

# Bushfire Assessment and Recommendations


**Proposed Residential Development  
Residential Subdivision &  
Attached Dual Occupancy  
900 Henry Lawson Drive  
Picnic Point NSW 2213**

**(within realigned Lot 5 DP 17218 & within the approved  
re-subdivision / boundary realignment of Lots 4 & 5 DP 17218)**



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<b>Reviewed by:</b>		

## Introduction

The following report has been commissioned by Robak Developments Pty Ltd, here in *'the proponent'*, to provide a Bushfire Assessment and Recommendations for bushfire safety and design compliance for the proposed residential subdivision/development of 900 Henry Lawson Drive, Picnic Point NSW 2213 (Canterbury – Bankstown Council Local Government Area), herein *'the subject property'* or *'subject development'*.

The development application involves the subdivision of a single residential allotment (unregistered Lot 5), into two new residential allotments, and the construction of a new attached dual occupancy.

The subject site is known as 'Lot 5' for the purposes of this report. Lot 5 is located within the approved re-subdivision / boundary realignment between Lots 4 & 5 DP 17218, as approved by Canterbury Bankstown Council (address previously known as 898 Henry Lawson Drive, DA-432/2024, Dated 28 June 2024 & RFS BFSA Reference No. DA20240529002198, Dated 23 June 2024).

The approved re-subdivision / boundary realignment between Lots 4 & 5 DP 17218 is not yet registered. Lot 5 will be known as 900 Henry Lawson Drive, once registered.

This assessment considers the subject development site on the basis of:

- A site-specific inspection undertaken on 4/3/2025,
- An analysis of the stamped/approved subdivision plan supporting DA-432/2024, prepared by BJC Architectural Building Designers (Job Reference HENL98, Sheet No. A063, Revision D, Dated 11/06/2024);
- An analysis of the proposed architectural plans, prepared by Archicorp, Belmore (Project No. 24-021, Drawing No. 1 – 10, Issue A, Dated 10/02/25);
- An analysis of the proposed new subdivision plan, prepared by Archicorp, Belmore (Project No. 24-021, Drawing No. 11, Issue A, Dated 10/02/25); &
- A desktop assessment using licensed or on-line spatial data resources available at the time of this report.

The subject property has currently been identified as being within, or bounded by, bush fire prone land. As such, the development has been assessed against the requirements and principals (aim and objectives) as outlined in the NSW document *'Planning for Bush Fire Protection 2019'*.

PBP 2019 states;

*'The aim of PBP is to provide for the protection of human life and minimize the impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment.'*

*The objectives are to:*

- *Afford buildings and their occupant protection from exposure to a bushfire;*
- *Provide for a defensible space to be located around buildings;*
- *Provide adequate separation between a hazard and buildings which, in combination with other measures, prevent the likely spread to buildings;*
- *Ensure that the appropriate operational access and egress for emergency services personnel and occupants is available;*
- *Provide for ongoing management and maintenance of Bushfire Protection Measures (BPMs): and*
- *Ensure that utility services are adequate to meet the needs of firefighters.*

This assessment includes an analysis of the potential (persisting) bushfire hazard extent and threat to the subject development and recommends standards and bush fire mitigation measures that should be introduced to address the objectives of PBP 2019.

Bushfire safety compliance, as purported by this report, for the subject development site, comprises a package of *measures in combination* including asset protection zones, building construction & design, landscaping, emergency management arrangements, water supply & utilities and access as applicable.

The above measures have been derived from provisions and recommendations as outlined within the document '*Planning for Bush Fire Protection 2019*'.

The following bushfire assessment has been prepared in accordance with the *NSW Rural Fires Regulation 2022 Clause 45 - Application for a bush fire safety authority*.

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## 1.0 Description of the property

### 1.1 Lot and deposited plan (DP) number of the subject property

Lot: 5                      DP: TBC

**Note:** Within the approved (but not yet registered), realigned Lot 5 DP 17218 & within the approved re-subdivision / boundary realignment of Lots 4 & 5 DP 17218.

### 1.2 Street address and locality map

900 Henry Lawson Drive, Picnic Point NSW 2213.

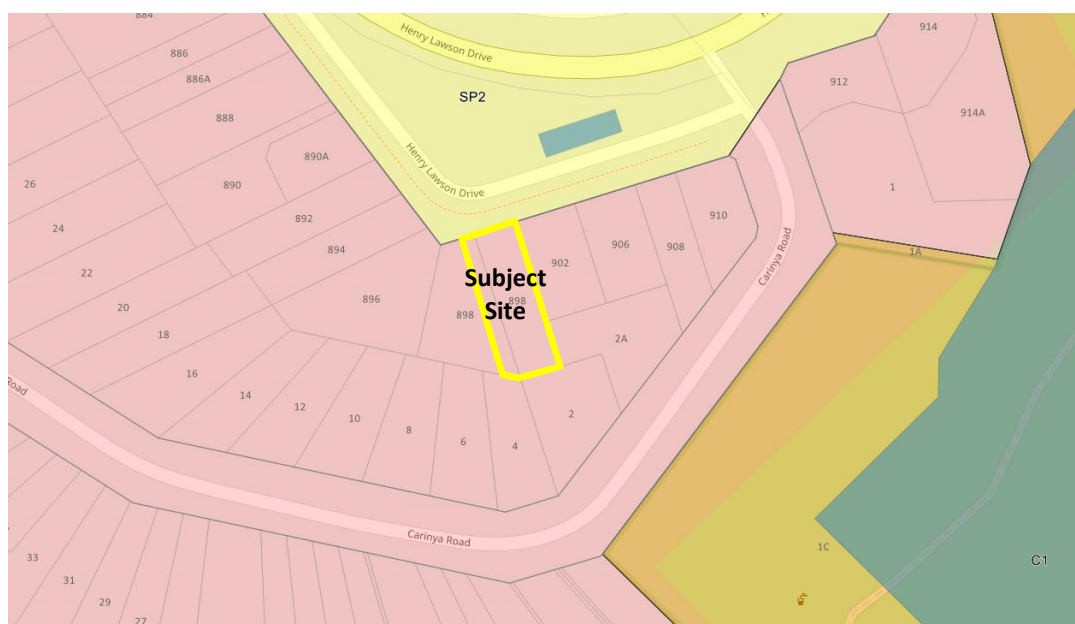
Locality map is as denoted in attached Map 1.

### 1.3 Zoning of the subject land and any adjoining lands

The subject site is zoned 'R2 – Low Density Residential' (Bankstown LEP 2023).

All adjoining residential allotments are zoned similarly, to support ongoing residential development.

These sites are separated from some bushland reserves to the South East (Georges River National Park & Fitzpatrick Park) by a local road (Carinya Road). The site also then also adjoins the major Henry Lawson Drive road reserve to the North.



**Extract Bankstown LEP 2023**



## 1.4 Staging issues, if relevant, and description of the whole proposal

### Description of the whole proposal

The site (Lot 5) is an approved (but not yet registered) single residential allotment (being an approved realignment of Lots 4 & 5 DP 17218), within a well-established residential subdivision.



The site currently has direct access to the public road system (Henry Lawson Drive).

Both new residential allotments will also be accessed directly from the existing public road system, by way of sealed all weather driveways.

The development application involves the subdivision of a single residential allotment (unregistered Lot 5), into two new residential allotments, and the construction of a new attached dual occupancy.

The subject site is known as 'Lot 5' for the purposes of this report. Lot 5 is located within the approved re-subdivision / boundary realignment between Lots 4 & 5 DP 17218, as approved by Canterbury Bankstown Council (address previously known as 898 Henry Lawson Drive, DA-432/2024, Dated 28 June 2024 & RFS BFSA Reference No. DA20240529002198, Dated 23 June 2024).

The approved re-subdivision / boundary realignment between Lots 4 & 5 DP 17218 is not yet registered. Lot 5 will be known as 900 Henry Lawson Drive, once registered.

The construction of these residential buildings is also subject to another assessment under *Section 4.14 EP&A Act 1979* (to determine relevant bushfire construction requirements – Bushfire Attack Levels) which is included within this assessment.

### **Staging Issues (temporary and reciprocal asset protection zone easements / agreements)**

For the purposes of bushfire safety compliance, the subject development will not rely on any temporary / reciprocal asset protection zone (APZ) easement / agreement on some adjoining lands.

## **1.5 Aerial or ground photographs of the subject land, existing and proposed cadastre**

An ortho-photo and boundary overlay of the subject property is as shown attached Map 1. Ground / site photos (captured 4/3/2025) of the subject property, neighbouring lands and existing public access roadway are appended to this report (Appendix 2).

Contours as shown / considered by this report are derived from the Department of Lands SIX Viewer Digital Elevation Model (DEM) data (10m Contour Interval).

The proposed cadastral boundaries are as denoted in attached Map 2.

## **2.0 Classification of vegetation out to 140m from the development**

### **2.1 Structural description consistent with the identification key in Keith D (2004) and PBP 2019**

The subject property has currently been identified as being within, or bounded by, bush fire prone land, and as such the development has been assessed against the requirements and principals (aim and objectives) as outlined in the NSW document '*Planning for Bush Fire Protection 2019*'.

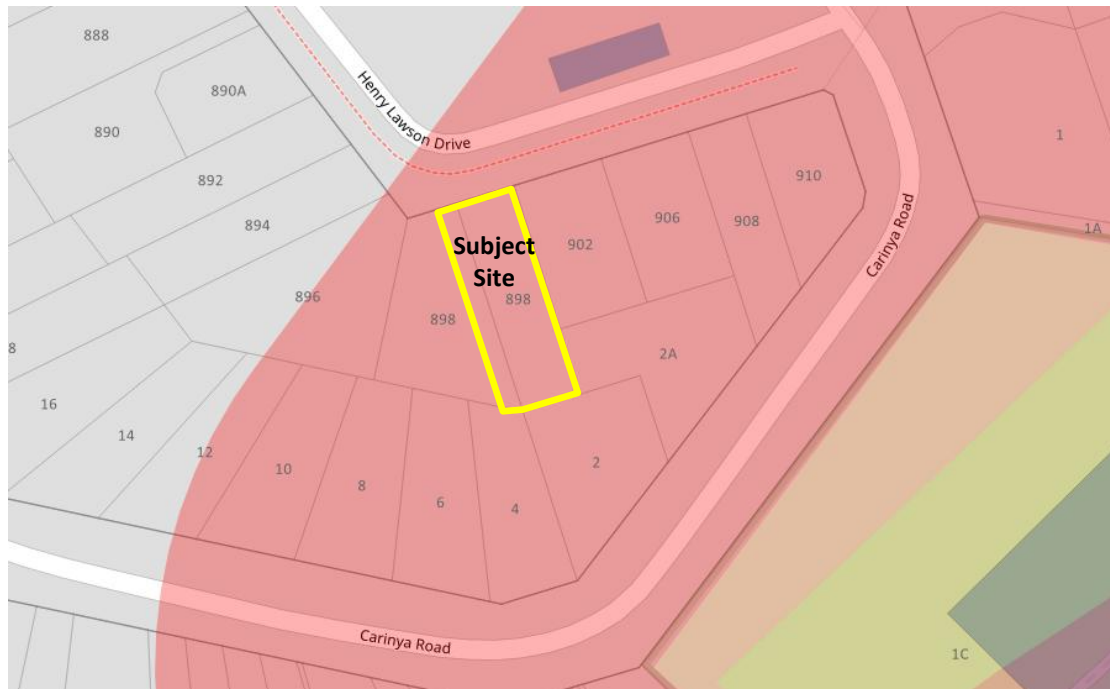
The extent of bushfire vegetation (hazard) within the study area is derived from aerial photo interpretation (API), a desktop review of local vegetation classification mapping and an inspection of the subject property.

The vegetation constraining the development is located within some public reserve (Georges River National park & Kilpatrick Park) to the South East of the subject site.

All vegetation is mapped within local studies as 'Sydney Coastal Dry Sclerophyll Forest'.

The subject development would potentially be prone to bushfire attack from the South – South East.

The extent of the bushfire vegetation (hazard) is clearly denoted in Appendix 1.



#### **Extract Canterbury – Bankstown Council BFPLM**

*PBP 2019 (Appendix 1 Section A1.10) states, 'The following exclusions of AS3959 apply, and are not required to be considered for the purposes of PBP, as detailed below:*

- *Single areas of vegetation less than 1 hectare in area and greater than 100metres separation from other areas of Category 1 and 2 vegetation.*
- *Multiple areas of vegetation less than 0.25 hectares in area and not within 20m of the site, or each other or of other areas of vegetation being classified vegetation.*
- *Strips of vegetation less than 20m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20m of the site or other areas of vegetation being Category 1, 2 or 3 vegetation.*
- *Vegetation regarded as low threat due to factors such as flammability, moisture content or fuel load, including grassland managed in a minimal fuel condition, mangroves and other saline wetlands, maintained lawns, golf courses such as playing areas and fairways, maintained public reserves and*



*parklands, sporting fields, vineyards, orchards, banana plantations, market gardens and other non-curing crops, cultivated gardens, arboretums, commercial nurseries, nature strips and windbreaks.*

- *Existing areas of managed gardens and lawns within curtilage of buildings.*
- *Non-vegetated areas including waterways, roads, footpaths, buildings and rocky outcrops.*

Considering the above, this report notes that all adjoining residential properties are generally considered 'managed lands'.

Adjacent sites currently contain established residential dwellings and all associated infrastructure.

The subject development also adjoins a managed road reserve along the Northern boundary (Henry Lawson Drive).

The subject development sites **will** provide sufficient separation for all proposed residential dwellings to comply with NCC – BCA DtS provisions or otherwise the application of AS 3959:2018.

## **2.2 Past disturbance factors and any future intended land uses that could alter the vegetation classification in the future**

Considering the location of the development site, within an established residential area, and the zoning of the adjacent lands, it would be reasonable to suggest that the potential extent of bushfire vegetation that may persist or accumulate adjacent to the subject development site will not increase any further in the future.

Residential development, under the local planning legislation (i.e. CBLEP 2023), will continue to maintain existing levels of residential development throughout the area, with no further increase in bushfire risk anticipated.

## **3.0 Assessment of the effective slope to a distance of 100m**

Slope analysis (used by this assessment) is derived from 2m grid digital elevation model (DEM) and a general inspection of the subject development site. This includes deriving contours for each 2m change in elevation and the approximate areas of slope / gradient based on PBP slope classes.

The effective slope surrounding or affecting the subject development site, primarily influencing bushfire behaviour has been assessed as:

Direction	Maximum Effective Slope (over up to 100m)
South East	18 Degrees Downslope (>15 – 20 Degrees Downslope)

#### 4.0 Identification of any significant environmental features

The proponent has not advised of any constraint, restriction or burden over the subject property for the purposes of land development and associated asset protection zone maintenance.

Based on a brief desktop assessment of the subject property, the following table outlines any significant environmental features potentially affected by the subject development.

**Table 1.0**

Environmental Feature	Present within Subject Property	Present within Study Area	Comment
Native Forest / Vegetation	No	Yes	Some native forest vegetation is located within the study area.
Riparian Corridor	No	No	
SEPP 14 – Wetland	No	No	
SEPP 26 – Littoral Rainforest	No	No	
SEPP 44 – Koala Habitat	No	No	
Areas of Geological Interest	Undetermined	Undetermined	
Environmental Protection Zones	No	No	
Steep Lands (>18°)	No	No	
Land Slip Area	No	No	
Flood Prone Area	Undetermined	Undetermined	
National Park / State Forest	No	Yes	

## **5.0 Details of threatened species, populations, endangered ecological communities and critical habitat known to the applicant**

No known threatened species, populations or ecological communities have been noted, recorded or advised of as part of this assessment.

For the purposes of this assessment, the proponent has not provided, nor indicated there to be any other threatened species issues or occurrence potentially affecting the subject land / development.

## **6.0 Details of Aboriginal heritage known to the applicant**

No known Aboriginal relics (being a relic within the meaning of the *NSW National Parks and Wildlife Act 1974*) or Aboriginal place (within the meaning of that Act) have been noted, recorded or advised of as part of this assessment.

For the purposes of this assessment, the proponent has not provided nor indicated there to be any items or issues of Aboriginal heritage potentially affecting the subject property / development.

Likewise, this assessment has not considered any past studies, surveys for the area or any documentation supplied to council in relation to any items or issues of Aboriginal heritage potentially affecting the subject property / development.

## **7.0 Bushfire assessment (including methodology)**

Methodology for this site assessment for bushfire attack and recommended mitigation measures (setback distances and construction standards) are based on Appendix 1 PBP 2019.

Minimum required asset protection zones and other recommended setback measures for bushfire protection are derived from distances outlined by Appendix 1 PBP 2019, for a residential subdivision development within an **FDI 100** Fire Area (Table A1.12.2 Appendix 1 PBP 2019).

The Canterbury – Bankstown Council LGA is designated as potentially having an **FDI of 100** as a 1:50 year event (Source: NSW RFS).

**Table 2.0**

<b>Table A1.12.2 Appendix 1 PBP 2019</b>				
<b>Direction</b>	<b>Vegetation</b>	<b>Minimum APZ Distance</b>	<b>Slope</b>	<b>k/Wm<sup>2</sup></b>
South – South East	Forest	Minimum 56m <b>(Actual &gt;56m)</b>	>15 – 20 Degrees Downslope	29

Considering the above, the subject development site can reasonably facilitate the specified minimum APZ / setback from potentially unmanaged and persisting bushfire vegetation, located within the study area.

Where the minimum specified APZ distance extends beyond the boundary of the subject development site, the adjoining land is managed lands and road reserves.

## **8.0 Bushfire Protection Measures**

The Bushfire Protection Measures (BPMs) for residential and rural residential subdivisions include measures relating to APZs, access to structures and water supply, fire trail access, and provision of water. Electricity and gas services should be provided so they don't add to the bush fire risk to buildings.

All requirements for BPMs that relate to the development must be provided, unless where specific circumstances apply to render a BPM irrelevant (e.g. no landscaping required).

### **8.1 Asset protection zones (including any management arrangements or easements including those contained on adjoining lands)**

**Intent of measures:** to provide sufficient space and maintain reduced fuel loads to ensure radiant heat levels at the building are below critical limits and prevent flame contact (Chapter 5.3.1 PBP 2019).

<b>Performance Criteria</b>	<b>Acceptable Solution</b>	<b>Compliance</b>	<b>Assessment / Comment</b>
The intent may be achieved where:			
<b>Asset Protection Zones</b>			
<b>Potential building footprints must not be exposed to radiant heat levels exceeding 29 kW/m<sup>2</sup> on each proposed lot.</b>	APZs are provided in accordance with Tables A1.12.2 and A1.12.3 based on the FFDI.	<b>Yes</b>	As per Recommendation No. 1

Performance Criteria	Acceptable Solution	Compliance	Assessment / Comment
The intent may be achieved where:			
APZs are managed and maintained to prevent the spread of fire towards the building	APZs are managed in accordance with the requirements of Appendix 4.	Yes	Where the minimum specified APZ areas extend beyond the boundary of the proposed allotment, the adjoining land will be road reserves, or managed lands.
The APZ is provided into perpetuity.	APZs are wholly within the boundaries of the development site.	No	
APZ maintenance is practical, soil stability is not compromised and the potential of a crown fire is minimised.	APZs are located on lands with a slope less than 18 degrees.	Yes	
Landscaping			
Landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions.	Landscaping is in accordance with Appendix 4.	Reasonably assumed	As per Recommendation No. 1
	Fencing is constructed in accordance with section 7.6	Reasonably assumed	Any landscaping and fencing to be constructed as part of the subdivision works will be able to comply.

The minimum specified APZ / setback required for the subject development have been determined within Section 7.0 (above). Considering the above, the subject development site can reasonably facilitate the specified minimum APZ / setback from potentially unmanaged and persisting bushfire vegetation, located within the study area.

Where the minimum specified APZ distance extends beyond the boundary of the subject development site, the adjoining land is managed lands and road reserves.

APZ recommendations are as listed Section 12.0 (Bushfire Safety & Compliance Recommendations).

## 8.2 Access

**Intent of measures:** to provide safe operational access to structures and water supply for emergency services, while residents are seeking to evacuate from an area (Chapter 5.3.2 PBP 2019).



Performance Criteria	Acceptable Solution	Compliance	Assessment / Comment
The intent may be achieved where:			
<b>Access (General Requirements)</b>			
<b>Firefighting vehicles are provided with safe all-weather access to structures.</b>	Property access roads are two-wheel drive, all-weather roads.	N/A	<p>No new property access arrangements or new public roads are proposed, nor required, as part of this development application.</p> <p>A compliant reticulated water supply has been provided.</p>
	Perimeter roads are provided for residential subdivisions of three or more allotments.	N/A	
	Subdivisions of three or more allotments have more than one access in and out of the development.	N/A	
	Traffic management devices are constructed to not prohibit access by emergency vehicles.	N/A	
	Maximum grades for sealed roads do not exceed 15 degrees and an average of not more than 10 degrees or other gradient specified by road design standards, whichever is the lesser gradient.	N/A	
	All roads are through roads.	N/A	
	Dead ends are not recommended, but if unavoidable, are not more than 200m in length, incorporate a minimum 12 meters' outer radius turning circle, and are clearly signposted as a dead end.	N/A	
	Where kerb and guttering is provided on perimeter roads, roll top kerbing should be used to the hazard side of the road.	N/A	
	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.	N/A	
	One-way public access roads are no less than 3.5 meters wide and have designated parking bays with hydrants located outside of these areas to ensure accessibility to reticulated water for fire	N/A	

Performance Criteria	Acceptable Solution	Compliance	Assessment / Comment
The intent may be achieved where:			
	suppression.		
The capacity of access roads is adequate for firefighting vehicles.	The capacity of perimeter and non-perimeter road surfaces and any bridges / causeways as sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes); bridges / causeways are to clearly indicate load rating.	N/A	
There is appropriate access to water.	Hydrants are located outside of parking reserves and road carriageways to ensure accessibility to reticulated water for fire suppression.	Yes	
	Hydrants are provided in accordance with the relevant clauses of AS 2419.1:2005 – <i>Fire hydrant installations System design, installation and commissioning.</i>	Yes	
	There is suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available.	N/A	
Perimeter Roads			
Access roads are designed to allow safe access and egress for 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.	Are two-way sealed roads	N/A	No new public roads are proposed, nor required, as part of this development application.
	Minimum 8m carriageway width kerb to kerb.	N/A	
	Parking is provided outside the carriageway width.	N/A	
	Hydrants are located clear of parking areas.	N/A	
	Roads are through roads, and these are linked to the internal road system at an interval of no greater than 500m.	N/A	
	Curves of roads have a minimum inner radius of 6m.	N/A	
	The maximum road grade is 15 degrees and average grade of not more than 10 degrees.	N/A	
	The road cross fall does not exceed 3 degrees.	N/A	
	A minimum vertical clearance of 4m to any overhanging obstructions,	N/A	

Performance Criteria	Acceptable Solution	Compliance	Assessment / Comment
The intent may be achieved where:			
	including tree branches, is provided.		
Non-Perimeter Roads			
Access roads are designed to allow safe access and egress for firefighting vehicles while residents are evacuating.	Minimum 5.5m carriageway width kerb to kerb.	N/A	No new public roads are proposed, nor required, as part of this development application.
	Parking is provided outside of the carriageway width.	N/A	
	Hydrants are located clear of parking areas.	N/A	
	Roads are through roads, and these are linked to the internal road system at an interval of no greater than 500m.	N/A	
	Curves of roads have a minimum inner radius of 6m.	N/A	
	The road cross fall does not exceed 3 degrees.	N/A	
	A minimum vertical clearance of 4m to any overhanging obstructions, including tree branches, is provided.	N/A	
Property Access			
Firefighting vehicles can access the dwelling and exit the property safely.	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.	Yes	Both proposed residential allotments have direct access to the existing public road system.  Both proposed dwellings are located within 70m of the existing public road system.
	In circumstances where this cannot occur, the following requirements apply.		
	Minimum 4m carriageway width.	N/A	
	In forest, woodland and heath situations, rural property access roads 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	

Performance Criteria	Acceptable Solution	Compliance	Assessment / Comment
The intent may be achieved where:			
	A minimum vertical clearance of 4m to any overhanging obstructions, including tree branches.	N/A	
	Property access must provide a suitable turning area in accordance with Appendix 3.	N/A	
	Curves have a minimum inner radius of 6m and are minimal in number to allow for rapid access and egress.	N/A	
	The minimum distance between inner and outer curves is 6m.	N/A	
	The cross fall is not more than 10 degrees.	N/A	
	Maximum grades for sealed roads do not exceed 15 degrees and not more than 10 degrees for unsealed roads.	N/A	
	A development comprising of more than 3 dwellings has formalised access by dedication of a road and not by right of way.	N/A	
Note: 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. The gradients applicable to public roads also apply to community style development property access roads in addition to the above.			

The subject development site will be accessed directly from Henry Lawson Drive, by way of short sealed all weather driveways. PBP 2019 acceptable solutions for property roads (relevant to these allotments) states that:

*‘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)’.*

Access recommendations are as listed Section 12.0 (Bushfire Safety & Compliance Recommendations).

### 8.3 Services – Water, electricity and gas

**Intent of measures:** to provide services for 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 (Chapter 5.3.3 PBP 2019).

Performance Criteria	Acceptable Solution	Compliance	Assessment / Comment
The intent may be achieved where:			
Water Supplies			
Adequate water supplies are provided for firefighting purposes.	Reticulated water is provided to the development where available.	Yes	As per Recommendation No. 3  A compliant reticulated water supply has previously been provided.
	A static water and hydrant supply is provided for non-reticulated developments or where reticulated water supply cannot be guaranteed.	N/A	
	Static water supplies shall comply with table 5.3d.	N/A	
Water supplies are located at regular intervals, and the water is accessible and reliable for firefighting operations.	Fire hydrant, spacing, design and sizing complies with the relevant clauses of AS 2419.1:2005.	Yes	
	Hydrants are not located within any road carriageway.	Yes	
	Reticulated water supply to urban subdivisions uses a ring main system for areas with perimeter roads.	Yes	
Flows and pressures are appropriate.	Fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005.	Reasonably assumed	
The integrity of the water supply is maintained.	All above ground water service pipes are metal, up to and including any taps.	Reasonably assumed	
	Above ground water storage tanks shall be concrete or metal.	N/A	
Electricity Services			
Location of electricity services limits the possibility of ignition of surround bush land or the fabric of the buildings.	Where practicable, electrical transmission lines are underground.	Yes	As per Recommendation No. 3  All future electrical transmission lines within the subject development will be located underground.
	Where overhead, electrical transmission lines are proposed as follows: - Lines are installed with short pole spacing of 30m, unless crossing gullies, gorges or riparian areas.	N/A	



Performance Criteria	Acceptable Solution	Compliance	Assessment / Comment
The intent may be achieved where:			
	- No part of a tree is closer to a power line than the distance set out in <i>ISSC3 Guideline for Managing Vegetation Near Power Lines</i> .		
<b>Gas Services</b>			
<b>Location of gas services will not lead to ignition of surrounding bush land or the fabric of the buildings.</b>	Reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 – <i>The storage and handling of LP Gas</i> , and metal piping is used.	<b>Reasonably assumed</b>	As per Recommendation No. 3  Any future gas supply will be installed and maintained as per the provisions of PBP 2019.
	All fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side.	<b>N/A</b>	
	Connections to and from gas cylinders are metal.	<b>N/A</b>	
	Polymer-sheathed flexible gas supply lines are not used.	<b>Reasonably assumed</b>	
	Above ground gas service pipes are metal, including and up to any outlets.	<b>Reasonably assumed</b>	

The subject development site is currently connected to a reticulated water supply, which services the residential development along Henry Lawson Drive. This report notes a number of hydrant connection points within the local road system.

Apart from the above, the proponent has not provided any specific advice (at the time of this assessment) regarding proposed reticulated water infrastructure and mains size, supply pressure or guarantee of delivery.

Services recommendations are as listed Section 12.0 (Bushfire Safety & Compliance Recommendations).

## 9.0 Construction standards to be used

Based on the above assessment, APZ recommendations and current separation distances stated by this report, the subject development site **will** provide sufficient separation for the current and future residential dwellings to comply with BCA DTS provisions or otherwise the application of AS 3959:2018.

The site methodology used for this assessment is based on Appendix 1 PBP 2019 and Table A1.12.5. In terms of establishing the construction levels relevant to the new residential dwellings, the following table illustrates the relevant BAL exposure levels for the proposal.

**Table 3.0**

Residence	Vegetation	Slope	Actual Separation	BAL Exposure Level
Lot 1	Forest	>56m	>15 – 20 Degrees Downslope	<b>BAL – 29</b>
Lot 2	Forest	>56m	>15 – 20 Degrees Downslope	<b>BAL – 29</b>

Construction standard recommendations are as listed Section 12.0 (Bushfire Safety & Compliance Recommendations).

## 10.0 An assessment of how the development complies with the specific objectives within Chapter 5 of PBP 2019

**Table 4.0**

Specific Objectives	Assessment / Comment
Minimise perimeters of the subdivision exposed to the bush fire hazard (hourglass shapes, which maximize perimeters and create bottlenecks should be avoided).	Where all recommendations stated by this report are reasonably and adequately incorporated into the design of the subdivision, exposure to bushfire hazards will be minimised.  In this respect, occupants remaining within a dwelling or else defending the dwelling during a potential bushfire should be reasonably separated from the effects of a bushfire event.
Minimise vegetated corridors that permit the passage of bush fire towards buildings.	Where all recommendations stated by this report are reasonably and adequately incorporated into the design of the subdivision, vegetated corridors and the passage of bushfire towards the buildings are minimised.
Provide for the siting of future dwellings away from ridge-tops and steep slopes, within saddles and narrow ridge crests.	Where all recommendations relating to APZ areas as stated by this report are reasonably and adequately incorporated, future dwellings will be afforded appropriate separation from bushfire hazards and detrimental features to prevent direct flame contact and material ignition.
Ensure that APZs between a bushfire hazard and future dwellings are effectively designed to address the relevant bush fire attack mechanisms.	Where all recommendations relating to APZ areas stated by this report are reasonably and adequately incorporated, it would be reasonable to assume that future dwellings are afforded sufficient separation distances to address all relevant bushfire attack mechanisms.

Specific Objectives	Assessment / Comment
Ensure the ongoing maintenance of APZs.	<p>Where all recommendations relating to APZ areas stated by this report are reasonably and adequately incorporated, it would be reasonable to assume regular residential property maintenance would ensure ongoing management and maintenance of bush fire protection measures.</p> <p>Should the standard or upkeep of APZ areas become compromised during the life of the subject development site, it would also be reasonable to assume Council or the Fire Authorities, through their standard policies, would address such issues (bushfire hazard) and notice procedures.</p>
Provide adequate access from all properties to the wider road network for residents and emergency services.	<p>Where all recommendations relating to property access as stated by this report are reasonably and adequately incorporated, emergency services personnel and residents should be afforded safe operational access / egress to the subject development site.</p> <p>The proposed public roadway system should safely facilitate access and egress (early evacuation) from the subject development site for emergency services personnel and residents during a bushfire event.</p>
Provide access to hazard vegetation to facilitate bush fire mitigation works and fire suppression.	<p>Where all recommendations relating to access as stated by this report are reasonably and adequately incorporated, emergency services personnel should be afforded safe operational access / egress to the subject development site.</p>
Ensure the provision of an adequate supply of water and other services to facilitate effective firefighting.	<p>Where all recommendations relating to firefighting water supplies as stated by this report are reasonably and adequately incorporated, both emergency services personnel and others assisting in bush firefighting should safely be able to draw on a water supply for property protection purposes.</p> <p>Similarly, where the installation or connection to electrical services and gas services incorporates the associated recommendations as stated by this report, both emergency services personnel and others assisting in bush firefighting should safely be able to manage any electrical or gas hazards associated during a bushfire event.</p>

## 11.0 An assessment of how the development complies with the aims and objectives of PBP 2019

Table 5.0

Aim and objectives	Assessment / Comment
Afford buildings and their occupant protection from exposure to a bushfire.	Where all recommendations stated by this report are reasonably and adequately incorporated, occupants remaining within the subject development site during a significant bushfire event would be afforded the benefit of bushfire protection ' <i>measures in combination</i> '. In this respect, occupants remaining within a dwelling or else defending the dwelling during a bushfire should be reasonably protected or separated from the effects of a bushfire event.
Provide for a defensible space to be located around buildings.	Where all recommendations relating to APZ areas stated by this report are reasonably and adequately incorporated and maintained, the proposed residential building would be afforded a defensible space.  Firefighters or occupants undertaking property protection activities in and around any future proposed residential buildings should reasonably be afforded protection and separation from radiant heat and an opportunity to quell small ignitions that may occur on or directly adjacent to the residential buildings.
Provide adequate separation between a hazard and buildings, which, in combination with other measures, prevent the likely spread to buildings.	Where all recommendations relating to APZ areas as stated by this report are reasonably and adequately incorporated, any future proposed residential buildings will be afforded appropriate separation to prevent direct flame contact and material ignition.
Ensure that the appropriate operational access and egress for emergency services personnel and occupants is available.	Where all recommendations relating to access roads as stated by this report are reasonably and adequately incorporated, emergency services personnel and residents should be afforded safe operational access / egress for the subject development site. The proposed public roadway system should safely facilitate access and egress (early evacuation) from the subject development site for emergency services personnel and residents during a bushfire event.
Provide for ongoing management and maintenance of BPMs.	Where all recommendations relating to BPMs stated by this report are reasonably and adequately incorporated, it would be reasonable to assume regular residential property maintenance would ensure ongoing management and maintenance of bush fire protection measures.  Should the standard or upkeep of BPMs become compromised during the life of the subject development site, it would also be reasonable to assume Council or the Fire Authorities, through their standard policies, would address such issues (bushfire hazard) and notice procedures.

Aim and objectives	Assessment / Comment
Ensure that utility services are adequate to meet the needs of firefighters.	<p>Where all recommendations relating to firefighting water supplies as stated by this report are reasonably and adequately incorporated, both emergency services personnel and others assisting in bush firefighting should safely be able to draw on a water supply for property protection purposes.</p> <p>Similarly, where the installation or connection to electrical services and gas services incorporates the associated recommendations as stated by this report, both emergency services personnel and others assisting in bush firefighting should safely be able to manage any electrical or gas hazards associated during a bushfire event.</p>

## 12.0 Bushfire Safety & Compliance Recommendations

The following recommendations are made for the bushfire safety & protection measures for the proposed residential subdivision development within 900 Henry Lawson Drive, Picnic Point NSW 2213.

These recommendations are based upon the relevant provisions (acceptable solutions or performance criteria) within the NSW Rural Fire Service guideline entitled *Planning for Bush Fire Protection 2019*, for residential & rural residential subdivision developments in bushfire prone areas.

### **Recommendation No. 1**

#### **Asset Protection Zones**

- 1.1** At the issue of the subdivision certificate, and in perpetuity, the entirety of both residential lots shall be considered to be an 'Asset Protection Zone' (APZ). This APZ shall be managed as an 'Inner Protection Area' as outlined within 'Appendix 4 – Planning for Bush Fire Protection 2019' and the document 'Standards for asset protection zones' (NSW Rural Fire Service, 2005).

#### **Landscaping**

- 1.2** Landscaping is to be in accordance with 'Appendix 4 – Planning for Bush Fire Protection 2019'.
- 1.3** Fencing is to be constructed in accordance with 'Section 7.6 – Planning for Bush Fire Protection 2019'.



## **Recommendation No. 2**

### **Access – Property Access Roads**

#### **2.1 Property Access roads shall comply with the following requirements of ‘Chapter 5.3.2 – Planning for Bush Fire Protection 2019’.**

- *‘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’.*

## **Recommendation No. 3**

### **Services – Water, electricity and gas**

#### **3.1 Water Supplies shall comply with the following requirements of ‘Chapter 5.3.3 – Planning for Bush Fire Protection 2019’.**

- Reticulated water is provided to the development where available.
- Fire hydrant, spacing, design and sizing complies with the relevant clauses of AS 2419.1:2005.
- Hydrants are not located within any road carriageway.
- Reticulated water supply to urban subdivisions uses a ring main system for areas with perimeter roads.
- Fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005.
- All above ground water service pipes are metal, up to and including any taps.

#### **3.2 Electrical Services shall comply with the following requirements of ‘Chapter 5.3.3 – Planning for Bush Fire Protection 2019’.**

- Where practicable, electrical transmission lines are underground.

#### **3.3 Gas Services shall comply with the following requirements of ‘Chapter 5.3.3 – Planning for Bush Fire Protection 2019’.**

- Reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 – *The storage and handling of LP Gas*, and metal piping is used.
- Polymer-sheathed flexible gas supply lines are not used.
- Above ground gas service pipes are metal, including and up to any outlets.

## **Recommendation No. 4**

### **Construction**

Construction standards have been determined from the following sections of the planning guidelines and are based on the relevant bushfire assessment as discussed above.

*AS 3959:2018 Section 3 Construction General*  
(See Recommendation 4.1)

*AS 3959:2018 Section 7 Construction for Bushfire Attack Level 29 (BAL – 29)*  
(See Recommendation 4.2)

*Steel Framed Construction in Bushfire Areas (NASH 2021)*

- 4.1** Where any part of a garage, carport, veranda or similar roofed structure is attached to, or shares a common roof space with, or is within 6m of, a building required to comply with the standard, the entire structure shall comply with the construction requirements of the standard (as per Recommendation 4.2), as applicable to the subject building.

Alternatively, the structure may be separated from the subject building by a wall complying with *AS 3959:2018 Section 3.2.1 a) or b)* i.e. fire rated construction as specified.

- 4.2** Predicated upon the maintenance of the APZ area as per Recommendation No. 1 of this report, it is recommended the proposed development incorporate, as a minimum, the following levels of construction as per *AS 3959:2018 Construction of buildings in bushfire prone areas*;

### **Attached Residences Lot 1 & Lot 2 – All Elevations**

**Construction for Bushfire Attack Level 29 (BAL – 29)  
– Section 7 (AS 3959:2018)**

**Alternately, the relevant sections of ‘NASH Standard – Steel Framed Construction in Bushfire Areas (NASH 2021)’ may be applied.**

**4.3** All sarking used shall be:

- Non-combustible, **or**
- Breather type sarking complying with AS/NZS 4200.1 and with a flammability index of not more than 5 (see AS 1530.2) and sarked on the outside of the frame, **or**
- An insulation material conforming to the appropriate Australian Standard for that material.

**4.4 South Elevations – Rear Alfresco & Roof (Lot 1 & Lot 2)**

The rear alfresco & associated roof should be constructed of 'non-combustible' materials only.

Apart from the suspended concrete floor slab, no structural elements should be shared with the attached residential structure (i.e. roof structure etc.).

**4.5 Fences & Gates**

All new fences and gates should be constructed of non-combustible materials.

**4.6 Retaining Walls**

All new retaining walls should be constructed of non-combustible materials.

### 13.0 Conclusion

Provided that the proposed residential building development, APZ areas, access provisions and services within the subject development site are designed, constructed and maintained in accordance with the recommendations as described by this report, it is a considered opinion that the subject development can satisfy the aims and objectives of *Planning for Bush Fire Protection 2019* that are considered relevant to the development under *Section 100B NSW Rural Fires Act 1997* and *Section 4.14 EP&A Act 1979*.

Bushfire safety compliance and mitigation (as recommended and/or purported by this report) for the subject development site comprises a package of '*measures in combination*' primarily including asset protection zoning, construction standards, access roads and adequate services for firefighting purposes.

The above measures have been derived from provisions and recommendations as outlined within the document '*Planning for Bush Fire Protection 2019*', engineered judgment, considered opinion, and previous advice received from the NSW Rural Fire Service.



**Scott Jarvis**  
**Sydney Bushfire Consultants**

Graduate Diploma Design for Bushfire Prone Areas  
Diploma of Building Surveying  
Diploma of Public Safety (Fire Fighting Management) (Dip PSFM)  
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## 14.0 References

*Australian Standard 3959:2018 Construction of buildings in bushfire prone areas* – Standards Australia.

*Building Best Practice Guide – Upgrading of Existing Buildings* (Development Assessment & Planning, NSW Rural Fire Service, Reference 0914).

*National Construction Code (2022)* – Australian Building Codes Board, Canprint.

*Environmental Planning and Assessment Act (1979)* – NSW Government Printer.

- Section 4.14 Consultation and Development Consent Certain Bushfire Prone Land
- Section 10.3 Bushfire Prone Land

*Rural Fires Act (1997)* – NSW Government Printer

*Landscape and building design for bushfire areas (2003)* – Ramsay G C & Rudolf L, CSIRO Publishing, Collingwood Victoria.

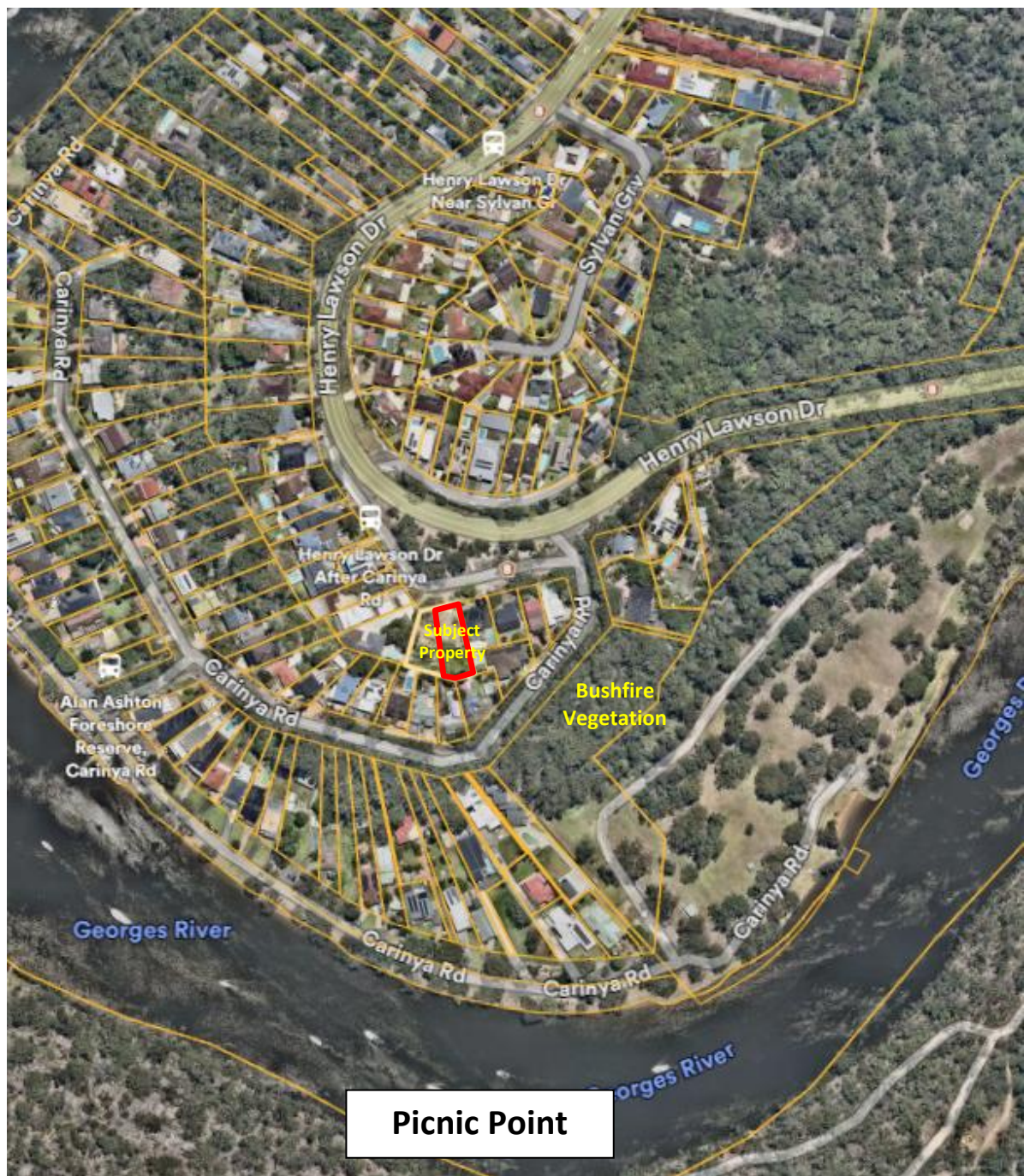
*Ocean shores to desert dunes: the native vegetation of NSW and the ACT (2004)* – Keith D, NSW Dept of Environment and Conservation, Hurstville NSW.

*Planning for Bush Fire Protection. A guide for councils, planners, fire authorities and developers (2019)* – NSW Rural Fire Service.

*Standards for Asset Protection Zones* – NSW Rural Fire Service



## Map 1 – Overview & Access

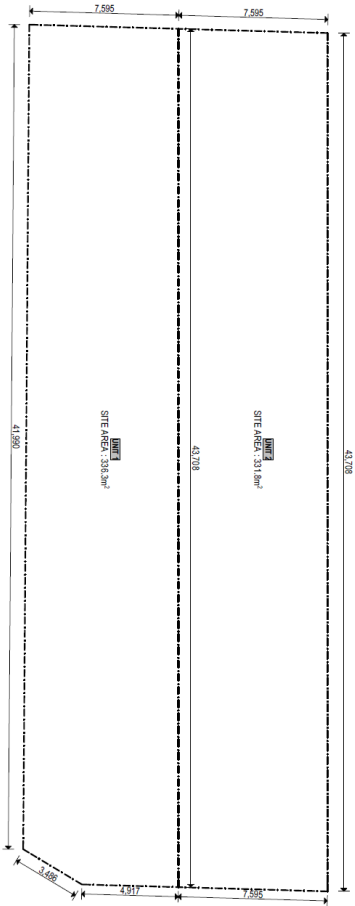


Map 2 – Subdivision Plan

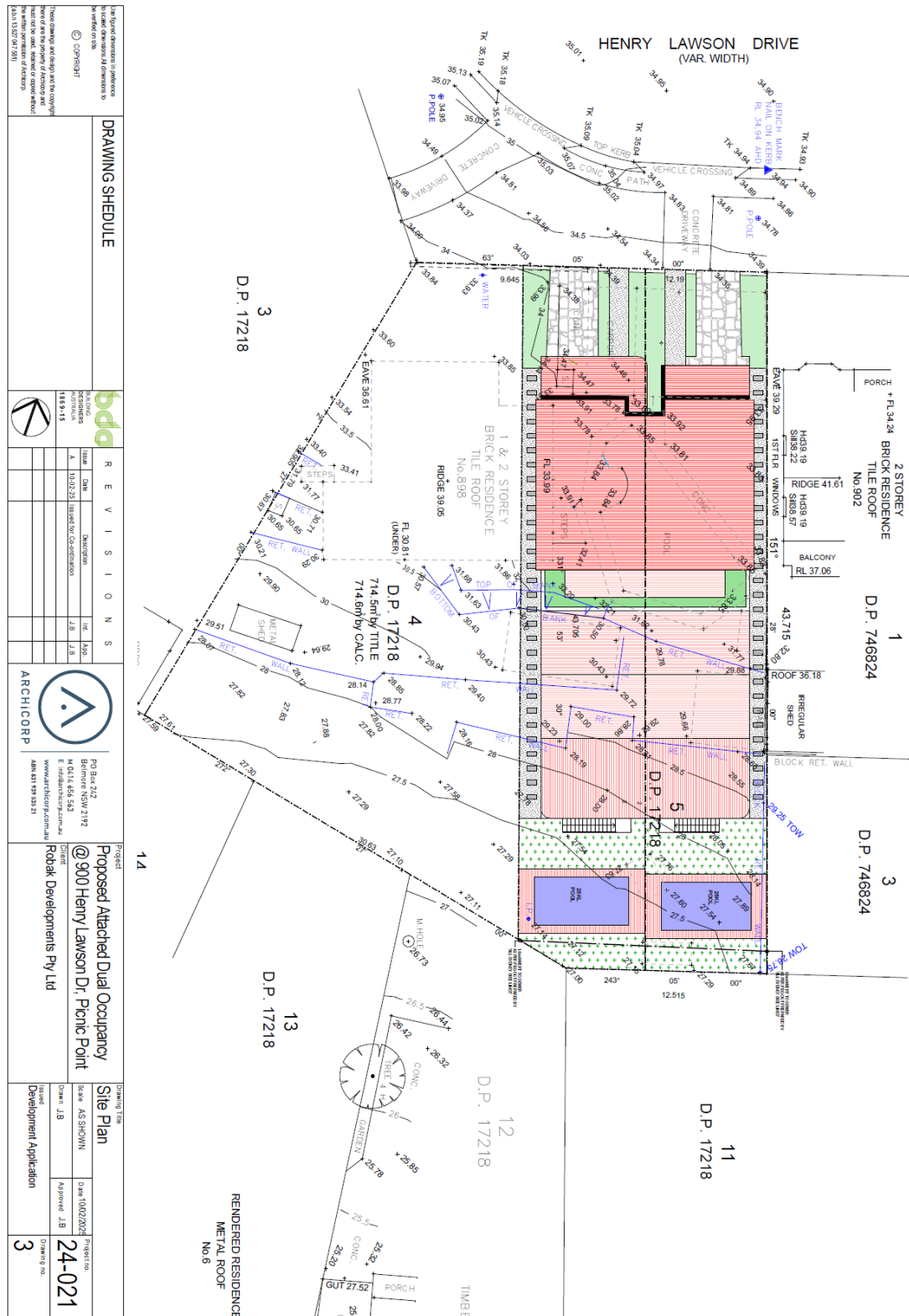
Use of drawings is in accordance with the provisions of the Building Act 1993 and the Building Regulation 2006. All dimensions are to be as shown on the drawings.	
DRAWING SCHEDULE	
bdc BUILDING DESIGN CONSULTANTS 100/115	
R E V I S I O N S	
Issue	Date
A	10/02/2025
Description	
Submitted for Consideration	
Int.	App.
J.B	J.B
ARCHICORP	
PO Box 242 Picnic Point NSW 2213 M 0414 656 543 E info@archicorp.com.au www.archicorp.com.au ABN 831 959 535 21	
Project	
Proposed Attached Dual Occupancy @ 900 Henry Lawson Dr, Picnic Point	
Client	
Robak Developments Pty Ltd	
Drawing Title	
Subdivision Plan	
Scale	AS SHOWN
Drawn	J.B
Checked	J.B
Development Application	
Project no.	
24-021	
Drawing no.	
11	

SUBDIVISION PLAN

SCALE 1:200 @ A3



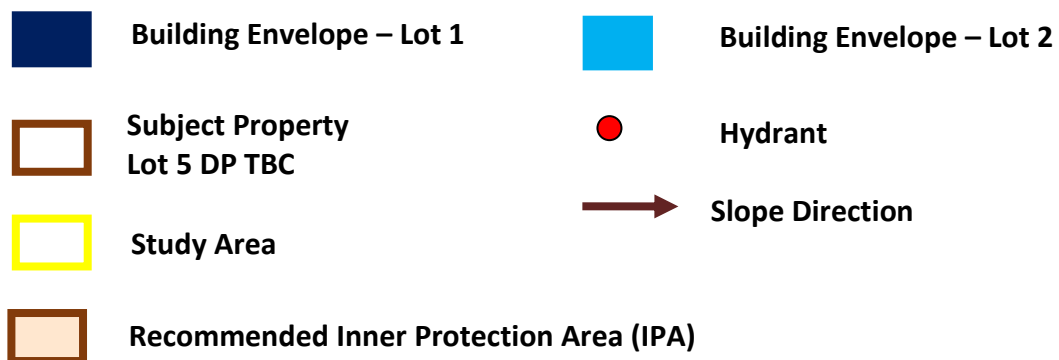
## Map 3 – Site Plan







## Appendix 1 - Bushfire Constraints





**Appendix 2 – Site Photos (4/3/2025)**



Existing site, looking South



Adjacent residential, looking East



Adjacent residential, looking West



Henry Lawson Road, looking North



Electrical supply point



Reticulated water supply





Public access side road / Henry Lawson Drive, looking West



Public access side road / Henry Lawson Drive, looking East



Typical forest vegetation, beyond Carinya Road, looking South



Typical forest vegetation, beyond Carinya Road, looking South East