



# Bushfire Hazard Assessment

25 Rifle Range Road Mudgee 2850 (Lot 69/-/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 44 of the Rural Fire Regulation (2013).		
Project Description	(#7) Seven Lot Subdivision.		
Report Number	BR-387921-B		
Date of Issue	24/01/2022	Report Validity:	1 year from date of issue

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24/01/2022



# BUSHFIRE RISK ASSESSMENT CERTIFICATION

Development Address	25 Rifle Range Road Mudgee 2850.
Parcel number	(Lot 69/-/DP756894).
Development description	(#7) Seven Lot Subdivision.
Drawings Reviewed.	Attached to report BR-387921-A.
Assessed Bushfire Attack Level	BAL-29
Does the assessment rely on alternate solutions?	Yes.
Assessed by Matthew Noone BPAD Accreditation Scheme No.	FPAA No. BPAD-PD 25584
Certificate Number:	BR-387921-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
10/12/2021	Bob Crooks	A	Issued for comment.
24/01/2022	Bob Crooks	B	Issued for comment.

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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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# SECTION 01 - BACKGROUND AND BRIEFING NOTES

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. The development relates to the subdivision of bushfire prone land and therefore must address the legislative requirements stipulated in Clause 4.46 of the EP&A Act 1979 and 100B of the Rural Fire Act 1997. The 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).

## 1.1 BUSHFIRE PRONE LAND

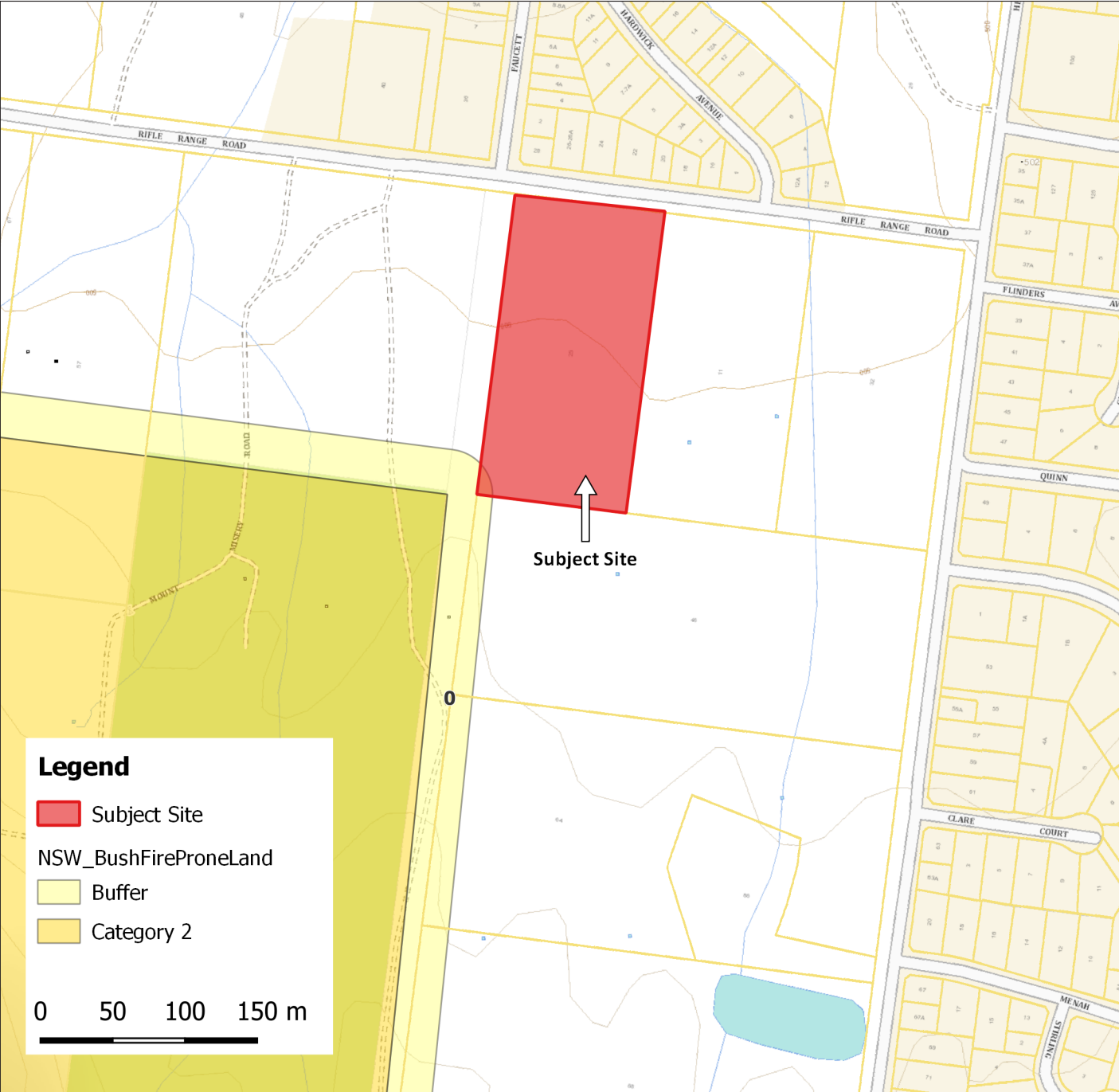


Figure 1.1: Bushfire Prone Land Map (NSW Planning Portal (2021) found at <https://www.planningportal.nsw.gov.au>) accessed 24/01/2022.

## 1.2 DEVELOPMENT PROPOSAL

The development relates to the subdivision of (Lot 69-/DP756894) into seven allotments. A rezoning application was approved in 2013. This subdivision relates to the development of the north western quadrant of the rezoned land (see below).

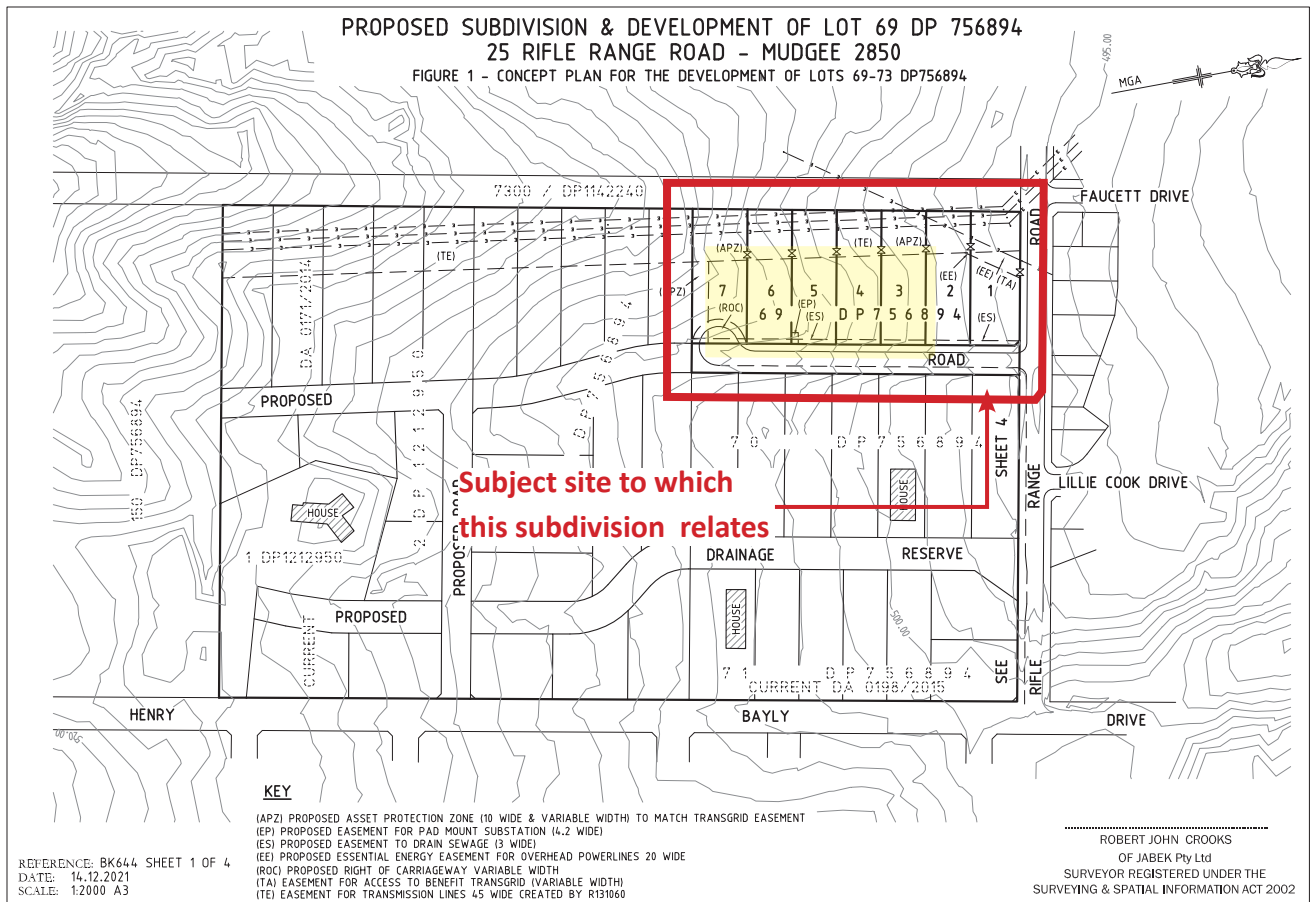


Figure 1.2: Approved Rezoning Application 2013.

## 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 46 of the Rural Fires Regulation 2013, Clause 44 of the Rural Fire Regulation 2013, The New South Wales RFS document Planning for Bushfire Protection (PBP 2019) and the National Construction Code (NCC 2019).

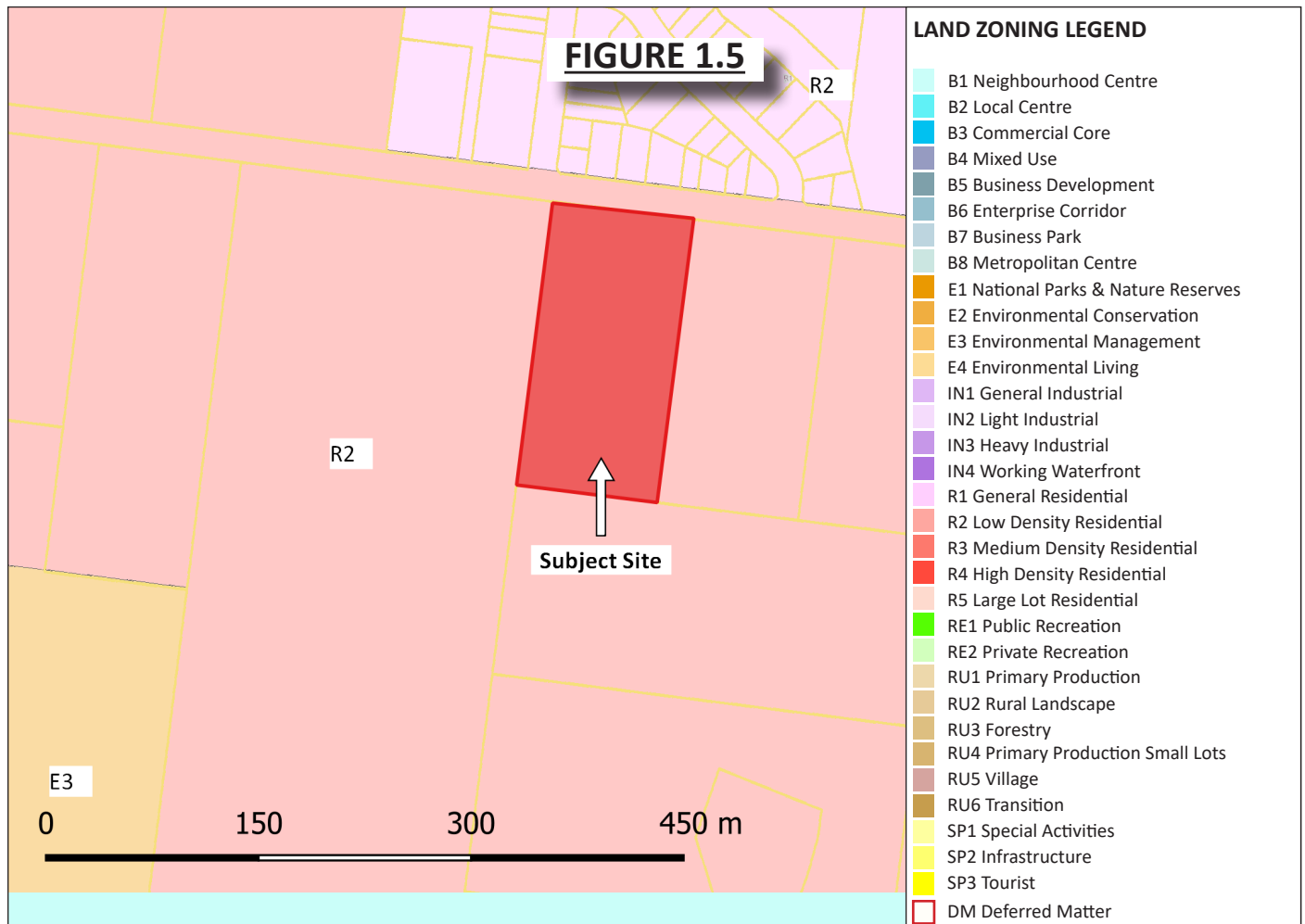
## 1.4 SITE LOCATION AND DESCRIPTION

The subject site is located in Mudgee which is within the Mid Western Regional Local Government Area (LGA). The proposed development is located on the western extent of the Mudgee municipal. The site is bounded by Rifle Range Road to the north, a Transgrid and Essential Energy easement to the west, Grassland to the south and a rural residential allotment to the east. The proposed subdivision is located within an area that was rezoned in 2013 to support the western extension of the town. The subject site will be surrounded in the future by residential curtilage and road systems to the south and east (refer Figure 1.2). The electrical easement can be utilized for the purpose of APZ provision (Figure A).



## 1.5 LAND USE, ZONING AND PERMISSIBILITY

The subject site and surrounding allotments are zoned R2 Low Density Residential.



## 1.6 SIGNIFICANT ENVIRONMENTAL FEATURES

There are no significant environmental features within the subject site.

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

To our knowledge there are no threatened species, populations, ecological communities or critical habitat within the subject site.

## 1.8 DETAILS OF ABORIGINAL HERITAGE

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



### 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 houses 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).

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<b>TABLE 1 - BAL ASSESSMENT</b> (To be read in conjunction with Figure A).				Forest Fire Danger Index = FDI 80		
LGA = Mid Western Regional Council				Forest Fire Danger Index = FDI 80		
ASPECT <sup>1</sup>	Vegetation Class <sup>2</sup>	Max Effective Slope <sup>3</sup>	Site slope <sup>3</sup>	Required APZ <sup>4</sup>	Proposed APZ / EML <sup>5</sup>	Maximum Expected Radiant Heat Flux
W	Grassland	U-S	N/A	10m	> 23.9m	< 12.5 kW/m <sup>2</sup>
N	Managed residential land - No bushfire threat.					
E	Grassland	U-S	N/A	10m	> 28m	< 12.5 kW/m <sup>2</sup>
S	Grassland	U-S	N/A	10m	> 10m	29 kW/m <sup>2</sup>

Abbreviations		
AOD All other directions	EML Extent of managed land	NVC Narrow vegetation corridor

<sup>1</sup>	<i>Cardinal direction from each proposed building facade based on grid north.</i>
<sup>2</sup>	<i>Vegetation Classifications are as described in PBP (2019) A1.2.</i>
<sup>3</sup>	<i>Site slope is calculated from 1m LiDAR contours.</i>
<sup>4</sup>	<i>Minimum APZ required stated as Acceptable Solutions within Table 1.12.2 and A1.12.5. PBP (2019).</i>
<sup>5</sup>	<i>Actual dimensional setback from the face of the building to the assessed vegetation. Achieved Asset Protection Zone (APZ) or extent of managed land (EML).</i>
<sup>6</sup>	<i>Where the direct line of sight between the proposed building and assessed vegetation is obstructed (by a wall or building) the assessed rating can be lowered by one BAL-rating (PBP 2019, s. A1.8).</i>
<sup>7</sup>	<i>Remnant bushland and narrow vegetation corridors (NVC) as stated in PBP (2019) s.A1.11 can be assessed as rainforest as a simplified approach or be assessed as Short Fire Run using method 2 (AS3959).</i>
<sup>8</sup>	<i>Deeming provisions for grassland s.7.9 PBP (2019).</i>

## 2.3 ASSET PROTECTION ZONE (APZ) ASSESSMENT SUMMARY.

A 10m asset protection zone (APZ) is required to the west, east and south. As per the Rural Fire Service pre-DA advice, larger than required APZs have been provided. A variable 23.9m - 32.5m APZ is provided within the Transgrid easement to the west. A minimum 28m APZ is provided to the east (18m Road + 10m minimum front boundary setback). A 10m APZ is provided to the south. The APZs for lots 1-6 provide for a maximum radiant heat load of 12 kW/m<sup>2</sup>. The future dwellings on Lots 1-6 are recommended to have a BAL-19 construction requirement. The future dwelling on lot 7 is to be constructed to BAL-29.

A building envelope that achieves a maximum predicted radiant heat load less than 29 kW/m<sup>2</sup> in the event of a bushfire can be provided. Therefore the development satisfies the APZ requirements for residential subdivision.

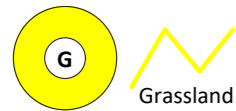
Note that to offset the deficient access, the other bushfire protection measures have been enhanced. Larger APZs than required have been provided and paired with a higher construction specification. Additional water has also been provided. These additional provisions are consistent with the RFS pre-DA advice (attached).

Refer to Section 3 for recommendations relating to APZ provision.

# BUSHFIRE PLANNING AND DESIGN

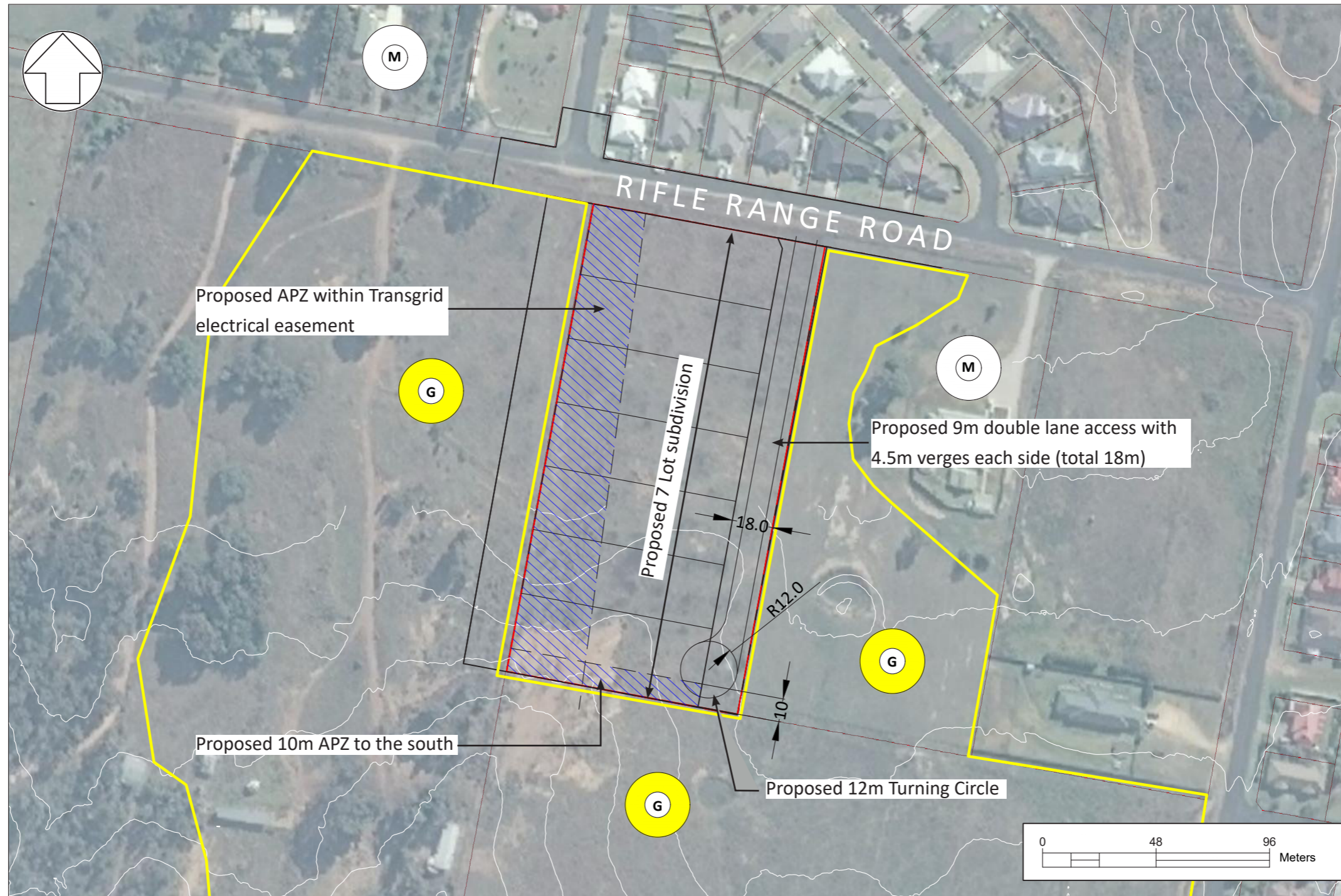
bpad.matthew.noone@gmail.com  
0406077222

## VEGETATION KEY (solid)



## LEGEND BAL (dashed)

BAL-FZ	Red dashed line
BAL-40	Orange dashed line
BAL-29	Yellow dashed line
BAL-19	Green dashed line
BAL-12.5	Cyan dashed line
BAL-LOW	Grey dashed line



50m Offset ——— 100m Offset - - - - Site ■ Hydrant (H)

## 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 will often be satisfied by surrounding managed land.
- 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.
- Landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions
- 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.
- 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 04 - CONSTRUCTION

### PERFORMANCE CRITERIA (PBP 2019)

It must be demonstrated that the proposed building can withstand bush fire attack in the form of wind, smoke, embers, radiant heat and flame contact. The BAL construction requirements has been determined in accordance with the appropriate table from A1.12.2 to A1.12.7 (PBP 2019) and in accordance with the NCC and as modified by section 7.5.

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.

- There are no bush fire protection requirements for Class 10 structures located more than 6m from a dwelling in bush fire prone areas. Where a Class 10 structure is located within 6m of a dwelling it must be constructed in accordance with the NCC.
- For a dwelling or structure that is assessed as BAL-LOW there are no requirements for fencing.

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## 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 Rifle Range Road to the south. Figure 5.1 shows the road systems in the area. Provide the following where applicable

- Property access roads to be two-wheel drive, all-weather roads.
- Perimeter roads to be provided for residential subdivisions of three or more allotments.
- ~~Subdivisions of three or more allotments have more than one access in and out of the development.~~  
Alternate solution prepared to avoid this requirement - Refer RFS pre-DA advice.
- 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.
- ~~All roads to be through roads.~~ Alternate solution prepared to avoid this requirement - Refer RFS pre-DA advice.
- 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.
- Where kerb and guttering is provided on perimeter roads, roll top kerbing should be used to the hazard side of the road.
- One way only public access roads to be no less than 3.5 metres wide.
- 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.
- Hydrants to be located outside of parking reserves and road carriageways to ensure accessibility to reticulated water for fire suppression.
- Hydrants to be provided in accordance with the relevant clauses of AS 2419.1:2005 - Fire hydrant installations System design, installation and commissioning.
- Provided suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available.

**PROPERTY ACCESS**

The proposed development is to provide the following where applicable;

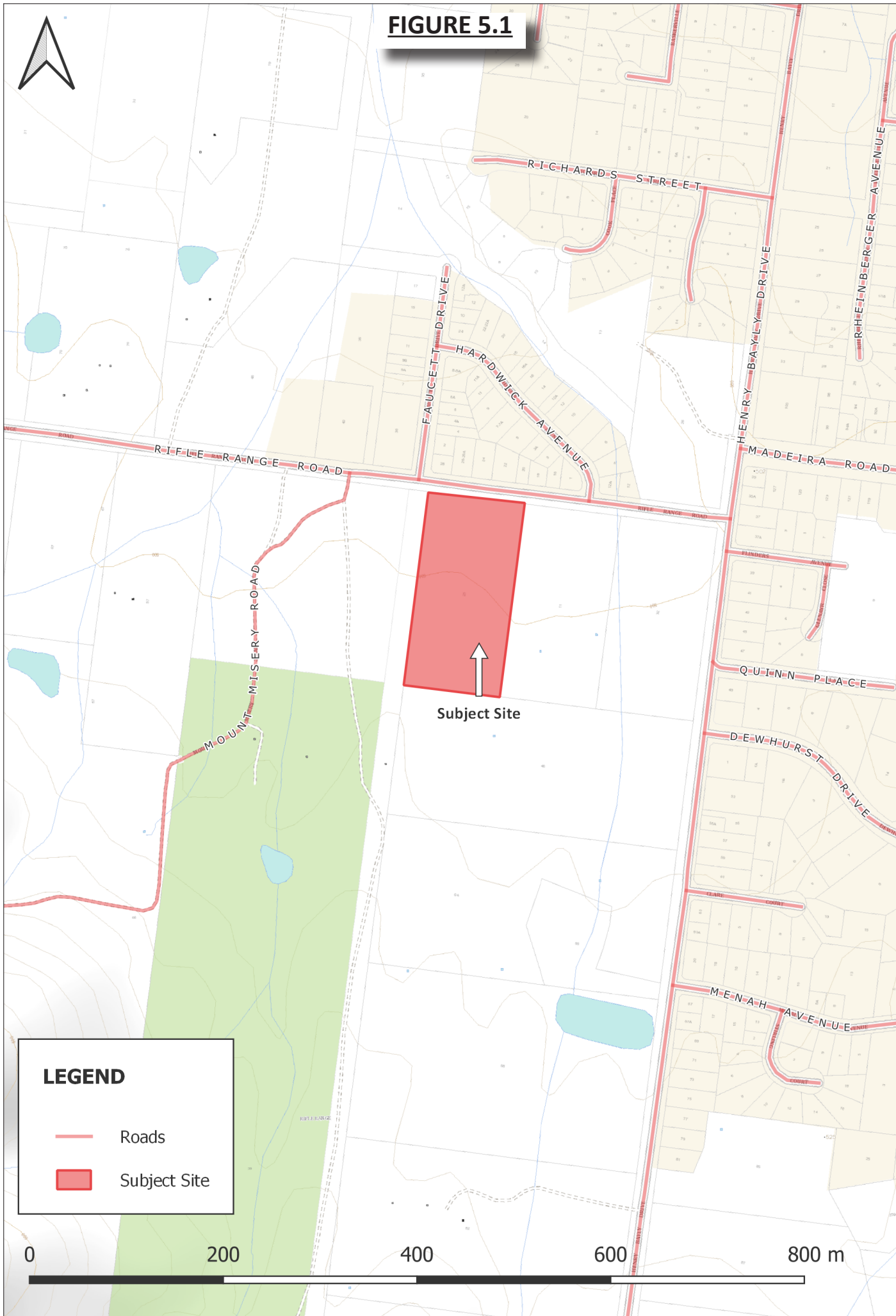
-	There are no specific access requirements in an urban area where an unobstructed path (no greater than 70m) is provided between the most distant external part of the proposed dwelling and the nearest part of the public access road (where the road speed limit is not greater than 70kph) that supports the operational use of emergency firefighting vehicles.
-	Provide a minimum 4m carriageway width.
-	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.
-	Provide a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches.
-	Maximum grades for sealed roads is not exceed 15 degrees and not more than 10 degrees for unsealed roads.
-	The crossfall is to be not more than 10 degrees.
-	Curves have a minimum inner radius of 6m.
-	Provide a suitable turning area in accordance with PBP (2019) Appendix 3.
-	A development comprising more than three dwellings is to provide access by dedication of a road and not by right of way.
-	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.
-	A compliant 12m radius turning circle at the termination of the proposed access road.

**ADDITIONAL COMMENTS IN RELATION TO ACCESS****ALTERNATE SOLUTION**

With consideration of the approved 2013 rezoning master plan it is our opinion that the dual access would not be required as the allotment will in the future be surrounded by residential curtilage and road systems to the south and east (Refer Figure 1). In the interim a two lane access road with a 12m (9m wide with 4.5m wide verges, roll over kerbs and providing a total width of 18m) will be provided between the subdivision and land to the east. A 12m outer radius turning circle will provide rapid access for RFS to turnaround to return to Rifle Range Road (through road). As per the approved rezoning master plan the proposed road to the east of the subdivision will extend south with multiple connections into Henry Bailey Drive to the east (refer Figure 1.2).



**FIGURE 5.1**



## 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.



### ADDITIONAL COMMENTS IN RELATION TO THE PROVISION OF WATER

The proposed development can comply with PBP (2019). Each of the new allotments will be connected to town water. A 5000 litre water supply is to be provided for fire fighting. This has been provided consistent with the RFS pre-DA advice.

## 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 - DEVELOPMENT RECOMMENDATIONS

The following points are recommended for inclusion in the DA conditions of consent;

1.	Construction	Future dwellings on Lots 1-6 to be constructed to BAL-19. Future dwelling on Lot 7 to be constructed to BAL-29.	
2.	APZs	West -	Manage the Transgrid easement as an Inner APZ.
		South -	Provide a 10m APZ within the southern most allotment for the full width of the southern boundary.
		North	None required
		East	Provide a 10m APZ within each allotment. Note, the road width provides an additional 18m APZ.
3.	Access	Provide a two lane road total 9m wide + 4.5m wide verges and roll top kerb. Provide a 12m radius turning circle at the southern extent of the proposed access road for rapid egress.	
4.	Water	Supplementary to town water, provide each lot with a 5000 litre water tank for fire fighting.	
5.	Services	As per Section 06 & 07.	
6.	In the event that Council or the NSW Rural Fire Service modifies our recommendations then this report should no longer be referred to. The bushfire requirements as stated in the DA Consent conditions will take precedence.		
7.	We strongly recommend that the applicant cross references the bushfire requirements within the DA consent conditions and our report and alert us to any discrepancies.		

## SECTION 09 - CONCLUSION

The development relates to the subdivision of (Lot 69/-/DP756894) into seven allotments. A rezoning application was approved in 2013. This subdivision relates to the development of the north western quadrant of the rezoned land (see below).

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 proposed development is located on the western extent of the Mudgee municipal. The site is bounded by Rifle Range Road to the north, a Transgrid and Essential Energy easement to the west, Grassland to the south and a rural residential allotment to the east. The proposed subdivision is located

within an area that was rezoned in 2013 to support the western extension of the town. The subject site will be surrounded in the future by residential curtilage and road systems to the south and east (refer Figure 1.2). The electrical easement can be utilized for the purpose of APZ provision (Figure A).

A 10m asset protection zone (APZ) is required to the west, east and south. As per the Rural Fire Service pre-DA advice, larger than required APZs have been provided. A variable 23.9m - 32.5m APZ is provided within the Transgrid easement to the west. A minimum 28m APZ is provided to the east (18m Road + 10m minimum front boundary setback). A 10m APZ is provided to the south. The APZs for lots 1-6 provide for a maximum radiant heat load of 12 kW/m<sup>2</sup>. The future dwellings on Lots 1-6 are recommended to have a BAL-19 construction requirement. The future dwelling on lot 7 is to be constructed to BAL-29.

A building envelope that achieves a maximum predicted radiant heat load less than 29 kW/m<sup>2</sup> in the event of a bushfire can be provided. Therefore the development satisfies the APZ requirements for residential subdivision.

A building envelope that achieves a maximum predicted radiant heat load less than 29 kW/m<sup>2</sup> in the event of a bushfire can be provided. The development therefore satisfies the APZ provisions in PBP (2019) for residential subdivision. As per the RFS pre-DA advice, larger than required APZs have been provided. Additional water and an elevated construction specification has also been proposed.

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.

R [REDACTED]

M

Grad.Dip. Design for Bushfire Prone Areas.

BSc (Geology)

[REDACTED]

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 <a href="http://www.legislation.nsw.gov.au">www.legislation.nsw.gov.au</a>
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 B - RFS Advice Letter

# APPENDIX A - SUBDIVISION DRAWINGS

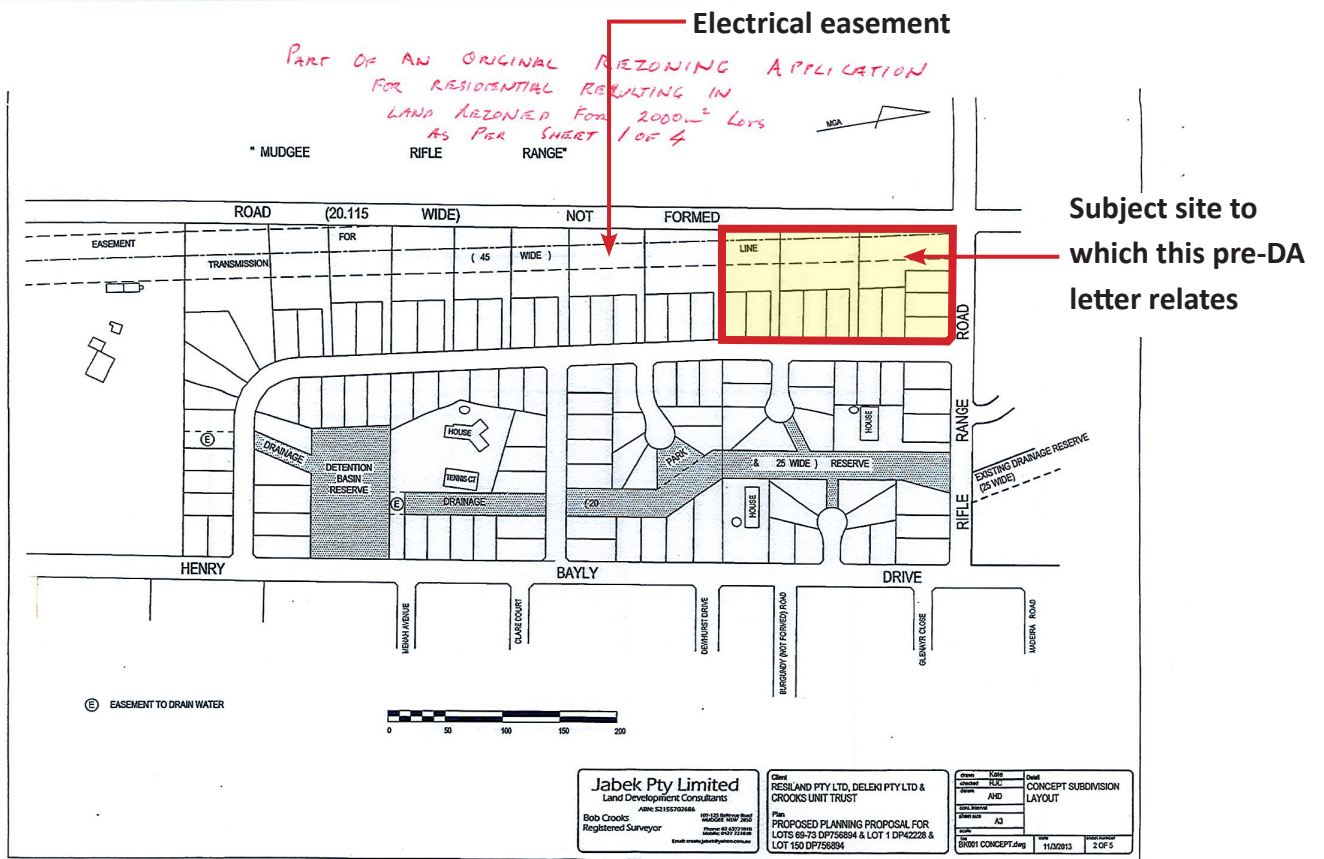


Figure 1 - Approved Rezoning Application 2013.

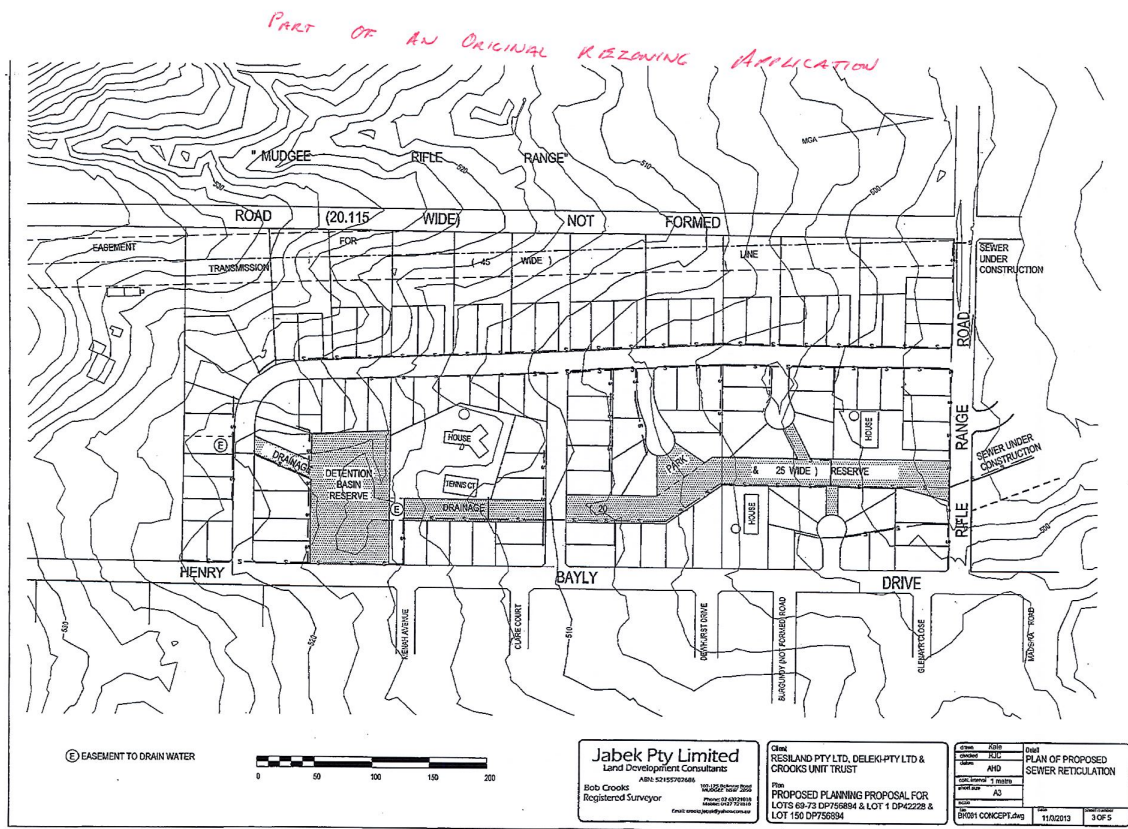


Figure 2 - Approved Rezoning Application 2013.



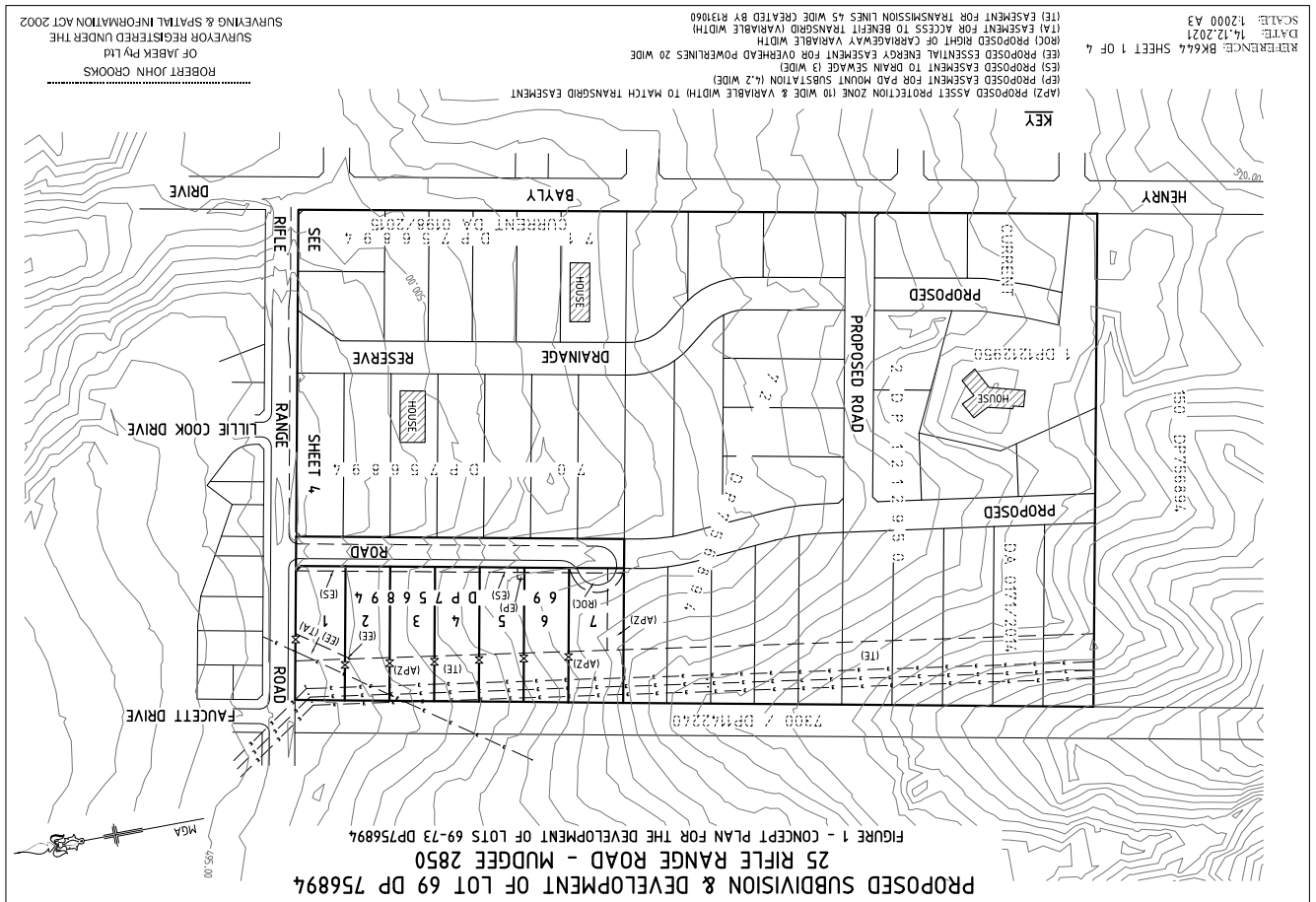


Figure 3 - Proposed 7 Lot subdivision of lot 69/-/DP756894 (25 Rifle Range Road).

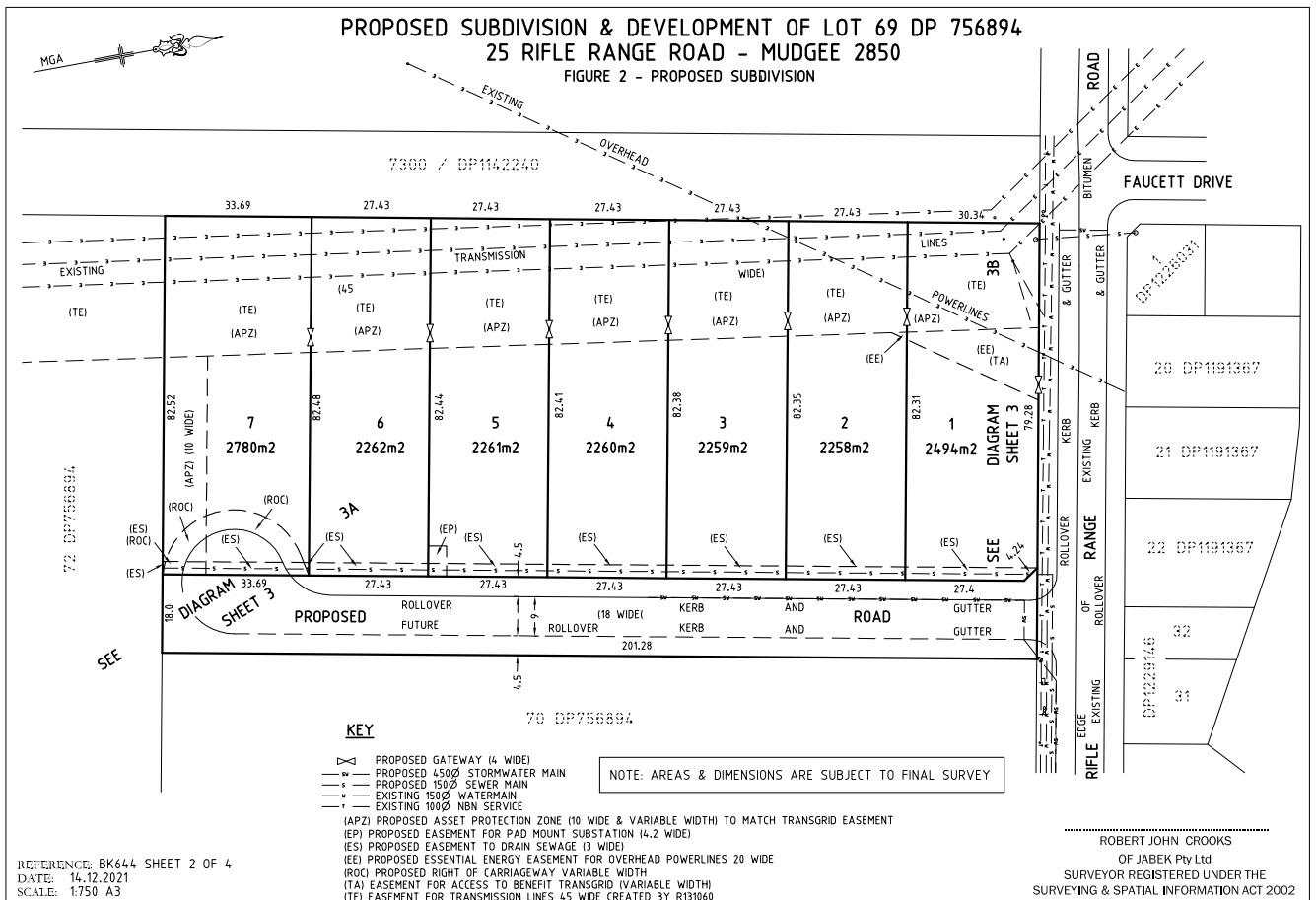


Figure 4 - Proposed 7 Lot subdivision of lot 69/-/DP756894 (25 Rifle Range Road).



# **APPENDIX B -**

## **RFS Advice Letter**



## PRE-DA ADVICE SUMMARY

**Applicant:** Bushfire Planning and Design  
**Subject:** Lot 69/-/ DP756894 – 25 Rifle Range Road Mudgee 2850  
RFS Ref. PRE-DA20211123000286

### Details of the proposal

- SFPP
- Residential subdivision
- Other Proposed 1 into 7 lot residential subdivision

### Bush fire protection issues discussed

- Hazard Assessment
- Asset Protection Zones
- Access
- Construction Standards No provision of perimeter road and only one in/out of the proposed subdivision.
- Services
- Emergency and Evacuation Planning

### Documentation / plans referenced

- Draft residential subdivision plan.

### Advice Provided

- In recognition that no perimeter road is proposed and there is only a single access point in and out of the proposed residential subdivision, additional contingency measures must be considered. These measures may include:
- Increased Asset Protection Zones greater than the minimum separation required in PBP 2019, paired with conditioned BAL construction requirements for future dwellings.
  - Increased static water supply provisions with a pump and hose combination supplied to enable property protection by future occupants.
  - Access provisions such as a ring-road or turning bay provided within future lots.

## Disclaimer

RFS advice is based on information provided and policy and legislative requirements applicable at the time. The advice should be copied into, or referenced in, any subsequent development application.

All efforts are made to identify issues of relevance and likely concern with the preliminary proposal. However, the comments and views in this document are based only on the plans and information submitted for preliminary assessment and discussion at the pre-DA meeting. You are advised that: -

- The views expressed may vary once detailed plans and information are submitted and formally assessed in the development application process, or as a result of issues contained in submissions by interested parties;
- Given the complexity of issues often involved and the limited time for full assessment, no guarantee is given that every issue of relevance will be identified;
- Amending one aspect of the proposal could result in changes which would create a different set of impacts from the original plans and therefore require further assessment and advice; and,
- The Pre-DA advice given does not bind Council officers, the elected Council members, or other parties to the DA process.

Submitted by:

Surbhi Chhabra  
Development Assessment and Planning Assistant  
Development Assessment and Planning  
Planning and Environment Services (East)  
Built and Natural Environment

Approved by:

Adam Small  
Supervisor  
Development Assessment and Planning  
Planning and Environment Services (East)  
Built and Natural Environment

Date: 01 December 2021