Land and environment consultants

Bushfire management plan

Proposed development | Round Mountain – Precinct B | Olsen Road and Mountain Ridge Road | New Beith | Queensland
Prepared for Frasers Property New Beith Pty Limited | 15 August 2025

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2025/1681

Date: 15 December 2025

Queensland Government

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Bushfire management plan

Final V1

Report 25032 | Frasers Property New Beith Pty Limited | 15 August 2025

Approved by Robert Janssen

Position Managing principal

Signature 

Date 15 August 2025

Document control

Version	Date	Prepared by	Reviewed by
Draft	2 June 2025	R. Janssen	LEC
Final	14 July 2025	R. Janssen	LEC
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Disclaimer

Notwithstanding the precautions adopted in this report, it should always be remembered that bushfires burn under a range of conditions. An element of risk, no matter how small always remains, and although AS 3959-2018 is designed to improve the performance of such buildings, there can be no guarantee, because of the variable nature of bushfires, that any building will withstand bushfire attack on every occasion.

It should be noted that upon lodgement of a development proposal, State Government, council and/or the fire service may recommend additional construction requirements.

Although every care has been taken in the preparation of this report, Land and Environment Consultants Pty Ltd accept no responsibility resulting from the use of the information in this report.

1 Introduction

Land and Environment Consultants Pty Ltd (**LEC**) was engaged to prepare a bushfire management plan (**BMP**) for the priority development area (**PDA**) development permit application (reconfiguration of a lot – residential subdivision, Round Mountain Precinct B) (**proposed development**) at Olsens Road and Mountain Ridge Road, New Beith, properly described as part of lot 4/SP332712(**the site**).

There is an overarching PDA development permit approval over the site for a context plan area strategy – context area 2 (**CA-2**) which is identified by EDQ as DEV2022/1302. There are no bushfire management conditions in the PDA development permit approval conditions for CA-2.

A PDA development permit application will be made for the proposed development under the *Greater Flagstone Urban Development Area – Development Scheme* and pursuant to the overarching PDA development permit approval for CA-2.

The site is identified as a bushfire hazard area by the *Bushfire prone area map* (**Bushfire prone area map)** in the State Planning Policy interactive mapping system (**SPP IMS**). Therefore, the PDA development permit application for the proposed development is subject to compliance with the bushfire hazard outcomes of the *Greater Flagstone Priority Development Area – Development Scheme* which calls up the superseded *State Planning Policy 1/03 Guideline – Mitigating the Adverse Impacts of Flood, Bushfire and Landslide* (DLGP, DES 2003) (**SPP 1/03 guideline**) for information and assessment criteria for bushfire.

The SPP 1/03 guideline was repealed in 2013 and the current SPP 2017 is now in effect. Therefore, it is considered relevant that this BMP considers outcomes sought by the current SPP 2017 by way of compliance with the example bushfire overlay code (**Bushfire overlay code**) in the *Natural Hazards, Risk and Resilience – Bushfire, State Planning Policy State Interest guidance material* (DSDMIP 2019) (**SPP guidance material – bushfire**) which reflects the current assessment benchmarks for development within a bushfire prone area.

This BMP has been prepared in general accordance with *Bushfire Resilient Communities Technical Reference Guide for the State Planning Policy State Interest 'Natural Hazards, Risk and Resilience – Bushfire* (QFES 2019a) (**BRC guide**) which was prepared by the former Queensland Fire and Emergency Services to provide technical guidance for the implementation of the SPP guidance material – bushfire. It documents the bushfire hazard assessment and demonstrates how the proposed development will comply with the Bushfire overlay code. It includes:

- an introduction (this section) and description of methods and information resources used for the preparation of this BMP;
- description of the site and proposed development;
- bushfire hazard assessment;
- identification of bushfire hazards associated with the site and proposed development;
- a plan for mitigating bushfire hazards; and
- assessment of the proposed development against the Bushfire overlay code.

1.1 Method

To meet requirements of the BRC guide, the following tasks were undertaken:

- review of the Bushfire prone area map in the SPP IMS, fire history data in Queensland Globe (DR 2025) and data in the Queensland Spatial Data Catalogue (DNRMMRRD 2025) (**Qspatial**) which is referenced in the *Bushfire Resilient Communities Mapviewer User Guide* (QFD 2025), ie regional ecosystem (**RE**) map, vegetation hazard class (**VHC**) map and severe fire weather map;

- inspection of land adjacent to the proposed development for vegetation characteristics, current land management practices, slope and evidence of previous fires;
- bushfire hazard assessment in general accordance with the method in the BRC guide;
- radiant heat exposure assessment using the Fire Protection Association of Australia *BAL calculator V4.9* (**BAL calculator**) which models the 'method 2' bushfire attack level (**BAL**) assessment procedure in the *Australian Standard* (**AS 3959-2018**) *Construction of buildings in bushfire prone areas*; and
- assessment of the proposed development against the Bushfire overlay code.

Aerial imagery of the site and measuring tools were accessed online from Google Earth and Queensland Globe to assist with validating observations and measurements made during the site inspection.

1.2 Suitably qualified person

This BMP was prepared by Robert Janssen who is a suitably qualified and experienced bushfire management consultant.

Robert is the managing principal at LEC and has over 25 years of experience in bushfire planning and operations. He has prepared bushfire management plans for residential, commercial and industrial property developments, utilities, government facilities and conservation estates.

Robert's formal qualifications as an environmental scientist and consulting experience are coupled with 10 years of experience as a nationally accredited fire-fighter with the national parks and wildlife service in New South Wales and Queensland.

2 Description of the site and proposed development

This chapter provides a description of the site and proposed development.

2.1 Site description

The location of the site and proposed development is shown in Figure 3.1 and is in the south-eastern corner of CA-2. The overarching context plan area strategy for CA-2 is provided in Appendix 1.

The northern, southern and western boundaries of the proposed development will adjoin future development within CA-2 as generally indicated by the overarching context plan area strategy. This will include low density residential to the north, major linear open space to the south and low density residential and major linear open space to the west. The BMP assumes bushland vegetation will be retained and rehabilitated within the major linear park and future conservation open space areas.

The eastern boundary of the proposed development adjoins the Brisbane – Sydney Railway and rural residential allotments where large areas of bushland vegetation has been retained.

2.2 Proposed development

The site plan for the proposed development is provided in Appendix 2 and shows the proposed layout of residential allotments, balance allotments, neighbourhood park, linear park, pedestrian linkages, major linear park and stormwater detention areas.

The proposed balance allotment for a future neighbourhood hub, ie lot 9016, will be subject to a separate PDA development permit application and is not considered further in this BMP. Given that it contains protected riparian vegetation it has been assessed based on the observations made at the time of the site inspection (as opposed to an assumed final landform under the separate PDA development permit application).

The proposed neighbourhood park, ie lot 9008, and linear park, ie lots 9012 and 9014 (**proposed parks**) will be maintained landscapes which consist of pathways, lawn and formal gardens.

Bushland vegetation will be retained, rehabilitated or landscaped within the proposed major linear park, ie lot 9009, stormwater detention areas, ie lots 9007 and 9011, and balance allotments for future conservation open space areas, ie lots 9013 and 9015 (**proposed open space areas**). It is assumed any landscaping within these areas will seek to restore the species and structure indicated by the local pre-clear RE mapping.

Access and egress for the proposed development will be via new roads which will be progressively established within CA-2 and provide connections to the north, south and east.

The proposed development will be connected to mains water and a hydrant system will be installed in the new road reserves.

2.3 Bushfire prone area map

The Bushfire prone area map for the site is provided in Appendix 3. Verification of the bushfire hazard areas shown in the Bushfire prone area map is provided via the bushfire hazard assessment in Chapter 3.

Please note, in this BMP, the terms ‘bushfire prone area’ and ‘bushfire hazard area’ have the same meaning. Both terms mean an area of vegetation that is determined to have a potential bushfire intensity > 4,000 kilowatts/metre (**kW/m**) and the land within 100 m of this vegetation.

3 Bushfire hazard assessment

This chapter provides details about the desktop review, site inspection and bushfire hazard assessment.

3.1 Severe fire weather

The severe fire weather data in Qspatial indicates the 5 % annual exceedance probability forest fire danger index (**FFDI**) for the site is 55. This FFDI value has been used for the potential bushfire intensity calculations in Section 3.4 and the radiant heat exposure assessment in Section 5.7.

3.2 Fire history

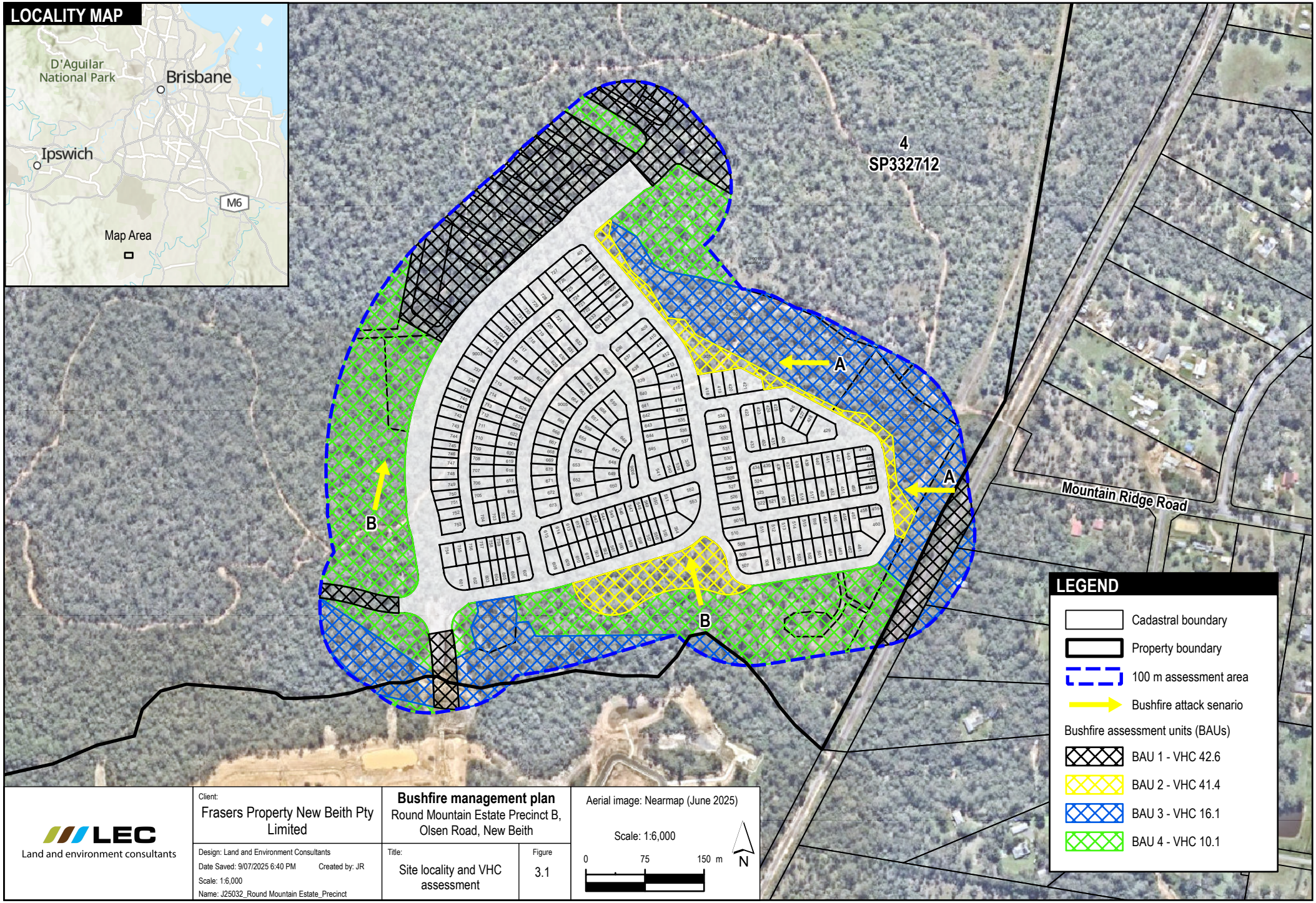
Fire history data indicates numerous fires have occurred within 1 kilometre (**km**) of the site during the past 20 years. The data does not indicate the origin of the fires, ie whether they were wildfires or planned burns.

3.3 Site inspection

LEC inspected the site on 10 April 2025. Observations were recorded about current land use and management, vegetation characteristics, the slope of land and evidence of previous fires.

Bushfire assessment units (**BAUs**) have been used to describe the characteristics of vegetation within 100 m of the site and are shown in Figure 3.1. They consider the post development landform of CA-2 based on the overarching context plan area strategy for CA-2 in Appendix 1 and the proposed site plan in Appendix 2.

Table 3.1 provides a summary of the desktop review, observations from the site inspection and notes about the bushfire hazard assessment of BAUs. Features of BAUs are shown in Photographs 3.1-3.2.



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Client:
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Design: Land and Environment Consultants
Date Saved: 9/07/2025 6:40 PM Created by: JR
Scale: 1:6,000
Name: J25032_Round Mountain Estate_Precinct

Bushfire management plan
Round Mountain Estate Precinct B, Olsen Road, New Beith

Title: Site locality and VHC assessment

Figure 3.1

Aerial image: Nearmap (June 2025)

Scale: 1:6,000

0 75 150 m

N

Table 3.1 Site observations

BAU	State mapped VHC	VHC	Notes
BAU 1	VHC 10.1 *Spotted gum dominated open forests* (**VHC 10.1**), VHC 16.1 *Eucalyptus dominated forest on drainage lines and alluvial plains* (**VHC 16.1**), VHC 40.4 *Continuous low grass or tree cover* (**VHC 40.4**) and VHC 41.4 *Discontinuous low grass or tree cover* (**VHC 41.4**).	VHC 42.6 *Nil to very low vegetation cover* (**VHC 42.6**)	BAU 1 is aligned with roads and low density residential areas adjoining the site as indicated by the overarching context plan area strategy for CA-2. In the post development landform, BAU 1 will have nil to very low vegetation and discontinuous bushfire fuel.
BAU 2	VHC 10.1	VHC 41.4	BAU 2 is aligned with the proposed parks which will be maintained landscapes consisting of pathways, lawn and formal gardens. In the post development landform, BAU 2 will have a low level of vegetation and discontinuous bushfire fuel.
BAU 3	VHC 10.1, VHC 16.1, VHC 40.4 and VHC 41.4	VHC 16.1	BAU 3 is aligned with parts of the proposed open space areas. Its alignment is based on a review of pre-clear RE mapping and ground truthing during the site inspection. The VHC assessment of BAU 3 is based on the retention and rehabilitation of existing bushland vegetation and landscaping which seeks to restore the species and structure indicated by the pre-clear RE mapping, ie VHC 16.1.
BAU 4	VHC 10.1, VHC 16.1, VHC 40.4 and VHC 41.4	VHC 10.1	BAU 4 is aligned with other parts of the proposed open space areas and the balance lot. Its alignment is based on a review of pre-clear RE mapping and ground truthing during the site inspection. The VHC assessment of BAU 4 is based on the retention and rehabilitation of existing bushland vegetation and landscaping which seeks to restore the species and structure indicated by the pre-clear RE mapping, ie VHC 10.1.

Photograph 3.1 VHC 16.1 within BAU 3

Photograph 3.2 VHC 10.1 within BAU 4

3.4 Potential bushfire intensity calculations

The potential bushfire intensity of BAUs was determined using the Queensland Public Safety Business Agency *Potential Bushfire Intensity Calculator* (version November 2014) which is an Excel spreadsheet calculator that models the bushfire hazard assessment method in Section 4.2.4 of the BRC guide.

Section 3.1 of the BRC guide defines bushfire hazard classes as follows:

- very high – potential bushfire intensity > 40,000 kW/m;
- high – potential bushfire intensity 20,000-40,000 kW/m;
- medium – potential bushfire intensity 4,000-20,000 kW/m; and
- non-bushfire hazard – potential bushfire intensity < 4,000 kW/m.

Results of the potential bushfire intensity calculations which determine the bushfire hazard class of BAUs shown in Figure 3.1 are presented in Table 3.2.

Table 3.2 Potential bushfire intensity

BAU	VHC	Potential fuel load tonnes/ha[1]	Slope (°)[2]	Potential bushfire intensity (kW/m)	Bushfire hazard class
BAU 1	VHC 42.6	2	0	136	Non-bushfire hazard
BAU 2	VHC 41.4	3	0	307	Non-bushfire hazard
BAU 3	VHC 16.1	16	4[3]	11,361	Medium
BAU 4	VHC 10.1	20.8	6[3]	22,319	High

Notes
1 Potential fuel load taken from the BRC guide.
2 Slope defaults to 0° for VHC 41.4 and VHC 42.6 which are defined in the BRC guide as a low hazard class with discontinuous bushfire fuel.
3 Maximum slope used for BAU 3 and BAU 4 is based on the desktop review and site inspection.

3.5 Bushfire hazard areas

Results of the potential bushfire intensity calculations in Table 3.2 confirm the proposed development is affected by medium and high potential bushfire intensity areas and the 100 m potential impact buffer which is applied to these areas. Therefore, the proposed development is within a bushfire hazard area and the PDA development permit application is subject to compliance with the Bushfire overlay code.

4 Bushfire hazards associated with the site

This chapter identifies bushfire hazards associated with the site.

4.1 Fire danger season

The fire danger season at the site starts in August, peaks in September and will begin to fall when consistent summer rainfall occurs. Typically, the worst fire weather conditions will be experienced during the fire danger season when the wind direction is from the north or west.

An FFDI of 55 will be associated with hot, dry and windy conditions. If a bushfire starts and takes hold under these conditions, it will be difficult to control and fast moving in large areas of unmanaged vegetation.

4.2 Fire history

As discussed in Section 3.2, fire history data indicates numerous fires have occurred within 1 km of the site during the past 20 years. Based on this fire history and the large continuous area of bushland vegetation that will be retained within CA-2, and which exists adjacent to the eastern boundary of the site, it is considered possible the proposed development could be exposed to bushfire attack in the future.

4.3 Bushfire attack scenarios

The proposed development could be exposed to bushfire attack from BAU 3 and BAU 4 shown in Figure 3.1 where medium and high potential bushfire intensity areas occur. These bushfire attack scenarios are identified as A and B in Figure 3.1 and are further analysed in Section 5.7.

4.4 Potential bushfire hazard from adjacent land use

The bushland vegetation that will be retained, rehabilitated or landscaped within the proposed open space areas and in the adjoining landscape is a potential bushfire hazard to the proposed development. This is confirmed by the potential bushfire intensity calculations in Section 3.4, which determined BAU 3 and BAU 4 are medium and high potential bushfire intensity areas.

4.5 Water and access for emergency services

The site will have access to mains water and a public road network which will provide access and egress for emergency services and future occupants. They will be progressively established as development occurs within CA-2.

5 Bushfire hazards associated with the proposed development

This chapter identifies potential bushfire hazards associated with the proposed development.

5.1 Siting and design

The proposed development will be designed to mitigate the risk of bushfire hazard determined by the bushfire hazard assessment in this BMP.

The topography of the site and adjoining land does not involve landscape features that exacerbate the risk of bushfire hazard or influence the layout of the proposed development, ie there are no steep slopes or ridgelines within the development area of proposed roads and residential allotments.

5.2 Land use

The proposed development does not involve vulnerable uses, community infrastructure for essential services or hazardous materials in the context of bushfire hazard as defined in the SPP guidance material – bushfire.

5.3 Proposed parks

The proposed parks will be landscaped and maintained in a manner which will result in a low level of discontinuous bushfire fuel. For example, landscaping will involve extensive areas of turf which will be maintained as lawn.

The proposed parks are identified as BAU 2 in Figure 3.1 and were assessed as a non-bushfire hazard class is Section 3.4.

5.4 Proposed open space areas

Bushland vegetation will be retained, rehabilitated or landscaped within the proposed open space areas. Landscaping within these areas will seek to restore the species and structure indicated by the local pre-clear RE mapping.

The proposed open space areas are identified as BAU 3 and BAU 4 in Figure 3.1 and were assessed as medium and high potential bushfire intensity areas in Section 3.4.

5.5 Fire-fighter water supply

The proposed development will be connected to mains water and a hydrant system will be installed in the new road reserves.

5.6 Access and egress

Access and egress for the proposed development will be via new roads which will be progressively established within CA-2 and provide connections to the north, south and east.

The proposed development does not involve residential allotments with long driveways which make access to buildings difficult for emergency services.

5.7 Radiant heat exposure

The Bushfire overlay code provides guidance about the acceptable level of radiant heat exposure for development within a bushfire hazard area. It requires development to provide allotment boundaries which are separated from hazardous vegetation by a distance which achieves a radiant heat flux level ≤ 29 kW/m^2 at allotment boundaries (or building envelopes when identified in the proposal plan).

As discussed in Section 4.3, the proposed development could be exposed to bushfire attack from BAU 3 and BAU 4 (bushfire attack scenarios A and B) shown in Figure 3.1. The radiant heat profile of these bushfire attack scenarios was analysed with the BAL calculator. Inputs used in the BAL calculator and results are provided in Appendix 4.

The separation distances required from BAU 3 and BAU 4 to achieve a radiant heat flux level ≤ 29 kW/m^2 are shown in Figure 6.1.

Some of the proposed residential allotments have a boundary that do not achieve a radiant heat flux level ≤ 29 kW/m^2, ie lots 460 – 464 and lots 501-507. However, they do not require an asset protection zone because mandatory building setbacks from the adjoining road reserves will prevent building within parts of these allotments that do not achieve a radiant heat flux level ≤ 29 kW/m^2.

6 Bushfire mitigation plan

This chapter identifies mitigation measures that must be implemented as part of the proposed development to comply with the Bushfire overlay code.

It is the total of the mitigation measures in this chapter that will reduce the risk of bushfire hazard to a tolerable level. Failure to implement all actions in their entirety could result in an increased level of exposure to bushfire hazards.

6.1 Temporary asset protection zone

A 50 m wide temporary asset protection zone (**APZ**) must be established and maintained within the CA-2 area adjoining the north-western boundary of the site as shown in Figure 6.1.

The temporary APZ must be cleared and maintained free of vegetation until civil works commence for the development of roads and residential allotments in this part of CA-2.

6.2 Building setbacks

The development footprint of dwellings within proposed residential allotments 460, 461, 462, 463, 464, 501, 502, 503, 504, 505, 506 and 507 must be setback from the boundary adjoining the road reserve by a distance ≥ 3 m.

6.3 Landscaping

Landscaping within the proposed residential allotments, proposed parks and pedestrian linkages must be designed and maintained in accordance with Part 5 of *Bushfire Resilient Building Guidance for Queensland Homes* (QRA 2020) (**Bushfire resilient building**) which is publicly available online. Plants used in formal gardens must favour the list of plant species in Appendix E of Bushfire resilient building.

Garden waste, weeds and vegetation debris must be removed from these landscaped areas at regular time intervals during the calendar year and turf must be maintained as lawn at a nominal height ≤ 100 millimetres.

6.4 Fire-fighting water supply

The proposed development must be connected to mains water and a hydrant system must be installed in the new road reserves.

The mains water connection must be in accordance with the local water retailer's specifications for supply and pressure.

The hydrant system must be designed and constructed in accordance with *Fire hydrant and Vehicle Access Guidelines for Residential, Commercial and Industrial lots* (QFES 2019b) (**Fire hydrant and vehicle access guidelines**) which defers to the local water retailer's specifications and the *Australian Standard* (**AS 2419.1-2021**) *Fire hydrant installations, system design, installation and commissioning.*

Where there are differences between the local water retailer's specifications and AS 2419.1-2021, the higher-level standard should prevail.

6.5 Access and egress

New roads must be designed and constructed for an urban fire truck in accordance with Fire hydrant and vehicle access guidelines which defers to the *Road Planning and Design Manual – 2nd Edition* (DTMR 2013) for load bearing capacity, geometry and turning radii.

6.6 Construction stages

During construction stages, emergency service vehicle manoeuvring on dead end roads must be provided via temporary turn around areas within the site.

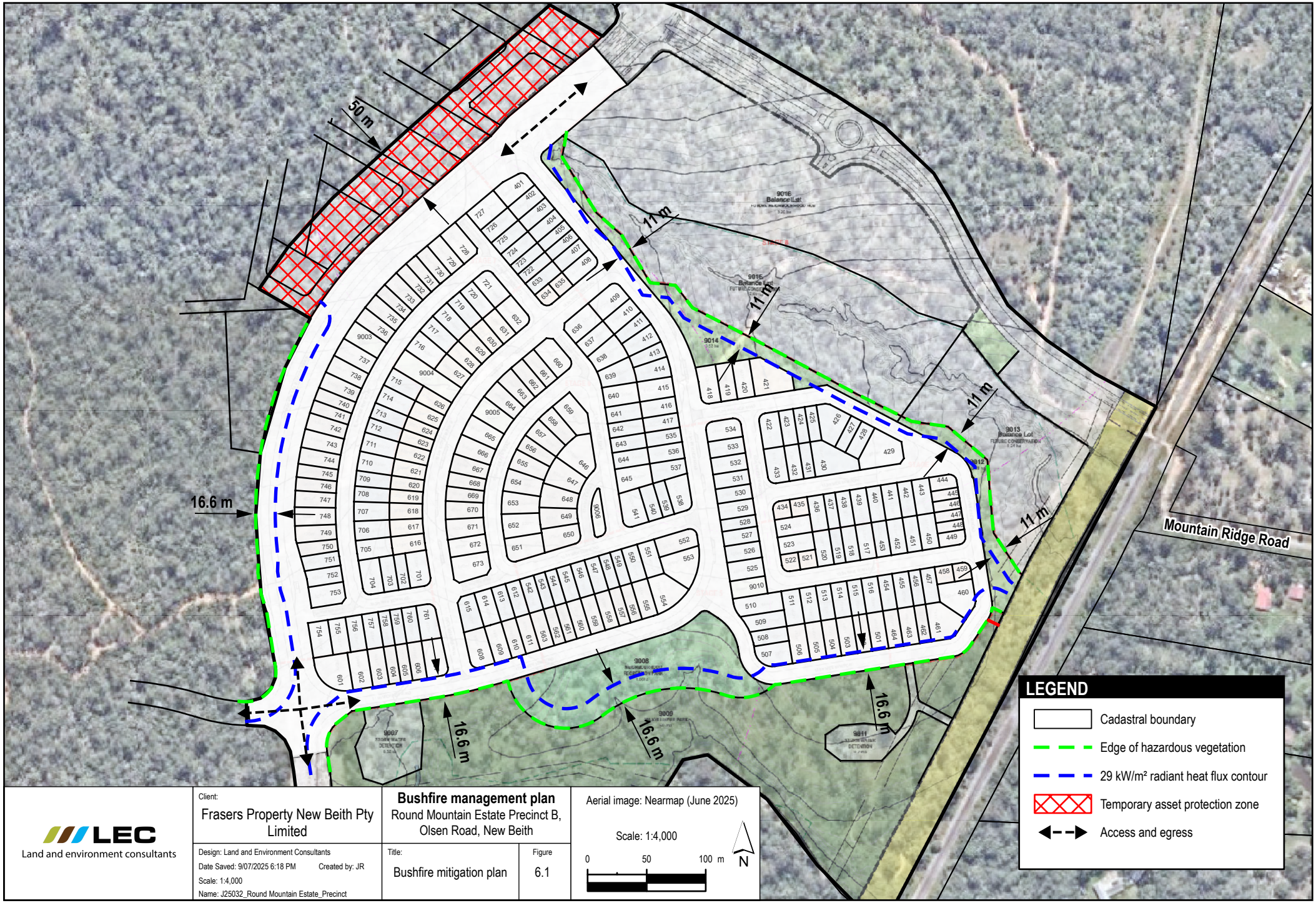
6.7 Prospective purchaser notification

Prospective purchasers must be notified at the point of sale that the proposed residential allotments are in a 'designated bushfire prone area' pursuant to Section 7 of the Queensland *Building Regulation 2021* and provisions of the *National Construction Code* (ABCB 2022) that apply to a designated bushfire prone area will apply to any building assessment work within them. This will include compliance with BAL design and construction specifications in AS 3959-2018.

A BAL rating is a matter relevant to a building application. Therefore, it is appropriate that the BAL assessment for the proposed residential allotments is delivered outside of the PDA development permit application process and this BMP.

6.8 Service installation

Reticulated services, ie water, electricity, gas and communications, must be installed underground.



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Client:
Frasers Property New Beith Pty Limited

Bushfire management plan
Round Mountain Estate Precinct B, Olsen Road, New Beith

Aerial image: Nearmap (June 2025)

Scale: 1:4,000

0 50 100 m

N

Design: Land and Environment Consultants
Date Saved: 9/07/2025 6:18 PM Created by: JR
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Name: J25032_Round Mountain Estate_Precinct

Title: Bushfire mitigation plan

Figure: 6.1

7 Conclusion

This BMP was prepared by a suitably qualified person and in general accordance with the BRC guide.

A bushfire hazard assessment determined the proposed development is within a bushfire hazard area and the PDA development permit application is subject to compliance with the Bushfire overlay code.

Mitigation measures that must be implemented as part of the proposed development are specified in Chapter 6. With the implementation of these mitigation measures the proposed development complies with the Bushfire overlay code as demonstrated in Appendix 5.

References

Australian Building Codes Board (ABCB) 2022, *National Construction Code Series, Building Code of Australia*, Australian Government and States and Territories of Australia, adopted May 2023

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Queensland Fire and Emergency Service (QFES) 2019b *Fire Hydrant and Vehicle Access Guidelines for Residential, Commercial and Industrial Lots*, March 2019

Queensland Reconstruction Authority (QRA) 2020, *Bushfire Resilient Building Guidance for Queensland Homes*, July 2020

Standards Australia Limited (Standards Australia) 2021, *Australian Standard 2419.1-2021 – Fire hydrant installation, system design, installation and commissioning*, Sixth edition, September 2021

Standards Australia Limited (Standards Australia) 2018, *Australian Standard 3959-2018 Construction of buildings in bushfire prone areas*, Fourth edition, November 2018

Appendix 1 Approved context plan area strategy for CA-2

ENDORSED
Date: 09/06/2023
MEDQ

Queensland Government

Legend

- Site Boundary
- Low Density Residential
- Major Linear Open Space
- Local linear Open Space
- District Sports Park (Area subject to EDQ Sports Park Planning Review)
- Bio-diversity Corridor
- Major Roads
- 30m Railway Widening
- Potential School Site (7.0 ha) (Subject to satisfying DoE New Schools Site Selection Guideline)
- Neighbourhood Centre
- Local Community Facility CF007
- Neighbourhood Recreation Park
- 400m Walkable Catchments

Note:
All Lot Numbers, Dimensions and Areas are approximate only, and are subject to survey and Council approval.

The boundaries shown on this plan should not be used for final detailed engineers design.

Source Information:
Site boundaries: Registered Survey Plans.
Adjoining information: DCDB.
Contours: Elvis Spatial
Environment constraints: Saunders Havill
Stormwater: Design Flow
Engineering: Colliers Engineering & Design
Bushfire: Eldon Bottcher Architect

FRASERS PROPERTY

PLAN REF: 151113 – 13
Rev No: F
DATE: 14 February 2023
CLIENT: Frasers
DRAWN BY: WNW
CHECKED BY: PHE

0 100 200 300 400 500 1 : 7,500 @ A3

NEW BEITH (LOT 4)
Context Area Plan
Land Uses

URBAN DESIGN
Level 4 HQ South
520 Wickham Street
PO Box 1559
Fortitude Valley QLD 4006
T +61 7 3539 9500
W rpsgroup.com

rps

Appendix 2 Proposed site plan

LEGEND

- SITE BOUNDARY
- PRECINCT BOUNDARY
- STAGE BOUNDARY
- CONTOURS (1m INTERVALS)
- EASEMENT BOUNDARY
- RIPARIAN CORRIDOR BOUNDARY
- NEIGHBOURHOOD PARK
- LINEAR PARK
- PEDESTRIAN LINKAGE (ROAD RESERVE)
- MAJOR LINEAR PARK
- STORMWATER DETENTION
- BALANCE LOT
- FUTURE RAIL CORRIDOR
- PROPOSED ROAD DEDICATION
- ENTRY STATEMENT
- BIO RETENTION BASINS
- BIN PAD LOCATION

DEVELOPMENT STATISTICS

Lot Width	Typical Lot Size	No. of Lots	%
15m Depth Allotments - Urban Twin			
15m	225m²	8	3.1%
Subtotal		**8**	**3.1%**
26m Depth Allotments - Terrace Twin			
9m	234m²	4	1.5%
10m+	260m²	2	0.8%
Subtotal		**6**	**2.3%**
28m Depth Allotments			
10m	280m²	4	1.5%
12.5m	350m²	8	3.1%
14m	392m²	4	1.5%
15m	420m²	0	0.0%
17m	476m²	4	1.5%
Subtotal		**20**	**7.6%**
30m Depth Allotments			
10m	300m²	26	9.9%
12.5m	375m²	44	16.8%
14m	420m²	43	16.4%
15m	450m²	19	7.3%
17m	510m²	10	3.8%
Subtotal		**142**	**54.2%**
32m Depth Allotments			
10m	320m²	20	7.6%
12.5m	400m²	31	11.8%
14m	448m²	19	7.3%
15m	480m²	12	4.6%
17m	544m²	4	1.5%
Subtotal		**86**	**32.8%**
TOTAL LOTS		**262**	**100.0%**
AVERAGE LOT SIZE		**420m²**	
DENSITY (NET RESIDENTIAL DENSITY)		**14.3 dw/ha**	

LAND USE BUDGET

Land Use	Area	%
Residential Allotments	11.18 ha	33%
Trunk Road Reserve	2.52 ha	7%
Road Reserve	5.84 ha	17%
Linear Park	0.64 ha	2%
Major Linear Park	5.07 ha	15%
Neighbourhood Park	1.00 ha	3%
Pedestrian Links	0.28 ha	1%
Stormwater	0.55 ha	2%
Balance Lot	7.15 ha	21%

URBIS

ROUND MOUNTAIN, NEW BEITH - PRECINCT B

RECONFIGURING OF A LOT - OVERALL

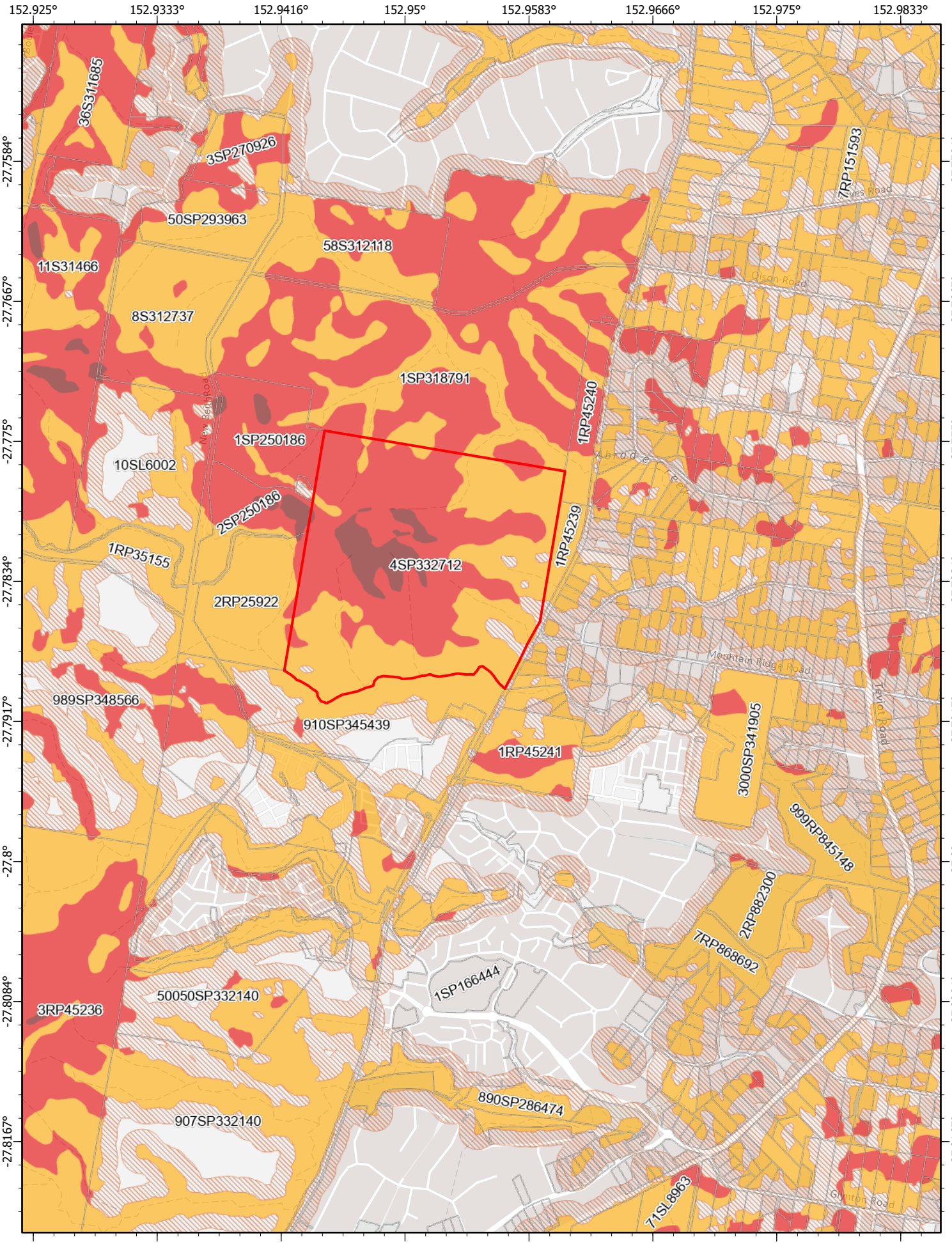
FRASERS PROPERTY

1:3000 @ A3

0 25 50 75 100 125 150

DATE: 14.8.2025
JOB NO: P0055018
DWG NO: ROL-00

Appendix 3 Bushfire prone area map



State Planning Policy IMS - Export Map

Making or amending a local planning instrument and designing land for local infrastructure

Date: 30/03/2025

N

Scale: 1:36,200

0 890

Metres

Queensland Government

Queensland Government


Cadastre (50k)

Bushfire prone area

CLASS


Very High Potential Bushfire Intensity


High Potential Bushfire Intensity

Medium Potential Bushfire Intensity


Potential Impact Buffer

State Planning Policy IMS - Export Map

Making or amending a local planning instrument and designing land for local infrastructure

Date: 30/03/2025

Queensland Government

Queensland Government

Appendix 4 Radiant heat exposure assessment

Bushfire attack scenario A

- Forest fire danger index - 55
- Vegetation - VHC 16.1 *Eucalyptus dominated forest on drainage lines and alluvial plains*
- Understorey fuel load – 13.8 tonnes/hectare (**t/ha**)
- Total fuel load – 16 t/ha
- Effective slope – 4° slope
- Site slope – 0° slope (constructed landform)
- Flame width – 100 metres (**m**)

FLAMESOL
FPA AUSTRALIA

Calculated May 19, 2025, 11:39 am (MDc v.4.9)

J25032

Minimum Distance Calculator - AS3959-2018 (Method 2)			
Inputs		Outputs	
Fire Danger Index	55	Rate of spread	1.2 km/h
Vegetation Classification	Forest	Flame length	9.720000000000001 m
Understorey fuel load	13.8 t/ha	Flame angle	54 °, 64 °, 72 °, 77 °, 79 ° & 84 °
Total fuel load	16 t/ha	Elevation of receiver	3.93 m, 4.36 m, 4.62 m, 4.73 m, 4.77 m & 4.83 m
Vegetation height	n/a	Fire intensity	9,922 kW/m
Effective slope	4 °	Transmissivity	0.881, 0.867, 0.846, 0.823, 0.8100000000000001 & 0.741
Site slope	0 °	Viewfactor	0.5924, 0.4367, 0.2932, 0.1994, 0.1616 & 0.0442
Flame width	100 m	Minimum distance to < 40 kW/m²	8.1 m
Windspeed	n/a	Minimum distance to < 29 kW/m²	11 m
Heat of combustion	18,600 kJ/kg	Minimum distance to < 19 kW/m²	16.3 m
Flame temperature	1,090 K	Minimum distance to < 12.5 kW/m²	23.6 m
		Minimum distance to < 10 kW/m²	28.5 m

Rate of Spread - Mcarthur, 1973 & Noble et al., 1980

Flame length - NSW Rural Fire Service, 2001 & Noble et al., 1980

Elevation of receiver - Douglas & Tan, 2005

Flame angle - Douglas & Tan, 2005

Radiant heat flux - Drysdale, 1999, Sullivan et al., 2003, Douglas & Tan, 2005

Bushfire attack scenario B

- Forest fire danger index - 55
- Vegetation - VHC 10.1 *Spotted gum dominated open forests*
- Understorey fuel load – 19.3 t/ha
- Total fuel load – 20.8 t/ha
- Effective slope – 6° slope
- Site slope – 0° slope (constructed landform)
- Flame width – 100 m

FLAMESOL
FPA AUSTRALIA

Calculated May 19, 2025, 11:40 am (MDc v.4.9)

J25032

Minimum Distance Calculator - AS3959-2018 (Method 2)			
Inputs		Outputs	
Fire Danger Index	55	Rate of spread	1.92 km/h
Vegetation Classification	Forest	Flame length	15.02 m
Understorey fuel load	19.3 t/ha	Flame angle	53 °, 63 °, 70 °, 75 °, 76 ° & 82 °
Total fuel load	20.8 t/ha	Elevation of receiver	5.99 m, 6.69 m, 7.05 m, 7.25 m, 7.28 m & 7.43 m
Vegetation height	n/a	Fire intensity	20,709 kW/m
Effective slope	6 °	Transmissivity	0.871, 0.852, 0.826, 0.8, 0.787 & 0.726
Site slope	0 °	Viewfactor	0.5996, 0.446, 0.3011, 0.2048, 0.1669 & 0.0452
Flame width	100 m	Minimum distance to < 40 kW/m²	12.4 m
Windspeed	n/a	Minimum distance to < 29 kW/m²	16.6 m
Heat of combustion	18,600 kJ/kg	Minimum distance to < 19 kW/m²	24.2 m
Flame temperature	1,090 K	Minimum distance to < 12.5 kW/m²	33.9 m
		Minimum distance to < 10 kW/m²	40 m

Rate of Spread - Mcarthur, 1973 & Noble et al., 1980

Flame length - NSW Rural Fire Service, 2001 & Noble et al., 1980

Elevation of receiver - Douglas & Tan, 2005

Flame angle - Douglas & Tan, 2005

Radiant heat flux - Drysdale, 1999, Sullivan et al., 2003, Douglas & Tan, 2005

Appendix 5 Bushfire overlay code assessment

Performance outcomes	Acceptable outcomes	Compliance assessment
Section A **Reconfiguring a lot (RaL) – where creating 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 15 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) a distance that is no closer than the distances specified in Table 5 at all development footprint plan boundaries; or (b) a distance that achieves a radiant heat flux level of 29 kW/m2 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.	**Not applicable**
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 access by emergency services under critical event conditions.	**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.	**Not applicable**
Section B		
Reconfiguring a lot (RaL) – where creating lots of 2,000 square metres or less		
PO3 The subdivision layout: (a) avoids creating lots on 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	**AO3.1** The subdivision layout results in lots that are sited so that they are separated from the closest edge to the adjacent mapped medium, high or very high potential bushfire intensity area by: (a) a distance that is no closer than the distances specified	**Complies with AO3.1** Most of the proposed residential allotments have boundaries which are set back from hazardous vegetation by a distance which achieves a radiant heat flux level ≤ 29 kilowatts/square metres (**kW/m²**).

Performance outcomes	Acceptable outcomes	Compliance assessment
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.	in Table 5 at all lot boundaries; or : (b) a distance that achieves a radiant heat flux level of 29 kW/m^2 or less: (i) at the building envelope, if identified at RaL stage; or (ii) where a building envelope is not identified, at all lot 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. Note – For staged developments, temporary separation areas may be absorbed as part of subsequent stages. Note - Existing cleared areas external to the site may only be used in calculating necessary separation where tenure ensures that the land will remain cleared of hazardous vegetation (for example the land is a road, watercourse or highly managed park in public ownership).	The exceptions being proposed lots 460-464 and 501-507. However, they do not require an asset protection zone (**APZ**) because mandatory setbacks from common boundaries with adjoining road reserves will prevent building within parts of these allotments that do not achieve a radiant heat flux level ≤ 29 kW/m^2. A 50 m wide temporary asset protection zone (**APZ**) will be established and maintained within the CA-2 area adjoining the north-western boundary of the site as shown in Figure 6.1 of the **BMP**. The temporary APZ will be cleared and maintained free of vegetation until civil works commence for the development of roads and residential allotments in this part of CA-2.
	AO3.2 The subdivision layout does not create lots that are within bushfire prone areas and on ridgelines, saddles and crests where slopes exceed 15 per cent (roads and parks may be located in these areas).	**Complies with AO3.2** The proposed development is not affected by ridgelines, saddles or crests where slopes exceed 15 %.
Section C		
Reconfiguring a lot (RaL) – where creating more than 20 lots		
PO4 The subdivision layout is designed to minimise the length of the development perimeter and number of lots exposed to hazardous vegetation. Note – For example, avoid finger-like subdivision patterns or substantive vegetated corridors between lots.	**AO4** No acceptable outcome is prescribed	**Complies with PO4** The proposed development uses roads and the proposed neighbourhood park and linear park (**proposed parks)** to separate the proposed residential allotments from hazardous vegetation. The proposed parks will be maintained landscapes which consist of pathways, lawn and formal gardens ie, in the post development landform, the proposed parks will have a low level of vegetation and discontinuous bushfire fuel.

<table>
<tr><th>Performance outcomes</th><th>Acceptable outcomes</th><th>Compliance assessment</th></tr>
<tr><td></td><td></td><td>Access and egress for the proposed development will be via new roads which will be progressively established within CA-2 and provide connections to the north, south and east.

The proposed development does not involve residential allotments with long driveways which make access to buildings difficult for emergency services.</td></tr>
<tr><td rowspan="2">PO5
The subdivision layout provides for adequate access and egress and safe evacuation routes, to achieve an acceptable or tolerable risk to people.</td><td>AO5.1
The subdivision layout:
(a) avoids the creation of bottle-neck points in the movement network within the development (for example, avoids hourglass patterns); and
(b) ensures the road network has sufficient capacity for the evacuating population.</td><td rowspan="2">Complies with PO5

The proposed residential allotments will have direct access to public roads which will provide efficient access and egress for emergency services.

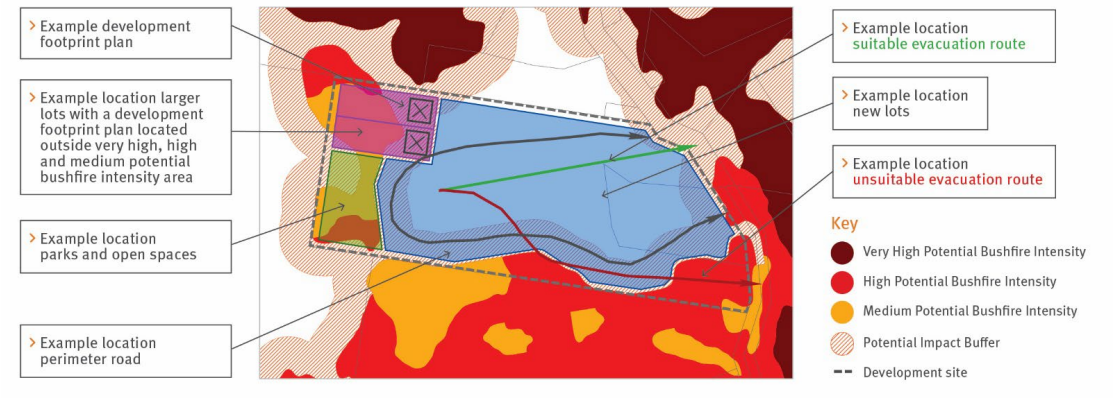
During development stages, provisions will be made on dead end roads to allow emergency vehicles to turn around.</td></tr>
<tr><td>AO5.2
The subdivision layout ensures evacuation routes:
(a) direct occupants away from rather than towards or through areas with a greater potential bushfire intensity; and
(b) minimise the length of route through bushfire prone areas.
Refer Figure 5.</td></tr>
<tr><td colspan="3"> 

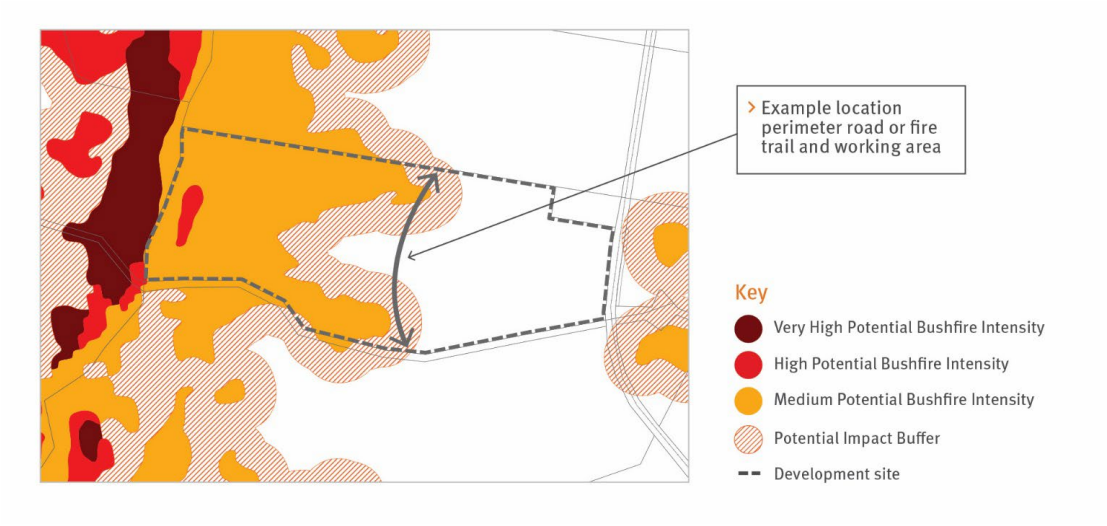
Figure 5 – Subdivision layout and evacuation routes</td></tr>
<tr><td rowspan="2">PO6
The subdivision layout provides adequate buffers between hazardous vegetation and development.

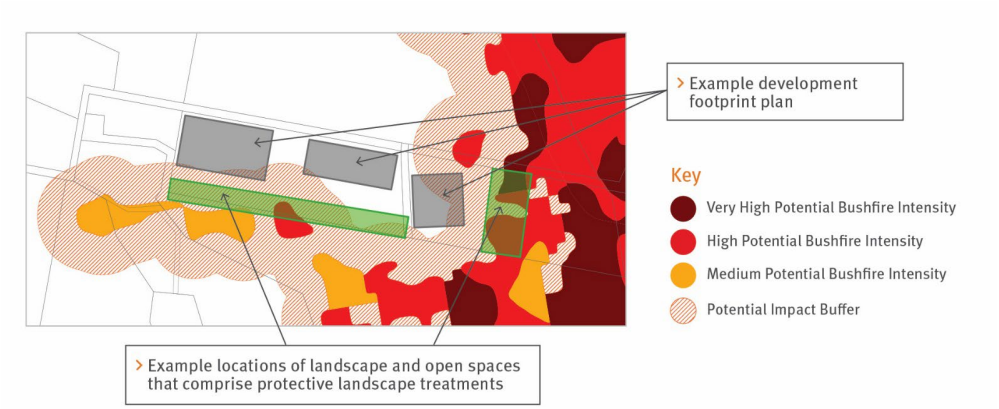
Note – An applicant may seek to undertake a site-level verification of the location and nature of hazardous</td><td>AO6.1
The subdivision layout results in an asset protection zone being located to create a separation area from adjacent mapped medium, high or very high potential bushfire intensity areas.</td><td rowspan="2">Complies with AO6.1 and AO6.2

The proposed development mostly uses roads and proposed parks to separate the proposed residential allotments from hazardous vegetation. The exceptions are proposed lots 460-464 and 501-507. However, they do not require an APZ</td></tr>
<tr><td>AO6.2</td></tr>
</table>

Performance outcomes	Acceptable outcomes	Compliance assessment
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.	The asset protection zone is comprised of: (a) parks and open spaces; and/or (b) lots greater than 2000 square metres; and/or (c) public roads (termed perimeter roads). Note – Parks and open space may be located within the mapped medium, high and very high potential bushfire intensity areas to create a separation between the development and the balance of the bushfire prone area. Note – Portions of lots greater than 2000 square metres may be located within the mapped medium, high and very high potential bushfire intensity areas. Refer Figure 5.	because mandatory setbacks from the boundary adjoining the road reserve will prevent building within parts of these allotments that do not achieve a radiant heat flux level ≤ 29 kW/m^2. Specifications for landscaping within the proposed parks are provided in Section 6.2 of the BMP. Implementation of these specifications will result in a low level of discontinuous bushfire fuels.
	AO6.3 Where the asset protection zone includes lots greater than 2000 square metres a development footprint plan is identified for each lot that is located in accordance with AO1.2.	
PO7 Parks or open space provided as part of the asset protection zone do not create additional bushfire prone areas. Note –The undertaking of a bushfire hazard assessment, in accordance with the methodology in the QFES *Bushfire resilient communities* document may assist in demonstrating compliance with this performance outcome.	**AO7** Where the asset protection zone includes parks or open spaces, they: (a) comprise only low threat vegetation, including grassland managed in a minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, cultivated gardens and nature strips; or (b) are designed to ensure a potential available fuel load is maintained at less than eight tonnes/hectare in aggregate and with a fuel structure that remains discontinuous. 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.	**Complies with AO7** Specifications for landscaping within the proposed residential allotments and proposed parks are provided in Section 6.2 of the BMP. Implementation of these specifications will result in a low level of discontinuous bushfire fuels.
PO8 Perimeter roads are accessible for fire-fighting vehicles, to facilitate emergency access and operational space for fire- fighting, maintenance works and hazard reduction activities.	**AO8.1** Where the asset protection zone includes a perimeter road it: (a) has a two-lane sealed carriageway clear of hazardous vegetation; and (b) is connected to the wider public road network at both ends and at	**Complies with AO8.1 and AO8.2** The proposed road network complies with AO8.1 (a)-(c).

Performance outcomes	Acceptable outcomes	Compliance assessment
	intervals of no more than 200 metres; and (c) does not include design elements that may impede access for fire-fighting and maintenance for fire- fighting purposes (for example traffic calming involving chicanes).	
	AO8.2 Where the subdivision contains a reticulated water supply, the road network and fire hydrants are designed and installed in accordance with: (a) *Fire Hydrant and Vehicle Access Guidelines for residential, commercial and industrial lots*, Queensland Fire and Emergency Services, 2015, unless otherwise specified by the relevant water entity; and (b) the *Road Planning and Design Manual 2nd edition*, Department of Transport and Main Roads, 2013.	**Complies with AO8.2** Sections 6.3 and 6.4 of BMP requires the road network and hydrants to be designed in accordance with AO8.2(a)-(b).
Section D		
Reconfiguring a lot (RaL) – where creating additional lots for the purpose of residential development and a reticulated water supply is not provided.		
PO9 The subdivision layout provides for perimeter roads or fire trail and working areas that are accessible by the type of fire-fighting vehicles servicing the area, to facilitate emergency access and operational space for fire-fighting, maintenance works and hazard reduction activities.	**AO9.1** The subdivision layout includes: (a) a fire trail and working area designed and constructed in accordance with the design parameters in Table 6 that separates the residential lot or development footprint plan from adjacent mapped medium, high or very high potential bushfire intensity areas; or (b) a perimeter road designed and constructed in accordance with AO8.1. Refer Figure 6.	**Not applicable** The proposed development will be connected to mains water.

Performance outcomes	Acceptable outcomes	Compliance assessment
 *Figure 6 – Siting of fire trail and working area*		
Section E		
Material change of use		
PO10 Site layout achieve an acceptable or tolerable risk to people. Landscape or open space provided as part of the development: (a) acts as a buffer between hazardous vegetation and development; and (b) does not create additional bushfire prone areas. 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.	**AO10.1** Site layout places the landscape and open spaces within the site between premises and adjacent mapped medium, high or very high potential bushfire intensity areas. Refer Figure 7.	**Not applicable** The proposed development does not involve a material change of use.
	AO10.2 This landscaping and open space comprises protective landscape treatments that: (a) comprise only low threat vegetation, including grassland managed in a minimal fuel condition, maintained lawns, golf courses and cultivated gardens; or (b) are designed to ensure a potential available fuel load is maintained at less than 8 tonnes/hectare in aggregate and that fuel structure remains discontinuous. 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.	**Not applicable** The proposed development does not involve a material change of use.

Performance outcomes	Acceptable outcomes	Compliance assessment
 *Figure 7 – Siting of protective landscape treatments*		
PO11 The development establishes evacuation areas, to achieve an acceptable or tolerable risk to people.	**AO11** If in an isolated location, development establishes direct access to a safe assembly/evacuation area. Note – Guidance on identifying safe evacuation areas is contained in the QFES *Bushfire resilient communities* document.	**Not applicable** The proposed development does not involve a material change of use.
PO12 If on a lot of over 2,000 m^2, where involving a new premises or an existing premises with an increase in development footprint, development: (a) locates occupied areas as close as possible to property entrances to facilitate safe evacuation during a bushfire event; and (b) ensures vehicular access is located and designed to allow safe evacuation of the site by occupants and maintain access by emergency services under critical event conditions	**AO12** No acceptable outcome is prescribed.	**Not applicable** The proposed development does not involve a material change of use.
PO13 Development is located within a reticulated water supply area or includes a dedicated static water supply that is available solely for fire-fighting purposes and can be accessed by fire-fighting vehicles. Note – Swimming pools, farm ponds and dams are not considered reliable sources of static water supply in Queensland due to regular drought events. Note for Local Government – Information on how to provide an appropriate static water supply, may form a condition of a development approval. For further information on preferred solutions refer to the QFES *Bushfire resilient communities* document.	**AO13** No acceptable outcome is prescribed	**Not applicable** The proposed development does not involve a material change of use.

Performance outcomes	Acceptable outcomes	Compliance assessment
PO14 Vulnerable uses listed in Table 7 are not established or intensified within a bushfire prone area unless: (a) there is an overriding need in the public interest for the new or expanded service the development provides; and (b) there are no other suitable alternative locations within the required catchment; and (c) site planning can appropriately mitigate the risk (for example, siting ovals for an educational establishment between the hazardous vegetation and structures. Note – The preparation of a bushfire management plan in accordance with the methodology in the QFES *Bushfire resilient communities* document may assist in demonstrating compliance with this performance outcome	**AO14.1** No acceptable outcome is prescribed.	**Not applicable** The proposed development does not involve a material change of use.
PO15 Community infrastructure providing essential services listed in Table 7 are not established within a bushfire prone area unless: (a) there is an overriding need in the public interest for the new or expanded service the development provides (for example, there are no other suitable alternative locations that can deliver the required level of service or meet emergency service response times during and immediately after a bushfire event); and (b) the infrastructure can function effectively during and immediately after a bushfire event. Note – The preparation of a bushfire management plan in accordance with the methodology in the QFES *Bushfire resilient communities* document may assist in demonstrating compliance with this performance outcome.	**AO15** No acceptable outcome is prescribed.	**Not applicable** The proposed development does not involve a material change of use.
PO16 Development avoids or mitigates the risks to public safety and the environment from the manufacture or storage of materials listed in Table 7 that are hazardous in the context of bushfire to an acceptable or tolerable level. Note – The preparation of a bushfire	**AO16** No acceptable outcome is prescribed.	**Not applicable** The proposed development does not involve a material change of use.

Performance outcomes	Acceptable outcomes	Compliance assessment
management plan in accordance with the methodology in the QFES *Bushfire resilient communities* document may assist in demonstrating compliance with this acceptable outcome. Editor's note – In addition to the requirements of this code the *Work Health and Safety Act 2011* and associated Regulation and Guidelines, the *Environmental Protection Act 1994* and the relevant building assessment provisions under the *Building Act 1975* contain requirements for the manufacture and storage of hazardous substances. Information is provided by Business Queensland on the requirements for storing and transporting hazardous chemicals, available at: www.business.qld.gov.au/running-business/protecting-business/risk-management/hazardous-chemicals/storing-transporting**.**		
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 performance outcome.	**AO17.1** 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	**Not applicable** The proposed development does not require APZs. Figure 6.1 of the BMP demonstrates that the separation required from hazardous vegetation to achieve a radiant heat flux level ≤ 29 kW/m^2 is provided by roads and proposed parks. The exceptions are proposed lots 460-464 and 501-507. However, they do not require an APZ because mandatory setbacks from the boundary adjoining the road reserve will prevent building within parts of these allotments that do not achieve a radiant heat flux level ≤ 29 kW/m^2. Specifications for landscaping within the proposed parks are provided in Section 6.2 of the BMP. Implementation of these specifications will result in a low level of discontinuous bushfire fuels.
	AO17.2 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. Note – The preparation of a landscape management plan undertaken in	**Not applicable**

Performance outcomes	Acceptable outcomes	Compliance assessment
	accordance with the methodology in the QFES *Bushfire resilient communities* document may assist in demonstrating compliance with this acceptable outcome.	
Section G		
Where planning provisions or conditions of approval require revegetation or rehabilitation		
PO18 Revegetation or rehabilitation areas are designed and managed to ensure they do not result in an unacceptable level of risk or an increase in bushfire intensity level. Note – The undertaking of a bushfire hazard assessment in accordance with the methodology in the QFES *Bushfire resilient communities* document may assist in demonstrating compliance with this performance outcome.	**AO18.1** Required revegetation or rehabilitation: (a) is located outside of any asset protection zone; or (b) maintains a potential available fuel load which is less than eight tonnes/hectare in aggregate and fuel structure which is discontinuous. 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 acceptable outcome (b).	**Complies with AO18.1** The bushfire hazard assessment in the BMP considers areas of bushland vegetation that will be retained, rehabilitated or landscaped within the proposed open space areas and bushland vegetation adjoining the site. Figure 6.1 of the BMP demonstrates that the separation required from hazardous vegetation to achieve a radiant heat flux level ≤ 29 kW/m² is provided by roads and proposed parks. Specifications for landscaping within the proposed parks are provided in Section 6.2 of the BMP. Implementation of these specifications will result in a low level of discontinuous bushfire fuels
	AO18.2 Revegetation or rehabilitation of areas located within mapped medium, high or very high potential bushfire intensity areas, revegetate and rehabilitate in a manner that maintains or reduces the existing fuel load. OR Revegetation or rehabilitation of areas located within the mapped potential impact buffer area, revegetate and rehabilitate in a manner that maintains or reduces the existing fuel load. Note – The preparation of a vegetation management plan undertaken in accordance with the methodology in the QFES *Bushfire resilient communities* document may assist in demonstrating compliance with this acceptable outcome.	**Complies with PO18** Figure 6.1 of the BMP demonstrates that the separation required from hazardous vegetation to achieve a radiant heat flux level ≤ 29 kW/m² is provided by roads and proposed parks. Specifications for landscaping within the proposed parks are provided in Section 6.2 of the BMP. Implementation of these specifications will result in a low level of discontinuous bushfire fuels

Table 6 – Fire trail and working area design parameters

Parameter	Provisions
Width	Contains a width of at least 20 metres including: 1. A trafficable area (cleared and formed); a. with a minimum width of 4 metres than can accommodate a rural firefighting vehicle b. with no less than 4.8 metres vertical clearance from canopy vegetation c. with no adjacent inhibiting embankments or retaining walls 2. A working area each side of the trafficable area: a. with a minimum width of 3 metres each side

Parameter	Provisions
	b. cleared of all flammable vegetation greater than 10 centimetres in height 3. The balance (i.e. 10 metre width) managed vegetation area: a. sited to separate the trafficable area from adjacent mapped medium, high or very high potential bushfire intensity areas managed vegetation b. comprising managed vegetation clear of major surface hazards.
Access	Access is granted in favour of the local government and Queensland Fire and Emergency Services Note – this access is commonly granted in the form of a easement that is to be maintained by the grantor.
Egress	Contains trafficable vehicle routes in to low hazard areas, every 200 metres

Table 7 – Vulnerable uses, community infrastructure for essential services and materials that are hazardous in the context of bushfire hazard

Group	Uses
Vulnerable uses	*childcare centre, community care centre, detention facility, educational establishment, hospital, nature-based tourism, relocatable home park, rooming accommodation, residential care facility, resort complex, retirement facility, tourist park*
Community infrastructure for essential services	*educational establishment, emergency services, hospital*
Hazardous materials in the context of bushfire hazard	Hazardous chemicals that are present at the levels or in the quantities that would constitute the use being a hazardous chemical facility Hazardous materials that are present in the quantities in the Work Health and Safety Regulation, schedule 15