

Bushfire Assessment Report for a Dwelling and Tourist Accommodation at Lot 31 DP733190 310 Pine Brush Road, Glen Martin NSW 2321.

Lezette Garry Hunter Valley Bushfire Consulting Services 27th January 2022

Table 1 – Document Version and Disclaimer

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Version 1	22/01/27_BAR_ 310 Pine Brush Rd_V1	lezette	Ashlee/Matt B

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Any recommendation or advice expressed in this report is made in good faith. It should be borne in mind that the measures recommended in this report cannot guarantee that a building will survive a bushfire event on every occasion. This is due to the degree of vegetation management, the unpredictable behaviour of bushfires and extreme weather conditions. As such, the author is not liable to any person for any damage or loss whatsoever which has occurred or may occur in relation to the person acting or not acting based on the recommendations of this report. It should not be considered safe to inhabit the development at times of bushfire risk. It is strongly recommended that you are away from the area at times of advised risk.

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

Charitable Donation:

Please note that a donation of \$10.00 will be made by Perception Planning to the NSW Rural Fire Service. The donation is made at the end of the financial year and is intended to assist the NSW RFS with community activities.

EXECUTIVE SUMMARY

This Bushfire Assessment Report (BAR) has been prepared by Hunter Valley Bushfire Consulting Services at the request of Perception Planning to assess compliance with the document, Planning for Bushfire Protection (PBP 2019) for a proposed new dwelling and conversion of two existing buildings to Tourist Accommodation (Farm stay) at Lot 31 DP733190, 310 Pine Brush Road, Glen Martin NSW 2321.

This report is to form part of the supporting documentation for a Development Application (DA) to be Lodged with Dungog Council (DC). The proposed development is classified as Integrated Development under the provisions of Planning for Bushfire Protection (PBP) (NSW Rural Fire Service (RFS), 2019), and is therefore required under the legislation to be referred to the commissioner of the RFS, for the issue of a Bushfire Safety Authority. The report demonstrates compliance with PBP (RFS, 2019) and AS3959-2018 Construction of Buildings in Bush Fire Prone Areas.

This assessment aims to consider and assess the bushfire hazard and associated potential threats relevant to the proposal. Recommendations are provided regarding fuel management, access, provision of emergency services, building protection and construction standards, to facilitate an acceptable level of bushfire protection.

In summary, the following is recommended to enable the proposal to meet the relevant legislative requirements:

- 1. The APZs listed below are required to be implemented around the existing dwelling and shed (Tourist Accommodation) in accordance with Table 4-1 in the above report. Asset Protection Zones (APZ) The APZ provides space and reduced fuel loads to ensure radiant heat levels at the buildings are below critical limits and to prevent direct flame contact.
 - The APZ is the distance from the external wall of the habitable building (existing dwelling and shed) to the unmanaged vegetation line to the north, east, south, and west. The shortest distance from the building to the unmanaged vegetation line has been identified to be:
 - 29m to the North.
 - 24m to the east.
 - 29m to the west.
 - 24m to the south
- 2. A minimum 50m APZ shall be applied around the new dwelling. That is the grass surrounding the new dwelling should be managed and maintained to a height of

100mm in accordance with the provisions of Appendix 4 of the Planning for Bushfire Protection 2019.

- 3. The existing dwelling (tourist accommodation) shall also be upgraded to improve ember protection. This shall be achieved by enclosing all openings (excluding roof tile spaces) or covering openings with a non-corrosive metal screen mesh with a maximum aperture of 2mm. Where applicable, this includes any sub floor areas, openable windows, vents, weepholes, and eaves. External doors are to be fitted with draft excluders.
- 4. The existing shed is to be constructed to BAL29 in accordance with the provisions of Table 6.8a of the Planning for Bushfire Protection 2019.
- 5. Vehicular Access to the property and the Tourist Accommodation Access standards provide for emergency evacuation and firefighting operations.

Access to the property and to the proposed Tourist Accommodation is required to comply with the provisions of Table 5.3b in Section 5 of the Planning for Bushfire Protection 2019.

6. Water Supplies to the Tourist Accommodation—A water supply is required for firefighting operations.

An assessment of the existing water supply has identified that reticulated water is NOT available. Where both reticulated water and associated hydrants are not available, a 20,000L static water supply that meets the following requirements is to be provided:

- A connection for firefighting purposes is located within the IPA or non-hazard side away from the structure; 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,
- Above-ground tanks are manufactured form concrete or metal.
- Raised tanks have their stands constructed form non-combustible material or bush fire-resisting timber (A3959-2018 (Appendix F),
- Unobstructed access can always be provided,
- All exposed water pipes external to the building are metal, including any fittings,
- Where pumps are provided, they are a minimum 5hp or 3Kw petrol or dieselpowered pimp, and are shielded against bush fire attack; any hose and reel for firefighting connected to the pump shall be 19mm internal diameter, and

- Fire hose reel are constructed in accordance with AS/NZS 1221:1997 and installed in accordance with the relevant clauses of AS 2441:2005.
- 7. Electricity Services to the Tourist Accommodation—The installation of any new electricity seeks to limit the possibility of igniting the surrounding bushland. Transmission lines are to be placed underground. If placing them underground is not practical, then overhead transmission lines are to:
 - Be installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas, and
 - No part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 – Guideline for Managing Vegetation Near Power Lines.
- 8. Gas Services to the Tourist Accommodation—The location and design of gas services will not lead to the ignition of surrounding buildings or the fabric of buildings. The provision of gas requires that:
 - Reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities,
 - Metal piping is used,
 - All fixed gas cylinders are kept clear of all flammable materials to 10m and shielded on the hazard side,
 - Connections to and from gas cylinders are metal,
 - · Polymer-sheathed flexible gas supply lines are not used, and
 - Above-gas service pipes are metal including and up to any outlets.
- 9. Emergency Evacuation A Bushfire Emergency Management and Evacuation plan is to be prepared for the site prior to the occupation of the Tourist Accommodation buildings. This Bushfire Emergency Management and Evacuation Plan is to be prepared consistent with the: The NSW RFS document: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan NSW RFS Schools Program Guide

Australian Standard AS 3745:2010 Planning for emergencies in facilities; and Australian Standard AS 4083:2010 Planning for emergencies – Health care facilities (where applicable). the Bush Fire Emergency Management and Evacuation Plan should include planning for the early relocation of occupants.

Note: A copy of the Bush Fire Emergency Management and Evacuation Plan should be provided to the Local Emergency Management Committee for its information prior to occupation of the development.

INTRODUCTION

The purpose of this report is to assess the compliance of a proposed Tourist Accommodation (conversion of two existing buildings) and a new dwelling at Lot 31 DP733190 310 Pine Brush Rd, Glen Martin NSW 2321 with the provisions of PBP 2019. The property contains existing residential buildings, together with various outbuildings.

1. LOT INFORMATION

Address: (Lot 31 DP:733190) 310 Pine Brush Rd, Glen Martin NSW 2321

Proposal: The proposal is for the conversion of two existing buildings into tourist

accommodation and the construction of a new dwelling.

Area: Total area of Lot 31 is 56.82ha

Council: Dungog Council

Zoning: RU1 – Primary Production

Bushfire Prone Land: yes **RFS Region:** Lower Hunter

Is a Bushfire Safety Authority (BFSA) required? Yes - the tourist accommodation is a

SFPP.

Significant Environmental Features: No Threatened Species: Nothing mapped Aboriginal Objects: Nothing Mapped

Registered Fire Trails: there are no registered fire trails in the area.

2. SPECIFIC OBJECTIVES

2.1 Compliance with the Specific Objectives in Clause 7.3 of the PBP 2019.

Specific Objective	Compliance	Comments
provide a defendable space to enable unimpeded access for firefighting around the building	Able to comply	APZs have been calculated in Table 4.1 below and have been included in the final recommendations.
provide better bush fire outcomes on a redevelopment site than currently exists, commensurate with the scale of works proposed	Able to comply	This can be demonstrated in the assessment tables and recommendations below. Providing a 50m APZ will reduce the level of risk posed by grass fire.

design and construct buildings commensurate with the bush fire risk.	Able to comply	Demonstrated in the compliance tables below. The APZ imposed reduces the level of risk.
provide access, services, and landscaping to aid firefighting operations	Able to comply	The implementation of the APZ reduces the need for other bushfire measures.
not impose an increased bush fire management and maintenance responsibility on adjoining landowners.	Able to comply	No management or maintenance required by anyone other than property owner.
increase the level of bush fire protection to existing dwellings based on the scale of the proposed work and level of bush fire risk.	Able to comply	The existing dwelling and shed both require upgrading to reduce the occupant's risk. Refer to recommendations.

2.2 Compliance with the Specific Objectives in Clause 6.2 of the PBP 2019.

Specific Objective	Compliance	Comments
minimise levels of radiant heat, localised smoke, and ember attack through increased APZ, building design and siting	Able to comply	The recommended BAL together with the APZ comply with the provisions of clause 6.2.
provide an appropriate operational environment for emergency service personnel during firefighting and emergency management	Able to comply	The recommendations listed below provide this.
ensure the capacity of existing infrastructure (such as roads and utilities)	Able to comply	Refer to the recommendations below.

can accommodate the increase in demand during emergencies as a result of the development		
ensure emergency evacuation procedures and management which provides for the special characteristics and needs of occupants	Able to comply	A bushfire emergency management and evacuation plan is required as a part of this development – refer to the recommendations below.

3. METHODOLOGY

The methodology for determining the required APZs is discussed below.

3.1 Vegetation Assessment

Vegetation surveys and vegetation mapping carried out on the site has been undertaken as follows:

• Aerial Photograph Interpretation to map vegetation cover and extent.

3.2 Slope Assessment

Slope assessment has been undertaken as follows:

• Aerial Photograph Interpretation in conjunction with analysis of electronic contour maps with a contour interval of 10m.

4. SITE ASSESSMENT

4.1 Asset Protection Zone (APZ) Assessment of Table A1.12. 2, PBP 2019 – SFPP Tourist Accommodation and dwelling - FFDI 100 (Dungog LGA).

Direction from site	Vegetation type within 140m of subdivision boundaries.	Effective slope (100m) under vegetation (degrees)	Distance from building to vegetation	Required minimum distance for APZ	BAL level
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North – tourist accommodation	Forest/grassland	0-5 degrees downslope	29m	29m	BAL29
North – new dwelling	grassland		50m	*50m	No BAL
West – Tourist accommodation	forest	0–5-degree downslope	29m	29m	BAL29
West – new dwelling	grassland	0–5-degree downslope	50m	*50m	No BAL
East- Tourist Accommodation	Forest/grassland	Flat/upslope	24m	24m	BAL29
East – new dwelling	grassland	Flat/upslope	50m	*50m	No BAL
South – Tourist Accommodation	forest	Flat/upslope	24m	24m	BAL29
South – new dwelling	grassland	Flat/upslope	50m	*50m	No BAL

^{*}PBP (2019), Clause 7.9, Grassland Deeming Provisions state that "Where an APZ of 50m can be provided, no further BPMs are required." An APZ of 50m can be applied to the proposed new dwelling.

5. BUSHFIRE PROTECTION MEASURES

5.1 APZs

5.1.1 APZ's and Compliance with Table 7.4a in Section 7 of the PBP 2019.

Performance Criteria	Acceptable Solutions	Compliance	Comments
APZs are provided commensurate with the construction of the building; and A defendable space is provided	an APZ is provided in accordance with Table A1.12.2 or A1.12.3 in Appendix 1.	Able to Comply	An APZ around the new dwelling can be provided in accordance with A1.12.2 in Appendix 1.
APZs are managed and maintained to prevent the spread of a fire to the building	APZs are managed in accordance with the requirements of Appendix 4 of PBP.	Able to comply	The management and maintenance of the APZ can be regulated by applying 88B instrument to the property.
the APZ is provided in perpetuity. APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised	APZs are wholly within the boundaries of the development site. APZ are located on lands with a slope less than 18 degrees	Able to comply	The APZ is able to be implemented wholly within the property and on slope <18 degrees.

5.1.2 APZ's and Compliance with Table 6.8a in Section 6 of the PBP 2019.

Performance Criteria	Acceptable Solutions	Compliance	Comments
Variation: Bed and breakfast and farm stay: the building will not be exposed to radiant heat levels exceeding 29kW/mÇ (1090K).	an APZ is provided in accordance with Tables A1.12.2 or A1.12.3 in Appendix 1 of this document around the entire building or structure	Doesn't comply at present-will be able to comply when cleared	

5.2. CONSTRUCTION STANDARDS

5.2.1 Construction and compliance with Table 7.4a in Section 7 of the PBP 2019. The construction of the new dwelling complies with the above table (and A1.12.5) with no BAL required as it will be 50m or more from the grassland vegetation.

5.2.2. Construction and compliance with Table 6.8a in Section 6 of the PBP 2019.

Performance Criteria	Acceptable Solutions	Compliance	Comments
Variation:			
Bed and breakfast and farm stay: the proposed building can withstand bush fire attack in the form of wind, embers, radiant heat, and flame contact.	construction is applied in accordance with Appendix 1 of PBP.	Doesn't currently comply.	The proposed tourist accommodation consists of two existing buildings – a dwelling and a shed. The construction of both buildings will require upgrading to comply with appendix 1 of PBP 2019. Refer to recommendations below.

5.3 LANDSCAPING

5.3.1 Landscaping and compliance with Table 7.4a in Section 7 of the PBP 2019 The new dwelling does not need to comply with the above table as no further bushfire measures are required for its development under Clause 7.9 of the PBP 2019.

5.3.2 Landscaping and Compliance with Table 6.8a in Section 6 of the PBP 2019.

Performance Criteria	Acceptable Solutions	Compliance	Comments
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	Able to comply.	

5.4 ACCESS

5. 4 1 Access and compliance with Table 7.4a in Section 7 of the PBP 2019

The new dwelling does not need to comply with the above table as no further bushfire measures are required for its development under Clause 7.9 of the PBP 2019.

5.4.2 Access and compliance with Table 6.8b in Section 6 of the PBP 2019

Performance Criteria	Acceptable Solutions	Compliance	Comments
Variation: Bed and breakfast and farm stay:	access is provided in accordance with the property access	Able to comply	The tourist accommodation is to be developed on an existing rural property that contains an existing rural dwelling. The existing access to the property is

Fig. Cal. C		T	intermed off or exist.
Firefighting vehicles are provided with safe, all-weather access to structures.	requirements of Table 5.3b.		informal off an existing rural (gravel) road (Pine Brush Rd – a no through road). The property does have an existing, unformed, crown road going through it. Refer to plans. From the point of the Pine Brush Rd access driveway to the tourist accommodation is approx. several kilometres, some of which are through forest vegetation. No secondary access exists. Refer to plans in the appendix.
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); bridges and causeways are to clearly indicate load rating.	Able to comply	A recommendation has been placed below.
there is appropriate access to water supply.	hydrants are located outside of parking reserves and road carriageways to ensure accessibility to reticulated water for fire suppression; hydrants are provided in accordance with the relevant clauses of AS 2419.1:2005; and there is suitable access for a Category 1 fire appliances to	Able to comply	There are no hydrants – a recommendation has been placed below regard access to water supply.

	within 4m of the static water supply where no reticulated supply is available there are two way	Not able to	The existing Pine Brush Rd is not
perimeter access roads are designed to allow safe access and egress for firefighting vehicles while occupants are evacuating as well as providing a safe operational environment for emergency service personnel during firefighting and emergency management on the interface	sealed roads; minimum 8m carriageway width kerb to kerb; parking is provided outside of the carriageway width; hydrants are to be located clear of parking areas; there are through roads, and these are linked to the internal road system at an interval of no greater than 500m; curves of roads have a minimum inner radius of 6m; the maximum grade road is 15 degrees and average grade of not more than 10 degrees; the road crossfall does not exceed 3 degrees; and a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches, is provided	comply	sealed. Nor do hydrants exist. No through roads. No parking areas
	carriageway width kerb to kerb;	Able to comply	The existing Pine Brush Rd only services this property. In a bushfire

non norimotor	parking is provided	emergency there should only be a small
non-perimeter	outside of the	
access roads		volume of traffic.
are designed	carriageway width;	
to allow safe	hydrants are	
access and	located clear of	
egress for	parking areas;	
_	there are through	
firefighting	roads, and these	
vehicles while	are linked to the	
occupants are	internal road	
evacuating.	system at an	
	interval of no	
	greater than 500m;	
	curves of roads	
	have a minimum	
	inner radius of 6m;	
	the maximum	
	grade road is 15	
	degrees and	
	average grade of	
	not more than 10	
	degrees; the road	
	crossfall does not	
	exceed 3 degrees;	
	and a minimum	
	vertical clearance	
	of 4m to any	
	overhanging	
	obstructions,	
	including tree	
	branches, is	
	provided	
	·	

5.5 WATER SUPPLY

5.5.1 Water supply and compliance with Table 7.4a in Section 7 of the PBP 2019 The new dwelling does not need to comply with the above table as no further bushfire measures are required for its development under Clause 7.9 of the PBP 2019.

5.5.2 Water supply and compliance with Table 6.8c of PBP 2019

Performance criteria	Acceptable Solutions	Compliance	Comments
an adequate water supply for firefighting purposes	reticulated water is to be provided to the development, where available; or a 10,000	Able to comply	No reticulated water supply is available. A 20000L static water

is installed and maintained	litres minimum static water supply for firefighting purposes is provided for each occupied building where no reticulated water is available.		supply for firefighting purposes is to be installed. See recommendation listed below.
water supplies are located at regular intervals. the water supply is accessible and reliable for firefighting operations	fire hydrant spacing, design and sizing comply with the relevant clauses of AS 2419.1:2005; hydrants are not located within any road carriageway; and reticulated water supply to SFPPs uses a ring main system for areas with perimeter roads.	n/a	No hydrants.
flows and pressure are appropriate	fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005.	n/a	No hydrants.
the integrity of the water supply is maintained	all above-ground water service pipes external to the building are metal, including and up to any taps.	Able to comply	A recommendation has been placed below.
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; 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; a hardened	Able to comply	A recommendation has been placed below.

ground surface for truck access is supplied within 4m of the access hole; aboveground 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 underground tanks are clearly marked, all exposed water pipes external to the building are metal, including any fittings; where pumps are provided, they are a minimum 5hp or 3kW petrol or diesel-powered pump, and are shielded against bush fire attack; Any hose and reel for firefighting connected to the pump shall be 19mm internal diameter; and fire hose reels are constructed in accordance with AS/NZS 1221:1997 Fire hose reels, and installed in accordance with the relevant clauses of AS 2441:2005 Installation of fire hose reels.

5.6 ELECTRICITY

5.6.1 Electricity and Compliance with Table 7.4a of the PBP 2019

The new dwelling does not need to comply with the above table as no further bushfire measures are required for its development under Clause 7.9 of the PBP 2019.

5.6.2 Electricity and compliance with Table 6.8c in Section 6 of the PBP 2019.

Performance criteria	Acceptable Solutions	Compliance	Comments
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, electrical transmission lines are proposed as follow: lines are installed with short pole spacing (30m), unless crossing gullies, gorges, or riparian areas; and no part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 Guideline for Managing Vegetation Near Power Lines	Able to comply	Should new electricity service be installed to the tourist accommodation a recommendation has been placed below.

5.7 GAS

5.7.1. Gas service and compliance with Table 7.4a in Section 7 of the PBP 2019 The new dwelling does not need to comply with the above table as no further bushfire measures are required for its development under Clause 7.9 of the PBP 2019.

5.7.2. Gas service and compliance with Table 6.8c in Section 6 of the PBP 2019

Performance Criteria	Acceptable Solutions	Compliance	comments
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; connections to and from	Able to comply	Should new gas installation be installed to the tourist accommodation buildings a recommendation has been placed below.

gas cylinders are metal; if gas	
cylinders need to be kept close	
to the building, safety valves	
are directed away from the	
building and at least 2m away	
from any combustible material,	
so they do not act as a catalyst	
to combustion; polymer	
sheathed flexible gas supply	
lines to gas meters adjacent to	
buildings are not to be used;	
and above-ground gas service	
pipes external to the building	
are metal, including and up to	
any outlets	

5.8 EMERGENCY MANAGEMENT

5.8.1. Emergency Management and compliance with Table 7.4a in Section 7 of the PBP 2019

The new dwelling does not need to comply with the above table as no further bushfire measures are required for its development under Clause 7.9 of the PBP 2019. The dwelling will however form a part of the Bushfire Emergency Management and Evacuation Plan for the Tourist Accommodation.

5.8.2. Emergency Management and compliance with Table 6.8c in Section 6 of the PBP 2019

Performance Criteria	Acceptable Solutions	Compliance	Comments
a Bush Fire Emergency Management and Evacuation Plan is prepared	Bush Fire Emergency Management and Evacuation Plan is prepared consistent with the: The NSW RFS document: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan NSW RFS Schools Program Guide Australian Standard AS 3745:2010 Planning for	Able to comply	A bushfire emergency management and evacuation plan are to be prepared prior to occupation of the buildings. A recommendation has been placed below.

emergencies in facilities; and Australian Standard AS 4083:2010 Planning for emergencies – Health care facilities (where applicable). the Bush Fire Emergency Management and Evacuation Plan should include planning for the early relocation of occupants. Note: A copy of the Bush Fire **Emergency Management and** Evacuation Plan should be provided to the Local **Emergency Management** Committee for its information prior to occupation of the development.

CONCLUSION AND RECOMMENDATIONS.

This development which is to comprise of Tourist Accommodation and a new dwelling can comply with the provisions of Sections 6 & 7, of the document, Planning for Bushfire Protection (RFS,2019), subject to the recommendations below. These recommendations are: -

1.The APZs listed below are required to be implemented around the existing dwelling and shed (Tourist Accommodation) in accordance with Table 4-1 in the above report. Asset Protection Zones (APZ) – The APZ provides space and reduced fuel loads to ensure radiant heat levels at the buildings are below critical limits and to prevent direct flame contact.

The APZ is the distance from the external wall of the habitable building (existing dwelling and shed) to the unmanaged vegetation line to the north, east, south, and west. The shortest distance from the building to the unmanaged vegetation line has been identified to be:

- 29m to the North.
- 24m to the east.
- 29m to the west.
- 24m to the south

- 2. A minimum 50m APZ shall be applied around the new dwelling. That is the grass surrounding the new dwelling should be managed and maintained to a height of 100mm in accordance with the provisions of Appendix 4 of the Planning for Bushfire Protection 2019.
- 3. The existing dwelling (tourist accommodation) shall also be upgraded to improve ember protection. This shall be achieved by enclosing all openings (excluding roof tile spaces) or covering openings with a non-corrosive metal screen mesh with a maximum aperture of 2mm. Where applicable, this includes any sub floor areas, openable windows, vents, weepholes, and eaves. External doors are to be fitted with draft excluders.
- 4. The existing shed is to be upgraded to BAL29 in accordance with the provisions of Table 6.8a of the Planning for Bushfire Protection 2019 and AS 3959 2018.
- 5. Vehicular Access to the property and the Tourist Accommodation Access standards provide for emergency evacuation and firefighting operations.

Access to the property and to the proposed Tourist Accommodation is required to comply with the provisions of Table 5.3b in Section 5 of the Planning for Bushfire Protection 2019.

6. Water Supply to the Tourist Accommodation— A separate water supply is required for firefighting operations.

An assessment of the existing water supply has identified that reticulated water is NOT available. Where both reticulated water and associated hydrants are not available, a 20,000L static water supply that meets the following requirements is to be provided:

- A connection for firefighting purposes is located within the IPA or non-hazard side away from the structure; 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.

- Above-ground tanks are manufactured form concrete or metal.
- Raised tanks have their stands constructed form non-combustible material or bush fire-resisting timber (A3959-2018 (Appendix F),
- Unobstructed access can always be provided,
- All exposed water pipes external to the building are metal, including any fittings,
- Where pumps are provided, they are a minimum 5hp or 3Kw petrol or dieselpowered pimp, and are shielded against bush fire attack; any hose and reel for firefighting connected to the pump shall be 19mm internal diameter, and
- Fire hose reel are constructed in accordance with AS/NZS 1221:1997 and installed in accordance with the relevant clauses of AS 2441:2005.
- 7. Electricity Services to the Tourist Accommodation—The installation of any new electricity seeks to limit the possibility of igniting the surrounding bushland. Transmission lines are to be placed underground. If placing them underground is not practical, then overhead transmission lines are to:
 - Be installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas, and
 - No part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 – Guideline for Managing Vegetation Near Power Lines.
- 8. Gas Services to the Tourist Accommodation—The location and design of gas services will not lead to the ignition of surrounding buildings or the fabric of buildings. The provision of gas requires that:
 - Reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities,
 - Metal piping is used,
 - All fixed gas cylinders are kept clear of all flammable materials to 10m and shielded on the hazard side,
 - Connections to and from gas cylinders are metal,
 - · Polymer-sheathed flexible gas supply lines are not used, and
 - Above-gas service pipes are metal including and up to any outlets.
- 9. Emergency Evacuation A Bushfire Emergency Management and Evacuation plan is to be prepared for the site prior to the occupation of any buildings. This Bushfire Emergency Management and Evacuation Plan is to be prepared consistent with the:

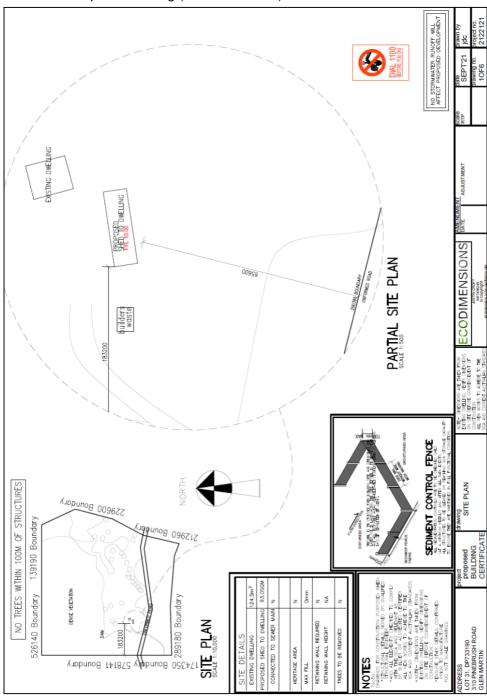
The NSW RFS document: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan NSW RFS Schools Program Guide

Australian Standard AS 3745:2010 Planning for emergencies in facilities; and Australian Standard AS 4083:2010 Planning for emergencies – Health care facilities (where applicable). the Bush Fire Emergency Management and Evacuation Plan should include planning for the early relocation of occupants.

Note: A copy of the Bush Fire Emergency Management and Evacuation Plan should be provided to the Local Emergency Management Committee for its information prior to occupation of the development.

APPENDIX

Figure1. Set of six plans of the Tourist Accommodation Buildings Source: Perception Planning (December 2021)



GENERAL SPECIFICATION UNLY. PLE	GENERAL SPECIFICATION ONLY. PLEASE REFER TO CLIENT / CONSULTANT OR AUSTRALIAN STANDARD TO ENSURE ACCURACY
DRAINAGE / PLUMBING	CONET 4LL DESIDE CHARGE SHARE OCCUMENDED FOR CONSTITUTION OF CONTROL TO JOSÉ PAO DESIDEO TO STRAINFERN REDIREDENTS CONTROL 4LL SIRROFFEE DAILS TO DESIDE TO STRAINFERN STEED FOR STRAINFERN STRAINFER
ELECTRICIAN	ALL WORK TO BE CARRIED OUT TO ASSOCIAZOUS ELECTRICAL WITHLANDY TO HOUSE IS TO BE CARRIED OUT IN ACCORDANCE WITH SAY WIRNO RULES. LICHE PITHOSS, SWITCHES AND OUTLESS TO OWNERS SELECTION AND LOCATION U.N.O.
GLAZIER	ALL CLASS THROUGHOUT IS TO BE OF APPROXID MANUFACIVIE. CLASS TO BE BACK FUTTED, SPRIDGED IND PRINCE OF CILL REDATES AND MEATHER FUTTED. FOR MINDROS & DOORS SHALL BE SLOWG ALLIMINATIO OWNERS SELECTION TO MATCH STILE OF DESTING HOUSE UND PROVIDE, APPROVED FLASHING UNDER APPROVED. AND PER EACH WINDOW FRANCE.
PAINTER WHERE REQUIRED	ALL PANT COLOURS & PNIDHES TO OWNER'S SELECTION ALL PANT TO BE SUPPLED BY A REPUTBLE WANEATHINER. ALL PANT TO BE APPLED IN ACCORDANCE WITH MANUFACTUREY'S SPECHED-TRONAL SURFACES SHALL BE PREPARED PROPERLY.
GENERAL WHERE REDURED	MANIFOLINES ON ALL BRICKHORK AT A LEDEL NOT HERBY THAN THE BUTTOM OF RLORG REMERS, PRODUE A CONTROL OS RAN OF PROPER MALE AND ENGAGE HERBY AND PLACE BUILDS AND PLACE BUILDS AND PLACE BUILDS AND THE PRODUCES AND THE PROPER WALLS FOR THE FOR THE PRODUCES AND THE PROPER WALLS FOR THE FOR THE PROPER WALLS FOR
TILELAYER WHERE REQUIRED	CORES PLOSO OF GATHOROW, TOLLETS AND LAUNDRY AND OTHERS MEETS INDICATED ON FIX TILES TO SUFFICES ORRE SUFFICES ORRESSAFINED MEETS AND OFFICE WATER WITH SELECTED TILES SET TO AN APPROVED PLAN, WHEN FAING TO BRICKHOMY USE 21 SAND/CEDENT
TIMBER	4L THREE CONSTRUCTION TO RE IN ACCORDANCE WITH AS 1684.2—2010 "NATIONAL THREES FRANKING CODE" 4LL WORKNAMOSHIP & NATIONAL SHALL COUNTY WITH SALL INFEST SHALLOON ON SALL THREE SHALL OF FRANKING CODE AS APPLICABLE. THREES SHALL RE FIRE OF CREEKS AT JOIN'S.
DESIGN WINDSPEED	(IN ACCORDANCE WITH AS170 PART-WHO LIZA FOR HOUSING) WIND CLASSIFICATION (PROVINCE I.I.) NSW THERE FEMAND CODE) MINE MINIMAL Z BRACKS UNITS EACH CYTERIAL WALL BRACKS LOCATIONS WAY BE WRIED PROMISING MINIMAN NUMBERS ARE MANTANED. THE A OR THEE B IN ACCORDANCE WITH ASTERIC OR NSW THEEP FRANNO MANUAL.
CONCRETE	ALL NORMANCHE AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600, CONCRETE CULTUP SHALL BE AS FOLLOWS— ALL NORMAN ALL ROOMED BY THE ALLES ADMINISTRATION OF THE PROPERTY OF THE ACCORDANCE AND THE SECTION AFT L'S OF PRINCE BY THE ALLES ADMINISTRATION OF THE SECTION AFT L'S ALL CONCRETE TO BE FACED IN ACCORDANCE WITH SECTION 19 OF SECTION AFT AND THE SECTION AFT L'S AS 1302 — REPRESENCE BARRES ELECTRON 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO BE FACED IN ACCORDANCE WITH SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO BE FACED IN ACCORDANCE WITH SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO BE FACED IN ACCORDANCE WITH SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO BE FACED IN ACCORDANCE WITH SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO BE FACED IN ACCORDANCE WITH SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO BE FACED IN ACCORDANCE WITH SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO BE FACED IN ACCORDANCE WITH SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO BE FACED IN ACCORDANCE WITH SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO BE FACED IN ACCORDANCE WITH SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO BE FACED IN ACCORDANCE WITH SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO BE FACED IN ACCORDANCE WITH SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO BE FACED IN ACCORDANCE WITH SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO BE FACED IN ACCORDANCE WITH SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO BE FACED IN ACCORDANCE WITH SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO BE FACED TO SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO SECTION 10 AS 3600 CONCRETE SURFACED TS— ALL CONCRETE TO SECTION 10 AS 3600 CONCRET
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BRICKWORK WHERE REDUIED	ALL MACHINER CONSTRUCTION AND WATERALS SHALL BE IN ACCORDANCE WITH AS 3700, BRIDGS USED IN LIADS DEPARCE WALLS SHALL HAVE A WARRAN CONSTRUCTION AND WATERALS SHALL BE CAREASHOTTON AN A 300 SHALL BE FERBER FREEDED. A 20 SASSURATE AND INTEREST SHALL WIT DESIGN OF 11 ALL THE AND HART A WARRAN CONFESSION STEEL AND BE LAND OF 11 AT A 300 SHALL BE FERBER FREEDED. A 20 SASSURATE AND BE CONFIDENCE AND TO 11 AT A 300 SHALL AND SHALL SHA
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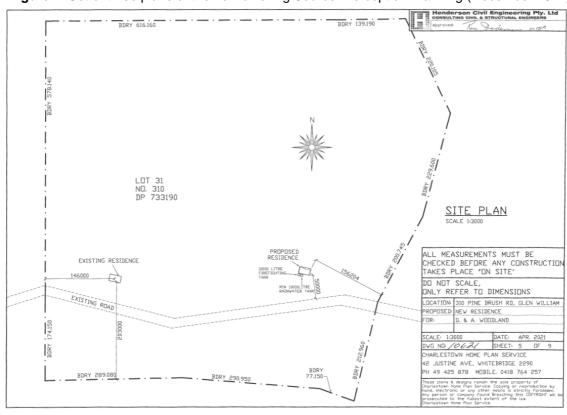
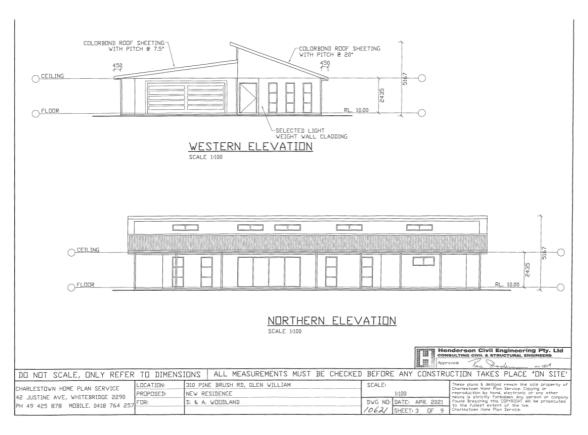
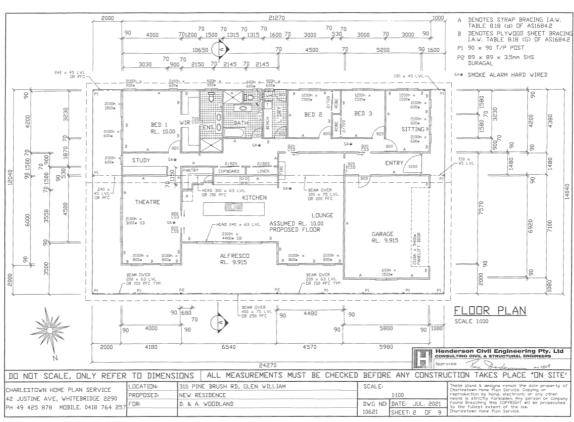


Figure 2. Set of three plans of the new dwelling Source: Perception Planning (December 2021)





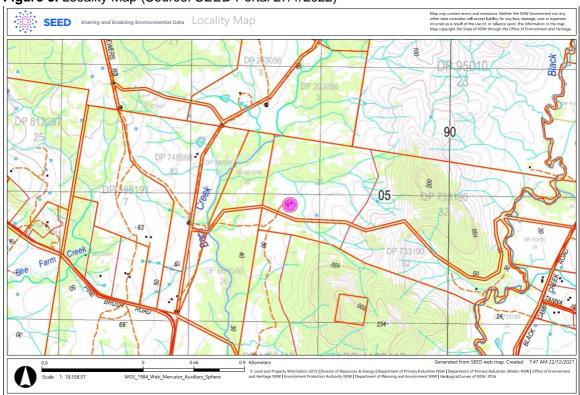
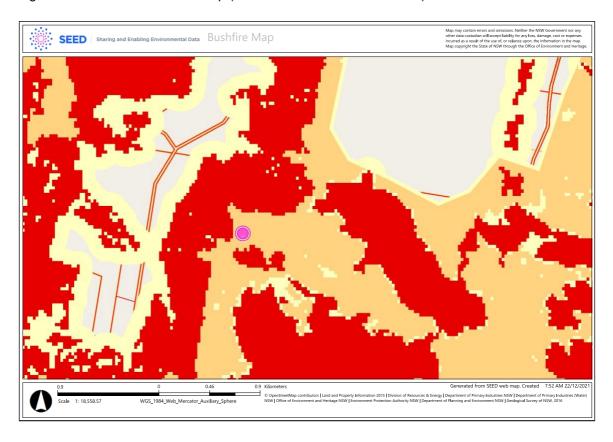


Figure 3. Locality Map (Source: SEED Portal 27/1/2022)





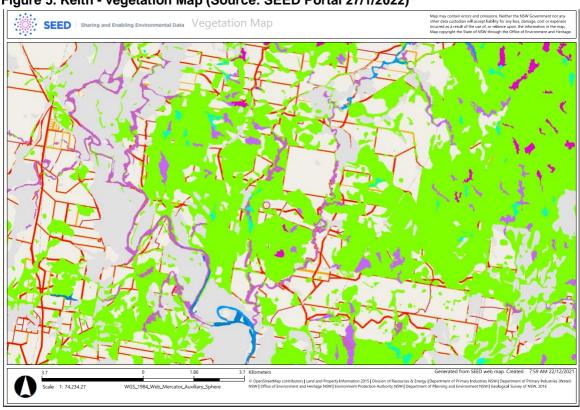


Figure 5. Keith - vegetation Map (Source: SEED Portal 27/1/2022)



