

Bushfire Planning & Design

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Bushfire Hazard Assessment

82 Henry Bayly Drive Mudgee 2850 (Lot 216/-/DP756894).



Project Details			
Assessed as:	Residential Subdivision		
Assessed by	Matthew Noone		
Highest BAL on any facade	BAL-29		
Planning for Bushfire Protection (2019) Compliance	The development conforms to the relevant specification and requirements of Planning for Bushfire Protection (2019). This report has addressed the requirements of Clause 45 of the Rural Fire Regulation (2022).		
Project Description	Three Lot Subdivision.		
Report Number	BR-579523-B		
Date of Issue	16/03/2023	Report Validity:	1 year from date of issue

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82 Henry Bayly Drive Mudgee 2850



16/03/2023

BUSHFIRE RISK ASSESSMENT CERTIFICATION

Development Address	82 Henry Bayly Drive Mudgee 2850.
Parcel number	(Lot 216/-/DP756894).
Development description	Three Lot Subdivision.
Architectural Drawings Reviewed.	Attached to report BR-579523-B.
Assessed Bushfire Attack Level	BAL-29 or lower.
Does the assessment rely on alternate solutions?	No.
Assessed by Matthew Noone BPAD Accreditation Scheme No.	FPAA No. BPAD-PD 25584
Certificate Number:	BR-579523-B

I hereby certify, in accordance with s.4.14 of the Environmental Planning and Assessment Act 1979 that;

1	I am a person recognised by the NSW Rural Fire Service as a qualified consultant in bushfire risk assessment; and
2	Subject to the recommendations contained in the attached Bushfire Risk Assessment Report the proposed development conforms to the relevant specifications and requirements*

* The relevant specifications and requirements being; specifications and requirements of the document entitled Planning for Bush Fire Protection prepared by the NSW Rural Fire Service in co-operation with the Department of Planning and any other document as prescribed by s.4.14 of the Environmental Planning and Assessment Act 1979.

I am aware that the Bushfire Assessment Report, prepared for the above mentioned site is to be submitted in support of a development application for this site and will be relied upon by Council as the basis for ensuring that the bushfire risk management aspects of the proposed development have been addressed in accordance with Planning for Bushfire Protection (2019).

The following have been provided and or included in our assessment.

- ☒ - Bushfire Risk Assessment Report.
- ☒ - Recommendations.
- ☒ - Statement of vegetation impact in relation to APZ.

DATE	ISSUED TO	REV.	Comments
09/03/2023	O’Ryan Geospatial	B	Issued to support Development Application

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Bushfire Planning & Design cannot be held liable for the loss of life or property caused by a bushfire event. This report has considered the relevant planning instruments, bushfire constructions codes and practices applicable at the time of writing. Should additional information be provided after this report has been issued, we reserve the right to review and if necessary modify our report. Bushfire Planning and Design has no control over workmanship, buildings degrade over time and vegetation if not managed will regrow. In addition legislation and construction standards are subject to change. Due to significant variance of bushfire behaviour, we do not guarantee that the dwelling will withstand the passage of bushfire even if this development is constructed to the prescribed standards.

AS3959 (2018) states *“It should be borne in mind that the measures contained in this Standard cannot guarantee that a building will survive a bushfire event on every occasion. This is substantially due to the degree of vegetation management, the unpredictable nature of behaviour of fire, and extreme weather conditions.”*

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This report has been prepared by Matthew Noone trading as Bushfire Planning and Design. Matthew Noone holds a BPAD Level 2 accreditation with the Fire Protection Association of Australia. Under the BPAD accreditation scheme a BPAD Level 2 consultant can provide advice and undertake all types assessments with the exception of alternate solutions. In the event that alternate solution is proposed it will be undertaken outside of our accreditation. Alternate solutions are considered a deviation from the prescribed standards and as per s.4.14 of the Environmental Planning and Assessment Act (1979) are required to be required to be referred to the New South Wales Rural Fire Service (RFS) for review.

This report has been based on our interpretation of Planning for Bushfire Protection (2019), AS3959 (2018) and the methodology for site specific bushfire assessment. As a consultant, our view can be subjective. Our opinions may differ from the opinions provided by you the Client (or Client Representative), the Council, the RFS or another bushfire consultant. The Rural Fire Service (RFS) has a higher authority and can upon their review, increase a nominated BAL-rating or entirely reject a development proposal. Any such recommendations made by the RFS take precedence. Our role is intermediary between our Client (or Client Representative) and the consenting authority. We apply our knowledge of the relevant bushfire protection standards to provide the best possible outcome for our Client (or Client Representative), both from a bushfire safety and financial perspective. Should the RFS modify our recommendations or reject the proposal to which this report relates to we will not be held liable for any financial losses as a result. By using this document, you the Client (or Client Representative) agree to and acknowledge the above statements.

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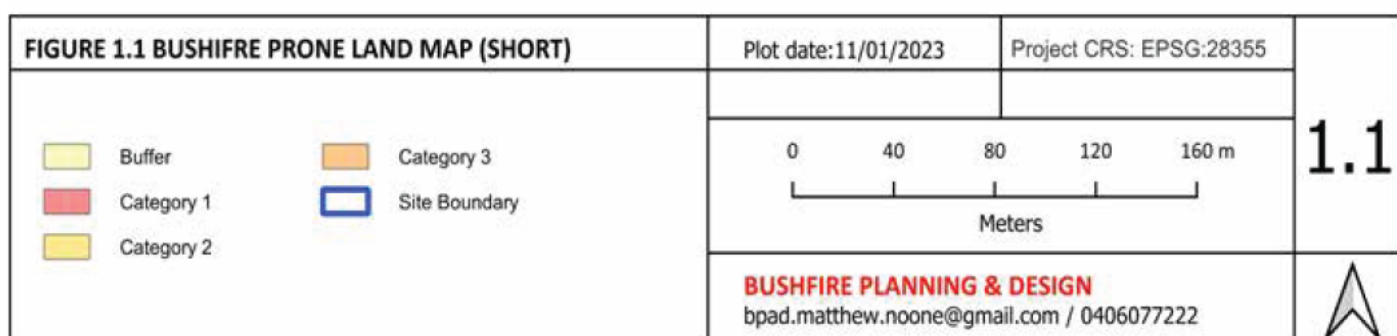
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SECTION 01 - BACKGROUND AND BRIEFING NOTES

1.1 BUSHFIRE PRONE LAND

The subject site whether in whole or part is recorded as bushfire affected on a relevant map certified under Section 10.3 (2) of the Environmental Planning and Assessment Act 1979 (Refer figure 1.1). The development relates to the development of bushfire prone land and therefore must address the legislative requirements stipulated in Section 4.14 of the Environmental Planning and Assessment Act 1979. The development is required to comply with the New South Wales Rural Fire Service document Planning for Bushfire Protection (2019).



1.2 DEVELOPMENT PROPOSAL

The development relates to the subdivision of Lot 216/-/DP756894 into three allotments. The existing dwelling and out buildings will be retained in proposed Lot 1. Proposed Lot 2 and Lot 3 will be developed for a residential purpose. This report relates to the subdivision of the land only.

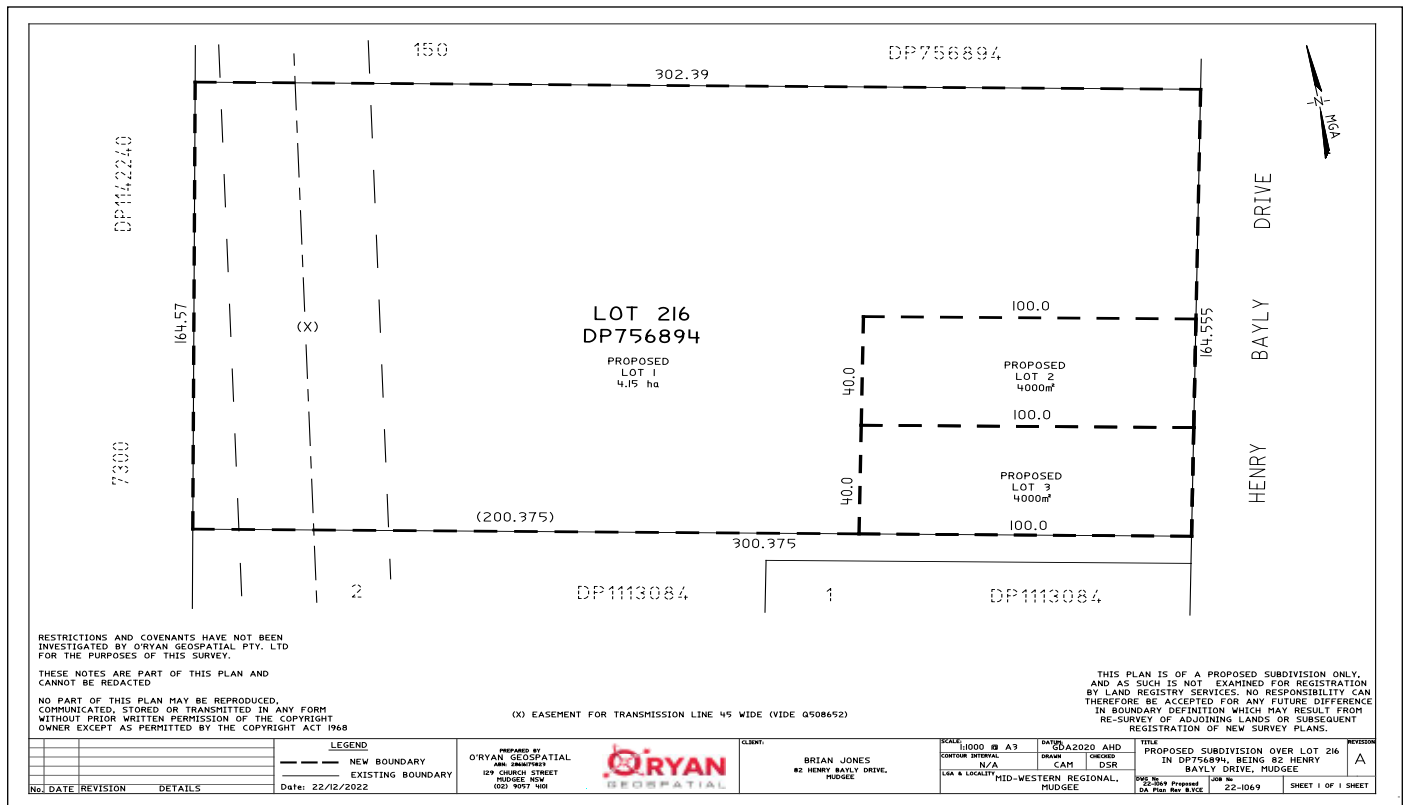


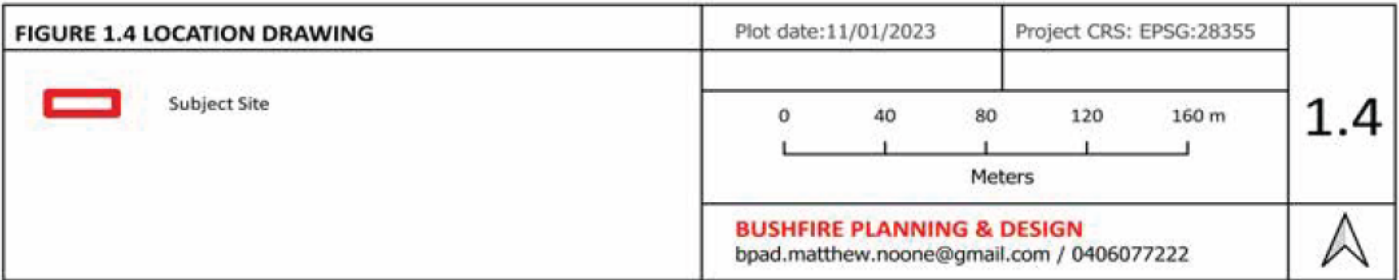
Figure 1.2: Concept Drawing

1.3 REGULATORY FRAMEWORK

The main legislation, planning instruments, development controls and guidelines that are related to this project are as follows; 100B of the Rural Fires Act 1997, Clause 45 of the Rural Fires Regulation 2022, The New South Wales RFS document Planning for Bushfire Protection (PBP 2019) and the National Construction Code (NCC 2019).

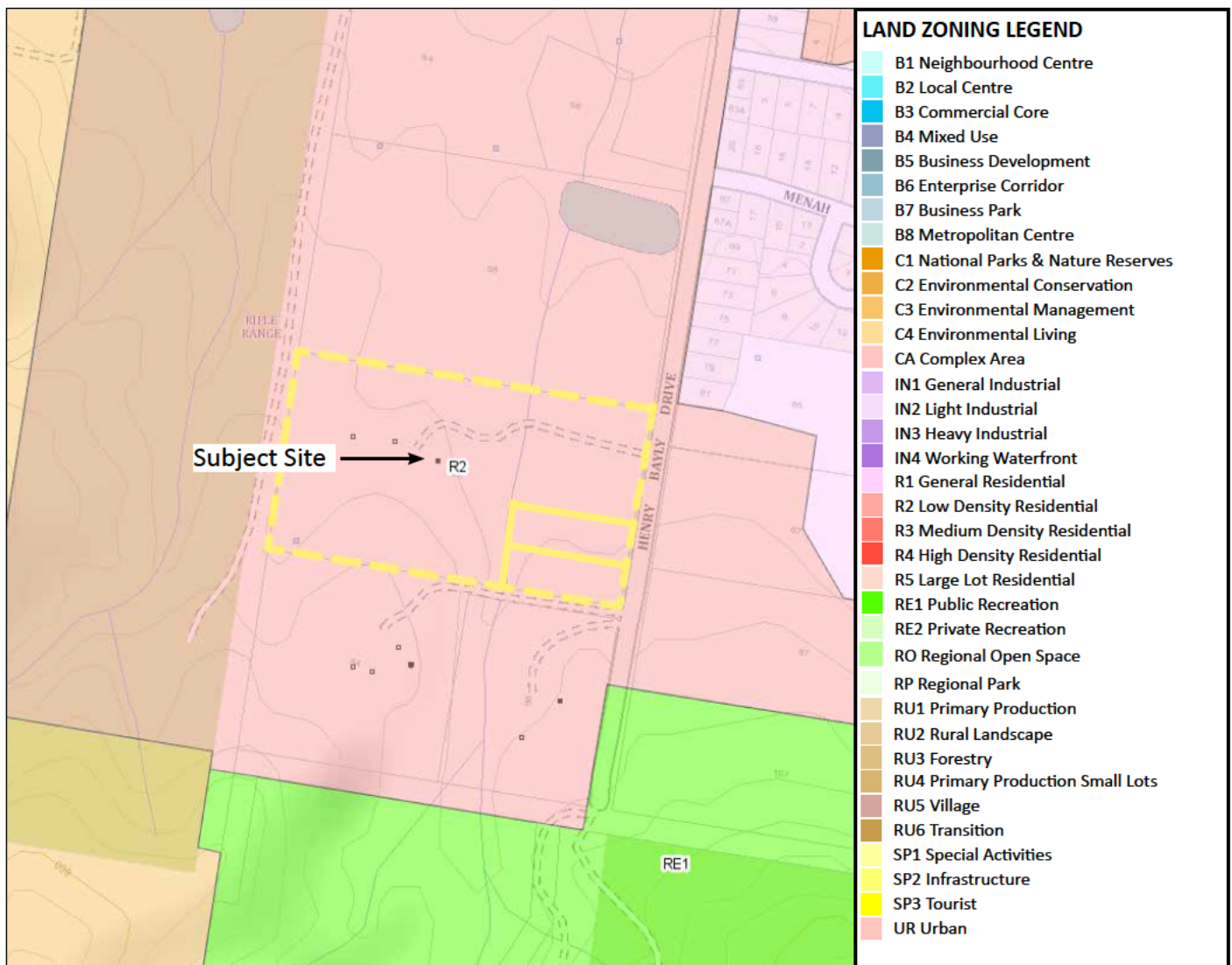
1.4 SITE LOCATION AND DESCRIPTION

The subject site is located in Mudgee which is within the Mid-Western Regional Local Government Area (LGA). The site is accessed from Henry Bayly Drive to the east. An existing dwelling is located on the site. Managed residential dwellings are located within the allotments to the south and east. Grassland is located within the land to the north. The northern half of the site is managed to minimal fuel conditions, particularly in the vicinity of the existing dwelling, out-buildings and driveway. An un-named watercourse is located in the vicinity of the proposed boundary between Lot 1 and new Lot 2 and Lot 3. The un-managed vegetation within the southern half of the site is dominantly a Woodland structure with a prevalence of Cootamundra Wattle (*Acacia baileyana*).



1.5 LAND USE, ZONING AND PERMISSIBILITY

The subject site is zoned R2 Low Density Residential.



1.6 SIGNIFICANT ENVIRONMENTAL FEATURES

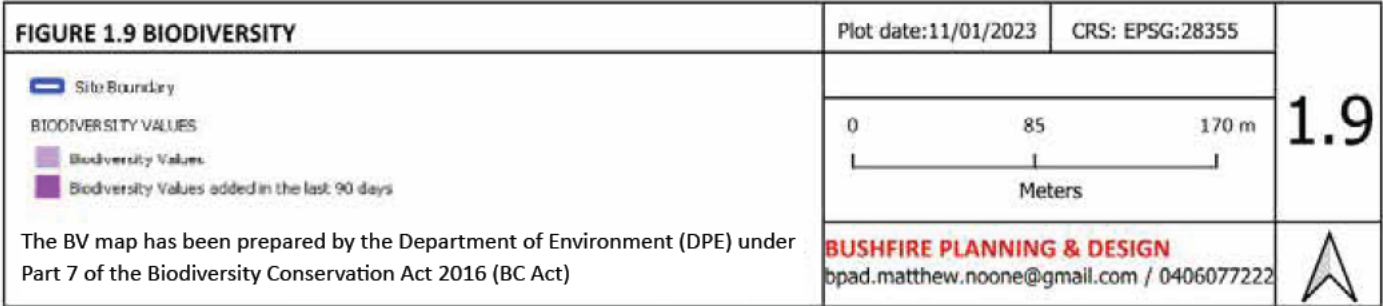
An un-named watercourse is located in the vicinity of the proposed western boundary for Lot 2 and Lot 3.

1.7 DETAILS OF ANY THREATENED SPECIES, POPULATIONS, ECOLOGICAL COMMUNITIES OR CRITICAL HABITATS

The site is mapped (Figure 1.9) by the Department of Planning and Environment (DPE) under Part 7 of the Biodiversity Conservation Act 2016 (BC Act) as having Biodiversity Values (BV). Some vegetation removal is required to satisfy our Asset Protection Zone recommendations however no vegetation removal is required in the BV mapped land (refer Figure A).

1.8 DETAILS OF ABORIGINAL HERITAGE

To our knowledge the site is not associated with any items of Aboriginal heritage.



SECTION 02 - BUSHFIRE ATTACK LEVEL (BAL) ASSESSMENT

2.0 INTRODUCTION

For the purpose of this bushfire assessment, the vegetation is required to be described to a distance of 140m from the boundary and the slope to 100m from boundary. Vegetation type and slope under vegetation are the factors that will significantly affect bushfire behaviour.

‘Research has shown that 85% of buildings are lost in the first 100m from bushland and that ember attack is a significant form of attack on properties’ (RFS 2006).

2.1 SLOPE DETERMINATION

The effective slope has been assessed for a distance of at least 100m from the proposed development. The slope data has been calculated from a 1m LiDAR Digital Elevation Model (DEM). The source data sets have been captured to standards that are generally consistent with the Australian ICSM LiDAR Acquisition Specifications which require a fundamental vertical accuracy of at least 0.30m (95% confidence) and horizontal accuracy of at least 0.80m (95% confidence). The slope arrows indicated in figure A represent the slope calculated across the length of the arrow direct from the digital elevation model. The calculated slope as shown in Figure A has not been manipulated or modified in any way.

2.2 PREDOMINANT VEGETATION CLASS

This assessment includes vegetation both within and external to the site boundaries. Where mixes of vegetation formations are located together, the vegetation formation providing the greater hazard shall be used for the purpose of assessment. The combination of vegetation and slope that yields the worst case scenario shall be used (A1.2 PBP 2019).

Space left intentionally blank.

2.2.1 VEGETATION PHOTOS



Photo 1: Managed land in the vicinity of the existing driveway Lot 1.



Photo 2: Managed land in the vicinity of the existing driveway Lot 1 (looking East).

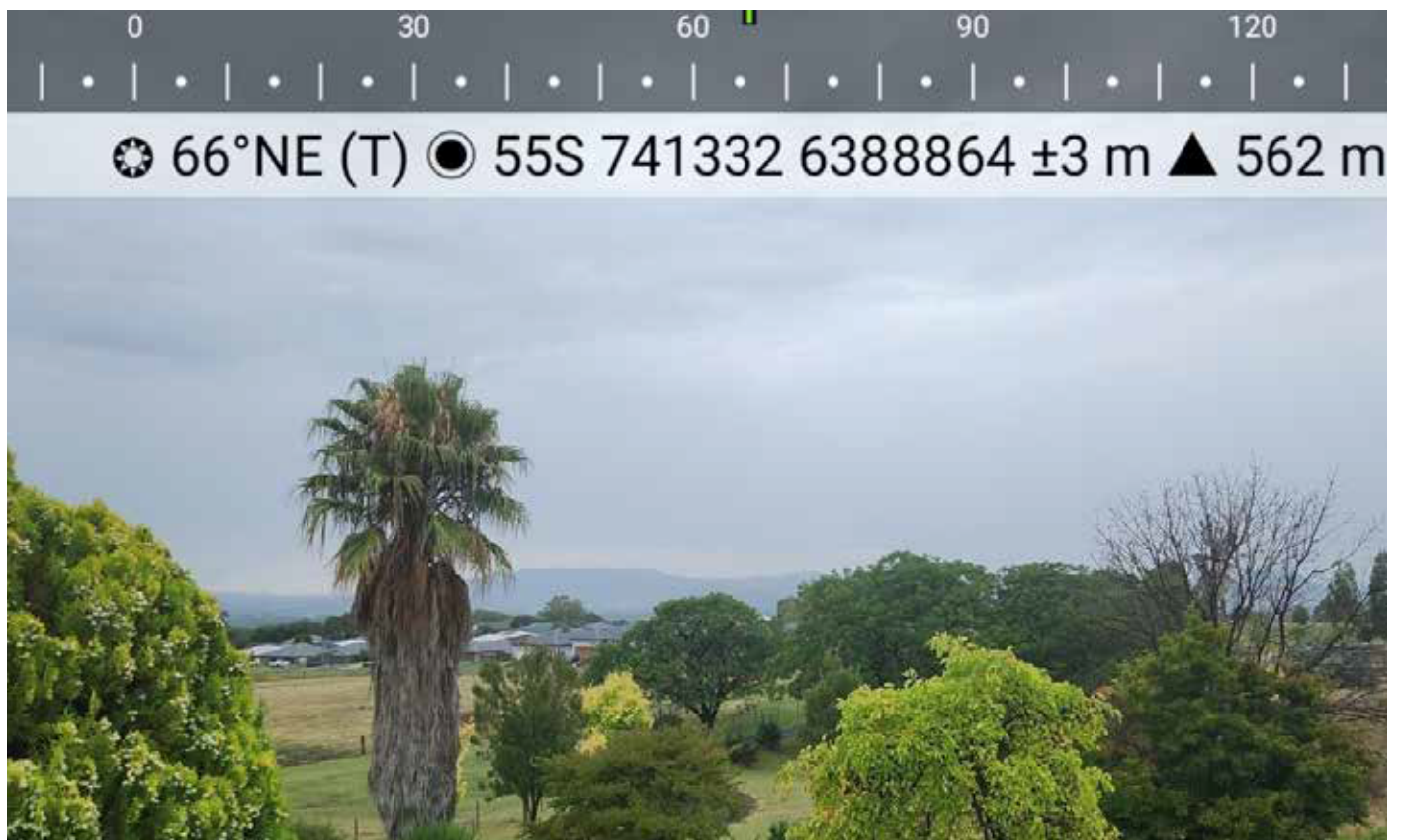


Photo 3: From the front of the dwelling from the south-west towards Henry Bayly Drive.



Photo 4: South of the existing dwelling to the north-east (Grassy Woodland).



Photo 5: From the south towards the existing dwelling (Grassy Woodland).



Photo 6: Grassy Woodland within Lot 1.



Photo 7: Grassy Woodland within Lot 1.



Photo 8: Grassy Woodland within Lot 1.

2.3 ASSET PROTECTION ZONE (APZ) ASSESSMENT.

To clarify the findings below, Grassy Woodland is located in the southern half of proposed Lot 1. A Remnant parcel of vegetation is located to the south of Lot 1 and Lot 3 in the adjoining neighbouring allotment. The remnant vegetation to the south buffers the watercourse running south to north through the eastern portion of proposed Lot 1. A small parcel of biodiversity mapped land is located in the eastern extents of proposed Lot 2 and proposed Lot 3. The land to the north of proposed Lot 2 (ie. In Lot 1) is dominated by Cootamundra Wattle. The land to the east of Henry Bayly Drive is managed land.

Based on Grassy Woodland with a maximum effective slope of 0-5° down slope, a 13m APZ is recommended in the western half of proposed Lot 2 and proposed Lot 3. We have positioned the APZ such that it lies to the east of the second order creek and vegetated riparian zone (VRZ). The APZ is also positioned such that it does not encroach into the biodiversity mapped land.

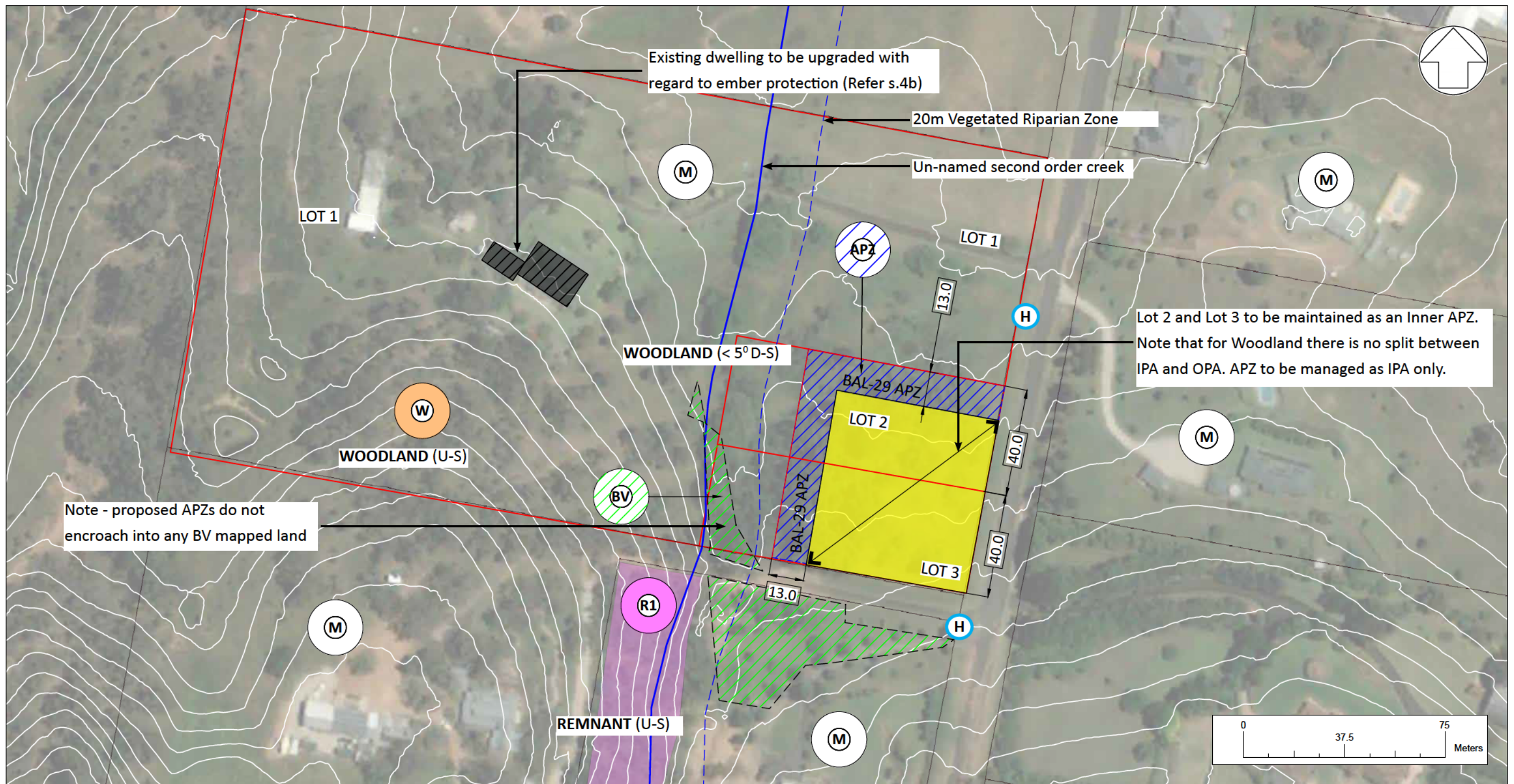
Based on the parameters identified in Table 1 below and as depicted in Figure A, a building envelope that achieves a maximum predicted radiant heat load less than 29 kW/m² in the event of a bushfire can be provided within proposed Lot 2 and proposed Lot 3.

With regard to the existing dwelling in proposed Lot 1, we recommend a 22m APZ (achieves BAL-12.5). The building should also be upgraded to with regard to ember protection.

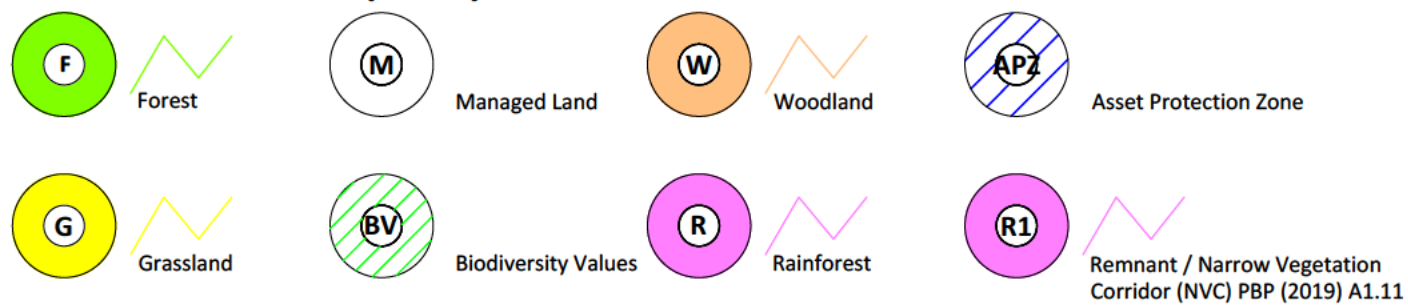
TABLE 1 (To be read in conjunction with Figure A).						
LGA = Mid-Western Regional Council				Forest Fire Danger Index = FDI 80		
ASPECT ¹	Vegetation Class ²	Max Effective Slope ³	Site slope ³	Required APZ ⁴	Proposed APZ / EML ⁵	BAL-Rating
N	Remnant ⁷	0-5 ⁰ D-S	N/A	N/A	N/A	N/A
W & N	Woodland	0-5 ⁰ D-S	N/A	13-19m	> 13m	BAL-29
AOD	Managed residential land					
Abbreviations						
AOD All other directions		EML Extent of managed land			NVC Narrow vegetation corridor	

¹	Cardinal direction from each proposed building facade based on grid north.
²	Vegetation Classifications are as described in PBP (2019) A1.2.
³	Site slope is calculated from 1m LiDAR contours.
⁴	Minimum APZ required stated as Acceptable Solutions within Table 1.12.2 and A1.12.5. PBP (2019).
⁵	Actual dimensional setback from the face of the building to the assessed vegetation. Achieved Asset Protection Zone (APZ) or extent of managed land (EML).

Refer to Section 3 for recommendations relating to APZ provision.



VEGETATION KEY (solid)



DRAWING LEGEND



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BAL KEY (dashed)

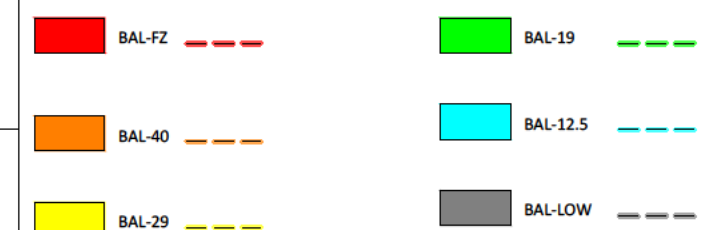


Figure:

A

SECTION 03 - ASSET PROTECTION ZONES (APZs)

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

3.0 APZ PERFORMANCE CRITERIA (PBP 2019)

- | | |
|---|---|
| • | APZs are to be provided commensurate with the construction of the building. |
| • | A defensible space is to be provided. |
| • | APZs are to be managed and maintained to prevent the spread of a fire to the building. |
| • | The APZ is to be provided in perpetuity. |
| • | APZ maintenance is to be practical, soil stability is not compromised and the potential for crown fires is minimised. |

The asset protection zones (APZ) requirements have been derived from the methodology of A1.12.2 or A1.12.3 in Appendix 1 of PBP (2019). Asset protection zones and in particular the Inner Asset Protection Zones are critical for providing defensible space and reducing flame length and rate of spread (PBP 2019). APZs are designed to provide sufficient open space for emergency workers to operate and for occupants to egress the site safely. They are divided into Inner and Outer Asset Protection Zones (IPAs and OPAs) and are required to be maintained for the life of the development. The IPA provides for defensible space and a reduction of radiant heat levels at the building line and the OPA provides for the reduction of the rate of spread and filtering of embers.

GENERAL RECOMMENDATIONS

- | | |
|---|--|
| • | The APZ should be located completely within the boundary of the site. The required APZ extent will often be satisfied by surrounding managed land which is excluded under clause A1.10 PBP (2019). |
| • | Landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions (refer to Section 3.1 and 3.2). |
| • | The APZ should not be located on slopes greater than 18° unless terracing is introduced. |
| • | A clear area of low-cut lawn or pavement is maintained adjacent to the asset requiring protection. |

3.1 - INNER APZ (IPA) GUIDELINES

The Inner APZ (IPA) is the managed area closest to the asset (eg. dwelling). The IPA is managed to minimal fuel conditions and aims to mitigate the impact of direct flame contact and radiant heat on the development. The IPA also aims to provide defensible space.	
TREES	
•	Canopy cover should be less than 15% (at maturity) within the Inner APZ.
•	Trees (at maturity) should not touch or overhang the building.
•	Lower limbs should be removed up to a height of 2m above ground.
•	Canopies should be separated by 2 to 5m (horizontal and or vertical displacement). .
•	Preference should be given to smooth barked and evergreen trees.
SHRUBS	
•	Create large discontinuities or gaps in the vegetation to slow down or break the progress of fire towards buildings.
•	Shrubs should not be located under trees shrubs should not form more than 10% ground cover.
•	Clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation.
GRASS	
•	Should be kept mown (as a guide grass should be kept to no more than 100mm in height).
•	Leaves and vegetation debris should be removed.

3.2 - OUTER APZ (OPA) GUIDELINES

The Outer APZ (OPA) is the part of the APZ that is located between the IPA and the bushfire vegetation threat. The reduction in the available fuels and canopy connections in the OPA aims to mitigate the intensity of an approaching fire and restricts the pathways to crown fuels thus reducing the level of direct flame, radiant heat and ember attack on the IPA and asset (dwelling).	
TREES	
•	Canopy cover should be less than 30% (at maturity) within the Outer APZ.
•	Trees should have canopy separation canopies should be separated by 2 to 5m.
SHRUBS	
•	Shrubs should not form a continuous canopy.
•	Shrubs should form no more than 20% of ground cover.

SECTION 04a - CONSTRUCTION

PERFORMANCE CRITERIA (PBP 2019)

This application relates to the subdivision of the land only. All future infill development is required to provide a site specific bushfire report or BAL-Certificate to ascertain the required Bushfire Attack Level. This report should not be used to support future infill development.

Space left intentionally blank.

SECTION 04b - CONSTRUCTION

PERFORMANCE CRITERIA (PBP 2019)	ACCEPTABLE SOLUTION
In keeping with PBP (2019) s.5.1.3, we recommend that the existing dwelling on proposed Lot-1 is to be upgraded with regard to ember protection commensurate with BAL-12.5 as specified in AS3959 (2018). The following principals should be considered.	

GENERAL	
•	Seal all gaps (>3mm) around the house (excluding subfloor) with:
•	Appropriate joining strips;
•	Flexible silicon based sealant; or
•	Mesh with a maximum aperture of 2mm, made from corrosion resistant steel, bronze or aluminium.
WALLS	
•	Install sarking with a flammability index of not more than 5 behind weatherboards or other external cladding when they are being replaced for maintenance or other reasons.
SUBFLOOR SPACE	
•	Removal of combustible materials and keeping areas clear and accessible.
DOORS	
•	Install weather strips, draught excluders or draught seals at the base of side hung doors.
WINDOWS	
•	Install mesh with a maximum aperture of 2mm, made from corrosion resistant steel, bronze or Aluminium to all external doors and openable windows.
VENTS AND WEEPHOLES	
•	Seal vents and weepholes in external walls with mesh (with an aperture size of 2 mm) of corrosion resistant steel, bronze or aluminium.
ROOFS	
•	Seal around roofing and roof penetrations with a non-combustible material.
•	Install sarking with a flammability index of not more than 5 beneath existing roofing when it is being replaced for maintenance or other reasons.
•	If installed, gutter and valley leaf guards shall be non-combustible.

SECTION 05 - ACCESS

Intent of measures: To provide safe operational access for emergency services personnel in suppressing a bush fire, while residents are accessing or egressing an area.

PERFORMANCE CRITERIA (PBP 2019)

- Fire-fighting vehicles are provided with safe, all-weather access to structures and hazard vegetation.
- The capacity of access roads is adequate for fire-fighting vehicles.
- There is appropriate access to water supply.
- Fire-fighting vehicles can access the dwelling and exit the property safely.

ACCESS - GENERAL REQUIREMENTS

The public road system is suitable for emergency response vehicles. The site is accessed from Henry Bayly Drive to the east. Provide the following where applicable:

Note that a perimeter road or dual access is not proposed. See commentary on the following page.

- Property access roads to be two-wheel drive, all-weather roads.	Can comply
- Perimeter roads to be provided for residential subdivisions of three or more allotments.	Not applicable - Lot 2 and Lot 3 have direct access to the public road. Lot 1 access is surrounded by managed land.
- Subdivisions of three or more allotments have more than one access in and out of the development.	
- Maximum grades for sealed roads do not exceed 15 degrees and an average grade of not more than 10 degrees or other gradient specified by road design standards, whichever is the lesser gradient.	Can comply
- All roads to be through roads.	Not applicable
- Dead end roads are not recommended, but if unavoidable, are not more than 200m in length, incorporate a minimum 12m outer radius turning circle, and are clearly sign posted as a dead end.	Not applicable
- Where kerb and guttering is provided on perimeter roads, roll top kerbing should be used to the hazard side of the road.	Not applicable
- Where access/egress can only be achieved through forest, woodland and heath vegetation, secondary access shall be provided to an alternate point on the existing public road system.	Not applicable - Lot 2 and Lot 3 have direct access to the public road. Lot 1 access is surrounded by managed land.
- One way only public access roads to be no less than 3.5 metres wide.	Can comply

-	The capacity of perimeter and non-perimeter road surfaces and any bridges/causeways to be sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes); bridges / causeways are to clearly indicate load rating.	Not applicable
-	Hydrants to be located outside of parking reserves and road carriageways to ensure accessibility to reticulated water for fire suppression.	Can comply - Hydrants currently located along Henry Bayly Drive.
-	Hydrants to be provided in accordance with the relevant clauses of AS 2419.1:2005 - Fire hydrant installations System design, installation and commissioning.	Can comply
-	Provided suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available.	Can comply

PROPERTY ACCESS

The proposed development is to provide the following where applicable;

-	There are no specific access requirements in an urban area where an unobstructed path (no greater than 70m) is provided between the most distant external part of the proposed dwelling and the nearest part of the public access road (where the road speed limit is not greater than 70kph) that supports the operational use of emergency firefighting vehicles.	Both building envelopes will be within 70m of Henry Bayly Drive
-	Provide a minimum 4m carriageway width.	Can comply
-	In forest, woodland and heath situations, rural property access roads are to have passing bays every 200m that are 20m long by 2m wide, making a minimum trafficable width of 6m at the passing bay.	N/A - to proposed new allotments. Lot 2 and 3 are within 70m of the public road.
-	Provide a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches.	Can comply
-	Maximum grades for sealed roads is not exceed 15 degrees and not more than 10 degrees for unsealed roads.	Complies - gradients less than 10° are achieved.
-	The crossfall is to be not more than 10 degrees.	Complies - gradients less than 10° are achieved.
-	Curves have a minimum inner radius of 6m.	Can comply
-	Provide a suitable turning area in accordance with PBP (2019) Appendix 3.	Can comply

-	A development comprising more than three dwellings is to provide access by dedication of a road and not by right of way.	Not applicable - Lot 2 and Lot 3 have direct access to the public road. Lot 1 access is surrounded by managed land.
-	Some short constrictions in the access may be accepted where they are not less than 3.5m wide, extend for no more than 30m and where the obstruction cannot be reasonably avoided or removed.	Not applicable

ADDITIONAL COMMENTS IN RELATION TO ACCESS

The proposed development can comply with the intent of PBP (2019) with regards to site access requirements.

SECTION 06 - WATER

Intent of measures: To provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building.

WATER - SPECIFIC REQUIREMENTS

The proposed development can comply with the PBP (2019) with regards to water requirements. Reticulated water is provided however the hydrant sizing, spacing or pressures have not been tested. No additional water for the suppression of bushfire is required for the proposed development. The following points are to be adhered to for the life of the development.

•	A static water and hydrant supply is to be provided for non-reticulated developments or where reticulated water supply cannot be guaranteed.
•	All above-ground water storage tanks shall be of concrete or metal.
•	All above ground water and gas service pipes and fittings external to the building are to be metal.
•	Reticulated water is to be provided to the development where available.
•	Fire hydrant, spacing, design and sizing is to comply with the relevant clauses of Australian Standard AS 2419.1:2005.
•	Hydrants are not to be located within any road carriageway.
•	Fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005.
•	Reticulated water supply to urban subdivisions uses a ring main system for areas with perimeter roads.
•	Reticulated water supply to urban subdivisions uses a ring main system for areas with perimeter roads.

ADDITIONAL COMMENTS IN RELATION TO THE PROVISION OF WATER

The proposed development can comply with PBP (2019). Water hydrants are located along the boundary of the site on the western side of Henry Bayly Drive. RFS require a maximum distance of 70m (60m hose length + 10m spray) from the hydrant to the most distal part of the dwelling. NSW Fire and Rescue require a maximum distance of 90m (20m hose length connected from the hydrant to the tanker + 60m hose length + 10m spray). If it is found that a hydrant is located more than the specified distances, tank water is to be provided as per s.5.3d and 7.4a PBP (2019).

SECTION 07 - ELECTRICITY & GAS

Intent of measures: To provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building.

PERFORMANCE CRITERIA (PBP 2019)

- Location of electricity services is to limit the possibility of ignition of surrounding bush land or the fabric of buildings.
- Location and design of gas services is not to not lead to the ignition of surrounding bushland or the fabric of buildings.

ELECTRICITY AND GAS - SPECIFIC REQUIREMENTS

The proposed development can comply with the PBP (2019) with regards to electricity and gas requirements. The following points are to be adhered to (where applicable) for the provision of electricity and gas services where applicable.

ELECTRICITY REQUIREMENTS

- Where practicable place electrical transmission lines are underground or,
- If overhead electrical transmission lines are proposed:- lines are installed with short pole spacing (30 metres), 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 'Vegetation Safety Clearances' issued by Energy Australia (NS179, April 2002).
- No part of a tree is to be closer to a power line than the distance set out in accordance with the specifications in ISSC3 Guideline for Managing Vegetation Near Power Lines.

GAS REQUIREMENTS

- 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 to be 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 gas cylinders are to be metal.
- Polymer-sheathed flexible gas supply lines are not to be used.
- Above-ground gas service pipes are to be metal, including and up to any outlets.

ADDITIONAL COMMENTS IN RELATION TO THE PROVISION OF ELECTRICITY AND GAS.

The proposed development can comply with PBP (2019) with regard to the provision of gas and electricity.

SECTION 08 - RECOMMENDATIONS

The development is required to be referred to NSW Rural Fire Service. RFS will provide their requirements in their General Terms of Approval / Bush Fire Safety Authority (BFSa) letter to Council. Provided Council agrees with the RFS recommendations, Council will reference the RFS requirements in the DA consent.

Once Council receives the RFS General Terms of Approval / BFSa advice this report and any recommendation within becomes obsolete and is no longer to be used or referenced unless directed otherwise or referenced in the RFS General Terms of Approval.

SECTION 09 - SUMMARY

The development relates to the subdivision of Lot 216/-/DP756894 into three allotments. The existing dwelling and out buildings will be retained in proposed Lot 1. Proposed Lot 2 and Lot 3 will be developed for a residential purpose. This report relates to the subdivision of the land only.

For the purpose of bushfire assessment and pursuant of clause 4.46 of the EP&A Act 1979 and 100B of the Rural Fire Act 1997, this project is considered to be an integrated development and is required to be referred to the RFS for their approval and issuance of a Bushfire Safety Authority (BFSA).

The subject site is located in Mudgee which is within the Mid-Western Regional Local Government Area (LGA). The site is accessed from Henry Bayly Drive to the east. An existing dwelling is located on the site. Managed residential dwellings are located within the allotments to the south and east. Grassland is located within the land to the north. The northern half of the site is managed to minimal fuel conditions, particularly in the vicinity of the existing dwelling, out-buildings and driveway. An un-named watercourse is located in the vicinity of the proposed boundary between Lot 1 and new Lot 2 and Lot 3. The un-managed vegetation within the southern half of the site is dominantly a Woodland structure with a prevalence of Cootamundra Wattle (*Acacia baileyana*).

There is sufficient space within the proposed allotments to provide an asset protection zone (APZ). A 13m APZ is required to the west within proposed Lots 2 & 3 and a 13m APZ is required to the north within Lot 2. A building envelope that achieves a maximum predicted radiant heat load less than 29 kW/m² in the event of a bushfire can be provided. The development therefore satisfies the APZ provisions in PBP (2019) for residential subdivision.

Access via the public road system is suitable for emergency response vehicles. The development can with PBP (2019) with regards to the provision of water, electricity and gas.

Should Council or the NSW Rural Fire Service have any objection to any part of this report, please get in contact to discuss.

Regards,

Matthew Noone

Grad.Dip. Design for Bushfire Prone Areas.

BSc (Geology)

0406077222

T/A Bushfire Planning and Design



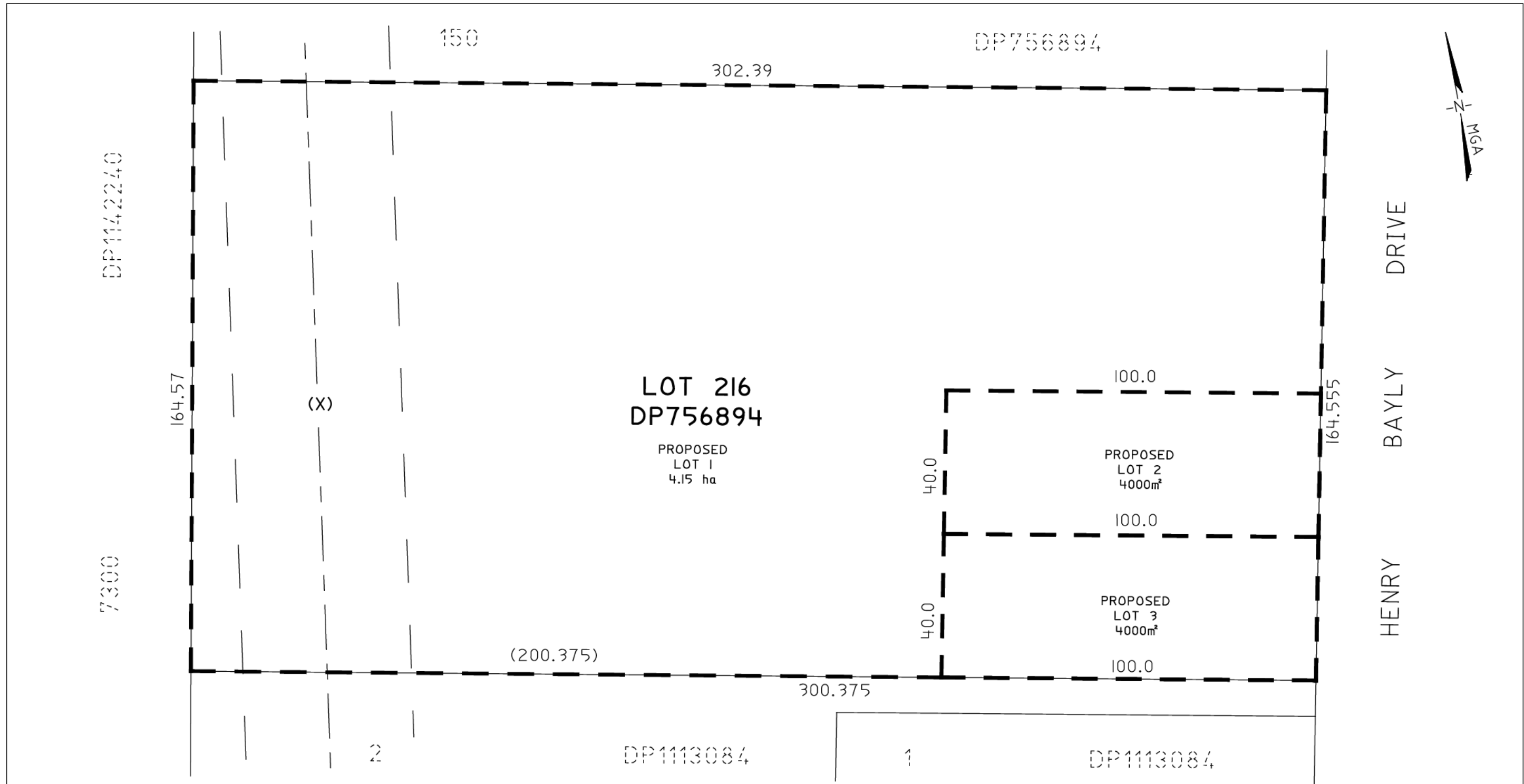
SECTION 10 - REFERENCES

AS3959 (2018)	Australian Standard, Construction of buildings in bushfire-prone areas, AS 3959, Third edition 2018 Standards Australia International Ltd, Sydney.
BCA (2019)	Building Code of Australia 2019, Building Code of Australia, Australian Building Codes Board, Canberra 2019.
EPA Act (1979)	Environmental Planning and Assessment Act 1979, NSW Government, NSW, legislation found at www.legislation.nsw.gov.au
PBP (2019)	Planning for Bushfire Protection, a Guide for Councils,Planners, Fire Authorities, Developers and Home Owners. Rural Fire Service 2019, Australian Government Publishing Service, Canberra.
RFS (2015)	Rural Fire Service, Guide For Bush Fire Prone Land Mapping, Version 5b.

SECTION 11 - APPENDICES

Appendix A - Architectural Drawings.

APPENDIX A - ARCHITECTURAL DRAWINGS



RESTRICTIONS AND COVENANTS HAVE NOT BEEN INVESTIGATED BY O'RYAN GEOSPATIAL PTY. LTD FOR THE PURPOSES OF THIS SURVEY.

THESE NOTES ARE PART OF THIS PLAN AND CANNOT BE REDACTED

NO PART OF THIS PLAN MAY BE REPRODUCED, COMMUNICATED, STORED OR TRANSMITTED IN ANY FORM WITHOUT PRIOR WRITTEN PERMISSION OF THE COPYRIGHT OWNER EXCEPT AS PERMITTED BY THE COPYRIGHT ACT 1968

(X) EASEMENT FOR TRANSMISSION LINE 45 WIDE (VIDE Q508652)

THIS PLAN IS OF A PROPOSED SUBDIVISION ONLY, AND AS SUCH IS NOT EXAMINED FOR REGISTRATION BY LAND REGISTRY SERVICES. NO RESPONSIBILITY CAN THEREFORE BE ACCEPTED FOR ANY FUTURE DIFFERENCE IN BOUNDARY DEFINITION WHICH MAY RESULT FROM RE-SURVEY OF ADJOINING LANDS OR SUBSEQUENT REGISTRATION OF NEW SURVEY PLANS.

LEGEND --- NEW BOUNDARY --- EXISTING BOUNDARY Date: 22/12/2022				PREPARED BY O'RYAN GEOSPATIAL ABN: 28616175823 129 CHURCH STREET MUDGEE NSW (02) 9057 4101		CLIENT: BRIAN JONES 82 HENRY BAYLY DRIVE, MUDGEE		SCALE: 1:1000 A3 CONTOUR INTERVAL: N/A LGA & LOCALITY: MID-WESTERN REGIONAL, MUDGEE	DATUM: GDA2020 AHD DRAWN: CAM CHECKED: DSR	TITLE PROPOSED SUBDIVISION OVER LOT 216 IN DP756894, BEING 82 HENRY BAYLY DRIVE, MUDGEE	REVISION A
No.	DATE	REVISION	DETAILS	DWG No. 22-1069 Proposed DA Plan Rev B.VCE		JOB No. 22-1069	SHEET 1 OF 1 SHEET				