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BUSHFIRE ASSESSMENT REPORT

1 INTO 4 LOT SUBDIVISION – 8 Myrtle Court, BLACKBUTT NORTH
Lot on Plan 118 RP174019

[redacted]

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14 September 2026

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1 Introduction

[redacted] was engaged by [redacted] to prepare a Bushfire Assessment Report in support of a Reconfiguring a Lot Development Application to South Burnett Regional Council (SBRC) for a 1 into 4 lot subdivision at 8 Myrtle Court, BLACKBUTT NORTH on land described as Lot on Plan 118 RP174019 (hereafter referred to as 'the site').

The site has been designated on the South Burnett Regional Planning Scheme (SBRPS) *Bushfire Hazard Overlay Map* as containing "bushfire prone" land. Accordingly, an assessment against the provisions of the *Bushfire Hazard Overlay Code* is required in support of the development application. The code requires the preparation of a Bushfire Management Plan to demonstrate the proposed development is designed in such a way that minimises the number of people and properties subject to bushfire risk.

Having been identified as "bushfire prone" by SBRC, the National Construction Code (NCC), ABCB (2019) specifies functional performance requirements for bushfire, and compliance with *AS3959-2018 Construction of buildings in bushfire-prone areas* for future Class 1, 2 or 3 buildings on the site.

Although this report has been prepared specifically to address requirements of SBRC's *Bushfire Hazard Overlay Code* and does take into consideration NCC requirements applicable to future buildings on the site, this report should not be used to satisfy building design requirements applicable at building construction stage. The recommendations of this report however will determine future building location and design options.

1.1 Report Objectives

This Bushfire Assessment Report has been prepared generally in accordance with SBRC's *Bushfire Hazard Overlay Code*, requirements of AS3959-2018, and vegetation clearing constraints. The report

- Provides an assessment of the bushfire threat and subsequent risk to the proposed development.
- Identifies and maps Bushfire Attack Level (BAL) requirements (BAL contours) for future buildings, in association with objectively determined setbacks and radiant heat shielding design elements to determine the suitability of the proposed development given its intended use.
- Details bushfire mitigation measures including building requirements, building siting, fuel management, access, and water requirements in accordance with legislative requirements and the general need to reduce the risk to life and property in bushfire prone environments.

1.2 Assessment Limitations

Site specific bushfire assessments comprise a necessarily limited field survey scope/timeframe undertaken at a specific point in time. Therefore, due to factors including climatic and seasonal variation they may not result in a complete representation of bushfire risk. As bushfire risk is also substantially influenced by land management practises undertaken at the time of the assessment and the proposed future use including its nature and intensity, the results of the bushfire assessment are limited to a specific set of circumstances.

In this regard, conclusions and recommendations stated herein are provided in good faith and of the understanding that conclusions and recommendations reached are only applicable to the proposed development as described. This report should not be used for further or future development of the site other than as described herein.

Changes to circumstances, including the passage of time and subsequent changes in fuel loads dependent on both weather conditions and vegetation management activities, together with changes in subdivision design will necessitate a reassessment of bushfire risk.

This report has been prepared on the basis that bushfire mitigation measures identified are implemented and maintained into the future. Failure to maintain these measures may contribute to the development and future buildings being exposed to a higher level of bushfire threat and attack.

This report including recommendations does not guarantee future buildings will survive a bushfire, and it is only considered valid for a period of 12 months.

1.3 Development Planning Context

The Bushfire Assessment Report has been prepared with regard to a future Development Application for 'Reconfiguring a Lot' (RaL) and has therefore been prepared in accordance with relevant provisions of the following legislation/policies:

- *South Burnett Regional Planning Scheme (2017) (Version 2,0, Effective from 28 October 2024).*
- Queensland *Planning Act (2016).*
- *AS3959-2018 Construction of buildings in bushfire-prone areas.*
- Queensland *Vegetation Management Act (1999)* (VM Act).

As noted previously, the site is designated on SBRC's Planning Scheme Bushfire Hazard Overlay. In this regard, the subdivision proposal requires assessment against provisions of the *Bushfire Hazard Overlay Code*.

The site is also broadly designated on SBRC's Planning Scheme Biodiversity Overlay. It should be noted that this bushfire assessment has been based solely on matters relevant to bushfire risk and mitigation as they relate to the features of the site and surrounds. Ecological matters have not expressly been examined in the context of this assessment or other matters including provisions of the Reconfiguring a Lot Code.

As SBRC has integrated the *State Planning Policy 2017* (SPP 2017) into their planning scheme, an assessment against the included natural hazards benchmarks is not required to be conducted.

1.4 Adopted Assessment Methodology

The current (Version 2.0) South Burnett Regional Planning Scheme provides minimal guidance on carrying out a Bushfire Assessment or preparing a Bushfire Management Plan in support of a development proposal application.

The Bushfire Hazard Overlay Code does though refer to *the Bushfire Resilient Communities Technical Reference Guide* (QFES Guidelines), which was prepared by the Queensland Fire and Emergency Services (QFES) to provide technical guidance for the SPP 2017 guidance material. The method detailed in these guidelines to undertake bushfire hazard assessment involves a quantitative assessment of the vegetation communities, fuel loads, slope, and other relevant factors.

The methodology used for this Bushfire Assessment is generally in accordance with the QFES Guidelines and that contained within AS3959-2018 (Bushfire Attack Level (BAL) Assessment). In addition, four (4) limiting design factors were also adopted and underlie the assessment undertaken. These are:

- A maximum sizing of Asset Protection Zones (APZs) in regulated vegetation restricted to the amount able to be cleared via the currently available exemption for the purposes of providing a firebreak for infrastructure (10m for boundary fencing under the *Vegetation Management Act 1999* (VM Act).
- Minimising the amount of regulated vegetation afforded protection under the VM Act to be cleared via a future exemption that dwelling approvals would give rise to (a necessary firebreak to protect infrastructure that is 1.5 times the height of the tallest adjacent vegetation or 20m whichever is greater).
- BAL ratings that do not exceed BAL 29 (i.e. a radiant heat flux level of 29 kW/m^2 or less).
- The entirety of any APZ is to be located wholly within each proposed lot.

With the above limiting design factors in mind, this assessment seeks to demonstrate that the proposed development satisfies the overall purpose of the *Bushfire Hazard Overlay Code* and in doing so minimises the extent of vegetation onsite needed to be cleared or structurally managed.

The overall purpose of the *Bushfire Hazard Overlay Code* is to ensure that risk to life, property, and the environment as a result of bushfire is mitigated to an acceptable or tolerable level in bushfire prone areas, by ensuring the reconfiguration of land appropriately responds to bushfire hazard and development, among other facets, provides access to water for firefighting purposes.

In the context of a subdivision proposal, it is considered a development appropriately responds to bushfire hazard where it can be demonstrated the subdivision proposal:

- Minimises the potential adverse impacts of bushfire on people, property, economic activity, and the environment.
- Does not result in a material increase in the extent or severity of bushfire hazard.

- Can accommodate future buildings that can comply with the requirements of AS3959-2018 (and hence the requirements of the National Construction Code (NCC)) and in doing so any required bushfire mitigation measures can be carried out wholly within lots.
- Minimises the loss of ecologically significant vegetation through inappropriately located development.
- Is designed to assist emergency services in responding to any bushfire threat.

1.5 The National Construction Code & Australian Standard AS3959-2018

Where a local government planning scheme designates an area "bushfire prone" (this being land mapped on SBRC's Bushfire Hazard Overlay mapping), a proposal to construct a new or upgrade a residential building (among others) will trigger assessment against the NCC.

The NCC itself calls up AS3959-2018 Construction of buildings in bushfire-prone areas and determines how a building is to be constructed to resist a hazard level, providing an acceptable construction practice, which is then deemed to satisfy the requirements of the NCC. These bushfire construction requirements are aimed at improving bushfire protection for buildings.

AS3959-2018 specifies building implications within 100m of designated bushfire prone land, or more strictly speaking, within 100m of intact, classified vegetation (50m in the case of grassland) and requires a site-by-site (for Class 1, 2 and 3 buildings) assessment of the hazard at building works approval stage to be signed off by a building certifier.

AS3959-2018 divides bushfire prone areas into six bushfire attack levels (Figure 1), based on the severity of the building's potential exposure to ember attack, radiant heat, and direct flame contact:

- BAL-LOW - very low risk.
- BAL-12.5 - low risk.
- BAL-19 - moderate risk.
- BAL-29 - high risk.
- BAL-40 - very high risk.
- BAL-FZ - extreme risk (Flame Zone).

A Bushfire Attack Level (BAL) assessment is a means of measuring the severity of a building's potential exposure to ember attack, radiant heat and direct flame contact in a bushfire event and thereby determining the construction measures required for the dwelling.

Because a BAL assessment is applicable, only for site-by-site circumstances (or in other words building-by-building) it is for this reason this assessment, prepared in the context of a development proposal, should not be used in support of obtaining future building permits on the site.



BAL-12.5	BAL-19	BAL-29	BAL-40	BAL-FZ
The risk is considered to be **LOW**	The risk is considered to be **MODERATE**	The risk is considered to be **HIGH**	The risk is considered to be **VERY HIGH**	The risk is considered to be **EXTREME**
There is a risk of ember attack. The construction elements are expected to be exposed to a heat flux not greater than 12.5 kW/m^2.	There is a risk of ember attack and burning debris ignited by wind borne embers and a likelihood of exposure to radiant heat. The construction elements are expected to be exposed to a heat flux not greater than 19 kW/m^2	There is an increased risk of ember attack and burning debris ignited by windborne embers and a likelihood of exposure to an increased level of radiant heat. The construction elements are expected to be exposed to a heat flux not greater than 29 kW/m^2.	There is a much increased risk of ember attack and burning debris ignited by windborne embers, a likelihood of exposure to a high level of radiant heat and some likelihood of direct exposure to flames from the fire front. The construction elements are expected to be exposed to a heat flux not greater than 40 kW/m^2.	There is an extremely high risk of ember attack and burning debris ignited by windborne embers, and a likelihood of exposure to an extreme level of radiant heat and direct exposure to flames from the fire front. The construction elements are expected to be exposed to a heat flux greater than 40 kW/m^2.

Figure 1: Explanation of Bushfire Attack Levels

Images sourced from Planning Practice Note 65 September 2014 Victoria State Government
BAL Descriptions - *Australian Standard AS3959-2018 - Construction of buildings in bushfire-prone areas*

2 Site Details & Development Description

2.1 Site Details & Location

The site is made up of one (1) almost rectangular shaped lot located at 8 Myrtle Court, BLACKBUTT NORTH within the South Burnett Regional Council's local government area, approximately 1.5 km northeast of the Blackbutt town centre.

The site is zoned as Rural Residential under the *South Burnett Regional Planning Scheme 2017* (SBRPS). The site locality is shown in Figure 2 on Page 6. Table 1 below provides a summary of the site details.

Table 1: Summary of Site Details

SITE ADDRESS:	8 Myrtle Court, BLACKBUTT NORTH
LOT ON PLANS:	118 RP174019
LOCAL GOVERNMENT:	South Burnett Regional Council
TOTAL SITE AREA:	20,012 m² (2.01 ha)
TENURE:	Freehold
ZONE:	Rural Residential
FIRE AUTHORITY:	**BLACKBUTT FIRE BRIGADE** 72 Hart Street, Blackbutt Phone No. 07 4172 8701 **TAROMEO RURAL FIRE BRIGADE** Mobile No. 0427 509 380
BUSHFIRE HAZARD:	Very High Potential Bushfire Intensity

2.2 Current Site Use

The site is currently mostly covered by trees, with two single-storey dwellings and associated outbuildings located on the southern side of the property. Several sheds and multiple water tanks are also located across the site.

Each existing dwelling are currently unoccupied. However, each has historically been leased to tenants as a residential property. Due to the site's proximity to Blackbutt township, it is assumed that the site has historically functioned as a rural residential place of residence.

2.3 Topography & Drainage

The site exhibits a gentle overall gradient, falling from approximately 452 m AHD along the southeastern boundary to approximately 439 m AHD at its lowest point in the northwestern corner of the property.

No watercourses, dams, or drainage lines are mapped within the site. The nearest mapped watercourse is the West Branch of Taromeo Creek, located approximately 1 km northwest of the site.

The absence of mapped water features indicates that the site is not directly intersected by any defined waterways or drainage corridors.

2.4 Surrounding Land Use

The site is bordered by a mix of rural residential and recreation/open space land uses, as outlined below:

- **North:** Rural residential properties are located north of the site, across Myrtle Court.
- **East:** Rural residential properties adjoin the site to the east.
- **South:** The Brisbane Valley Rail Trail, zoned Recreation and Open Space, is located immediately south of the site. Beyond this are further rural residential properties at the cul-de-sac head of Griffith Road.
- **West:** Rural residential properties adjoin the site to the west.

More broadly, the site is located on the southern outskirts of Blackbutt North, a rural locality characterised by an established pattern of rural residential living. The predominant land use in the surrounding area is rural residential development, generally comprising larger rural residential allotments similar in form and scale to the proposed subdivision. Larger rural lots used for grazing and pasture are also present on the fringes of Blackbutt North and within the broader locality.

Rural residential development is well established in the vicinity of the site, particularly near the D'Aguilar Highway corridor through Blackbutt. This settlement pattern is likely influenced by the area's rural amenity, accessibility, and natural landscape features.

2.5 Proposed Development

The applicant is seeking a Development Permit for Reconfiguring of a Lot to subdivide one (1) existing lot into four (4) lots ranging from 4,000m^2 to 6,275m^2.

Proposed Lots 2 & 3 will have direct access to Myrtle Court, whilst proposed Lots 1 & 4 will be provided access via access handles running parallel with their respective boundaries. A proposed Site Plan prepared by ONF Surveyors is presented in Appendix A.

The existing houses on proposed Lot 4 are to be retained. The shed situated on the proposed boundary separating Lots 1 and 4 is expected to be removed following approval of the subdivision.

2.6 Bushfire Hazard Overlay Mapping

The Bushfire Hazard Overlay shows the entirety of the site mapped as Very High Potential Bushfire Intensity. The bushfire hazard mapping for the site and the surrounding area is shown in Figure 3.

2.7 Vegetation Hazard Classes

Vegetation is the primary source of fuel and combustion of fuel powers a bushfire. However, it is not just the quantity (load) of fuel that matters, but also the fuel arrangement and composition of fuel that contributes to the rate of fire spread and fire line intensity.

Only potential fuel load is used and here this refers to the possible total fuel load that a vegetation community would normally accumulate 10 years after a fire is used to estimate the fire line intensity and bushfire hazard. Not the actual fuel load on any particular day or year as measured in the field. This approach has been introduced by the State to ensure there is underlying consistency in bushfire planning and design across the State.

This potential total fuel load represents the ambient fuel load that is combustible under severe weather conditions. It is calculated as the sum of surface fuel load, near-surface fuel load, elevated fuel load and standing bark fuel and represents the 80th percentile fuel load for each fuel category based on the long-term unburnt condition.

Here fine fuel load, structure and composition, is described using a series of vegetation hazard classes (VHCs) which are in turn used to estimate potential fuel loads as outlined above. VHCs are based on the Queensland Herbarium's Regional Ecosystem mapping at the broad vegetation group level, and several other mapping data sets such as foliage projective cover mapping.

With reference to Figure 4, the site and immediate surrounding area are mapped as containing three (3) vegetation hazard classes (VHCs), as follows:

- *8.1 Wet eucalypt tall open forest*
- *40.4 Continuous low grass or tree cover*
- *42.6 Nil to very low vegetation cover*

The entirety of the site is mapped as containing *8.1 Wet eucalypt tall open forest*. For details of field confirmation and corresponding potential fuel loads, refer to Sections 4.3 and 4.5 on Pages 12 and 16, respectively.

2.8 Proximity of Fire Brigade(s)

The site is within the Taromeo Rural Fire Brigade district and is located approximately 2.5 km by road (around 3-4 minutes away) northeast of the Blackbutt Auxiliary Fire Brigade Station situated at 72 Hart Street BLACKBUTT. These Rural and Auxiliary Fire Brigades are operated by volunteers and would have a response times dependent on availability of volunteers to turn out.

In the event of a natural disaster, emergency response teams are likely to be also drawn from the Yarraman Auxiliary Fire Brigade Station situated at 7 Toomey Street YARRAMAN as well as other nearby Rural Fire Brigades (Moore Linville and Mount Binga).

2.9 Specific Risk Factors Associated with the Proposed Development

2.9.1 Anticipated Onsite Activities

As noted above the proposed development is for a residential subdivision. No bulk storage or handling of hazardous materials in bulk is envisaged.

2.9.2 Numbers of People Likely to be Present

Under normal circumstances up to two adult persons and potentially children can be expected to be present on each lot depending on the time of day and day of the week.

Figure 2
Site Locality Plan

Legend

- Subject Site
- Locality Boundary
- State Contolled Roads

Layer Sources: Qld GIS Layers (Qld Gov Information Service 2026)
Aerial - Google Earth 2026

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Project No:	YEP2026032		
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Revision:	A	Date:	26/05/26

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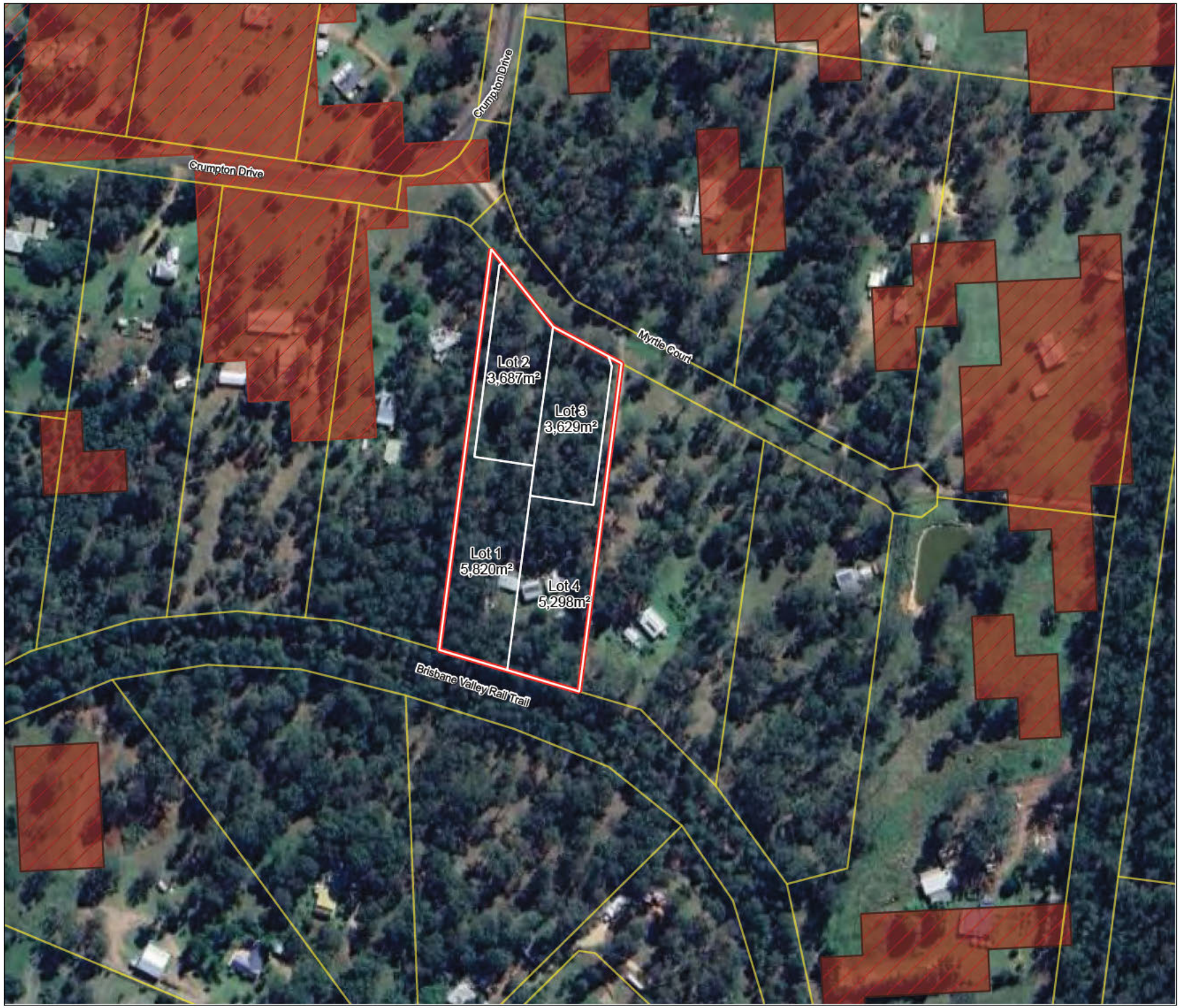
2,200 m

1: 50,000 (A4)
GDA2020 MGA Z56

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Figure 3
Bushfire Hazard Overlay



Legend

- Proposed Lot Layout
- Subject Site
- Cadastre

Bushfire Hazard Overlay : CLASS

- High Potential Bushfire Intensity
- Medium Potential Bushfire Intensity
- Potential Impact Buffer
- Very High Potential Bushfire Intensity

Layer Sources: Qld GIS Layers (Qld Gov Information Service 2026)
Aerial - Google Earth 2026

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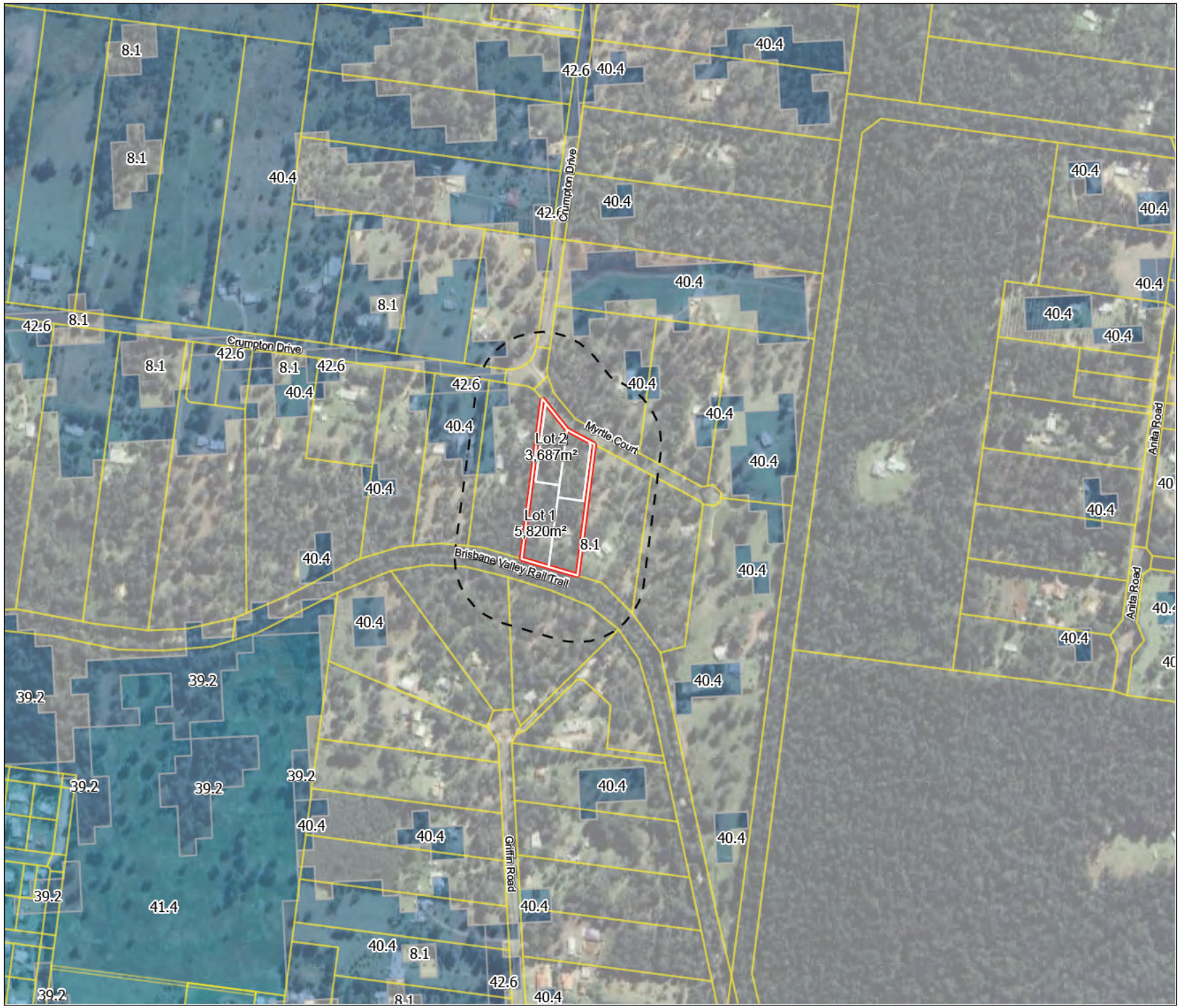
CELEBRATING 20 YEARS

130 m

1: 3,000 (A4)
GDA2020 MGA Z56

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Figure 4
Vegetation Hazard Class



Legend

- 100m Buffer
- Proposed Lot Layout
- Subject Site
- Cadastre

Vegetation Hazard Class : VHC

- 5.1
- 8.1
- 38.5
- 39.2
- 40.4
- 41.4
- 42.6
- 43.6

Layer Sources: Qld GIS Layers (Qld Gov Information Service 2026)
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Client:	[redacted]		
Project No:	YEP2026032		
Drawn:	[redacted]	Approved:	[redacted]
Revision:	A	Date:	11/06/26

N

330 m

1: 7,500 (A4)
GDA2020 MGA Z56

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3 Nature & Severity of Potential Bushfire Attack

By way of background, bushfire attack comes in a number of forms: direct flame, radiant heat, embers, smoke and wind (Figure 5), and that in most bushfires over 80% of housing loss and 80% of human life loss has occurred within 100m of bushland (Chen and McAneney 2004; Blanchi, Leonard et al. 2013).

Overall, the intention of bushfire mitigation measures should be to prevent flame contact to a structure, reduce radiant heat to below the ignition thresholds for various elements of a building, to minimise the potential for wind driven embers to cause ignition and reduce the effects of smoke on residents and firefighters.

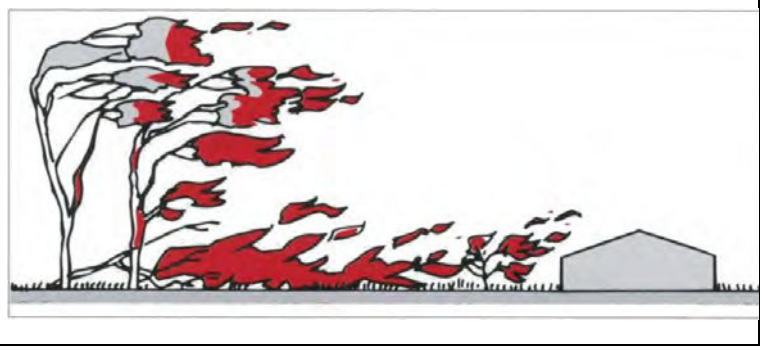
Ignition of buildings by burning embers carried by the wind	
Ignition of buildings by heat radiation from the fire	
Ignition of buildings by direct flame contact	

Figure 5: The Three Main Elements of Bushfire That Threaten Life and Property

Source: (Ramsay & Rudolf 2003)

3.1 Bushfire Season & Fire Weather

3.1.1 Bushfire Season

Varied fire seasons reflect different weather patterns. For most of southern Australia, the danger period is summer and autumn. For New South Wales and southern Queensland, the peak risk usually occurs in spring and early summer. Northern Australia experiences most of its fires in winter and spring (Figure 6).

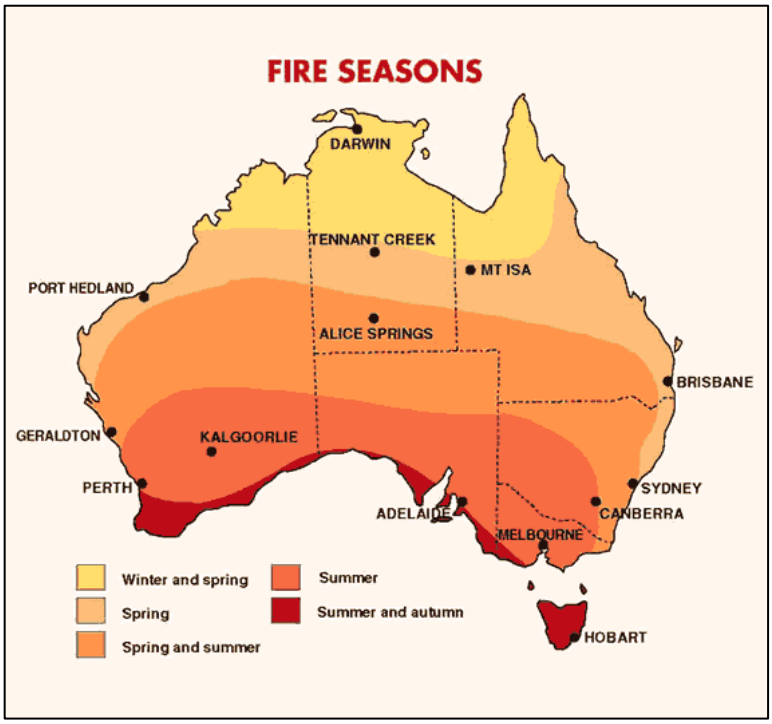


Figure 6: Australia's Fire Seasons

In Queensland, bushfires can occur at any time of the year, however the fire season usually coincides with progressive drying following the autumn rain season, peaking during the spring months of more severe fire weather, and concluding with the arrival of more regular storm events and rain in late spring and summer. On the east coast, this peak fire season is characterised by frequent dry westerly winds and lower humidity. In inland areas, wind direction is less significant, and the fire season can extend much longer into the summer months if rainfall is delayed.

The typical fire season in the Blackbutt North area peaks between September and November. The predominant winds in the area are south easterly, however during the fire season; hot gusty northerlies and westerlies of over 30 kph can be expected, with Relative Humidity falling to 20%.

Temperatures on these days can exceed 35^0C, and for two or three days a year, fire weather conditions equivalent to FDI levels of around 70 can be anticipated. It should be noted that this is in contrast to the value of 40 which is the current FDI attributed to Queensland in AS3959-2018.

3.1.2 Anatomy of a Fire Danger Day

In terms of weather conditions, low relative humidity, high winds, and lack of rain all contribute to increased fire danger. Sunshine and high temperatures rapidly dry timber and grass (fuel) which burn very quickly. Hot air can lower the moisture content of forests and grasslands to around 5 per cent and in extreme cases to 2-3 per cent, greatly increasing the speed of the fire.

Humidity: Relative humidity is the most used measure of atmospheric moisture and is defined as the ratio of the amount of water vapour measured compared to that which air could hold at saturation. Very low relative humidity of, say, less than 20 per cent, causes fuels to dry out and become more flammable.

Wind: Air movement provides the oxygen the fire needs to keep burning. Higher winds mean more oxygen and more intense flames. Doubling the wind speed will quadruple the rate of spread of the fire. However, above about 50 km an hour this relationship begins to break down, and above 80 km/h the rate of spread in grasslands reduces. This occurs because the head fire breaks up into narrow tongues, many of which become self-extinguishing. Winds also carry burning embers downwind, which can start new fires. This is known as spotting.

Rainfall: Dry grass, parched native shrubs, and dead leaves and twigs are fire's basic fuel. During droughts and in very hot, windy weather, even heavy fuels like large logs and the green leaves and smaller branches of large trees can become dry and flammable.

The worst weather conditions in southern Queensland occur when deep low-pressure systems near Tasmania bring strong, dry, westerly winds to the coast, as occurred in the major New South Wales fires in January 1994 (Figure 7).

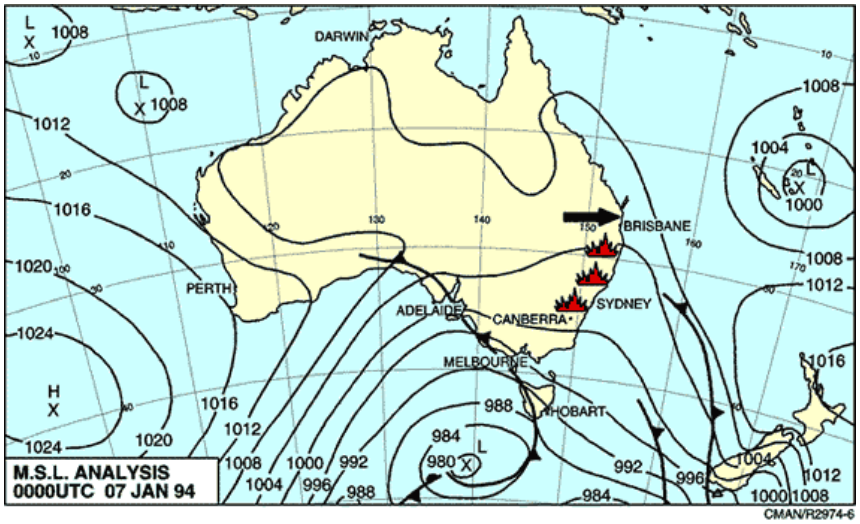


Figure 7: Historic Chart Analysis at 11am EDT on 7 January 1994, showing areas with extreme fire weather that resulted in serious bushfires in NSW and southern Queensland

Source: (Bureau of Meteorology)

3.2 Anticipated Direction of Bushfire Attack

The most likely direction for a major bushfire to approach the site is from the timbered areas to the north of the site or from the south of the site, where there is a large patch of canopy cover present. However, under adverse conditions, a bushfire could approach from virtually any direction.

As noted above, severe fire weather conditions are typically associated with hot strong westerly to northerly winds. Bushfires in the area have the potential to generate quantities of embers that could affect buildings even though the fire does not necessarily reach it.

3.3 Likely Fire Runs

The length of fire run influences the area in which a fire has to develop and reach its potential maximum intensity for the conditions prevailing at the time. It is important to assess the length of fire run to determine the potential scale and intensity of fires that may occur in the area.

Fire runs less than one (1) kilometre in length are generally considered to pose a lesser risk than those with a longer run. Fire runs may be modified by natural features such as creeks, rock formation and vegetation types and be influenced by weather and fuel conditions. Land management activities such as cultivation and cropping, roads and firebreaks can aid in limiting the potential of fire runs.

Fire runs in the locality of the site are relatively long and contiguous from the north, east and south, and consequently will increase the intensity and severity of bushfires in the area. The residential lots on its southwestern boundary have been largely modified due to residential activities including buildings, construction of roads and landscaping.

The semi developed nature of the landscape acts to impede the development, intensity and progress of a bushfire should one occur. There is a possibility for a fire to come up from the southern side of the site, but the most likely scenario is for a fire to be deliberately or accidently lit which could approach from ignition of dry vegetation along the roadside on the northern side of the site depending on the prevailing winds.

4 Bushfire Attack Level (BAL) Assessment

A BAL rating is determined through identification and assessment of the following parameters:

- Fire Danger Index (FDI) rating; assumed to be FDI-40 for QLD.
- All classified vegetation within 100m of the subject building.
- Separation distance between the building and the classified vegetation source/s; and
- Slope of the land under the classified vegetation.

There are two separate methods in AS3959-2018 for determining the impact of bushfire on buildings and have been summarised below:

- **Method 1** (outlined in Section 2 of AS 3959-2018) allows for a basic assessment of radiant heat flux that calculates the required setback to achieve an acceptable level of radiant heat exposure (i.e., BAL-29) based on an assessment of classified vegetation within 100m of a site. This method uses the standard fuel loads outlined in AS3959 and considers the effective slope beneath vegetation. This method can only be used where the slope **under** classifiable vegetation is equal to or less than 20 degrees downslope.
- **Method 2** (outlined in Appendix B of AS3959-2018) provides a framework for a more rigorous and site-specific assessment of radiant heat flux exposure for a site, involving bushfire engineering analysis and modelling using site specific data (e.g., climate/weather conditions during fire season, actual onsite fuel loads associated with classified vegetation etc.).

4.1 Assessment Method

This assessment has been undertaken using Method 2 of AS 3959-2018 to determine the maximum heat flux. Method 2 of AS 3959 involves the evaluation of the site characteristics using site specific conditions (such as fuel accumulation though in this instance the assessment relies on VHC derived fuel loads) and FDI to determine fire behaviour and is a more detailed assessment than Method 1.

4.2 Fire Danger Index (FDI)

In accordance with Table 2.1 of AS3959-2018 the relevant Fire Danger Index (FDI) for a BAL assessment in Queensland is FDI 40, however in view of adopting a more cautious approach and in line with methodology detailed in the QFES Guidelines, the assessment has adopted an FDI of 70.

4.3 Classified Vegetation Assessment

A site visit is necessary to inspect vegetation located on and around the site. An inspection for the purposes of confirming mapped vegetation hazard classes (VHCs) and classifying vegetation in accordance with AS 3959-2018 was carried out by [redacted] from [redacted] on Wednesday 6 May 2026.

In the context of AS3959-2018, vegetation within and the surrounding 100m of the site was assessed in the field and then mapped. Vegetation beyond 100m and that which does not trigger a BAL assessment (i.e., low threat) according to Section 2.2.3.2 of AS3959-2018 was excluded from the assessment.

This excluded low threat vegetation included the following:

- Vegetation of any type more than 100 m from the site.
- Single areas of vegetation less than 1 ha in area and not within 100 m of other areas of vegetation being classified.
- Multiple areas of vegetation less than 0.25 ha in area and not within 20 m of the site or each other.
- Strips of vegetation less than 20 m wide (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20 m of the site or each other, or other areas of vegetation being classified.
- Non-vegetated areas, including waterways, roads, footpaths, buildings, and rocky outcrops.
- Low threat vegetation, including grassland managed in a minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parkland, vineyards, orchards, cultivated gardens, commercial nurseries, nature strips and wind breaks.

In the context of AS3959-2018, two types of classified vegetation were encountered in the study area:

- **Open Forest** - Vegetation situated on adjoining properties to the north and west of the site consisting of trees up to 30m high, with between 40% and 50% canopy cover. This area is mapped as remnant vegetation by the Queensland Government, comprising of composite regional ecosystem RE 12.12.2 and 12.5.6c, which is dominated by *Eucalyptus pilularis* tall open forest on Mesozoic to Proterozoic igneous rocks especially granite and Eucalyptus siderophloia, E. propinqua, E.microcorys and/or E. pilularis open forest on remnant Tertiary surfaces (Plate 1).
- **Low threat vegetation -** areas of pasture, mown grass, driveways, roads, and gardens sometimes having occasional trees or patches of regrowth with a discontinuous canopy cover less than 30% (Plate 2).

The location and extent of this classified vegetation is illustrated on Figure 8.

Site photos are also provided in Appendix B. The site visit undertaken also included field assessment to confirm the VHCs mapped across and surrounding the site. It is considered that the VHC is accurately mapped.



Plate 1: Open Forest



Plate 2: Low Threat Vegetation

4.4 Effective Slope

From a bushfire hazard perspective, slope of the land under the bushfire prone vegetation can greatly influence fire behaviour. This slope is referred to as the effective slope. If the potentially hazardous vegetation is located upslope of the asset(s) the contribution that slope makes towards the intensity and rate of spread of the fire is negligible. Site slope is the gradient of the land between retained vegetation and adjoining assets. The site slope influences the 'view factor' of the flame geometries in BAL models.

Where potentially hazardous vegetation is located downslope of the asset(s) the effective slope gradient of the vegetated land will have significant influence on bushfire intensity and rate of spread.

Typically, for each 18-20% (or 10 degrees) increase in slope gradient the rate of forward spread and intensity of a bushfire will double for a fire moving up the slope towards an asset. Similarly, if the fire is moving down the slope the rate of spread will decrease by approximately double for each 18-20% (or 10 degrees) decrease in slope gradient. As the rate of spread of a bushfire increase so does its intensity.

A GIS and LIDAR desktop assessment of has been conducted and found a maximum effective slope of approximately 2 degrees downslope in a north easterly direction commencing from the north eastern corner of the APZ for proposed Lot 3.

A summary of the results of the effective slope assessment performed is presented in Table 2 overleaf. Figure 9 on Page 19 illustrates the maximum effective slope relevant to this assessment.

Table 2: Effective Slope Assessment Results

LOT NUMBER	DIRECTION	EFFECTIVE SLOPE
Lot 3	North East	2° Downslope
Lot 2	North West	2° Upslope
Lot 1	South West	2° Upslope

4.5 Potential Fuel Loads

Table 3 below lists the potential fuel loads used in the assessment for the ground truthed VHCs encountered on and surrounding the site as detailed in the *Bushfire Resilient Communities Guidelines* (QFES 2019). For all assessed directions, classified vegetation equated with *VHC 8.1 Wet eucalypt tall open forest.*

Table 3: Ground-truthed Vegetation Hazard Classes & Potential Fuel Loads

DIRECTION	VEGETATION HAZARD CLASS (VHC)	SURFACE & NEAR SURFACE FUEL LOAD (ha)	TOTAL FIELD LOAD (ha)
East, North, and West	8.1 Wet eucalypt tall open forest	28.0	31.0

4.6 Determination of Existing Bushfire Attack Levels

After calculating and mapping the results of the above steps, this information was then used to determine the BALs for the site in its existing state (i.e. pre-development) using Method 2 modelling results. The results of this are shown as BAL contours presented Figure 10.

Figure 8
AS3959 Vegetation Classification

Legend

- 100m Buffer
- Proposed Lot Layout
- Subject Site

AS3959 Vegetation Classification :

- A forest
- Low Threat Vegetation
- Cadastre

Layer Sources: Qld GIS Layers (Qld Gov Information Service 2026)
Aerial - Google Earth 2026

Client:	[redacted]		
Project No:	YEP2026032		
Drawn:	[redacted]	Approved:	[redacted]
Revision:	A	Date:	11/06/26

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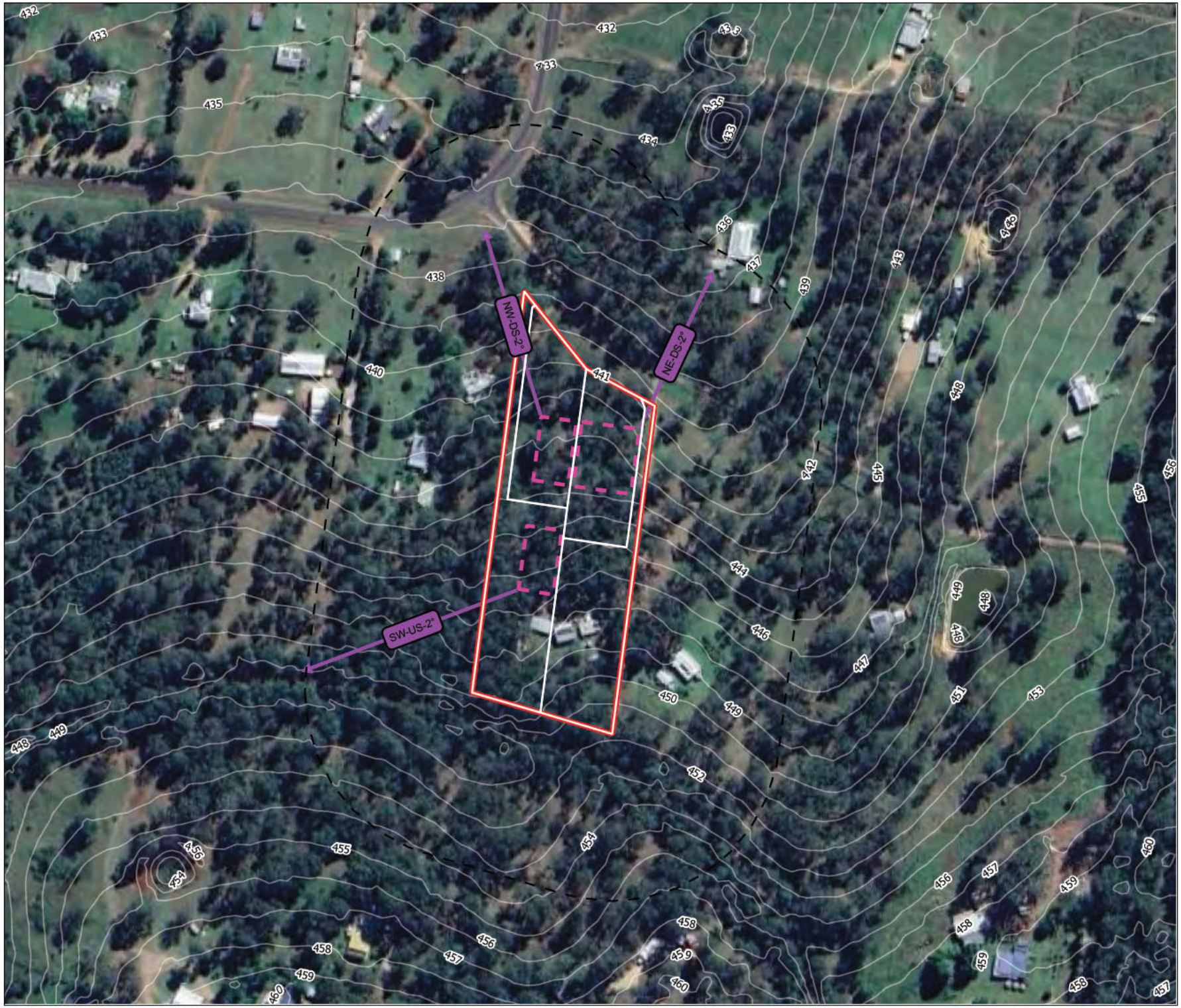
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Figure 9
Effective Slope Assessment

Legend

- Proposed Lot Layout
- Subject Site
- Building Location Envelope
- 100m Buffer
- Slope
- 1m Contours



Layer Sources: Qld GIS Layers (Qld Gov Information Service 2026)
Aerial - Google Earth 2026

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Project No:	YEP2026032		
Drawn:	[redacted]	Approved:	[redacted]
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Figure 10
Pre Development Attack Level (BAL) Contours (Method 2)

Legend

- Proposed Lot Layout
- Subject Site
- 100m Buffer

Pre - Development BAL Contours : Source

- BAL - 12.5
- BAL - 19
- BAL - 29
- BAL - 40
- BAL - FZ

Layer Sources: Qld GIS Layers (Qld Gov Information Service 2026)
Aerial - Google Earth 2026



Client:	[redacted]		
Project No:	YEP2026032		
Drawn:	[redacted]	Approved:	[redacted]
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5 Site Constraints Limiting Bushfire Mitigation Measures

5.1 Vegetation of Conservation Significance

The *Vegetation Management Act 1999* (VM Act) establishes the vegetation management framework for Queensland, which applies to all vegetation other than state forests, national parks, forest reserves, and certain other tenures defined under the *Forestry Act 1959* and the *Nature Conservation Act 1992*.

The purpose of the Act is to regulate the clearing of vegetation in a way that conserves remnant endangered, of concern and least concern regional ecosystems, vegetation in declared areas, ensures clearing does not cause land degradation, prevents the loss of biodiversity, and maintains ecological processes. It uses a series of maps to determine what vegetation is regulated and where clearing may not take place.

A review of state vegetation mapping indicates the site is largely mapped as vegetation afforded protection under the VM Act approximately 75% of the site. The field assessment revealed there is little regrowth with most of the vegetation on the site cleared with exception of the overstory. Tree species located on site align with the species composition expected to be found on site aligning closely with RE's 12.12.2 & 12.5.6c.

The site is not mapped as containing High Risk Areas identified by the Queensland Government on its Protected Plant Flora Trigger Mapping or Koala Habitat Area.

As noted previously, the site is also affected by SBRC's biodiversity overlay. Accordingly, the vegetation present on the site is recognised as having conservation significance from both State and Local Government perspectives. While the field assessment indicated relatively low species richness and a lack of well-developed understorey, the mapped biodiversity value remains applicable due to the presence of vegetation associated with protected regional ecosystems and biodiversity areas.

The presence of vegetation of conservation significance constrains the implementation of certain bushfire mitigation measures. In particular, extensive vegetation clearing, broad-scale fuel reduction activities, and the establishment of asset protection zones or firebreaks may be subject to environmental assessment and approval requirements. Consequently, the range of available management options is more limited than would otherwise be the case on a site without identified ecological values, and bushfire management measures must be designed to balance hazard reduction objectives with the protection of environmental values.

5.2 Fire History & Frequency

Due to the lack of vegetation on the site there was no evidence of burned stumps, logs of fence posts found during the field assessment. There was evidence of controlled and self-contained waste burning on the site in the form of fire pits. An investigation of the Queensland Government's fire scar history database revealed recordings of fires occurring adjacent to the site in 1998.

6 Bushfire Mitigation Measures

In light of the established bushfire hazard and vegetation classification, a number of bushfire mitigation measures are discussed below, some of which will be needed to ensure the development proposal has appropriately responded to bushfire hazard.

6.1 Siting of Future Buildings

To assist in appropriately siting future buildings in locations where mitigation measures are achievable, development footprints, building footprints, building location envelopes or building exclusion zones are commonly recommended.

In this instance, in order to achieve the required BAL 29 it is recommended that any buildings developed on the proposed lots are situated within the nominated building location envelopes as seen in Figure 13.

6.2 Asset Protection Zones

Asset Protection Zones (APZs) are a critical component of bushfire risk mitigation, providing strategic defence for a dwelling against radiant heat, direct flame contact, and to a lesser extent, ember attack. An APZ typically consists of two subordinate areas:

- **Inner Protection Area (IPA)** - Located closest to the dwelling, its primary function is to distance the asset from flame and radiant heat by minimising fuel loads.
- **Outer Protection Area (OPA)** - Positioned between the IPA and unmanaged vegetation, it separates ground fuels from canopy fuels, encouraging canopy fires to collapse into less intense ground fires.

Figure 11 illustrates the spatial relationship between the IPA, OPA, and surrounding vegetation.

Contrary to popular belief, not all vegetation within an APZ must be removed. Instead, vegetation - whether existing or introduced, such as garden beds or ornamental trees - should be managed to reduce available fuel and prevent fire spread. This approach allows for the retention of some vegetation while ensuring it does not contribute significantly to bushfire risk.

IPAs must be maintained in a very low fuel state. This means there should be minimal fine fuels at ground level, and vegetation must be discontinuous to prevent fire from reaching the asset. Vegetation within the IPA is acceptable if it does not touch or overhang buildings, is well spaced and does not form a continuous canopy, is not a species that retains dead material or produces excessive ground fuel and is located far enough from buildings to prevent ignition via radiant heat or direct flame contact.

The establishment and ongoing maintenance of both IPA and OPA will require regular fuel load management. This includes pruning of trees and shrubs, mowing or slashing of grasses, and removal of dead vegetation and leaf litter to ensure compliance with bushfire protection standards.

This zone serves to protect the asset from flames and radiant heat. It improves the chances of the asset surviving the passing of the fire front, providing a safe refuge for occupants during this period and providing a relatively defendable space for firefighting activity.

Plants introduced into an APZ should be selected based on low combustibility, by virtue of high moisture content, low volatile oil content, high leaf mineral levels, large fleshy leaves, and absence of shedding bark. Plants should be placed so as to not provide either vertical or horizontal connectedness of plant material.

The use of flammable mulches on garden beds such as woodchip or straw within 10 m of buildings inside an IPA is to be avoided and the use of non-flammable mulches such as river pebbles or stones on garden beds favoured.

In this instance, given the configuration of the proposed lots, the surrounding unmanaged vegetation, and the irregular shape of the site, a 23 m wide APZ is recommended.

It is important to note that portions of the 23 m APZ extend into existing adjoining properties and overlaps into each proposed lot. However, in all cases these extending areas into existing adjoining properties contain vegetation classified as low threat. Plate 3 shows the fence line along the western boundary of the subject site and the existing 4 m wide cleared vegetation setback on the adjoining property. This setback has been accounted for in the BAL assessment and contributes to achieving BAL-29 for proposed Lots 1 and 2 by increasing the separation distance from classified vegetation.



Plate 3: Existing 4m vegetation setback on adjoining property along the western boundary

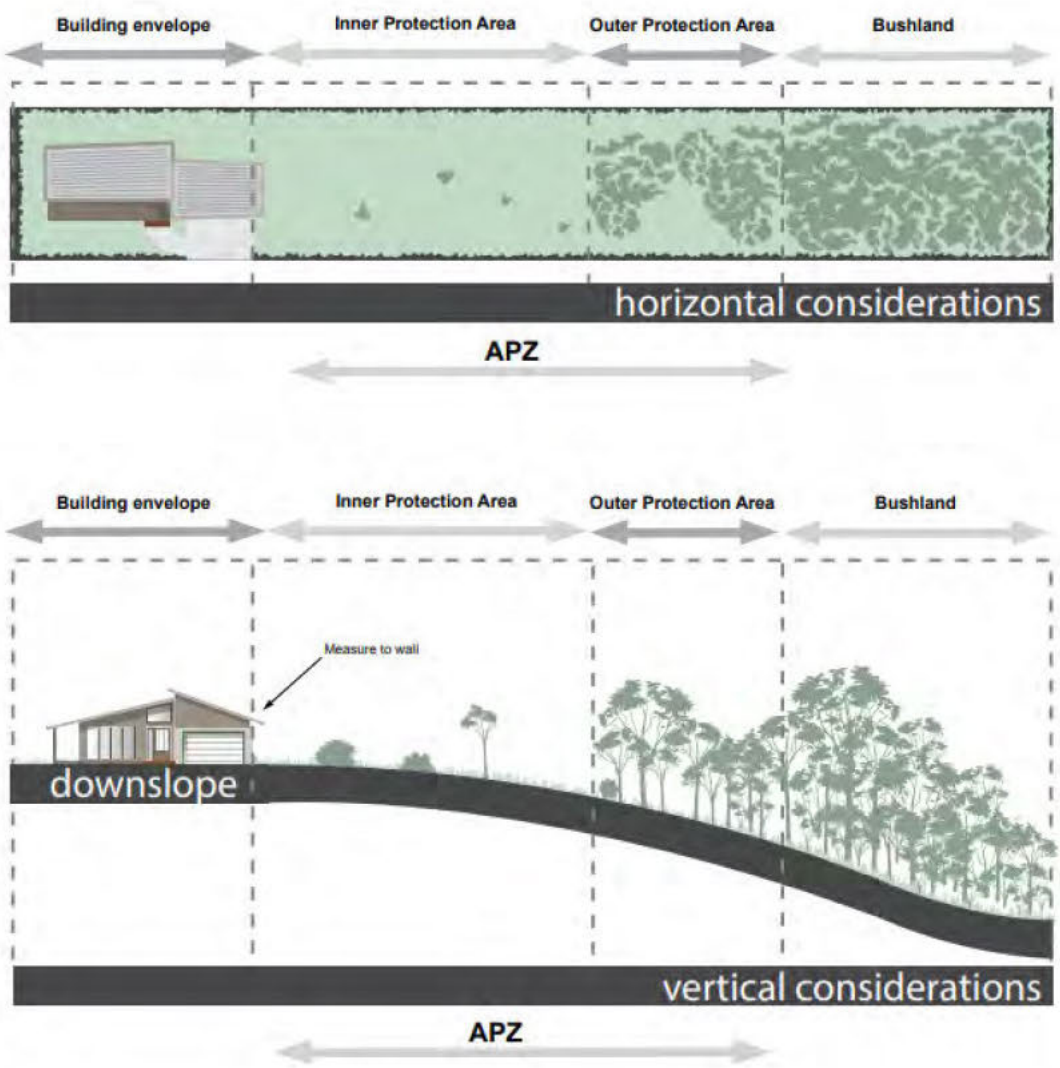


Figure 11: Typical inner & outer protections areas of an APZ

6.3 Determination of Post Development Bushfire Attack Levels

Future buildings situated on lots within 100m of bushfire prone areas will need to be constructed to meet the requirements of the National Construction Code (NCC) and in turn AS3959-2018.

Table 4 provides a summary of the BAL assessment undertaken in accordance with Method 2 of AS3959-2018 for each lot proposed with and without a building location envelope. The results obtained are based on the vegetation classification and slope analysis previously outlined.

From Table 4 it can be seen the maximum BAL rating for the most affected lots with the building location envelopes would be no more than BAL-29 for the most exposed direction assessed.

Figure 15 shows the modelled BAL contours following development of the site using Method 2 These BAL contours were modelled of the updated AS3959 Classification displayed in Figure 14. Results are also summarised graphically in Figure 12 below with detailed calculations also provided in Appendix C.

Table 4: Method 2 BAL Assessment Result

PROPOSED LOT	WITHOUT BLE		WITH BLE	
	MAXIMUM SEPARATION	MAXIMUM BAL	MAXIMUM SEPARATION	MAXIMUM BAL
Lot 1	0m	BAL FZ	23m	BAL 29
Lot 2	0m	BAL FZ	23m	BAL 29
Lot 3	0m	BAL FZ	23m	BAL 29

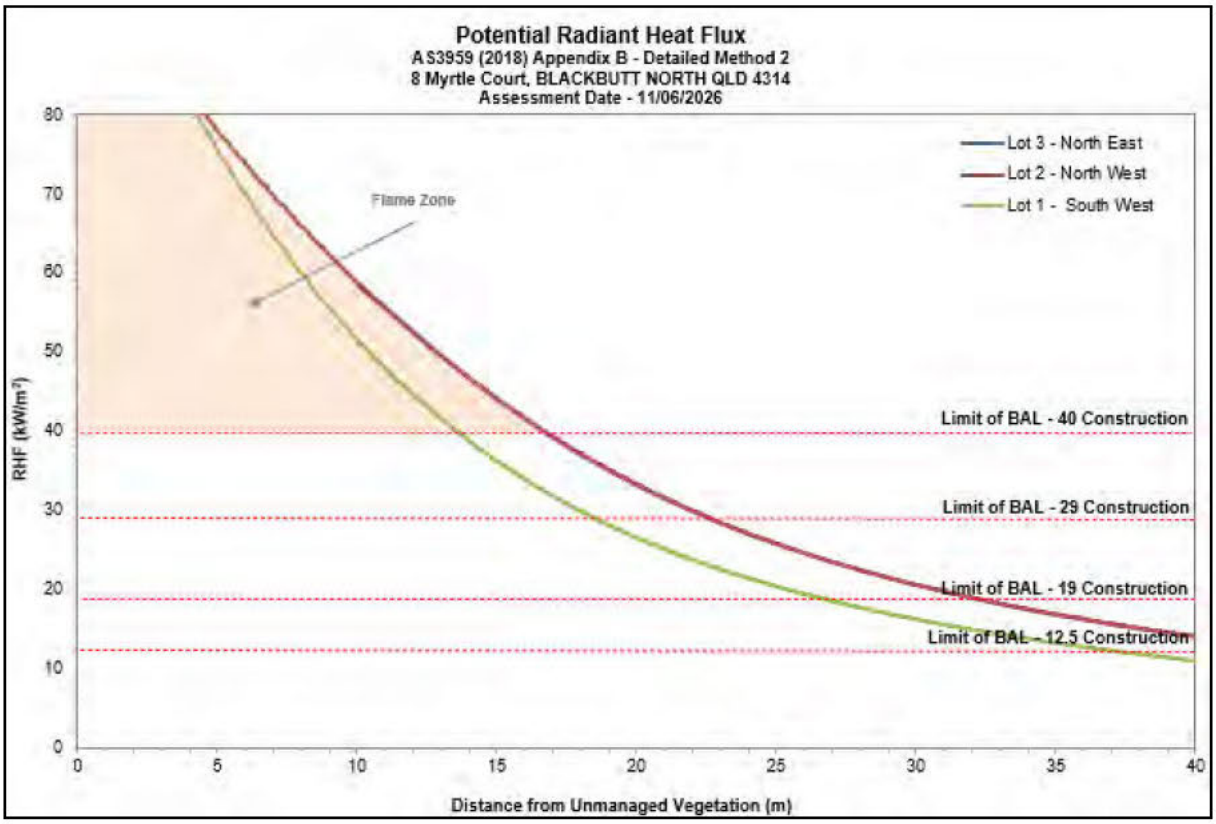


Figure 12: Modelled Potential Radiant Heat Flux Levels

Appendix C presents a summary of AS3959-2018 construction standards as they relate to BAL-29. For detailed construction standards, refer to Sections 3 and 5 of AS3959-2018.

It is worth noting too that in accordance with AS3959-2018 any structure (such as a shed or garage) built within 6m of the dwelling will also need to be constructed in accordance with the corresponding BAL rating attained ahead of obtaining building approval.

6.4 Lot Access & Egress

In the event of a significant bushfire threat, it is critical that the proposed development provides adequate ingress and egress for firefighting vehicles, along with sufficient defendable space to

support emergency response efforts. Safe access and evacuation routes are also essential to ensure the safety of future residents.

In this instance, the nominated Building Location Envelopes for proposed Lots 2 and 3 are located within 60 m of the street frontage, and access to Myrtle Court can be achieved via a driveway with a gradient not exceeding 12.5%.

Proposed Lot 1 does not comply with the prescribed 60 m street frontage requirement as per AO2 of the Overlay Code. Notwithstanding this departure, adequate access is available via the proposed driveway to facilitate the safe evacuation of residents and provide access for firefighting and emergency service vehicles. Consequently, the intent of PO2 is considered to be achieved.

Proposed Lot 1 is situated along the western boundary of the site, while the primary bushfire risk has been assessed as originating from the north-east and south-east. Consequently, it is considered that sufficient time would be available for the safe evacuation of occupants in the event of a bushfire.

6.5 Fire Trails & Firebreaks

A fire trail is considered a form of fire management line and may include roads, tracks, fence-line clearings, or other access routes used for firefighting operations, hazard reduction burning, or back-burning activities.

Fire trails are most effective where they provide a strategic advantage for bushfire management, including facilitating firefighter access, hazard reduction activities, and the maintenance of buffers protecting development. In urban areas, fire trails may also function as strategic control lines where they are connected to the public road network at regular intervals.

However, fire trails can present ongoing maintenance and management obligations, particularly where located on private land. As such, they are generally most appropriate where development adjoins public bushland reserves and can integrate with an existing fire trail or public road network.

No dedicated fire trail network is proposed as part of this subdivision. Given the relatively small scale of the development and the absence of a broader fire trail network to connect with, the provision of a fire trail would not deliver a meaningful strategic benefit for bushfire management or emergency response operations.

Firebreaks are generally linear areas of bare earth or low-fuel vegetation intended to assist in slowing or limiting the spread of bushfire. While firebreaks can assist in reducing fire intensity and spread, their effectiveness is limited under severe bushfire conditions, particularly where spotting occurs beyond the cleared area.

No firebreaks are proposed along lot boundaries or elsewhere within the subdivision. Having regard to the size, configuration, and layout of the proposed lots, the provision of firebreaks is not considered to offer any significant strategic or operational benefit for bushfire management.

6.6 Water Supplies & Utilities

The *Bushfire Hazard Overlay Code* requires development to be provided with an adequate and reliable water supply for firefighting purposes that is safely located and readily accessible during a bushfire event.

For dwelling houses, this can be achieved through connection to a pressurised reticulated water supply. As a reticulated water supply is not available to the site, each proposed dwelling will rely on rainwater harvesting infrastructure to provide both potable water and a dedicated firefighting water supply.

Any LPG gas installation associated with future dwellings will be designed and installed in accordance with the relevant requirements of *AS 1596 - The Storage and Handling of LP Gas*. This includes the use of non-combustible piping, maintaining appropriate clearances from combustible materials, and directing pressure relief valves away from buildings and other vulnerable assets to minimise bushfire risk.

Figure 13
Bushfire Mitigation Measures

Legend

- Proposed Lot Layout
- Subject Site
- Indicative Dwelling - 320m²
- Indicative Shed - 45m²
- Indicative Effluent Spray Out - 2 x 240m²
- Building Location Envelope
- APZ - 23m
- APZ - 23m
- Cadastre

Layer Sources: Qld GIS Layers (Qld Gov Information Service 2026)
Aerial - Google Earth 2026

Client:	[redacted]		
Project No:	YEP2026032		
Drawn:	[redacted]	Approved:	[redacted]
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Figure 14
Post Development AS3959 Vegetation Clasification

Legend

Proposed Lot Layout
Subject Site
100m Buffer
Cadastre
Post AS3959 Vegetation Classification :
A Forest
Low Threat Vegetation

Layer Sources: Qld GIS Layers (Qld Gov Information Service 2026)
Aerial - Google Earth 2026

Client:	[redacted]		
Project No:	YEP2026032		
Drawn:	[redacted]	Approved:	[redacted]
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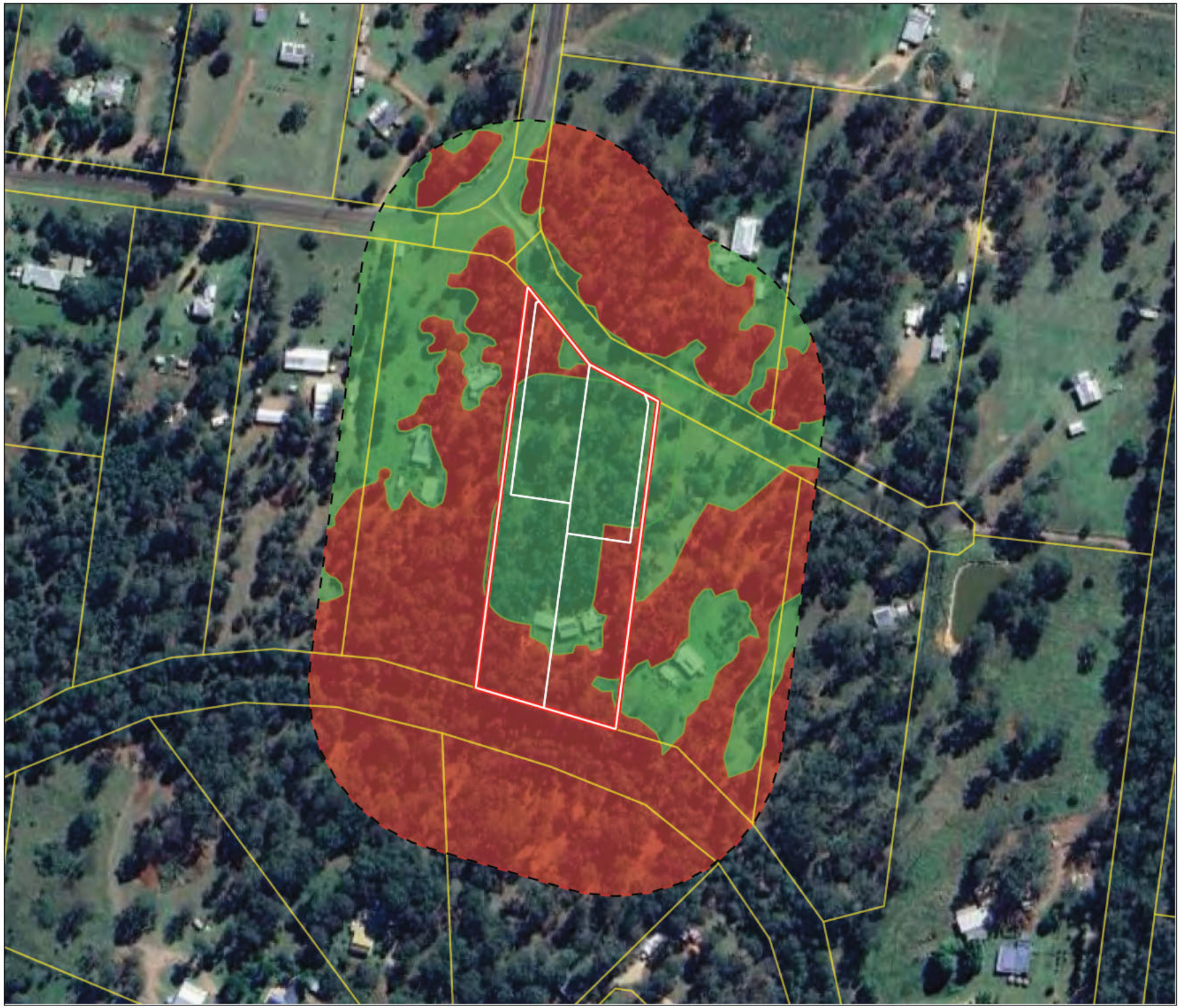


Figure 15
Post Development Bushfire Attack Level (BAL) Contours (Method 2)

Legend

- Proposed Lot Layout
- Subject Site
- Building Location Envelope
- 100m Buffer
- Cadastre

BAL Contours : Source

- BAL - 12.5
- BAL - 19
- BAL - 29
- BAL - 40
- BAL - FZ

Layer Sources: Qld GIS Layers (Qld Gov Information Service 2026)
Aerial - Google Earth 2026



Client:	[redacted]		
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7 Recommendations

In summary, the following recommendations should be implemented to mitigate the potential impacts of bushfire on the proposed subdivision proposal and reduce the risk to life and property within the bushfire prone environment.

7.1 Siting of Future Buildings

Future dwellings should be located within the nominated Building Location Envelopes shown on Figure 13. It should be noted that where a shed is located within 6 m of a dwelling, it will need to be constructed to the same bushfire construction standard as the dwelling.

7.2 Construction of Future Buildings

Future buildings are to be constructed to meet the requirements of the relevant building standards prevailing at the time to enable a building to be designed and constructed according to the site conditions. This includes *Australian Standard AS3959-2018 Construction of buildings in bushfire prone areas* as invoked by the National Construction Code (NCC).

Although a separate requirement independent of any subdivision approval process, it is worth reiterating that future dwellings, where located within 100m of classified vegetation, will be subject to the findings of a Bushfire Attack Level Assessment prepared for a Building Certifier immediately prior to obtaining a building permit.

7.3 Asset Protection Zone

A 23 m wide Asset Protection Zone (APZ) is recommended to be established around the nominated Building Location Envelopes of each assessed lot at the time of dwelling construction, as shown on Figure 13**Error! Reference source not found.**. The APZ will provide separation from bushfire h azards by reducing exposure to direct flame contact and radiant heat, while also creating a defendable area to support firefighting operations.

The APZ should be maintained in a low-fuel condition, with minimal accumulations of fine fuels at ground level and vegetation managed to avoid the formation of continuous fuel pathways. Vegetation retained or established within the APZ should satisfy the following criteria:

- Potential available fuel loads should remain below 8 tonnes per hectare.
- Vegetation must not touch or overhang buildings.
- Trees and shrubs should be appropriately spaced to prevent the formation of a continuous canopy at maturity, both horizontally and vertically.
- Species that retain significant amounts of dead material or rapidly shed combustible fuel, particularly during periods of elevated bushfire risk, should be avoided.
- Vegetation should be located sufficiently clear of buildings to prevent ignition from direct flame contact or radiant heat exposure.
- Any landscaping should comprise species with low flammability characteristics, including high moisture content, low volatile oil content, high leaf mineral content, fleshy leaves, and minimal bark shedding characteristics.

The APZ will require ongoing fuel management to maintain its effectiveness, including activities such as pruning, mowing, slashing, and the removal of dead vegetation, leaf litter, and other combustible materials. At the time of the field assessment, much of the proposed APZ area comprised managed or low-threat vegetation, with only limited areas of regrowth vegetation identified as requiring structural management to achieve the desired fuel-reduced condition.

7.4 Water Supply

As a reticulated water supply is not currently available to the site, future dwellings should be provided with rainwater storage tanks constructed of non-combustible materials or installed below ground level.

The water supply system should incorporate dedicated firefighting water storage and be designed to ensure the following:

- A minimum of 45,000 L is maintained for domestic potable water supply.
- A minimum dedicated reserve of 22,500 L is available at all times for firefighting purposes.
- Tanks, pumps, pipework, and associated infrastructure are protected from bushfire attack and installed in accordance with the principles of *AS 2304:2011 Water Storage Tanks for Fire Protection Systems*.
- Medium rigid firefighting appliances (up to 15 tonnes) are able to access the water supply within 6 m of the tank.
- Where servicing by a rural fire brigade is anticipated, the water supply is fitted with a 50 mm ball valve and male camlock coupling, and where an underground tank is proposed, an access opening of at least 200 mm diameter is provided to accommodate firefighting suction lines.
- The location of the firefighting water supply is clearly identified by suitable directional signage visible from the property entrance or street frontage.

Water supply infrastructure should be designed, installed, and maintained in accordance with Section 9 of the *Bushfire Resilient Communities* guideline (October 2019), as referenced by the Bushfire Hazard Overlay Code.

8 Conclusion

[redacted] has prepared this Bushfire Assessment Report in support of a Reconfiguring a Lot Development Application to South Burnett Regional Council for a 1 into 4 lot subdivision at 8 Myrtle Court, BLACKBUTT NORTH.

Having regard to the site characteristics, surrounding vegetation, and the recommendations outlined in Section 7 of this report, it is considered that the proposed subdivision has been appropriately designed to address the identified bushfire hazard. In particular, the proposal:

- minimises the potential adverse impacts of bushfire on people, property, economic activity, and the environment;
- does not result in a material increase in the extent or severity of bushfire hazard;
- is capable of accommodating future dwellings that can be designed and constructed in accordance with the requirements of AS 3959:2018;
- minimises impacts on ecologically significant vegetation through the appropriate siting of future development; and
- facilitates an effective response to bushfire events by residents and emergency services.

Accordingly, it is considered that the proposed subdivision can achieve an acceptable level of bushfire safety and is capable of being developed in a manner that appropriately manages bushfire risk.

In light of the above, South Burnett Regional Council's favourable consideration of the application is respectfully requested, subject to any reasonable and relevant conditions imposed in accordance with the *Planning Act 2016*.

For a detailed assessment against the *Bushfire Hazard Overlay Code*, refer to Appendix E of this report.

9 References

ABCB (2019) National Construction Code, Australian Building Codes Board

Blanchi, R., J. Leonard, et al. (2013). Environmental circumstances surrounding bushfire fatalities in Australia 1901-2011. Environmental Science & Policy, http://dx.doi.org/10.1016/j.envsci.2013.09.013

Chen, K. and J. McAneney (2004). Quantifying bushfire penetration into urban areas in Australia. Geophys. Res. Lett. 31(12): L12212

Queensland Fire and Emergency Services (2019) *Bushfire Resilient Communities: Technical Reference Guide for the State Planning Policy State Interest 'Natural Hazards, Risk and Resilience - Bushfire'*, State of Queensland, Brisbane.

Queensland Reconstruction Authority (2020) *Bushfire Resilient Building Guidance for Queensland Homes*, The State of Queensland, Brisbane.

Standards Australia (2018) AS 3959 - 2018 *Construction of buildings in bushfire prone areas*, Standards Australia, North Sydney, New South Wales.

Standards Australia (2021) AS2419.1 *Fire hydrant installations, Part 1: System design, installation and commissioning*, Standards Australia, North Sydney, New South Wales.

Appendix A

PLAN OF DEVELOPMENT

PREPARED BY [redacted]



Legend

MSES – Regulated Vegetation (Category C)

Building Location Envelope – Minimum rectangle (40x25m)

Power Pole 3196161

127°30' 6.302

MYRTLE COURT

Proposed Access

3.7

2.285

135°0' (53.293) 49.593

Existing Access

Power Pole 3196163

Power Pole 3196164

110°0' (47.877) 37.877

10.0

Proposed Access

8.038

Proposed Access

Proposed Lot 2

Proposed Lot 3

132.289

124.22

90.769

(109.97)

93.595

89.73

4000 m²

4000 m²

36.684

38.989

6.0

6.0

119 RP174019

0°0' (257.235)

117 RP174019

(214.65) 180°0'

Proposed Lot 4 5848 m²

Proposed Lot 1 6275 m²

124.947

Shed

Water Tank

Water Tanks

Shed

Gutter

House

House

121.056

Base Parcel 5493 m²

Shed (to be demolished)

Shed

Water Tanks

Base Parcel 5270 m²

43.33

45.67

(89.0) 279°54'20"

BRISBANE VALLEY RAIL TRAIL

Locality of Blackbutt

2 CSH534

N

NOTE : -

The title boundaries as shown hereon were not marked at the time of survey and have been determined by plan dimensions only and not by field survey.

REVISION NOTES : -

10/03/2026 - Location of Houses/Sheds + amendment to proposed boundaries

23/06/2026 - Location of Building Envelopes updated

Scale 1:1000 – Lengths are in metres.

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

Contour Interval 1.0m	Level Datum AHD-D
Level Origin Qld Globe	Value
Surveyed	Date
Drawn [redacted]	Date 04/12/2025

ONF SURVEYORS [redacted]

Client [redacted]

Project: Proposal Plan of Lots 1 - 4 Cancelling Lot 118 on RP174019 8 Myrtle Court, Blackbutt North

Computer File	Scale (A3)	Job No.	Local Authority	Drawing Number	Rev	Sheet
[redacted]	1:1000	14748	South Burnett Regional	14748_P1	A	1 OF 1

Appendix B

SITE PHOTOS


P1
8/05/2026 7:45:51 AM Dir=S Lat=-26.87633 Lon=152.11517 Alt=447m MSL


P2
8/05/2026 7:46:01 AM Dir=S Lat=-26.87667 Lon=152.1155 Alt=407m MSL


P3
8/05/2026 7:46:05 AM Dir=SSW Lat=-26.87667 Lon=152.11533 Alt=447m MSL


P4
8/05/2026 7:46:09 AM Dir=E Lat=-26.87616 Lon=152.1135 Alt=450m MSL


P5
8/05/2026 7:46:14 AM Dir=SSW Lat=-26.87683 Lon=152.116 Alt=444m MSL


P6
8/05/2026 7:46:20 AM Dir=SSW Lat=-26.877 Lon=152.11583 Alt=444m MSL


P7
8/05/2026 7:46:25 AM Dir=SSW Lat=-26.877 Lon=152.11583 Alt=452m MSL


P8
8/05/2026 7:46:29 AM Dir=NNE Lat=-26.877 Lon=152.11583 Alt=444m MSL


P9
8/05/2026 7:46:34 AM Dir=SSW Lat=-26.87667 Lon=152.11533 Alt=437m MSL


P10
8/05/2026 7:46:46 AM Dir=SSE Lat=-26.87616 Lon=152.115 Alt=453m MSL


P11
8/05/2026 7:46:51 AM Dir=SW Lat=-26.876 Lon=152.11483 Alt=448m MSL


P12
8/05/2026 7:47:00 AM Dir=SW Lat=-26.87683 Lon=152.11517 Alt=450m MSL


P13
8/05/2026 7:47:04 AM Dir=ENE Lat=-26.877 Lon=152.11533 Alt=447m MSL


P14
8/05/2026 7:47:19 AM Dir=WSW Lat=-26.877 Lon=152.1155 Alt=454m MSL


P15
8/05/2026 7:47:22 AM Dir=E Lat=-26.87716 Lon=152.11517 Alt=454m MSL


P16
8/05/2026 7:47:34 AM Dir=SSE Lat=-26.87716 Lon=152.11517 Alt=453m MSL


P17
8/05/2026 7:47:40 AM Dir=NW Lat=-26.87716 Lon=152.11483 Alt=451m MSL


P18
8/05/2026 7:47:48 AM Dir=W Lat=-26.87733 Lon=152.11483 Alt=450m MSL


P19
8/05/2026 7:47:55 AM Dir=S Lat=-26.8775 Lon=152.11533 Alt=464m MSL


P20
8/05/2026 7:48:06 AM Dir=SSE Lat=-26.8775 Lon=152.11533 Alt=464m MSL


P21
8/05/2026 7:48:11 AM Dir=SSW Lat=-26.878 Lon=152.11667 Alt=449m MSL


P22
8/05/2026 7:48:25 AM Dir=SE Lat=-26.879 Lon=152.116 Alt=463m MSL


P23
8/05/2026 7:48:29 AM Dir=SE Lat=-26.87816 Lon=152.115 Alt=456m MSL


P24
8/05/2026 7:48:40 AM Dir=SE Lat=-26.87816 Lon=152.115 Alt=458m MSL


P25
8/05/2026 7:48:44 AM Dir=SE Lat=-26.87816 Lon=152.115 Alt=458m MSL


P26
8/05/2026 7:48:56 AM Dir=SW Lat=-26.87867 Lon=152.11533 Alt=464m MSL


P27
8/05/2026 7:48:59 AM Dir=SSW Lat=-26.87887 Lon=152.11483 Alt=444m MSL


P28
8/05/2026 7:49:12 AM Dir=SSE Lat=-26.879 Lon=152.11533 Alt=441m MSL


P29
8/05/2026 7:49:15 AM Dir=SSW Lat=-26.87833 Lon=152.115 Alt=465m MSL


P30
8/05/2026 7:49:27 AM Dir=SSE Lat=-26.8785 Lon=152.11483 Alt=460m MSL


P31
8/05/2026 7:49:33 AM Dir=S Lat=-26.87867 Lon=152.11483 Alt=460m MSL


P32
8/05/2026 7:49:46 AM Dir=NNE Lat=-26.87867 Lon=152.11466 Alt=459m MSL


P33
8/05/2026 7:49:51 AM Dir=ENE Lat=-26.87867 Lon=152.11466 Alt=459m MSL


P34
8/05/2026 7:50:03 AM Dir=SW Lat=-26.87583 Lon=152.11417 Alt=439m MSL


P35
8/05/2026 7:50:30 AM Dir=SE Lat=-26.87583 Lon=152.11417 Alt=439m MSL


P36
8/05/2026 7:50:38 AM Dir=ESE Lat=-26.88 Lon=152.116 Alt=463m MSL


P37
8/05/2026 7:50:49 AM Dir=SE Lat=-26.88 Lon=152.116 Alt=463m MSL


P38
8/05/2026 7:50:58 AM Dir=SSW Lat=-26.87867 Lon=152.11533 Alt=461m MSL


P39
8/05/2026 7:51:08 AM Dir=W Lat=-26.87867 Lon=152.11533 Alt=461m MSL


P40
8/05/2026 7:51:17 AM Dir=S Lat=-26.87883 Lon=152.1155 Alt=463m MSL


P41
8/05/2026 7:51:21 AM Dir=S Lat=-26.87883 Lon=152.1155 Alt=463m MSL


P42
8/05/2026 7:51:26 AM Dir=N Lat=-26.87883 Lon=152.1155 Alt=461m MSL


P43
8/05/2026 7:51:32 AM Dir=WNW Lat=-26.87883 Lon=152.1155 Alt=461m MSL


P44
8/05/2026 7:51:37 AM Dir=WSW Lat=-26.879 Lon=152.11566 Alt=452m MSL


P45
8/05/2026 7:51:42 AM Dir=SSW Lat=-26.879 Lon=152.11566 Alt=452m MSL


P46
8/05/2026 7:51:48 AM Dir=N Lat=-26.87816 Lon=152.11566 Alt=454m MSL


P47
8/05/2026 7:52:03 AM Dir=SW Lat=-26.87816 Lon=152.11533 Alt=454m MSL


P48
8/05/2026 7:52:08 AM Dir=NNW Lat=-26.87667 Lon=152.11533 Alt=446m MSL


P49
8/05/2026 7:52:12 AM Dir=NNE Lat=-26.87667 Lon=152.11533 Alt=446m MSL


P50
8/05/2026 7:52:15 AM Dir=E Lat=-26.87667 Lon=152.11533 Alt=445m MSL

Appendix C

AS3959-2018 METHOD 2 BAL ASSESSMENT CALCULATION



Bushfire Attack Assessment Calculation Summary

AS3959 (2018) Appendix C - Detailed Method 2

Site Street Address:	8 Myrtle Court, BLACKBUTT NORTH	**Assessment Date:**	11/06/2026
Assessor:	[redacted]	**Field Visit Date:**	6/05/2026
Local Government Area:	South Burnett Regional Council	**Onsite Fuel Assessment:**	Yes

Lot 3 - North East

Vegetation Information

Vegetation Type:	Forest		**Vegetation Group:**	Forest	
Vegetation Slope:	2	Degrees	**Vegetation Slope Type:**	Downslope	
Surface Fuel Load:	28	t/ha	**Overall Fuel Load:**	31	t/ha

Site Information

Site Slope:	2	Degrees	**Site Slope Type:**	Level	
Elevation of Receiver:	Default	m	**APZ/Separation:**	23	m

Fire Inputs

Flame Width:	100	m	**Flame Temp:**	1090	K

Calculation Parameters

Flame Emissivity:	0.95	ε	**Relative Humidity:**	0.25	%
Heat of Combustion:	18600	kJ/kg	**Ambient Temp:**	308	K
Moisture Factor:	5	%	**FDI:**	70	

Outputs

Category of Attack:	**HIGH**		**Peak Elevation of Receiver:**	8.67	m
Level of Construction:	**BAL-29**		**Fire Intensity:**	43246	I
Radiant Heat:	28.43	kW/m^2	**Flame Angle:**	63	Degrees
Flame Length:	21.27	m	**Maximum View Factor:**	0.4470	Φ
Rate of Spread:	2.70	km/hr	**Inner Protection Area:**	0	m
Transmissivity:	0.837	τ	**Outer Protection Area**	0	m

Lot 2 - North West

Vegetation Information

Vegetation Type:	Forest		**Vegetation Group:**	Forest	
Vegetation Slope:	2	Degrees	**Vegetation Slope Type:**	Downslope	
Surface Fuel Load:	28	t/ha	**Overall Fuel Load:**	31	t/ha

Site Information

Site Slope:	2	Degrees	**Site Slope Type:**	Downslope	
Elevation of Receiver:	Default	m	**APZ/Separation:**	23	m

Fire Inputs

Flame Width:	100	m	**Flame Temp:**	100	K

Calculation Parameters

Flame Emissivity:	0.95	ε	**Relative Humidity:**	25%	%
Heat of Combustion:	18600	kJ/kg	**Ambient Temp:**	308	K
Moisture Factor:	5	%	**FDI:**	70	

Outputs

Category of Attack:	**HIGH**		**Peak Elevation of Receiver:**	8.67	m
Level of Construction:	**BAL-29**		**Fire Intensity:**	43246	I
Radiant Heat:	28.43	kW/m^2	**Flame Angle:**	63	Degrees
Flame Length:	21.27	m	**Maximum View Factor:**	0.4470	Φ
Rate of Spread:	2.70	km/hr	**Inner Protection Area:**	0	m
Transmissivity:	0.837	τ	**Outer Protection Area**	0	m

Equations Used

Transmissivity:	Fuss & Hammins, 2002	**Peak Elevation of Receiver:**	Tan et al., 2005
Flame Length:	RFS PBP, 2001	**Peak Flame Angle:**	Tan et al., 2005
Radiant Heat:	Drysdale, 1985, Sullivan et al., 2003, Tan et al., 2005	**Rate of Fire Spread:**	Noble et al., 1980

Bushfire Attack Assessment Calculation Summary

AS3959 (2018) Appendix C - Detailed Method 2

Site Street Address:	8 Myrtle Court, BLACKBUTT NORTH	**Assessment Date:**	2026/06/11
Assessor:	[redacted]	**Field Visit Date:**	2026/05/06
Local Government Area:	South Burnett Regional Council	**Onsite Fuel Assessment:**	Yes

Lot 1 - South West

Vegetation Information

Vegetation Type:	Forest		**Vegetation Group:**	Forest	
Vegetation Slope:	2	Degrees	**Vegetation Slope Type:**	Upslope	
Surface Fuel Load:	28	t/ha	**Overall Fuel Load:**	31	t/ha

Site Information

Site Slope:	2	Degrees	**Site Slope Type:**	Level	
Elevation of Receiver:	Default	m	**APZ/Separation:**	23	m

Fire Inputs

Flame Width:	100	m	**Flame Temp:**	1090	K

Calculation Parameters

Flame Emissivity:	0.95	ε	**Relative Humidity:**	25%	%
Heat of Combustion:	18600	kJ/kg	**Ambient Temp:**	308	K
Moisture Factor:	5	%	**FDI:**	70	

Outputs

Category of Attack:	**HIGH**		**Peak Elevation of Receiver:**	6.79	m
Level of Construction:	**BAL-29**		**Fire Intensity:**	32815	I
Radiant Heat:	22.52	kW/m^2	**Flame Angle:**	63	Degrees
Flame Length:	21.27	m	**Maximum View Factor:**	0.3553	Φ
Rate of Spread:	2.05	km/hr	**Inner Protection Area:**	0	m
Transmissivity:	0.834	τ	**Outer Protection Area**	0	m

Equations Used

Transmissivity:	Fuss & Hammins, 2002	**Peak Elevation of Receiver:**	Tan et al., 2005
Flame Length:	RFS PBP, 2001	**Peak Flame Angle:**	Tan et al., 2005
Radiant Heat:	Drysdale, 1985, Sullivan et al., 2003, Tan et al., 2005	**Rate of Fire Spread:**	Noble et al., 1980

Appendix D

SUMMARY OF AS3959-2018 CONSTRUCTION REQUIREMENTS

Summary of AS3959-2018 Construction Requirements

Note: The information in the table below is summary of the construction requirements in the April 2018 Australian Standard and is not intended as a design or construction guide. One should consult the standard for the full technical details and amendments issued from time to time.

BUILDING ELEMENT	BAL-LOW	BAL-12.5	BAL-19	BAL-29	BAL-40	BAL-FZ
SUB FLOOR SUPPORTS	No special construction requirements	No special construction requirements	No special construction requirements	Enclosure by external wall or by steel, bronze or aluminium mesh, non-combustible supports where the subfloor is unenclosed or naturally fire resistant timber	If enclosed by external wall refer below 'External Walls' section in table or non-combustible subfloor supports or tested for bushfire resistance to AS 1530.8.1	Subfloor supports – enclosure by external wall or non-combustible with an FRL of 30/-/- or be tested for bushfire resistance to AS 1530.8.2
FLOORS	No special construction requirements	No special construction requirements	No special construction requirements	Concrete slab on ground or enclosure by external wall, metal mesh as above or flooring less than 400 mm above ground level to be non-combustible, naturally fire resistant timber or protected on the underside w	Concrete slab on ground or enclosure by external wall or protection of underside with a non-combustible material such as fibre cement sheet or be non-combustible or be tested for bushfire resistance to AS 1530.8.1	Concrete slab on ground or enclosure by external wall o ran FRL of 30/30/30 or protection of underside with 30 minute incipient spread of fire system or be tested for bushfire resistance to AS 1530.8.2
EXTERNAL WALLS	No special construction requirements	As per BAL-19	External walls – Parts less than 400 mm above ground or decks etc. to be of non-combustible material, 6 mm fibre cement clad, or bushfire resistant/naturally fire resistant timber	Non-combustible material (masonry, brick veneer, mud brick, aerated concrete, concrete), timber framed, steel framed walls sarked on the outside and clad with 6 mm fibre cement sheeting or steel sheeting or bushfire resistant timber	Non-combustible material (masonry, brick veneer, mud brick, aerated concrete, concrete) or timber framed, or steel framed walls sarked on the outside and clad with 9 mm fibre cement sheeting or steel sheeting or be tested for bushfire resistance to AS 1530.8.1	Non-combustible material (masonry, brick veneer, mud brick, aerated concrete, concrete) with minimum thickness of90 mm or an FRL of -/30/30 when tested from outside or be tested for bushfire resistance to AS 1530.8.2

BUILDING ELEMENT	BAL-LOW	BAL-12.5	BAL-19	BAL-29	BAL-40	BAL-FZ
EXTERNAL WINDOWS	No special construction requirements	4mm Grade A Safety Glass or glass blocks within 400 mm of ground, deck etc. with Openable portion metal screened with frame of meteor metal reinforced PVC-U or bushfire resisting timber	5mm toughened glass or glass blocks within 400 mm of ground, deck etc. with Openable portion metal screened with frame of metal or metal reinforced PVC-U or bushfire resisting timber. Above 400mm annealed glass can be used with all glass screened	5 mm toughened glass with openable portion screened and frame foetal or metal reinforced PVC-U, or bushfire resisting timber and portion within 400 mm of ground, deck etc. screened	6 mm toughened glass. Fixed and Openable portion screened with steel or bronze mesh	Protected by bushfire shutter or FRL of-/30/- and openable portion screened with steel or bronze mesh or be tested for bushfire resistance to AS 1530.8.2
EXTERNAL DOORS	No special construction requirements	As for BAL–19 except that door framing can be naturally fire resistant (high density) timber	Screened with steel, bronze or aluminium mesh or glazed with 5 mm toughened glass, non-combustible or 35 mm solid timber for 400 mm above threshold, metal or bushfire resisting timber framed for 400 mm above ground, decking, etc., tight-fitting with weather strips at base	Screened with steel, bronze or aluminium mesh or non- combustible, or 35 mm solid timber for 400 mm above threshold. Metal or bushfire resisting timber framed tight-fitting with weather strips at bas	Non-combustible or 35 mm solid timber, screened with steel or bronze mesh, metal framed, tight-fitting with weather strips at base	Protected by bushfire shutter or tight-fitting with weather strips at base and an FRL of -/30/-
ROOFS	No special construction requirements	As for BAL–19 (including roof to be fully sarked)	Non-combustible covering. Roof/wall junction sealed. Openings fitted with non-combustible ember guard	Non-combustible covering. Roof/wall junction sealed. Openings fitted with non-combustible ember guards. Roof to be fully sarked	Non-combustible covering. Roof/wall junction sealed. Openings fitted with non-combustible ember guards. Roof to be fully sarked and no roof mounted evaporative coolers	Roof with FRL of30/30/30 or tested for bushfire resistance to AS 1530.8.2. Roof/wall junction sealed. Openings fitted with non-combustible ember guards. No roof mounted evaporative coolers

BUILDING ELEMENT	BAL-LOW	BAL-12.5	BAL-19	BAL-29	BAL-40	BAL-FZ
VERANDAHS DECKS ETC	No special construction requirements	As per BAL-19	Enclosed sub-floor space – no special requirement for materials except within 400 mm of ground. No special requirements for supports or framing. Decking to be non-combustible or bushfire resistant within 300 mm horizontally and 400 mm vertically from a glazed element	Enclosed sub-floor space or non-combustible or bushfire resistant timber supports. Decking to be non-combustible or bushfire-resisting timber	Enclosed sub-floor space or non-combustible supports. Decking to be non-combustible	Enclosed sub-floor space or non-combustible supports. Decking to have no gaps and be non-combustible
WATER AND GAS SUPPLY PIPES	Aboveground, exposed water and gas supply pipes are to be metal.	Aboveground, exposed water and gas supply pipes are to be metal.	Aboveground, exposed water and gas supply pipes are to be metal.	Aboveground, exposed water and gas supply pipes are to be metal.	Above-ground, exposed water and gas supply pipes are to be metal	Aboveground, exposed water and gas supply pipes are to be metal.

Appendix E

BUSHFIRE HAZARD OVERLAY CODE RESPONSE

Bushfire Hazard Overlay Code Response (Applicable Sections Only)

Performance Outcomes	Acceptable Outcomes	Response
SECTION A: Reconfiguring a lot (RaL) – where creating any number of lots of more than 2,000 square metres:		
PO1 The subdivision layout: (a) enables future buildings to be located away from slopes and land forms that expose people or property to an intolerable risk to life or property; and (b) facilitates emergency access and operational space for firefighters in a reduced fuel area between future buildings and structures and hazardous vegetation, that reduce risk to an acceptable or tolerable level. *Note - An applicant may seek to undertake a site-level verification of the location and nature of hazardous vegetation and resulting potential bushfire intensity levels, for example where changes in foliage have occurred (e.g. as a consequence of adjoining permanent urban development) or where an applicant seeks to verify the regional ecosystem map inputs. This verification should form part of a bushfire hazard assessment in accordance with the methodology in the QFES Bushfire resilient communities document. The outcomes of this assessment can demonstrate how an alternate solution to the acceptable outcome can deliver an acceptable or tolerable level of risk.*	**AO1.1** A development footprint plan is identified for each lot that avoids ridgelines, saddles and crests where slopes exceed 28 per cent. **AO1.2** A development footprint plan is identified for each lot that is separated from the closest edge to the adjacent mapped medium, high or very high potential bushfire intensity area by a distance that achieves a radiant heat flux level of 29 kW/m^2 or less at all development footprint plan boundaries. *Note - This separation area is often termed an asset protection zone. Note – The radiant heat flux levels can be established by undertaking a bushfire hazard assessment in accordance with the methodology in the QFES Bushfire resilient communities document.*	**Complies with A01.1** Each proposed lot has been assigned a building location envelope sized and positioned to avoid ridgelines, saddles, and steep crest areas **Complies with A01.2** The BAL assessment confirms that, with the implementation of a 23m wide asset protection zone and the nomination of building location envelopes, future dwellings will be adequately separated from nearby hazardous vegetation to achieve a radiant heat flux of 29 kW/m² or less.
PO2 The subdivision layout enables: (a) future buildings to be located as close as possible to property entrances to facilitate safe evacuation during a bushfire event; and (b) future site access to be located and designed to allow safe evacuation of the site by occupants and maintain	**AO2** A development footprint plan is identified for each lot that: (a) is located within 60 metres of the street frontage; and (b) sited to enable a route between the development footprint plan and the street frontage with a gradient that does not exceed of 12.5 per cent.	**Alternative Solution** Each proposed lot has been allocated a building location envelope that is positioned to be as close as possible to street frontage allowing for safe evacuation and is configured to allow a connecting driveway with a gradient not exceeding 12.5%.

Performance Outcomes	Acceptable Outcomes	Response
access by emergency services under critical event conditions.		The building location envelope for proposed lot 1 is not located within 60 metres street frontage however clear access for evacuation and firefighting purposes is maintained. The highest risk of bushfire to the site is from the northeast and southeast, from which the primary bushfire threat is expected to originate. Proposed Lot 1 is located furthest from these hazard interfaces and retains adequate access for evacuation and emergency response purposes.
SECTION F: Where involving an asset protection zone:		
PO17 Asset protection zones are designed and managed to ensure they do not increase the potential for bushfire hazard. *Note – The preparation of a landscape management plan undertaken in accordance with the methodology in the QFES Bushfire resilient communities document may assist in demonstrating compliance with this outcome.*	**AO17** Landscaping treatments within any asset protection zone comprise only low threat vegetation, including grassland managed in a minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, vineyards, orchards, cultivated gardens, commercial nurseries, nature strips and windbreaks. *Note - Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack, for example short-cropped grass to a nominal height of 10 centimetres.* **OR** Landscaping management within any asset protection zone maintains a: (a) potential available fuel load which is less than eight tonnes/hectare in aggregate; and (b) fuel structure which is discontinuous.	**Complies** Within the proposed 23m wide asset protection zone, the majority of vegetation present is low-threat. The remaining areas are recommended to be subject to ongoing structural management to ensure: (a) the potential available fuel load remains below 8 tonnes per hectare in aggregate; and (b) the fuel structure remains discontinuous. Any plant species introduced into the APZ are to be selected for low combustibility, characterised by features such as high moisture content, low volatile oil levels, high leaf mineral content, large or fleshy leaves, and the absence of shedding bark, and

Performance Outcomes	Acceptable Outcomes	Response
	Note –The preparation of a landscape management plan undertaken in accordance with the methodology in the QFES Bushfire resilient communities document may assist in demonstrating compliance with this acceptable outcome.	positioned to avoid both vertical and horizontal continuity of fuels. Conditions requiring such management can be imposed.

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