



Bush Fire Assessment Report

PEPPERTREE HILL ESTATE

85 ROCKY WATERHOLE RD, MT FROME

- Proposed Luxury & Super Luxury Villas
- Additions to an existing Café/restaurant

Document Tracking:

CLIENT:

Wild Modular

DATE: 16/05/2025

JOB REFENCE: 24SBC_1156

VERSION: 3

PREPARED BY: Steven Houghton

Statewide Bushfire Consulting



Contents

| C | Contents2 | | | |
|---|-----------|--------|--|----|
| 1 | | Intro | duction | 3 |
| | 1. | .1 | Building and Site Characteristics | 3 |
| | 1. | .2 | Legislative requirements | 4 |
| | 1. | .3 | Scope | 4 |
| | 1. | .4 | Other known constraints: | 4 |
| | 1. | .5 | Existing SFPP Development | 5 |
| 2 | | Site A | ssessment | 7 |
| | 2. | .1 | Vegetation | 7 |
| | 2. | .2 | Effective Slope | 7 |
| | 2. | .3 | Fire weather | 7 |
| | 2. | .4 | Separation distance and Available APZ: | 7 |
| | 2. | .5 | Bush fire attack level (BAL): | 8 |
| 3 | | Bush | fire protection measures | 11 |
| | 3. | .1 | Asset Protection Zone (APZ) | 12 |
| | 3. | .2 | Landscaping | 14 |
| | 3. | .3 | Construction Standards | 15 |
| | 3. | .4 | Access arrangements | 17 |
| | 3. | .5 | Water supply | 19 |
| | 3. | .6 | Electricity services | 22 |
| | 3. | .7 | Gas services | 23 |
| | 3. | .8 | Emergency Management | 24 |
| 4 | | Speci | fic objectives for infill development: | 25 |
| 5 | | Concl | usions and recommendations | 26 |
| 6 | | Discla | imer | 27 |
| 7 | | Refer | ences | 27 |
| 8 | | Appe | ndix A – Photos | 28 |
| 9 | | • • | ndix B – Turning head requirements | |
| _ | | PPC | | |

1 Introduction

1.1 Building and Site Characteristics

This report forms part of the submission requirements to support a Development Application summarised in **Table 1**.

Table 1: Proposal summary

| Property Details | 85 Rocky Waterhole Road Mount Frome 2850 Lot/Section/Plan no: 2/-/DP1283989 Council: MID-WESTERN REGIONAL COUNCIL | | |
|----------------------------|---|--|--|
| Type of Proposal | ☑ Integrated Development ☑ s100B – SFPP – Other Tourist Accommodation | | |
| Development | Proposed construction of sixteen (16) Villas Additions and Alterations to existing Café/Restaurant (Cellar Door) and Dwelling (The Lodge) – Figure 2 | | |
| BFPL Status | ☑ Subject Lot mapped as bushfire prone land – Figure 1 | | |
| Information relied upon | Site Visit – December 2024 (Photos, Appendix A) Site plan supplied by proponent (see Figure 2) Traffic Impact Assessment had been prepared by Metafora Consultants Pty Ltd dated 12/05/2025 FireMaps (FPAA) and ePlanning (NSW State Government) - cadastral and topographic information for New South Wales | | |



Figure 1: Bush fire prone land mapping showing subject lot captured.

1.2 Legislative requirements

The subject Lot/site is 'Bush fire prone land' as determined by local council bush fire prone land mapping under s.146 of the Environmental Planning and Assessment Act (EP&A) 1979.

The specific development types which are considered as Special Fire Protection Purpose (SFPP) development are listed within s.100B, of the RF Act, including schools, hospitals, nursing homes and tourist accommodation. SFPP development is termed Integrated Development, requiring a Bush Fire Safety Authority (BFSA) from the NSW Rural Fire Service (RFS).

For the purposes of meeting the Specific Objectives under Section 6.2 of PBP for SFPP development, this assessment provides recommendations for compliance against the Performance Criteria listed in Table 6.8a, 6.8b and 6.8c of PBP.

1.3 Scope

The purpose of this report is to demonstrate compliance, or otherwise, with the broad aims and objectives of *Planning for Bushfire Protection 2019 (PBP)* and *AS 3959-2018 'Construction of buildings in bushfire-prone areas.*

Based on these requirements, this report seeks to:

- 1. Assess the proposal with reference to PBP-2019 and AS3959-2018;
- 2. Identify appropriate Bush fire Protection Measures designed to mitigate the bushfire risk and protect occupants
- 3. Assist the Consent Authority in the determination of the suitability of the proposed development.

The recommendations contained herein may assist in forming the basis of any specific bushfire conditions that Council and/ or the NSW Rural Fire Service may elect to place within the consent conditions issued for the subject Development Application (DA).

1.4 Other known constraints:

No threatened species or other known significant environmental or heritage constraints are known or have been advised.

Local Council or the NSW Rural Fire Service, as the determining authority, will assess more thoroughly any potential environmental, heritage or zoning issues.

1.5 Existing SFPP Development -

The proposed development of sixteen (16) Villas and alterations and additions to the existing Café/restaurant (Cellar Door) and Dwelling (The Lodge) as depicted in **Figure 2**, is located within an established Special Fire Protection (SFPP) development.

In accordance with Section 6.4 of PBP, an appropriate combination of Bush fire Protection Measures (BPMs) are recommended, that will result in a 'better bush fire outcome 'than if the development did no proceed. This includes the provision for compliant 10kW/m² APZ's (providing appropriate defendable space), minimum BAL-12.5 construction for all new buildings and proposed alterations and additions (including retrofitting to achieve BAL-12.5) and static water supply.

Full compliance can be achieved to satisfy all Acceptable Solutions under PBP for SFPP Development, outlined in **Section 3**.

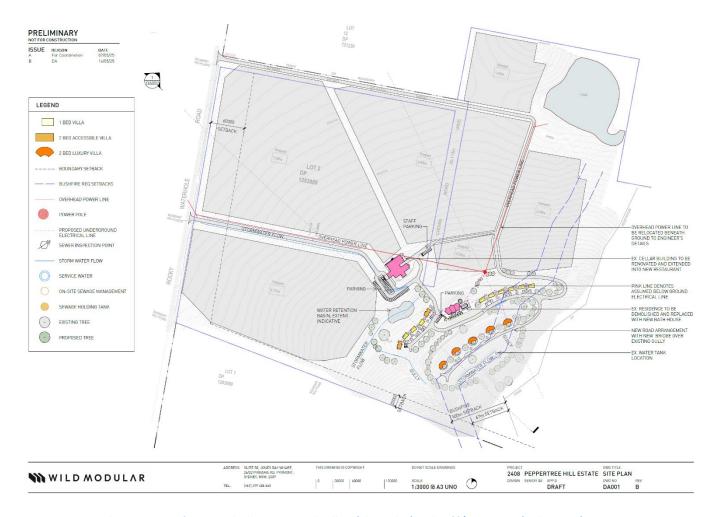


Figure 3: Site plan. Location of proposed villas, existing dwelling (The Lodge) and Café/restaurant (Cellar Door)

2 Site Assessment

The relevant Asset Protection Zone (APZ) and bushfire attack level (BAL) is determined using the methodology detailed in Appendix 1 of PBP.

2.1 Vegetation

Determine vegetation formations according to Keith (2004) in all directions around the proposed development to 140m.

Vegetation extent (bushfire hazard) within the study area is derived from Aerial photo interpretation (latest NearMap Imagery)

- All land located to the north and west of the proposed development is assessed an established Vineyard, excluded from assessment under Section A1.10 of PBP
- To the East within the subject lot are areas assessed as Forest under PBP (Photo 1, Appendix A)
- To the South of the proposed villas within the subject lot is an of land assessed as Grassland under PBP (Photo 2, Appendix A)

2.2 Effective Slope

Determine the effective slope of the land from the building for a distance of 100 metres

The slope(s) that most significantly influences the bush fire behavior and has been derived from topographic <u>2m contour data</u> (FireMaps – FPAA Mapping Software) and depicted in **Figure 3**

2.3 Fire weather

Determine the relevant Fire Area having a Fire Danger Index (FFDI) for the council area

The Lot is situated within MID-WESTERN REGIONAL COUNCIL having a FFDI of 80

2.4 Separation distance and Available APZ:

Determine the separation distance from the unmanaged vegetation to the closest external wall.

The separation distance in all hazard directions is shown in **Figure 3** which represents the available APZ in that direction provided in **Table 2**.

2.5 Bush fire attack level (BAL):

The Bush fire attack level (BAL) is used as the basis for establishing the construction requirements for development of Class 1, 2, 3 and 4 (part) buildings in NSW

The site assessment methodology for determining the construction requirements for bushfire prone areas is calculated using Appendix 1 of PBP 2019 which determines the appropriate BAL

Table 2: Bush fire hazard assessment

| Transect | Vegetation formation | Effective Slope | Minimum APZ¹ | Proposed APZ | Comments | |
|----------|-------------------------|------------------------------|-----------------|-----------------|--|--|
| East | Forest | Upslope | 67m | ≥67m | The minimum APZ to be established and managed an APZ, between the proposed development and the bushfire interface: • 67m to the East (Forest) | |
| South | Grassland | Downslope > 0-5 ⁰ | 40m | ≥40m | • 40m to the south (Grassland) | |

¹PBP 2019 – Table A1.12.1 - Minimum distances for APZs – SFPP developments (<10kW/m2, 1200K)

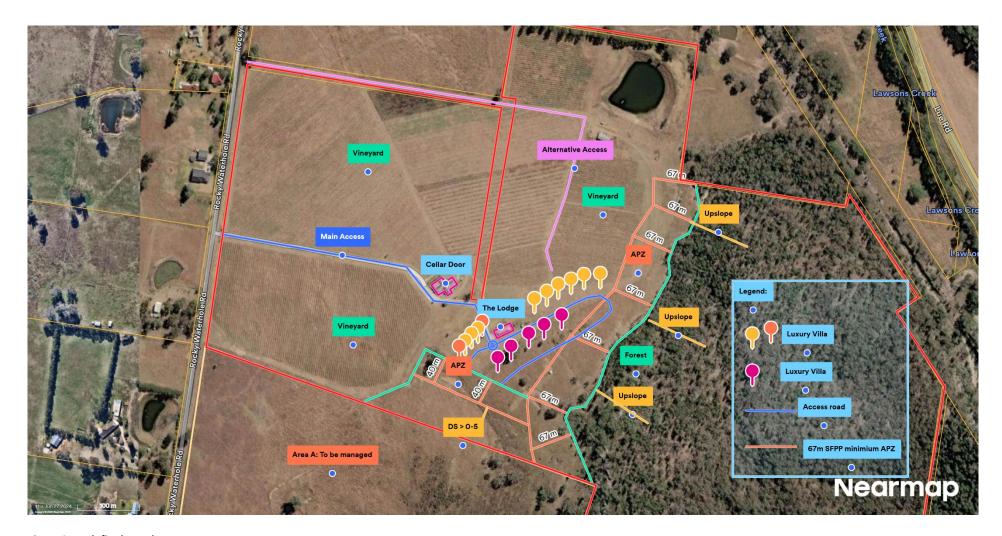


Figure 3: Bush fire hazard assessment.

3 Bush fire protection measures

The Bush Fire Protection Measures for SFPP developments are provided to minimise the risk of fire spread to buildings and take into account the increased vulnerability of the occupants.

Intent of measures: to minimise the risk of bush fire attack and provide protection for emergency services personnel, residents and others assisting firefighting activities.

Table 3: Summary of bushfire protection measures assessed.

| Bushfire Protection Measure | Report Section | Acceptable Solution | Performance Solution |
|--------------------------------|----------------|------------------------|-------------------------|
| Asset Protection Zones | 3.1 | | |
| Landscaping | 3.2 | ☑ | |
| Construction Standards | 3.3 | ☑ | |
| Access | 3.4 | ☑ | |
| Water supply | 3.5 | ✓ | |
| Electrical services | 3.6 | ☑ | |
| Gas services | 3.7 | ✓ | |
| Emergency Management | 3.8 | ☑ | |

All BPMs can comply with the Acceptable Solutions under Table 6.8a, 6.8b and 6.8c of PBP for SFPP development (Sections 3.1 to 3.8).

3.1 Asset Protection Zone (APZ)

An APZ is a buffer zone between a bush fire hazard and buildings. The APZ is managed to minimise fuel loads and reduce potential radiant heat levels, flame, localised smoke and ember attack. Relevant Acceptable Solutions in Table 6.8a of PBP for APZs below.

The proposed development is located within an existing Tourist development and is able to achieve the minimum radiant heat setbacks for SFPP development provided the APZ is established and managed.

Table 4: Relevant APZ Performance Criteria, Acceptable Solution and Compliance:

| PERFORMANCE CRITERIA | ACCEPTABLE SOLUTION (DTS) | COMPLIANCE |
|--|--|--------------|
| radiant heat levels of greater than 10kW/m² (calculated at 1200K) will not be experienced on any part of the building. | the building is provided with an APZ in accordance with Table A1.12.1 in Appendix 1. | ☑ Can comply |
| APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised. | APZs are located on lands with a slope less than 18 degrees. | ☑ Complies |
| The APZ is provided in perpetuity. APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised | the APZ is managed in accordance with the requirements of Appendix 4 of this document, and is wholly within the boundaries of the development site; APZ are wholly within the boundaries of the development site; and other structures located within the APZ need to be located further than 6m from the refuge building. | ☑ Can comply |

APZ Recommendations:

- A 67m area to the East of the 'Super Luxury' villas is to be established and managed in perpetuity as an IPA
- A 40m area to the south of the southernmost located villas is to be established and managed in perpetuity as an IPA

- When establishing and managing an IPA, the following requirements are recommended:
 - Tree canopy less than 15% at maturity and separated by 2 to 5m;
 - o Lower limbs are removed up to a height of 2m above the ground;
 - o Preference is given to smooth-barked and evergreen trees;
 - Large discontinuities or gaps in vegetation are provided to slow down or break the progress of fire towards buildings;
 - o Shrubs are not located under trees or form more than 10% of ground cover;
 - Clumps of shrubs are separated from exposed windows and doors by a distance of at least twice the height of the vegetation.
 - o Grass to be kept mown (as a guide grass no more than 100mm in height);

3.2 Landscaping

Landscaping within the APZ is designed and managed in accordance with the requirements of 'Asset protection zone standards' outlined in Appendix 4 of PBP – 2019. Relevant Acceptable Solutions in Table 6.8a of PBP for landscaping:

Table 5: Relevant Landscaping Standards Performance Criteria, Acceptable Solution and Compliance:

| PERFORMANCE CRITERIA | ACCEPTABLE SOLUTION (DTS) | COMPLIANCE |
|--|---|---------------|
| landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions | landscaping is in accordance with Appendix 4; and Fencing is constructed in accordance with section 7.6 | ☑ Can comply. |

Landscaping Recommendations:

- 1m wide area suitable for pedestrian traffic provided around the curtilage of all buildings;
- New planting is limited in the immediate vicinity of any buildings;
- New planting does not provide a continuous canopy to the building (i.e. Plants are isolated)
- Landscape species are chosen to ensure tree canopy cover is less than 15% at maturity;
- Trees do no touch or overhang buildings;
- Avoid species with rough fibrous bark, or which retain/shed bark in long strips;
- Use smooth bark trees species which generally do not spread fire up into the crown;
- Avoid planting of deciduous species that increase fuel at surface/ ground level (i.e. leaf litter); Avoid climbing species to walls and pergolas;
- Locate combustible materials such as mulch, flammable fuel stores away from the building;
- Locate combustible structures such as garden sheds, pergolas and materials such as timber garden furniture away from the building;
- Low flammability vegetation species are used.
- Fencing within 6m of a building or in areas of BAL-29 or greater are made of noncombustible material only.

Fences and Gates: fencing is constructed in accordance with section 7.6. of PBP:

• All fences in bush fire prone areas should be made of either hardwood or non-combustible material. In circumstances where the fence is within 6m of a building or in areas of BAL-29 or greater, they should be made of non-combustible material only.

3.3 Construction Standards

Relevant Acceptable Solutions in Table 6.8a of PBP for Construction:

Table 5: Relevant Construction Standards Performance Criteria, Acceptable Solution and Compliance:

| PERFORMANCE CRITERIA | ACCEPTABLE SOLUTION (DTS) | COMPLIANCE |
|---|--|---------------|
| the proposed building can withstand bush fire attack in the form of wind, embers, radiant heat and flame contact. | a construction level of BAL-12.5 under AS 3959 or NASH Standard and section 7.5 of PBP is applied. | ☑ Can comply. |

Construction Recommendations:

Proposed Villas:

- New construction is to comply with Section 3 (Construction General) and Section 5
 (BAL-12.5) of Australian Standard AS 3959-2018 'Construction of buildings in bushfireprone areas as (AS 3959 20018). Alternately, the relevant sections of 'NASH Standard –
 Steel Framed Construction in Bushfire Areas (NASH 2014)' may be applied
- In accordance with Section 7.5.2 of PBP, variations to AS 3959 apply in NSW for the purposes of NSW G5.2(a)(i) of Volume One and NSW 3.10.5.0(c)(i) of Volume Two of the National Constriction Code (NCC);

Alterations and Additions to Existing Restaurant/Café (Cellar Door)

In accordance with Section 6.4 of PBP, it is recommended to retrofit existing buildings to ensure an improved level of bush fire protection.

- New construction is to comply with Section 3 (Construction General) and Section 5
 (BAL-12.5) of Australian Standard AS 3959-2018 'Construction of buildings in bushfireprone areas as (AS 3959 20018). Alternately, the relevant sections of 'NASH Standard –
 Steel Framed Construction in Bushfire Areas (NASH 2014)' may be applied
- Existing areas of the building not subject to proposed alterations/additions will be upgraded to achieve a minimum BAL-12.5 construction.
- In accordance with Section 7.5.2 of PBP, variations to AS 3959 apply in NSW for the purposes of NSW G5.2(a)(i) of Volume One and NSW 3.10.5.0(c)(i) of Volume Two of the National Constriction Code (NCC);

Alterations and Additions to existing Dwelling (The Lodge)

In accordance with Section 6.4 of PBP, it is recommended to retrofit existing buildings to ensure an improved level of bush fire protection.

- New construction is to comply with Section 3 (Construction General) and Section 5
 (BAL-12.5) of Australian Standard AS 3959-2018 'Construction of buildings in bushfireprone areas as (AS 3959 20018). Alternately, the relevant sections of 'NASH Standard –
 Steel Framed Construction in Bushfire Areas (NASH 2014)' may be applied
- Existing areas of the building not subject to proposed alterations/additions will be upgraded to achieve a minimum BAL-12.5 construction.
- In accordance with Section 7.5.2 of PBP, variations to AS 3959 apply in NSW for the purposes of NSW G5.2(a)(i) of Volume One and NSW 3.10.5.0(c)(i) of Volume Two of the National Constriction Code (NCC);

Fences and Gates: All fences in bush fire prone areas should be made of either hardwood or non-combustible material. In circumstances where the fence is within 6m of a building or in areas of BAL-29 or greater, they should be made of non-combustible material only.

3.4 Access arrangements

Design of access roads shall enable safe access and egress for residents attempting to leave the area at the same time that emergency service personnel are arriving to undertake firefighting operations.

The proposed Villas are located within an established SFPP Tourism development (Cellar Door).

• Traffic Impact Assessment had been prepared by Metafora Consultants Pty Ltd dated 12/05/2025.

The main access to the subject land is to the west joining Rocky Waterhole Road.

Alternative access is available within the subject land heading north and then west onto Rocky Waterhole Road as shown in **Image 1 (Water Supply)**

Access Recommendations:

The existing Access Road and available Alternative access road to be upgraded as necessary and maintained in in accordance with the property access requirements of Table 6.8b of PBP 2019, as outlined in **Table 3** below.

Table 3: PBP: Relevant Performance Criteria, Acceptable Solution and Compliance - Table 6.8b of PBP.

| PERFORMANCE CRITERIA | ACCEPTABLE SOLUTION (DTS) | COMPLIANCE |
|---|---|---|
| Firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation. | SFPP access roads are two-wheel drive, all-weather roads; Access is provided to all structures; traffic management devices are constructed to not prohibit access by emergency services vehicles; Access roads must provide suitable turning areas in accordance with Appendix 3. | Can comply Access to the top level by heavy vechicles is not provided. Emergency services including RFS Cat 1 tonnage trucks would access villas from the lower level in the vicinity of the provided Hydrants. Walking access is provided. |
| The capacity of access roads is adequate for firefighting vehicles. | the capacity of road surfaces and any bridges/causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes); | ☑ Can comply |
| there is appropriate access to water supply. | there is suitable access for a Category 1 fire appliances to within 4m of the static water supply where no reticulated supply is available. | ☑ Can comply Refer Section 3.5 |

Access Recommendations:

- Private access roads to the development from the west (main access) and north and then west (alternative access) are two-wheel drive, all-weather roads.
- The capacity of the access roads and hardstand/carpark areas will support firefighting vechicles up to 23 tonnes.
- Access will be provided for emergency services vehicles and provide suitable turning areas (Appendix B)
- Suitable access for a Category 1 fire appliances to within 4m of the static water supply recommended in **Section 3.5**

3.5 Water supply

An adequate supply of water is essential for firefighting purposes. The water supply would enable occupants to stay and defend if chosen to and allow fire-fighting personnel to attach equipment for use.

The subject Lot is not connected to reticulated water.

Image 1 below sketch provided by Wild Modular shows the proposed hydrant connections that are connected to static water supply tanks that are proposed to be located upslope underground to the south-east of the villas on the hill.

Access paths to all cabins will be provided from the lower road.

A heavy Fire Truck positioned on the area indicated by the pink cross will be approximately 90m to the proposed cabin to the south. Smaller vechicles will be able to locate on the upper road, as per residents staying in the villas, with adequate turning areas.



Image 1: Image showing1 way alternative access to public road and proposed hydrant locations.

Relevant Acceptable Solutions in Table 6.8c of PBP for water supply:

Table 4: Relevant Water Supply Performance Criteria, Acceptable Solution and Compliance:

| PERFORMANCE CRITERIA | ACCEPTABLE SOLUTION (DTS) | COMPLIANCE |
|---|---|---|
| Adequate water supply is provided for firefighting purposes. | a 10,000 litres minimum static water supply for firefighting purposes is provided for each occupied building where no reticulated water is available. | ☑ Can comply See Recommendations |
| Water supplies are located at regular intervals, accessible and reliable for firefighting operations. | reticulated water supply to SFPPs uses a ring main system for areas with perimeter roads. | ☑ Not applicable. Established SFPP development. No perimeter road or reticulated water. Static water supply is proposed |
| water supplies are adequate in areas where reticulated water is not available. | a connection for firefighting purposes is located within the IPA or non hazard side and away from the structure; | ☑ Can comply See Recommendations |
| | a 65mm Storz outlet with a ball valve is fitted to the outlet; ball valve and pipes are adequate for water flow and are metal; supply pipes from tank to ball valve have the same bore size to ensure flow volume; underground tanks have an access hole of 200mm to allow tankers to refill direct from the tank and clearly marked, a hardened ground surface for truck access is supplied within 4m of the access hole; above-ground tanks are manufactured from concrete or metal; raised tanks have their stands constructed from non-combustible material or bush fire-resisting timber (see Appendix F AS 3959); unobstructed access is provided at all times; tanks on the hazard side of a building are provided with adequate shielding for the protection of firefighters; and | |

Water Supply Recommendations:

- Minimum 10,000 L per cabin (160,000L total) static water supply is provided, located in proximity to the proposed cabins with unobstructed access and clearly marked, with connections and fittings to comply with Table 6.8c of PBP (Table 4 above)
- Minimum 20,000L of static water located adjacent to existing Café/Restaurant and Dwelling with unobstructed access and clearly marked, with connections and fittings to comply with Table 6.8c of PBP (Table 4 above)

Additional Notes from BPAD consultant:

Minimum Water supply volumes can be achieved based on plans supplied. Hydrant locations supplying static water supply from tanks upslope can provide adequate water to appliances on the lower-level road within 90m radius.

3.6 Electricity services

The location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings. Relevant Acceptable Solutions in Table 6.8c of PBP for Electricity services:

Table 8: Relevant Water Supply Performance Criteria, Acceptable Solution and Compliance:

| PERFORMANCE CRITERIA | ACCEPTABLE SOLUTION (DTS) | COMPLIANCE |
|--|--|--------------|
| Location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings. | Where practicable, electrical transmission lines are underground; Where overhead, are installed with | ☑ Can Comply |
| | short pole spacing (30m), unless crossing gullies, gorges or riparian areas; | |
| | No part of a tree is closer to a power line | |
| | than the distance set out in accordance with the specifications in ISSC3 <i>Guideline</i> | |
| | for Managing Vegetation Near Power Lines. | |

Electricity Services Recommendations:

- Where practicable, electrical transmission lines are underground;
- Where overhead, are installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas and comply with the specifications in ISSC3 *Guideline for Managing Vegetation Near Power Lines*.

3.7 Gas services

The location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings. Relevant Acceptable Solutions in Table 6.8c of PBP for Gas services:

Table 9: Relevant Gas Supply Performance Criteria, Acceptable Solution and Compliance:

| PERFORMANCE CRITERIA | ACCEPTABLE SOLUTION (DTS) | COMPLIANCE |
|---|--|------------|
| Location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings. | 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; All connections to and from gas cylinders are metal (polymer sheathed | ☑ Complies |
| | flexible gas supply lines are not used) Above-ground gas service pipes are | |
| | metal, including and up to any outlets. | |

Gas Services Recommendations:

• It is understood no Gas requirements are proposed. SFPP is existing and augmentation or changes to Gas services are beyond the scale of works being undertaken.

3.8 Emergency Management

Intent of measures: to provide suitable emergency and evacuation arrangements for occupants of SFPP developments.

The emergency and evacuation management plan should include a mechanism for the early relocation of occupants. Emergency management requirements and procedures must be clearly displayed within the property to ensure current occupants are aware of the bush fire risk

The SFPP development is existing. The standard recommendations are repeated below for consistency, and it is recommended the certifying authority review for compliance.

Recommendations for Emergency Management

- Bush Fire Emergency and Evacuation Management Plan is to be prepared consistent with the:
 - NSW RFS publication: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan;
 - AS 3745:2010; Australian Standard AS 3745:2010 Planning for emergencies in facilities; and Australian Standard AS 4083:2010, and;
 - Planning for emergencies Health care facilities
- A copy of the bush fire emergency management plan should be provided to the Local Emergency Management Committee (LEMC)
- Emergency Planning Committee is established to consult with residents (and their families in the case of aged care accommodation and schools) and staff in developing and implementing an Emergency Procedures Manual; and
- Detailed plans of all emergency assembly areas including on site and off-site arrangements as stated in AS 3745:2010 are clearly displayed, and an annually emergency evacuation is conducted.

4 Specific objectives for infill development:

The proposed SFPP development can meet the requirements for the specific objectives of subdivision development within PBP.

Table 11: Specific objectives for SFPP development

| Specific Objective | Comment |
|--|--|
| Minimise levels of radiant heat, localised smoke and ember attack through increased APZ, building design and siting; | Compliant APZ is recommended. |
| Provide an appropriate operational environment for emergency service personnel during firefighting and emergency management; | Provision for vehicle access to facility on existing public road network, with ample space to conduct firefighting operations within the prescribed APZ with reticulated water supply available. Emergency management requirements and procedures will be clearly displayed within the property (Section 3.8) |
| Ensure the capacity of existing infrastructure (such as roads and utilities) can accommodate the increase in demand during emergencies as a result of the development; | Proposal is for development to an existing SFPP facility. Provisions for access, utilities, and landscaping are outlined in Section 3.2 -3.7. |
| Ensure emergency evacuation procedures and management which provides for the special characteristics and needs of occupants. | Bush Fire Emergency and Evacuation Management Plan is to be prepared Emergency Planning Committee is to be established Emergency assembly areas including onsite and off-site arrangements and an annually emergency evacuation is conducted. |

5 Conclusions and recommendations

The proposal can meet the requirements for the specific objectives of SFPP development (Section 4) by compliance with the acceptable for all BPM's within PBP- 2019

Table 12: Conclusions and Recommendations

| Performance Criteria | Report Section | Summary of Recommendations |
|-------------------------|-------------------|--|
| APZ's | 3.1 | A 67m area to the East established and managed in perpetuity as an IPA A 40m area to the south established and managed in perpetuity as an IPA |
| Landscaping | 3.2 | Designed and managed in accordance with Appendix 4 of PBP |
| Construction standards | 3.3 | Construction to comply with Section 3 and Section 5 (BAL-12.5) of AS3959-2018, including variations to AS 3959 apply in NSW Retrofitting existing buildings to achieve compliance with BAL-12.5 |
| Access | 3.4 | Property access road and alternative access road upgraded and maintained in accordance with specifications in Table 3. |
| Water supply | 3.5 | Minimum 10,000L per cabin (160,000L total) and 20,000L each for existing Café and Dwelling of static water supply is provided, located in proximity to the proposed buildings with unobstructed access and clearly marked, with, connections and fittings to comply with Table 6.8c of PBP |
| Electricity service | 3.6 | Where practicable, electrical transmission lines are underground. Where overhead, are installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas and comply with the specifications in ISSC3 Guideline for Managing Vegetation Near Power Lines. |
| Gas service | 3.7 | No additional recommendations apply |
| Emergency Management | 3.8 | Bush Fire Emergency and Evacuation Management Plan is to be prepared, and copy provided to the LEMC Emergency Planning Committee is established Detailed plans of all emergency assembly areas are clearly displayed, and an annually emergency evacuation is conducted. |

In accordance with the recommendations described by this report, this assessment concludes that the proposed additions and alterations to the facility can comply with the requirements for the specific objectives of SFPP development by compliance with the acceptable solution within 'Planning for Bush Fire Protection 2019' relevant to the development under Section 100B of the NSW Rural Fires Act.

Steven Houghton
Statewide Bushfire Consulting
Graduate Diploma of Bushfire Protection
BPAD Accredited Practitioner Level 3 No. BPAD46241



6 Disclaimer

| Client uses only | This document is intended for client use only. This document must be used for the stated purpose only. It must not be distributed to a third party or used for an alternative purpose without written approval of the author. | |
|-----------------------------------|---|--|
| Limit Liability | The author is not liable to any person for damage or loss of life resulting from actions taken or not taken as recommended in this report. | |
| Changeable guidelines | This report is based on the author's interpretation of <i>Planning for Bush Fire Protection 2019</i> (<i>PBP</i>) and <i>Australian Standard AS 3959-2018 'Construction of buildings in bushfire-prone areas</i> as at the time of writing. | |
| Conflict of interest | This report reflects the opinions and recommendations of the author only, and not those of the Rural Fire Service (RFS). Should Council or the RFS modify the recommendations or reject an assessment or proposal the author will not be held liable for any financial loss incurred as a result. | |
| Remaining risk | Notwithstanding the recommendations made by the author, there can be no absolute guarantee that a bushfire will not occur or cause damage to property because of the extreme number of variables that bushfires present. | |
| Measures not upheld in perpetuity | It is the responsibility of the client to maintain all bushfire protection measures proposed on an ongoing basis. | |

7 References

- Keith, D. 2004. *Ocean Shores to Desert Dunes*. Department of Environment and Conservation, Sydney.
- NSW Rural Fire Service (RFS) 2019. *Planning for Bush Fire Protection: A Guide for Councils, Planners, Fire Authorities, Developers and Home Owners*. Government Publishing Service, Canberra.
- Resources and Energy NSW (2016). *ISSC 3 Guide for the Managing Vegetation in the Vicinity of Electrical Assets*. NSW Government
- Standards Australia (SA). 2021. Fire hydrant installations System design, installation and commissioning, AS 2419.1, (2021), SAI Global, Sydney.
- Standards Australia (SA). 2018. *Construction of buildings in bushfire-prone areas*, AS 3959-2018. SAI Global, Sydney.
- Standards Australia (SA). 2014. *The storage and handling of LP Gas*, AS/NZS 1596:2014. SAI Global, Sydney.

8 Appendix A - Photos



Photo 1: View East upslope towards Forest vegetation with area to be managed as an APZ in foreground.



Photo 2: View West from area near proposed Villas, Grassland hazard assessed to south (left in photo)

9 Appendix B - Turning head requirements

Multipoint turning options

