supplies	Yes	The area has reticulated water supply and the nearest street hydrant is within the minimum required distance from the most distant point of the subject site in accordance with the requirements of PBP and AS2419.1 2005	
Electricity & Gas supplies	Yes	This report shall recommend compliance with PBP 4.1.3 for services including electricity and gas.	
Emergency and Evacuation Planning	Yes	An emergency evacuation plan is not recommended as a condition of consent.	



11) Recommendations

The following recommendations are made for the bushfire protection measures for the proposed residential development of refurbishment and alterations to an existing class 1A dwelling at No 1 William Street, Avalon and are based upon the relevant provisions of the NSW Rural Fire Service guideline entitled *Planning for Bushfire Protection 2006*.

- Construction Standard: The proposed development shall be constructed to a
 minimum standard of BAL 12.5, AS3959, 2009 with the exception that the
 construction requirements shall be varied to comply with the requirements of
 Section A3.7 of the NSW Rural Fire Service Addendum to Appendix 3 of
 Planning for Bushfire Protection 2006.
- 2) <u>Construction Standard Class 10b</u>: At the planning stage, class 10b buildings in bushfire prone areas should be non-combustible. [Class 10b buildings include a retaining or free standing wall, swimming pool or the like.]
- 3) Fences and Gates: All new fencing and gates shall be constructed in accordance with the NSW Rural Fire Service guideline: Fast Fact – Fences or Gates in Bushfire Prone Areas. [Refer Section 15 of this report]
- 4) <u>Gutter Guards:</u> Roofing shall be gutterless or have leafless guttering and valleys to prevent the build up of flammable material. Any materials used shall have a flammability index no greater than 5.
- 5) <u>Electricity and Gas Supplies</u>: As far as practical, new electricity and gas supplies shall be installed in accordance with the requirements of 4.1.3 of PBP. Note: 4.1.3 of PBP requires that 'where practical, electrical transmission lines should be underground' and 'the location of gas services will not lead to ignition of surrounding bushland or the fabric of the building'.
- 6) Existing Windows: All openable windows, including louvres, shall be screened with aluminium, corrosion-resistant steel or bronze mesh with a maximum aperture size of 2mm in such a way that the entire opening remains screened when the window is open.
- 7) Existing External doors: Weather strips or draught excluders to be fitted.

- 8) Existing Vents and weepholes: Vents and weepholes shall be protected with spark guards made from corrosion-resistant-steel or bronze mesh with a maximum aperture size of 2mm
- 9) Asset Protection Zones: At the commencement of building works and in perpetuity, the entire property shall be managed as an inner protection area as outlined within PBP and the NSW RFS document 'Standards for asset protection zones' with the exception that gutter guards have been recommended as an alternate solution rather than remove or severely prune overhanging trees. The following points are a guide to Inner Protection area requirements. The Inner Protection Area should comprise of 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; and
 - 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.
- 10) <u>Emergency and Evacuation Planning</u>: An emergency evacuation plan is not recommended as a condition of consent.
- 11) Water Supplies: Reticulated water supply is located on the adjoining road at regular intervals and is easily accessible. No additional water supplies have been recommended.

12) Summary

This report consists of a bushfire risk assessment for the proposed residential development of refurbishment and alterations to an existing class 1A dwelling at No 1 William Street, Avalon.

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. The proposed development will be constructed to the minimum standards required in accordance with the guidelines of *Planning for Bushfire Protection 2006*.

This report has considered all of the elements of bushfire attack and provided the proposed development is constructed in accordance with the recommendations included in section 11 of this report, it is my considered opinion that the development satisfies the Objectives and Performance requirements of the *Building Code of Australia, Planning for Bushfire Protection 2006 and Australian Standard AS3959, 2009.*

Not withstanding the precautions adopted, it should always be remembered that bushfires burn under a wide range of conditions and an element of risk, no matter how small always remains, and although the standard is designed to improve the performance of such buildings, there can be no guarantee, because of the variable nature of bushfires, that any one building will withstand bushfire attack on every occasion.

This Report is a Bush Fire Hazard Assessment that provides the required information to assist Local Council and the Rural Fire Service in determining compliance in accordance with Planning for Bushfire Protection and AS 3959, 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.

RE Gff

Ron Coffey – Bushfire Safety Engineer
Grad I Fire E [Institute of Fire Engineers - 1973]
Grad Cert Fire Safety Eng [UWS - 2003]
Grad Dip Building in Bushfire Prone Areas [UWS – 2005]
Ass Prof Cert in Expert Evidence in the Land & Environment Court [UTS – 2005]
Corporate Member - Institute of Fire Engineers
Member - Fire Protection Association Australia



Planning for Bushfire Protection Pty Ltd. Fire Protection Association of Australia BPAD-A Certified Practitioner/Certified Business Certification No BPD-PA09328 02 99137907 0408220443

13) References

Australian Building Codes Board

Building Code of Australia Volumes 1&2 Canprint

Australian Building Codes Board [2001]

Fire Safety Engineering Guidelines Edition 2001 ABCB Canberra

D. Drysdale D. [1998]

Introduction to Fire Dynamics 2nd Edition John Wiley & Sons Ltd

NSW Government Environmental Planning and Assessment Act [1979]

Part 79BA – Consultation and development Consent – Certain Bushfire Prone Land NSW Government Printer

Planning NSW [2006]

Planning for Bushfire Protection 2006

A Guide for Councils, Planners, Fire Authorities, Developers and Home Owners
This document provides the necessary planning considerations when developing areas for residential use
in residential, rural residential, rural and urban areas when development sites are in close proximity to
areas likely to be affected by bushfire events and replaces Planning for Bushfire Protection 2001.
This document is essential reading: Download a copy from the RFS website or purchase a copy through
the NSW Government Online Shop or phone 9228 6333

Ramsay C & Rudolph L [2003]

Landscape and Building Design for Bushfire Prone Areas CSIRO Publishing

Standards Australia [2009]

Australian Standards 3959 Australian Building Code Board

14) Fences and Gates

BAL 12.5 & BAL 19

- 1. Where a timber fence does not connect to a dwelling and has a minimum of 1 metre separation from the dwelling then a fence may be constructed from hardwood, or non-combustible material.
- 2. 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.
- 3. 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.

The above is based on the premise that construction for level 1 & 2 dwellings is sufficiently removed from the main fire front and won't be subjected to direct flame contact or extreme levels of radiant heat that may cause ignition of combustible materials. However, dwellings could still be exposed to significant levels of ember attack and relatively high levels of radiated heat that may cause fences to ignite.

BAL 29, BAL 40 &/or Flame Zone

Dwellings assessed as requiring these construction levels shall have fencing constructed from non-combustible materials e.g. Sheet metal or masonry. This is due to the increased likelihood of direct flame contact causing ignition of combustible materials which may provide a fire path to the dwelling.

