

Bushfire Threat Assessment

McCloy Group

Part Lot 4 DP 844371 and Part Lot 1 DP 1018270
Bonny Hills NSW

October 2021





Bushfire Threat Assessment

Part Lot 4 DP 844371 and Part Lot 1 DP 1018270 Bonny Hills NSW

Kleinfelder Document Number: NCA21R129079

File Name: 20221449 Bonny Hills SCC

Project No: 20221449

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Prepared for:

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Please Note:

This report is prepared in accordance with current accepted practice as described in the NSW Rural Fire Service Guide *Planning for Bushfire Protection*, 2019. AS 3959–2018 Construction of buildings in bushfire-prone areas, and the National Construction Code (NCC).

This report is not an insurance policy. Owing to the unpredictable nature of bushfires and of weather conditions at the time of a bushfire, this report cannot be taken as a warranty that the recommended bushfire mitigation measures will protect the property from damage in every possible bushfire event. Ultimately, the onus is on the land owner to accept the risks associated with development on the site in light of the identified bushfire threat. A full statement of limitations is attached in Appendix 2.

Document Control:

Version	Description	Date	Author	Technical Reviewer	Peer Reviewer
1.0	Draft For Client Review	16 August 2021	Tony Hawkins	Darren Holloway	Jake Brown
2.0	Draft For Client Review	27 October 2021	Tony Hawkins	Darren Holloway	Jake Brown
3.0	Draft For Client Review	28 October 2021	Tony Hawkins	Darren Holloway	Jake Brown
4.0	Final	3 November 2021	Tony Hawkins BPAD 48592 	Darren Holloway	Jake Brown

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EXECUTIVE SUMMARY

Aspect	Details
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Assessor	Tony Hawkins BPAD 48592
Report	Bushfire Threat Assessment
Client	McCloy Group
Client Contact Details	PO Box 2214 Dangar NSW 2309
Site Address	Part Lot 4 DP 844371 and Part Lot 1 DP 1018270 Bonny Hills NSW
Local Government Area	Port Macquarie - Hastings Council
Fire Danger Index Area	80
Bushfire Prone Land	Yes
Source Methodology/s	NSW Rural Fire Service (2019), Planning for Bushfire Protection Guidelines Australian Standards 3959-2018: Construction of Buildings in Bushfire-Prone Areas. State Environmental Planning Policy (Housing for Seniors or People with A Disability) 2004
Document Date	27 October 2021
Document Number	NCA21R129079
Site plans attached	Yes



GLOSSARY

APZ	Asset Protection Zone
BTA	Bushfire Threat Assessment
BoM	Bureau of Meteorology
FRNSW	Fire and Rescue New South Wales
NSW RFS	New South Wales Rural Fire Service



TABLE OF CONTENTS

EXECUTIVE SUMMARY	III
GLOSSARY	IV
1 INTRODUCTION.....	6
1.1 SCOPE OF ASSESSMENT	6
1.2 SITE ASSESSMENT METHODOLOGY.....	9
1.3 LEGISLATION.....	9
1.4 PLANNING POLICIES AND GUIDELINES	9
2 SITE DESCRIPTION.....	10
2.1 LOCATION AND SURROUNDING LAND USE	10
2.2 FIRE WEATHER.....	10
2.3 WATER SUPPLY AND SERVICES	10
2.4 ACCESS AND EGRESS.....	10
2.5 ENVIRONMENTAL.....	10
3 BUSHFIRE ATTACK LEVEL ASSESSMENT	11
3.1 BUSHFIRE HAZARD (VEGETATION)	11
3.2 SLOPE ASSESSMENT.....	11
3.3 ASSET PROTECTION ZONES (APZ).....	12
3.4 CONSTRUCTION STANDARDS.....	12
3.5 EMERGENCY MANAGEMENT	12
4 COMPLIANCE SUMMARY	15
4.1 AIMS AND OBJECTIVES OF PBP 2019.....	15
5 CONCLUSION	18
6 REFERENCES.....	19
APPENDIX 1 SITE PLANS.....	20
APPENDIX 2 STATEMENT OF LIMITATIONS	21



1 INTRODUCTION

Under the Rural Fires and Environmental Assessment Legislation Amendment Act 2002 (amends the Environmental Planning and Assessment Act 1979) local councils are required to ensure that all developments on bushfire prone lands conform to documented bushfire protection specifications.

The following Bushfire Threat Assessment has been prepared for the proposed Seniors Living development of land located at Part Lot 4 DP 844371 and Part Lot 1 DP 1018270 Bonny Hills NSW (the 'site').

1.1 SCOPE OF ASSESSMENT

The proposal for a Seniors Living development is classified as a Special Fire Protection Purpose (SFPP) by Section 100b of the Rural Fires Act 1997. Section 100b requires the issue of a Bushfire Safety Authority by the NSW Rural Fire Service (RFS) for prescribed SFPP developments. To support the application for a Bushfire Safety Authority, assessment criteria described in Section 44 of the Rural Fire Regulation 2013 (NSW RFS 2013) must be addressed.

The site is in the Port Macquarie - Hastings Local Government Area (LGA) (**Figure 1**). The NSW Planning Portal Bushfire Prone Land Map (2021) identifies the site to be affected by bushfire prone vegetation (**Plate 1**).

The site is currently zoned RU1: Primary Production under the Port Macquarie Hastings Local Environment Plan 2011 (**Plate 2**).

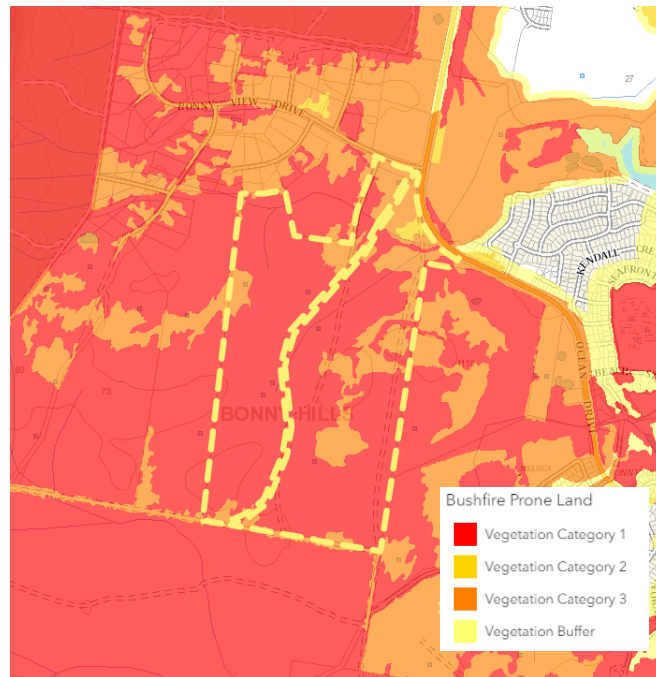


Plate 1: Bushfire Prone Land Map. NSW Planning Portal 2021

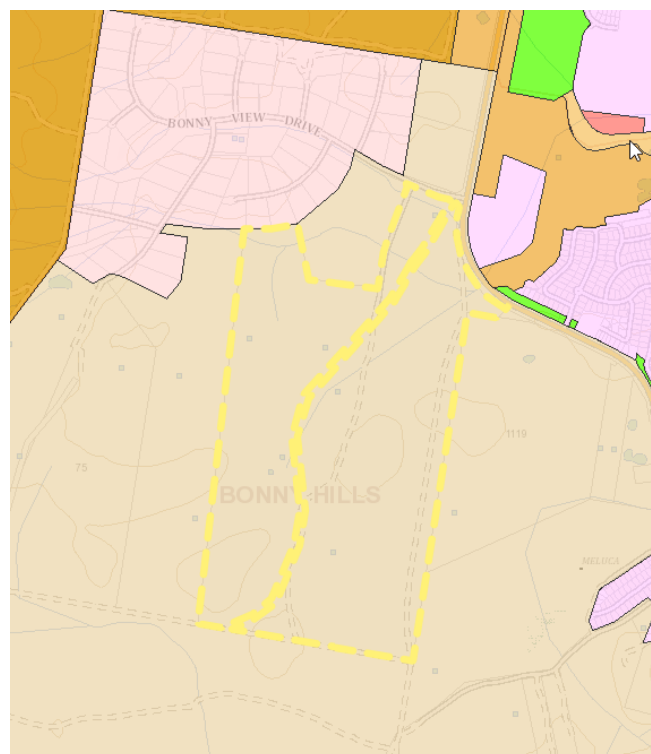


Plate 2: Land Zoning, NSW Planning Portal 2021





1.2 SITE ASSESSMENT METHODOLOGY

The site assessment methodology used to determine the level of bushfire attack for this development has been sourced from Appendix 1 of the NSW RFS Document *Planning for Bushfire Protection 2019* (PBP).

1.3 LEGISLATION

Section 100B of the *Rural Fires Act 1997* (RF Act) states that the NSW RFS can issue a Bushfire Safety Authority (BFSA) approval provided the development meets certain requirements and standards. A BFSA authorises development to the extent that it complies with standards regarding setbacks (to mitigate radiant heat), provision of water supply, emergency management and other matters considered by the Commissioner to be necessary to protect persons, property or the environment from danger that may arise from a bushfire. A BFSA requires a bushfire assessment to be prepared in accordance with Clause 44 of the Rural Fires Regulation 2013, which specifies the information requirements for consideration of a BFSA under section 100B of the RF Act. This section of the RF Act has been considered in preparing this report.

1.4 PLANNING POLICIES AND GUIDELINES

1. NSW RFS Document; *Planning for Bushfire Protection 2019 (PBP 2019)*;
2. Australian Standards AS3959-2018;
3. The National Construction Code (NCC);
4. The provisions of Port Macquarie – Hastings LEP and DCP apply in respect of the land.
5. The Rural Fires Act 1997, and
6. The Rural Fire Regulation 2013.



2 SITE DESCRIPTION

2.1 LOCATION AND SURROUNDING LAND USE

The site comprises two undeveloped lots, surrounded by residential and rural residential development to the north west, north, and south east. The site is bounded by Bonny View Drive to the north and Ocean Drive to the east. Cleared and managed land is located to the east and the southern aspect is to native bushland.

2.2 FIRE WEATHER

Port Macquarie - Hastings LGA is within the NSW General Fire Area and has a Fire Danger Index (FDI) rating set at 80.

2.3 WATER SUPPLY AND SERVICES

Reticulated water is available at Bonny View Drive. An extension of this water supply will be required to the proposed development.

Water supply provided on the site should achieve the minimum criteria of PBP 2019 Table 6.8c.

The provision of Electrical and Gas services should be compliant with criteria of PBP 2019 Table 6.8c.

2.4 ACCESS AND EGRESS

Access to and within the site is shown in **Figure 2**. All access should achieve the minimum criteria of PBP 2019 Table 6.8b.

2.5 ENVIRONMENTAL

Broad Leaved paperbark – Swamp Mahogany Forest, is mapped as present on the site (DPIE 2014) (**Figure 3**). This mapping will be utilised for the purposes of this report.

No heritage items are identified on the site.



3 BUSHFIRE ATTACK LEVEL ASSESSMENT

The proposed development is not expected to increase the bush fire threat at the site.

3.1 BUSHFIRE HAZARD (VEGETATION)

The bushfire hazard vegetation is located to the north, east, south and west of the site.

The condition and type of vegetation across the site varies between managed land, grassland, riparian buffer areas and remnant forest vegetation.

Vegetation assessment is based on mapping provided by the Department of Planning, Industry and Environment (VIS 4205) and confirmed by a site inspection.

For the purposes of this assessment, vegetation classifications of **Grassland and Forest** have been adopted (**Table 1**).

Table 1: Vegetation Assessment

Aspect	Vegetation	Comments	Classification
North	Grassland/Managed land	Mostly cleared rural residential land with evidence of management	Grassland
East	Grassland/Managed land/Riparian buffer	Mostly cleared rural residential land with evidence of management	Grassland
South	Forested wetlands/Wet Sclerophyll Forest	Broad Leaved paperbark – Swamp Mahogany Forest/ Northern Hinterland Wet Sclerophyll Forest	Forest (Coastal Swamp Forest)
West	Forested Wetlands/Wet Sclerophyll Forest	Broad Leaved paperbark – Swamp Mahogany Forest/ Northern Hinterland Wet Sclerophyll Forest	Forest (Coastal Swamp Forest)

3.2 SLOPE ASSESSMENT

The effective slopes are slopes that affect the behaviour of a bushfire. Slopes impact the rate of fire spread, flame lengths and fire intensity.

Only the effective slopes under vegetation to a distance of 100 metres have been assessed as no further development has been proposed.

Slopes have been assessed using 1m contours provided by the ELVIS LiDAR website and confirmed onsite using a Suunto inclinometer.

Measured slopes are detailed in **Table 2**.



Table 2: Slope Assessment

Aspect	Slope
North	2.7° Upslope (Classified as Flat to upslope)
East	0.41° Downslope (Classified as 0 - 5° Downslope)
South	0.40° Upslope (Classified as Flat to upslope)
West	0.55° Upslope (Classified as Flat to upslope)

3.3 ASSET PROTECTION ZONES (APZ)

APZ widths have been calculated using the SFPP guidelines provided by PBP 2019 table A1.12.5 and are detailed in **Table 3**.

Table 3: APZ widths, PBP 2019 Table A1.12.1

Aspect	Slope	Vegetation	SFPP APZ Width
North	Flat to upslope	Grassland	36m
East	0 - 5° Downslope	Grassland	40m
South	Flat to upslope	Forest	67m
West	Flat to upslope	Forest	67m

The recommended APZ widths reflect the aim of maintaining a radiant heat impact of less than 10 kw/m² to the proposed development.

The proposed APZ would be located within the boundaries of land owned by the proponent to the south and west. Where the required APZ extends beyond the site boundary to the north and east, the proposed APZ is located on existing roads and road reserves which are considered permanent infrastructure and compliant with APZ standards.

Where APZ areas are required, they should be constructed and maintained in accordance with the guidelines provided by PBP 2019 Appendix 4.

3.4 CONSTRUCTION STANDARDS

All proposed and future construction on the site should meet the minimum standard of AS3959 – 2018 Chapters 3 and 5 (BAL 12.5).

3.5 EMERGENCY MANAGEMENT

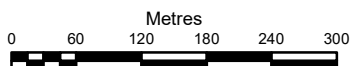
An emergency management and evacuation plan should be prepared and available prior to occupation of the site. The Plan should be consistent with the guidelines provided by the NSW RFS Document; *A Guide to Developing a Bush fire Emergency Management and Evacuation Plan* and the Australian Standard, AS3745:2010 *Planning for emergencies in facilities*.

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Legend

- Proposed Lots
- Access
- APZ
- Contours 1m
- 100m Assessment Area
- 140m Assessment Area
- Lot Boundaries



PROJECT REFERENCE: 20221449

DATE DRAWN: 20/09/2021 14:34 Version 1

DRAWN BY: THawkins

DATA SOURCE:
NSW DFSI - 2019
NearMap - 2021

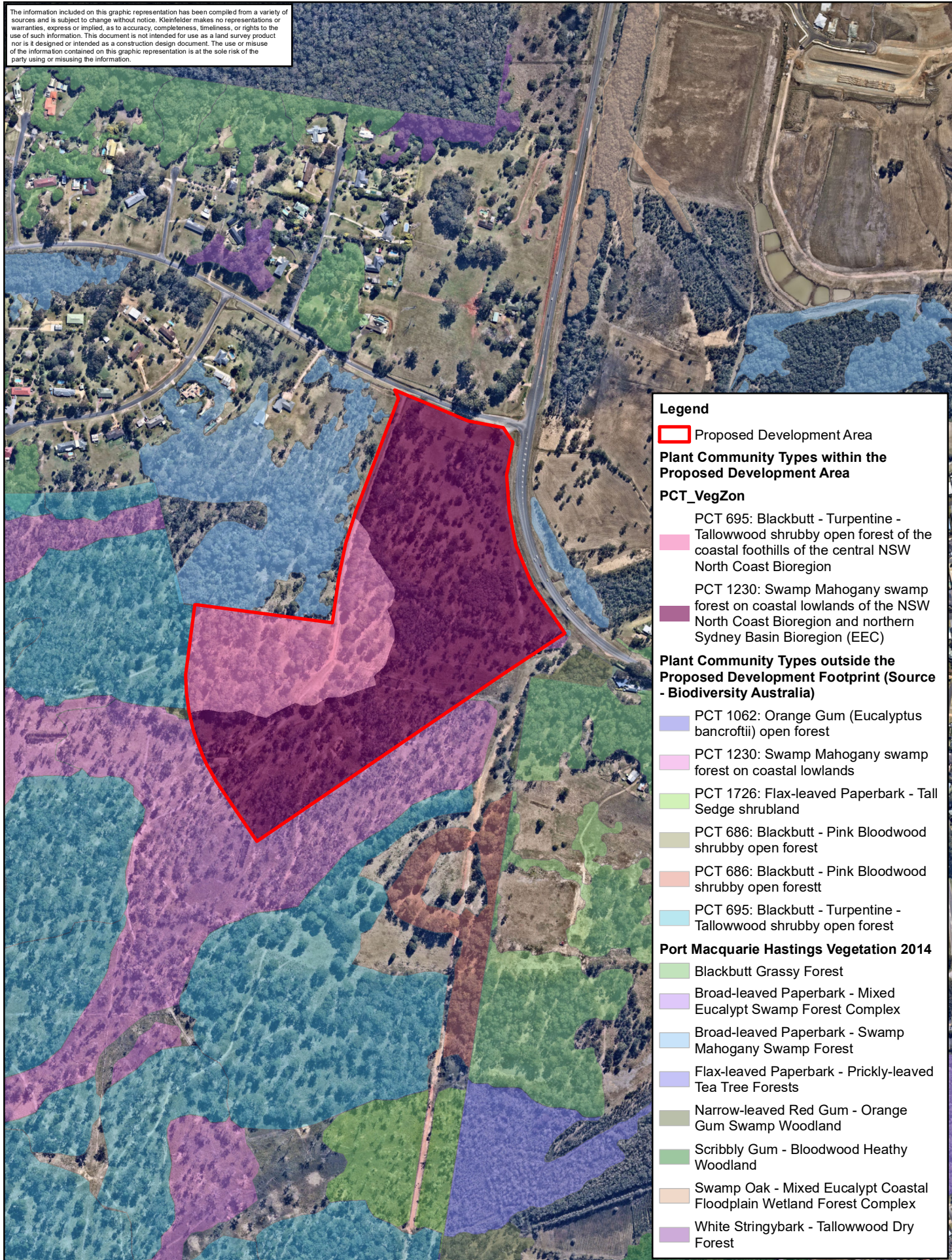
Bushfire Threat Assessment

McCloy Property Group
Lot 4 DP 844371 and Lot 1 DP 1018270
Bonny Hills NSW

FIGURE:

2

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Legend

 Proposed Development Area

Plant Community Types within the Proposed Development Area

PCT_VegZon

- PCT 695: Blackbutt - Turpentine - Tallowwood shrubby open forest of the coastal foothills of the central NSW North Coast Bioregion
- PCT 1230: Swamp Mahogany swamp forest on coastal lowlands of the NSW North Coast Bioregion and northern Sydney Basin Bioregion (EEC)

Plant Community Types outside the Proposed Development Footprint (Source - Biodiversity Australia)

- PCT 1062: Orange Gum (Eucalyptus bancroftii) open forest
- PCT 1230: Swamp Mahogany swamp forest on coastal lowlands
- PCT 1726: Flax-leaved Paperbark - Tall Sedge shrubland
- PCT 686: Blackbutt - Pink Bloodwood shrubby open forest
- PCT 686: Blackbutt - Pink Bloodwood shrubby open forest
- PCT 695: Blackbutt - Turpentine - Tallowwood shrubby open forest

Port Macquarie Hastings Vegetation 2014

- Blackbutt Grassy Forest
- Broad-leaved Paperbark - Mixed Eucalypt Swamp Forest Complex
- Broad-leaved Paperbark - Swamp Mahogany Swamp Forest
- Flax-leaved Paperbark - Prickly-leaved Tea Tree Forests
- Narrow-leaved Red Gum - Orange Gum Swamp Woodland
- Scribbly Gum - Bloodwood Heathy Woodland
- Swamp Oak - Mixed Eucalypt Coastal Floodplain Wetland Forest Complex
- White Stringybark - Tallowwood Dry Forest

Metres
0 25 50 100 150 200 250



PROJECT REFERENCE: 20221149

DATE DRAWN: 11/3/2021 16:07 Version 1

DRAWN BY: JCBrown

DATA SOURCE:

McCloy Management Group - 2021
NSW DFSI - 2020
Nearmap - 2021

Vegetation Mapping

McCloy Project Management Pty Ltd
Lot 4 DP 844371 & Lot 1 DP 1018270

FIGURE:

3





4 COMPLIANCE SUMMARY

4.1 AIMS AND OBJECTIVES OF PBP 2019

Table 4 provides an assessment of the proposed Seniors Living development at Part Lot 4 DP 844371 and Part Lot 1 DP 1018270, Bonny Hills NSW against the aims and objectives of PBP 2019.

Table 4: Planning for Bush Fire Protection (2019) – Aims and Objectives Compliance Summary

1.1 PBP 2019 Aims and Objectives	
Intent:	Complies with PBP (2019)
i. Afford buildings and their occupants protection from exposure to a bush fire	Complies with PBP (2019): YES The provision of APZ setbacks as detailed in Section 3.13 of this report will provide adequate protection from bush fire exposure.
ii. Provide for a defendable space to be located around buildings	Complies with PBP (2019): YES The provision of APZ setbacks as detailed in Section 3.13 of this report will provide adequate protection from bush fire exposure
iii. Provide appropriate separation between a hazard and buildings which, in combination with other measures, minimises material ignition	Complies with PBP (2019): YES The provision of APZ setbacks as detailed in Section 3.13 of this report will provide adequate protection from bush fire exposure
iv. Ensure that appropriate operational access and egress for emergency service personnel and residents is available	Complies with PBP (2019): YES Access provisions as detailed in Section 2.8 of this report will achieve compliance with the requirements of PBP 2019.
v. Provide for ongoing management and maintenance of BPMs	Complies with PBP (2019): YES Maintenance of APZ areas should be in accordance with the recommendations of this report, PBP 2019 Appendix 4 and in perpetuity.
Vi. Ensure that utility services are adequate to meet the needs of firefighters.	Complies with PBP (2019): YES The provision of services as per Section 2.7 of this report will achieve compliance with PBP 2019.
PBP 2019 Performance criteria for SFPP Developments	
Table 6.8a APZ and Landscaping	
Radiant heat levels of greater than 10kW/ m ² (calculated at 1200K) will not be experienced on any part of the building	Complies with PBP (2019): YES The provision of APZ setbacks as detailed in Section 3.13 of this report can achieve this outcome.
APZs are managed and maintained to prevent the spread of a fire towards the building	Complies with PBP (2019): YES Maintenance of APZ areas should be in accordance with PBP 2019 Appendix 4 and in perpetuity
The APZ is provided in perpetuity	Complies with PBP (2019): YES



	The proposed APZ's should be provided in accordance with the recommendations of this report in section 3.13.
APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised	Complies with PBP (2019): YES The effective slope of the area surrounding the site is minimal and unlikely to cause erosion. APZ construction to IPA standard as per Appendix 4 of PBP 2019 will minimise the potential for crown fires.

Table 6.8b Access

Firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation	Complies with PBP (2019): YES Proposed access as per Section 2.8 of this report will achieve compliance with the requirements of PBP 2019.
The capacity of access roads is adequate for firefighting vehicles	Complies with PBP (2019): YES Proposed access as per Section 2.8 of this report will achieve compliance with the requirements of PBP 2019.
There is appropriate access to water supply	Complies with PBP (2019): YES The provision of water supply as detailed in Section 2.7 of this report can achieve compliance with the requirements of PBP 2019.
Perimeter access roads are designed to allow safe access and egress for medium rigid firefighting vehicles while residents are evacuating as well as providing a safe operational environment for emergency service personnel during firefighting and emergency management on the interface	Complies with PBP (2019): YES Proposed access as per Section 2.8 of this report will achieve compliance with the requirements of PBP 2019.
Non perimeter access roads are designed to allow safe access and egress for medium rigid firefighting vehicles while residents are evacuating	Complies with PBP (2019): YES Proposed access as per Section 2.8 of this report will achieve compliance with the requirements of PBP 2019.

Table 6.8c Services

An adequate water supply for firefighting purposes is installed and maintained	Complies with PBP (2019): YES The provision of a water supply as detailed in Section 2.7 of this report will achieve compliance with the requirements of PBP 2019.
Water supplies are located at regular intervals The water supply is accessible and reliable for firefighting operations	Complies with PBP (2018): YES The provision of a water supply as detailed in Section 2.7 of this report will achieve compliance with the requirements of PBP 2019.
Flows and pressure are appropriate	Complies with PBP (2019): YES The provision of a water supply as detailed in Section 2.7 of this report will achieve compliance with the requirements of PBP 2019.
The integrity of the water supply is maintained	Complies with PBP (2019): YES The provision of a water supply as detailed in Section 2.7 of this report will achieve compliance with the requirements of PBP 2019.
	Complies with PBP (2019): YES



Location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings.	The provision of electrical services as detailed in Section 2.7 of this report will achieve compliance with the requirements of PBP 2019
Location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings.	Complies with PBP (2019): YES
	The provision of gas services as detailed in Section 2.7 of this report will achieve compliance with the requirements of PBP 2019
Table 6.8.d Emergency Management Planning	
A Bush Fire Emergency Management and Evacuation Plan is prepared	Complies with PBP (2019): YES
	The provision of an Emergency Management and Evacuation Plan as detailed in Section 3.15 of this report will achieve compliance with the requirements of PBP 2019
Appropriate and adequate management arrangements are established for consultation and implementation of the Bush Fire Emergency Management and Evacuation Plan.	Complies with PBP (2019): YES
	The provision of an Emergency Management and Evacuation Plan as detailed in Section 3.15 of this report will achieve compliance with the requirements of PBP 2019



5 CONCLUSION

The proposal has been assessed against the PBP 2019 performance criteria for a proposed Seniors Living development of land located at Lot 4 DP 844371 and Lot 1 DP 1018270 Bonny Hills NSW). Following the implementation of the recommendations contained within this report the proposal can comply with the specific objectives for Special Fire Purpose Protection developments.

Port Macquarie- Hastings Council may apply the following conditions;

- Asset Protection Zones should be provided surrounding the site to the following widths; North 36 metres, East 40 metres, South 67 metres, and West 67 metres.
- Water supply provided on the site should achieve the minimum criteria of PBP 2019 Table 6.8c.
- All proposed and future construction on the site should meet the minimum standard of AS3959 – 2018 Chapters 3 and 5 (BAL 12.5).
- An emergency management and evacuation plan should be prepared and available prior to occupation of the site. The Plan should be consistent with the guidelines provided by the NSW RFS Document; *A Guide to developing a Bush fire Emergency Management and Evacuation Plan* and the Australian Standard, AS3745:2010 *Planning for emergencies in facilities*.



6 REFERENCES

Australian Standard 3959–2009: Construction of Buildings in Bushfire-Prone Areas. SAI Global

NSW Rural Fire Service (2019). Planning for Bushfire Protection guidelines. Prepared in cooperation with Planning NSW. Retrieved from;
https://www.rfs.nsw.gov.au/__data/assets/pdf_file/0005/130667/Planning-for-Bush-Fire-Protection-2019.pdf

NSW Rural Fire Service. Standards for Asset Protection Zones. Retrieved from;
https://www.rfs.nsw.gov.au/__data/assets/pdf_file/0010/13321/Standards-for-Asset-Protection-Zones.pdf

NSW Government 1997. Rural Fires Act 1997. Retrieved from;
<https://legislation.nsw.gov.au/view/html/inforce/current/act-1997-065#sec.100B>

NSW Government 2013. Rural Fire Regulation 2013. Retrieved from;
<https://legislation.nsw.gov.au/view/whole/html/inforce/current/sl-2013-0488#sec.44>

Department of Planning, Industry and Environment 2014. Port Macquarie Hastings LGA Vegetation and EEC Maps 2014 VIS IDs 4205 and 4206. Retrieved from;
<https://datasets.seed.nsw.gov.au/dataset/8a9fcc75-5f50-4ef1-ae28-6923353b9d44/metaexport/html>



APPENDIX 1 SITE PLANS



APPENDIX 2 STATEMENT OF LIMITATIONS

This report has been prepared by Kleinfelder Australia Pty Ltd (Kleinfelder) and may be used only by the Client and its designated representatives or relevant statutory authorities and only for the purposes stated for this specific engagement within a reasonable time from its issuance, but in no event later than two (2) years from the date of the report.

This work was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions, and recommendations are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no other representation, guarantee, or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

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The findings and conclusions contained within this report are relevant to the conditions of the site and the state of legislation currently enacted in the relevant jurisdiction in which the site is located as at the date of this report.

Additionally, the findings and conclusions contained within this report are made following a review of certain information, reports, correspondence and data noted by methods described in this report including information supplied by the client or its assigns. Kleinfelder has designed and managed the program for this report in good faith and in a manner that seeks to confirm the information provided and test its accuracy and completeness. However, Kleinfelder does not provide guarantees or assurances regarding the accuracy, completeness and validity of information and data obtained from these sources and accepts no responsibility for errors or omissions arising from relying on data or conclusions obtained from these sources.

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