

Bushfire management plan/Statement addressing the Bushfire Protection Criteria coversheet

Site address:

Site visit: Yes No

Date of site visit (if applicable): Day Month Year

Report author or reviewer:

WA BPAD accreditation level (please circle):

Not accredited Level 1 BAL assessor Level 2 practitioner Level 3 practitioner

If accredited please provide the following.

BPAD accreditation number: Accreditation expiry: Month Year

Bushfire management plan version number:

Bushfire management plan date: Day Month Year

Client/business name:

	Yes	No
Has the BAL been calculated by a method other than method 1 as outlined in AS3959 (tick no if AS3959 method 1 has been used to calculate the BAL)?		
Have any of the bushfire protection criteria elements been addressed through the use of a performance principle (tick no if only acceptable solutions have been used to address all of the bushfire protection criteria elements)?		

Is the proposal any of the following (see SPP 3.7 for definitions)?	Yes	No
Unavoidable development (in BAL-40 or BAL-FZ)		
Strategic planning proposal (including rezoning applications)		
High risk land-use		
Vulnerable land-use		


None of the above

Note: Only if one (or more) of the above answers in the tables is yes should the decision maker (e.g. local government or the WAPC) refer the proposal to DFES for comment.

Why has it been given one of the above listed classifications (E.g. Considered vulnerable land-use as the development is for accommodation of the elderly, etc.)?

The information provided within this bushfire management plan to the best of my knowledge is true and correct:

Signature of report author or reviewer



Date

Bushfire Management Plan

Lot 49 (No. 45) Jakattah Road, Muckenburra

February 2024



LIMITATIONS STATEMENT

This Bushfire Management Plan ('BMP') in support of a proposal to place five campsites, short stay accommodation, at Lot 49 (No. 45) Jakattah Road, Muckenburra

Envision Bushfire Protection Pty Ltd

ABN: 90958370365

PO Box 7209 SHENTON PARK WA 6008

Ph: 0428 066 147

Email: admin@envisionbp.com.au

Version Control

Lot 49 (No. 45) Jakattah Road, Muckenburra			
Version	Date	Author	
V1	15 February 2024	Anthony Rowe	submission

Copyright

Unless otherwise agreed in writing, this report is the intellectual property of Envision Bushfire Protection. The report is designed to be used exclusively by the person who commissioned it. Permission must be sought prior to the reproduction of any portion of this document, and every effort is made to ensure proper referencing of this document.

Disclaimer

In undertaking this work, the authors have made every effort to accurately apply the available information at the time of writing following the instructions of the regulatory authorities and applying best practice as described by the Fire Protection Association Australia. Any conclusions drawn or recommendations made in the report are made in good faith, and the consultants take no responsibility for how this information and the report are subsequently used.

Envision Bushfire Protection accepts no liability for a third party's use of, or reliance upon, this specific report.

Envision Bushfire Protection accepts no liability for the inaction of the owner to provide or maintain the bushfire protection measures identified in this report. Vegetation is dynamic, building materials may distort, and the accumulation and the location of flammable materials near the building may affect the potential for damage or loss of a building to occur.

Failure to maintain the property and/or building to these standards may compromise an insurance policy if currently covering any of your assets or those of any third party that may be consequentially affected due such failure. If not insured, and if you are seeking insurance, this report may not influence the decision of any insurer not to offer cover.

Importantly the measures contained in this report cannot guarantee human safety or an absence of harm or that the building will not be damaged or would survive a bushfire event on every occasion. This is due to the unpredictable nature of fire behaviour (knowledge in this field continues to develop) and the unpredictable nature of extreme weather conditions.

Scope of this report

Envision Bushfire Protection has been engaged to provide assessment of the proposed development.

Envision Bushfire Protection has not been engaged to assess the compliance of the site and the construction standard of the building in accordance with its planning and building approvals.

The scope of the advice has been to assess the proposal for compliance with the policy measures described in State Planning Policy 3.7.

The investigations and mitigation measures identified in the BMP, has, in turn, formed the basis for the preparation of a Bushfire Emergency Evacuation Plan.

Client relationship

I was engaged to provide expert bushfire safety and planning advice. My relationship with the client is a standard commercial contract, and no private, personal, or other matter has influenced the content of the BMP or my findings.

STATEMENT OF CONFORMITY – PLANNING AND DEVELOPMENT ACT 2005



Anthony Rowe Level 3 - BPAD36690

Principal Bushfire Consultant | Town Planner



The signatory declares that this Bushfire Management Plan meets the requirements of State Planning Policy 3.7 and the Guidelines for Planning in Bushfire Prone Areas V1.4.

SUMMARY

Preface

The applicant proposes to provide 6 campsites on private land at Lot 49 (No. 45) Jakattah Road, Muckenburra. The camp sites are to provide self-reliant camping/accommodation. No additional habitable buildings are proposed nor are services (water) proposed.

The site is within a declared bushfire prone area. Accordingly, the development is required to be assessed for its compliance with State Planning Policy 3.7 *Planning in Bushfire Prone Areas* ('SPP 3.7') and the bushfire protection criteria described in the Guidelines v1.4.

The intent of the policy is: ***"to preserve life and reduce the impact of bushfire on property and infrastructure"***.

The proposed development is classed as a 'vulnerable' land use because guests at the accommodation may be unfamiliar with the locality. The BMP has therefore been prepared for the use of land (not buildings) and provide emergency management with a Bushfire Emergency Evacuation Plan addressing the use of the land.

This BMP has been prepared in accordance with SPP 3.7 and Appendix Five in the Guidelines v1.4 and the Department of Planning Lands and Heritage (DPLH) *BMP Template for a complex development application*; the following has been prepared to comply with the DPLH template.

Proposal details (addressed in Section 1)

The proposal is to provide 6 campsites (locations) to provide self-reliant camping; no services are provided to the campsites other than a means of access. The campsites (short stay) will not operate during the bushfire season (Shire of Gingin from 1 December to 30 March each year) and camp fires/open fires will be restricted in the restricted burning period (Shire of Gingin from 1 October to 16 May).

The site is a 38-ha regular shape (approximating square) and located on Gingin Brook Road - 15 km west of the town of Gingin.

The site is located on Gingin Brook Road but is bordered at its west boundary by Murray Road (573 m -dead end) and at its east boundary by Jakattah Road (483m – dead end).

The site has a single residence and outbuilding located at the north east corner of the site, accessed from Jakattah Road (483 m from Gingin Brook Road).

The site is primarily a pasture site, predominantly grassland. The site has a large central lake with a perimeter (narrow row) of forest. The site has a low slope, 5.0⁰ from its boundaries to the central lake, but is otherwise considered to be flat.

The camp sites are to be spread around the lake and secluded from one another; obscured by the forest trees.

Each campsite is an area of ground; a fire pit will be provided at each campsite but will be restricted from use between 1 October to 16 May and on any other day declared as 'High', or greater, fire danger rating (FDR).

Access to each camp site is from Murray Road, with entry from the north west corner 573 m from Gingin Brook Road. A private driveway across open grassland located on the outside and around the lake will service campsite locations and it will provide a continuous link from Murray Road to Jakattah Road.

The site does not have access to a reticulated water supply, nor is water intended to be provided to each campsite.

Environmental considerations (addressed in Section 2)

No vegetation other than pasture grasses are affected by the proposal. Surface works will include the private driveway, and areas temporarily disturbed by camping activity. Firewood is to be provided for each guest and the collecting of fuels will be restricted.

The Asset Protection Zone 21 m around the existing dwelling is to be established. It will affect grassland and understorey vegetation, but the present tree canopies can be retained when the understorey (driveway) is maintained as low threat.

Landscape plan

The proposal does not require any offset planting nor will involve revegetation that may affect the determined bushfire classification and risk.

Bushfire assessment results (addressed in Section 3)

A Bushfire Attack Level (BAL) assessment following Method 1 AS 3959:2018, and the *DPLH Visual guide for bushfire risk assessment in Western Australia*, and using an FFDI of 80, has been undertaken. The following bushfire hazards were identified as applicable within 100 m to the site:

- Grassland (Class G) vegetation, the site is an agriculture lot, largely cleared and used for pasture and grazing. Grassland extends from the site in a north, east and west direction, support a grass fire spread into the site.
- Woodland (Class D) vegetation, trees > 10 m tall have been retained in pockets at the site west of the site. It may affect access along Murray Road but is distant to the camp sites.
- Forest (Class A) vegetation, a narrow strip roadside vegetation around the lake and position closed to the campsite. Contiguous forest extends south from the site and may expose the site to ember attack.

Identification of bushfire hazard issues (addressed in Section 4)

The broader landscape area (2.5 Km) is predominantly pasture (grassland), and forest extending south. The campsites may be affected by a grass fire spread across the site, either as a continuation from the grassland north and west or ignited in the site from embers from the forest extending south.

The exposure of guests to grass fire (extreme heat) is fatal.

No shelter buildings are proposed on site, other than establishing the Asset Protection Zone for the existing dwelling to provide a potential place of last resort.

The primary risk treatment is to restrict operation from 1 December to 30 March each year, and pre-emptively evacuate the site on days forecast as High (Fire Danger Rating).

Whilst a fire can occur outside the bushfire season moderate conditions enable more time for evacuation and avoidance. The route along Gingin Brook Road provides the opportunity to evacuate in the opposite direction to an approaching fire and to observe its position, to take action to avoid it.

Assessment against the bushfire protection criteria (addressed in Section 5)

The proposal was compared with the four Bushfire Protection Criteria for Element 5, ***camping ground only or nature-based park***.

Acceptable Solution compliance

A5.10 Siting and design

The proposal does not involve the construction of habitable buildings and the campsites are proposed as a tolerable loss; exempting each from a positioning distant classified vegetation (BAL 29) which would undermine the intimacy and seclusion within the environment.

The primary risk treatment is to avoid operation during the bushfire season (Shire of Gingin).

A5.11 Vehicular access

The site has access to Gingin Brook Road, a through road providing destinations within the Gingin township, 15 km east, and to Indian Ocean Drive 15 km west and on to Lancelin 54 km, to provide an opportunity to evacuate the site in an opposite direction to an approaching fire.

A5.12 Provision of water

The site does not have access to a reticulated water supply and drinking water is not provided at each site. Guests are intended to be self-reliant, and the accommodation is not permanent, or expected to be present to be defended in a bushfire.

Additional Bushfire Management Strategies (addressed in section 5.2)

Additional Bushfire Management Strategies (risk treatments in addition to those addressed in Elements 1-5) includes the Bushfire Emergency Evacuation Plan (Attached at Attachment 2) prepared in compliance with 5.5.4 in the Guidelines v1.4.

Spatial representation of the bushfire management strategies (Shown on Figure EX 1)

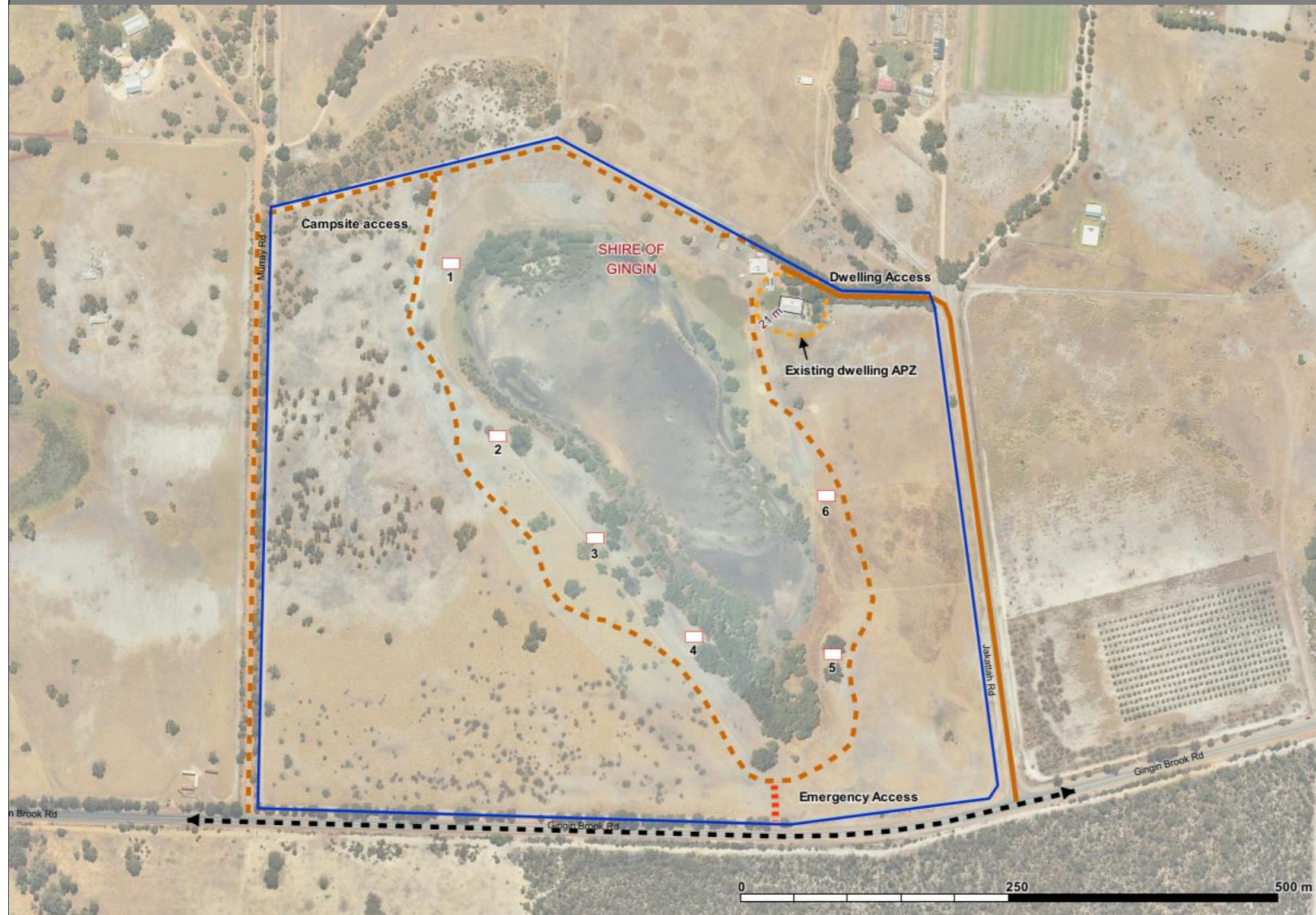
The key features demonstrating compliance with the bushfire protection measures are identified on the *Spatial representation of the bushfire management strategies*.

These actions are reflected in the following *Responsibilities for implementation and management of the bushfire measures*.

Responsibilities for implementation and management of the bushfire measures (addressed in section 6)

The Owner responsibilities (Guidelines 4.6.3) identify the bushfire management measures necessary to achieve compliance with the bushfire protection criteria are provided at **section 6** in this BMP and summarised in Figure Ex1.

Figure Ex 1 - Spatial representation of the proposed risk management strategies Lot 49 (No. 45) Jakattah Road, Muckenburra -



Responsibilities for implementation and management of the bushfire measures

1. The establishment and maintenance of the site as an Asset Protect Zone 21 m from the dwelling: the extent is shown on Figure Ex1 (

The Asset Protection Zone is to be established and maintained in compliance with Schedule 1 Standards for Asset Protection Zones (Guidelines 1.4).

2. The construction of the driveway serving each camp site is to be provided and maintained in accordance with the technical specifications in Table 6 column 4 (Guidelines v1.4). The private driveway is a 6 m continuous loop (all weather surface) providing access to each camp site and connecting to Murray Road and Jakattah Road.

3. The driveway is to be provided with reflective way finding at 50 m intervals.

4. A 6 m wide emergency access is to be provided from the southern extent of the driveway and onto Gingin Brook Road

5. Directional signage is to be provided at the exit onto Murray Road indicating the Evacuation destinations consistent with the Bushfire Emergency Evacuation Plan.

6. A notification, pursuant to Section 70A Transfer of Land Act 1893 is to be placed on the certificate(s) of title:

"This land is within a bushfire prone area as designated by an Order made by the Fire and Emergency Services Commissioner and is subject to a Bushfire Management Plan. The Short Stay accommodation is restricted from operation during the bushfire season (shire of Gingin).

LEGEND

- | | | | | | | | |
|--|----------------------------|--|---------------------------|--|---------------------------|--|------------|
| | Site Boundary | | Private driveway proposed | | Emergency access | | Camp sites |
| | Two way public road access | | Existing access | | 21m asset protection Zone | | |

Table of Contents

1. PROPOSAL DETAILS	1
1.1 Introduction	1
1.2 Regulatory Compliance Requirements	5
2. ENVIRONMENTAL CONSIDERATIONS.....	6
2.1 Native Vegetation - Regulated	6
2.2 Native Vegetation – Modification and Clearing	7
2.3 Re-vegetation/Landscape Plans	7
3. BUSHFIRE ASSESSMENT	8
3.1 Bushfire Attack Level Assessment (Inputs)	8
3.2 Assessment Outputs.....	23
4. IDENTIFICATION OF BUSHFIRE HAZARD ISSUES	26
4.1 Scope and objective	27
4.2 Risk Identification	27
4.3 Risk Analysis –.....	28
5. BUSHFIRE PROTECTION MEASURES	35
5.1 Guidelines for Planning in Bushfire Prone Areas Version 1.4 (the Guidelines)	35
5.2 Bushfire Management Strategies.....	43
5.3 Spatial representation of the bushfire management strategies	45
6. RESPONSIBILITIES FOR IMPLEMENTATION AND MANAGEMENT OF THE BUSHFIRE MEASURES	46

ATTACHMENT 1 - Emergency Evacuation Plan

ATTACHMENT 2 - APZ Guidelines

ATTACHMENT 3 – Access

ATTACHMENT 4 – Firebreak Notice

ATTACHMENT 5 – References

1. PROPOSAL DETAILS

1.1 Introduction

The applicant proposes to place 6 campsites on private land at Lot 49 (No. 45) Jakattah Road, Muckenburra.

The site is within a declared bushfire prone area. Accordingly, the proposal (short stay accommodation) is development that is required to be assessed for its compliance with State Planning Policy 3.7 *Planning in Bushfire Prone Areas* ('SPP 3.7') and the bushfire protection criteria described in the Guidelines v1.4.

The intent of the policy is: ***"to preserve life and reduce the impact of bushfire on property and infrastructure"***.

The proposed development is classed as a 'vulnerable' land use because guests may be unfamiliar with the locality. The BMP has therefore been prepared in conjunction with a Bushfire Emergency Evacuation Plan.

This BMP has also been prepared in accordance with SPP 3.7 and Appendix Five in the Guidelines v1.4 and the Department of Planning Lands and Heritage (DPLH) *BMP Template for a complex development application*; the following has been prepared to comply with the DPLH template.

Purpose of this Plan

The purpose of this BMP is to assess the suitability of the proposal and its location for the intended use and identify the measures to reduce the vulnerability of people and property from significant adverse bushfire impacts.

Site and Proposal Description

Address	Lot 49 (No. 45) Jakattah Road, Muckenburra			
Local Government Area	Shire of Gingin			
Local Planning Scheme Zone	General Rural 20			
Bushfire Season	1 December – 12 May (precise dates may vary annually)			
Development proposal	Short term accommodation - 6 camps site, for self-reliant accommodation, restricted to operate only outside of the bushfire season (Shire of Gingin from 1 December to 30 March each year) The camp sites are to be spread around a central lake and secluded from one another (obscured by the forest trees located on the banks of the lake).			
Building class	Not applicable No permanent buildings are proposed.			
Lot size	38 ha			
Land description site	The site has been used for pasture and agistment. The site has a large central lake with a perimeter (narrow row) of forest. The site has a low slope, 5.0° from its boundaries to the central lake, but is otherwise considered to be flat. The site has a single residence and outbuilding located at the north east corner of the site, accessed from Jakattah Road (483 m from Gingin Brook Road).			
Adjoining Land uses	North	East	South	West
	Rural/pasture	Rural/pasture	Forest	Rural/pasture

Road Access	<p>The site adjoins Gingin Brook Road but is also bordered east by Jakattah Road and west by Murray Road.</p> <p>The camp site access is to be from Murray Road at the north west corner. The existing dwelling is accessed from Jakattah Road at the north east of the site.</p> <p>A private driveway will service the campsites and link Murray Road to Jakattah Road.</p> <p>A direct access on to Gingin Brook Road at the south of the site is also proposed, to avoid doubling back to get to Gingin Brook Road.</p>
Water supply	The site does not have access to a reticulated water supply. Drinking water is not intended to be provided to the campsites.
Tele communications	The site is within the Telstra 4G network
Emergency services	
Minor Development	The nearest rural fire brigades are Gingin Volunteer Bushfire Brigade (15 km)
Unavoidable development	N/A
Vulnerable Development	Yes
High risk land use	N/A

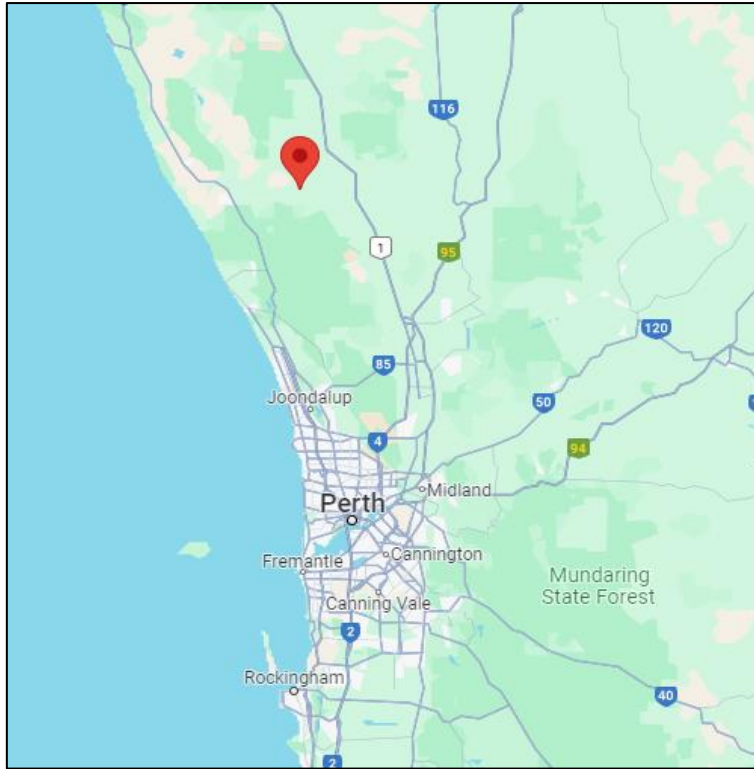


Plate 1: Site in Locality (red marker)

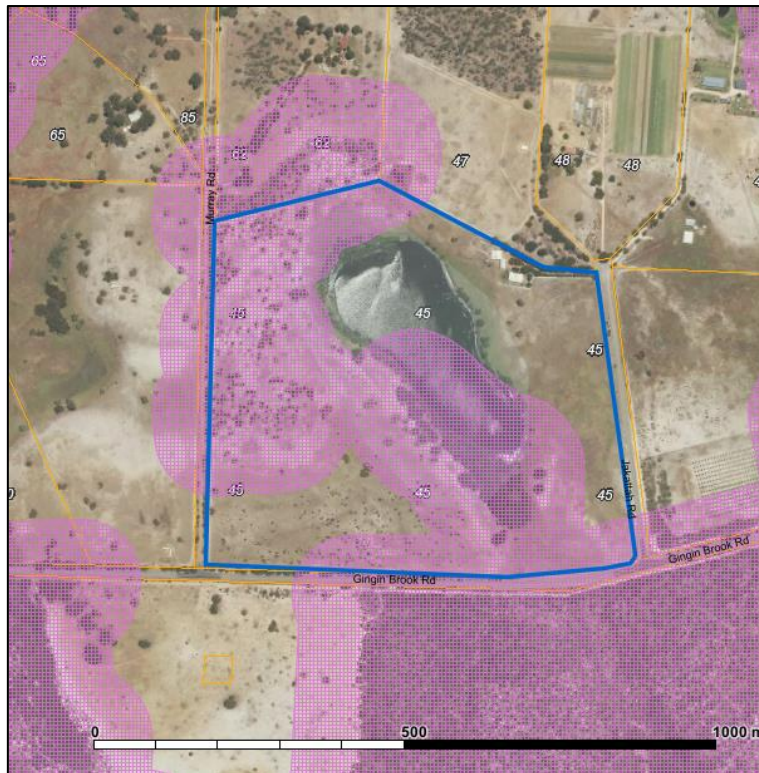


Plate 2: OBRM Bushfire Prone Area (pink area)

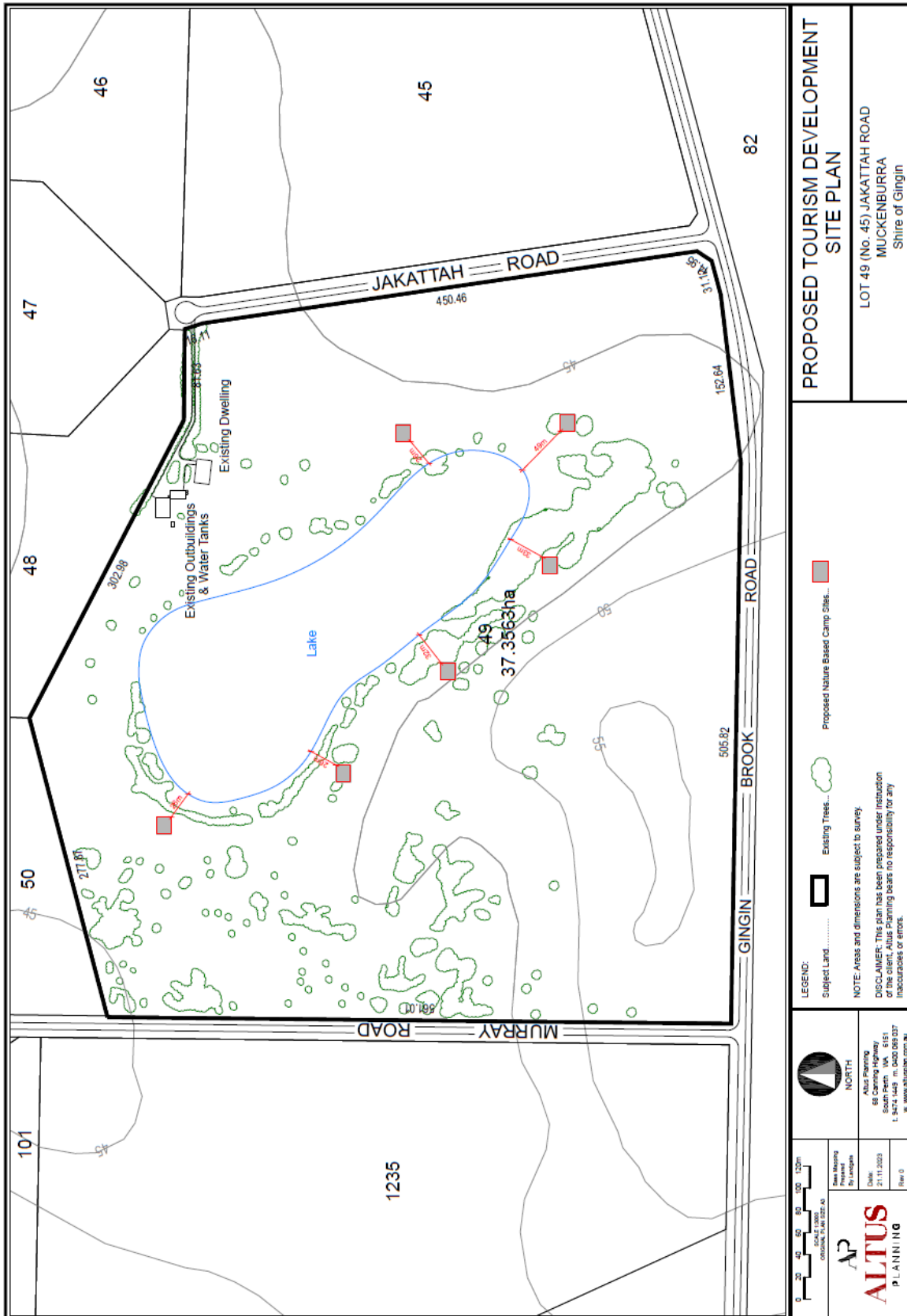


Plate 3 Camp locations

1.2 Regulatory Compliance Requirements

The following statutory requirements has been considered in the assessment and are followed within the demonstrated compliance with the Bushfire Protection Criteria at section 5 of the report. These are listed for the purpose of procedural consideration.

Planning and Development Act 2005 - SPP 3.7

On 7 December 2015, the State Government introduced by Gazette, a state map of Bushfire Prone Areas by order under the *Fire and Emergency Services Act 1998* and introduced development controls in Bushfire Prone Areas through the *Planning and Development Act 2005*. These controls were authorised by State Planning Policy 3.7 (Planning in Bushfire Prone Areas) regulations introduced under Part 10A Schedule 2 of the *Planning and Development (Local Planning Scheme) Regulations 2015* and guided by the *Guidelines for Planning in Bushfire Prone Areas*.

The State Planning Policy, Regulations, and Guidelines now form the foundation for fire risk management planning in WA at a community and land development level. The Policy Intent of SPP 3.7 is **to preserve life and reduce the impact of bushfire on property and infrastructure**.

Applicable clause from SPP 3.7, include:

SPP 6.2: A development application within a bushfire prone area has or will, on completion, have a moderate BHL and/or where BAL-12.5 to BAL-29 applies, may be considered for approval. *The campsites are not structures and proposed to be accepted as a 'tolerable loss' in accordance with Element 5 A5.10a.*

SPP 6.5: A development application in a bushfire prone area is to be accompanied by an assessment against the bushfire protection criteria contained within the Guidelines, demonstrating compliance within the boundary of the development. *The proposed development requires no imposition beyond its site.*

SPP 6.7: A development that will result in the introduction or intensification of development or land use in an area that has or will, on completion, have an extreme BHL and/or BAL-40 or BAL-FZ will not be supported. *An exception is provided for a tolerable loss in accordance with Element 5 A5.10a.*

SPP 6.10: The decision-maker may impose a 'notice on title' advising that the site is located in a bushfire prone area and is subject to a Bushfire Management Plan. *Routinely imposed as a condition of planning approval.*

SPP 6.11: Precautionary Principle if a landowner/proponent cannot satisfy the performance principles of the relevant policy measures (intent) through either the acceptable solutions outlined in the Guidelines, or through the alternative solutions (Performance Principle) the application may not be approved. *The proposal achieves compliance by the acceptable solutions.*

Building Act 2011

The proposal is a Class 1 building (single dwelling) for the purpose of the *Building Act 2011*. The Act in turn, only applies the National Construction Code 2019 AS 3959:2018 to the construction of class 1, 2, 3, and 10a, buildings. AS 3959:2018 is used to determine the siting considerations for all habitable buildings.

Bush Fires Act 1954

Section 33 of the *Bush Fires Act 1954* recognises the responsibility of all landowners to prevent the spread of bushfire. The Shire of Gingin issues a Firebreak Notice annually. The Shire can issue a notice upon the landowner to act as and when specified in the notice with respect to anything which is upon the land, and which in the opinion of the local government or its duly authorised officer, is or is likely to be, conducive to the outbreak of a bushfire or the spread or extension of a bushfire.

An owner who fails to comply with a notice is guilty of an offence (Penalty: \$5,000). The local government may in addition carry out the required works of the notice and recover the costs incurred by application to a Court.

The *Bush Fires Act 1954* also provides the Bushfire Risk Treatment Standard 2020. The Standard enables the clearing of vegetation out to 20 m from a building unless it is within an identified Environmentally Sensitive Area (ESA).

2. ENVIRONMENTAL CONSIDERATIONS

2.1 Native Vegetation - Regulated

A fundamental consideration in the assessment of development under SPP 3.7 is to avoid instances where bushfire risk management measures would conflict with the objectives of the separate State and Federal Environment Protection Legislation.

The following comprise 'Regulated Vegetation', which is protected flora, or flora that is essential for the habitat of protected fauna and which requires authorisation prior to modification or removal.

Environment Protection Act 1986 and Environmental Protection (clearing native vegetation) Regulation 2004

It is an offence to clear native vegetation without the authority of a permit or an exemption. The act of clearing native vegetation requires a permit from either the Department of Water and Environmental Regulation (DWER) or the Department of Mines, Industry Regulation and Safety (DMIRS), unless an exemption applies.

Exemptions include:

Environment Protection Act 1986

- Clearing is required by local government Section 33 *Bush Fires Act 1954*.
- **Clearing in accordance with the terms of a subdivision approval.**
- Clearing in accordance with a permit under the *Bush Fires Act 1954* (prescribed burning) and clearing by a bushfire control officer.

Environmental Protection (clearing native vegetation) Regulation 2004 (exemptions do not apply in Environmentally Sensitive Areas, and clearing > than 5 ha)

<https://www.der.wa.gov.au/your-environment/environmentally-sensitive-areas>

- Clearing to the extent necessary to construct an approved building.
- Clearing that is for fire hazard reduction burning.
- Clearing to maintain an area cleared in the last ten years.

(WA) Biodiversity Conservation Act 2016 and Bio-diversity Conservation Regulations 2018

The *Biodiversity Conservation Act, 2016*, replaces the *Wildlife Conservation Act, 1950*, and the *Sandalwood Act, 1929*, it became operational with the *Bio-diversity Conservation Regulations 2018*, on 1 January 2019.

The Act provides for listing species, threatened ecological communities (TECs), key threatening processes, and critical habitats. It introduces criteria for listing species 'endangered', 'critically endangered' or 'vulnerable,' to align with the Environment Conservation and Biodiversity Conservation Act 1999 (Cth).

The *Biodiversity Conservation Act 2016* recognises that activities approved under the *Environment Protection Act 1986* do not require further approval, include clearing of native vegetation that is either exempt or done under the authority of a clearing permit or done in accordance with an implementation decision under Part IV of the *Environment Protection Act 1986*.

Commonwealth Environment Protection Biodiversity Conservation Act 1999

The Commonwealth Environment Protection Biodiversity Conservation Act 1999 provides for the protection of matters of national environmental significance. National environment law does not generally regulate fire prevention measures taken by state and territory governments, but no specific exemptions are provided.

In accordance with the Department of Planning Lands and Heritage template (BMP template to support a BAL Contour Assessment) a review of the listed databases (Landgate) has been undertaken to identify whether published restrictions or other specific considerations may apply to the proposal that would affect the implementation of any bushfire protection initiatives which involve the removal or modification of regulated native vegetation (flora) and the habitat (for fauna) it supports.

Important Note 1: The published restrictions do not represent some items at a specific location, either because the survey has not been undertaken or because the item may not be identified for reason of its protection. The

onus is upon the owner to demonstrate that they have undertaken all reasonable actions to identify any restricted items and seek authorisation for disturbance if required.

Important Note 2: The review of the environmental data bases follows the requirement of SPP 3.7 and the required investigations. It does not account for any other environmental policies either directly or indirectly (landscape values) of the policies and bylaws of the local government that may affect the clearing or modification of vegetation.

Table 1

Is the land affected by:	Yes/No	Comment
Conservation Wetland or buffer (DBCA-019 DBCA-017)	Yes	The site is within the broad Geomorphic wetlands Swan Coastal Plain identified as 'multi use'
RAMSAR Wetland (DBCA-010)	No	The site is not identified as RAMSAR Wetland.
Threatened and Priority Flora (DBCA-036)	No	No threatened priority flora communities are identified within the site – the site however retains remnant vegetation.
Threatened and Priority Fauna (DBCA-037)	Yes	The site is located within an investigation area for the Carnaby's Black Cockatoo. This broadly applies to all identified remnant vegetation.
Threatened Ecological Communities (DBCA-038)	No	No threatened ecological communities are identified within the site
Bush Forever (COP-071)	No	The site does not occupy an area identified as Bush Forever
Environmentally Sensitive Area (DWER-046)	No	The site is not identified as an Environmentally Sensitive Area
Regionally Significant Natural Areas (DWER-070)	No	
Conservation Covenant (DPIRD-023)	No	No existing covenant.
Does the proposal require the removal of restricted vegetation?		Yes No

2.2 Native Vegetation – Modification and Clearing

No clearing of regulated vegetation is required for the proposal. Pasture grasses will be displaced to provide the access and the locations for the campsite. The Asset Protection Zone around the house is focused on the understory management and defining a separation area within an already disturbed area.

It will not affect existing tree canopies that may otherwise affect Carnaby's Black Cockatoo habitat.

2.3 Re-vegetation/Landscape Plans

Re-vegetation/landscape plans are not required as an offset to the modification of regulated vegetation.

The intent is to maintain the trees at the development site, either as Low threat providing an irrigated lawn managed at the existing dwelling, or the existing low threat driveway surface under the tree canopy, trimmed to 4.5 m above the ground.

3. BUSHFIRE ASSESSMENT

3.1 Bushfire Attack Level Assessment (Inputs)

The following assessment has applied the methodologies described in AS 3959:2018, the Guidelines, and has used the Fire Protection Association Australia accredited practitioner methodology for the preparation of Bushfire Attack Level (BAL) assessments.

All vegetation within 150 m (context) of the subject building has been classified following Clause 2.2.3 (AS 3959:2018) to determine the predominant vegetation affecting the behaviour at the locality. The Bushfire Attack Level is determined by the **predominant** vegetation within 100 m of the site boundary (for subdivision), or around the development site (building envelope) or the external face from a habitable building.

The classifications of vegetation used in AS 3959:2018 are based on foliage cover, measured as a percentage of a hectare and by the fuel (vegetation) height.

Foliage cover: *The portion of the ground that would be shaded by foliage when the sun is shining directly overhead, expressed as a percentage for each stratum or identifiable layer of vegetation.*

Table 2: Bushfire fuel descriptions

AS 3959:2018

Layer/ Stratum	Description	Hazard
Bark	Tight/fine – course/ribbon	Spotting and ember attack potential associated with forest
Canopy	Trees taller than 6 m (forest)	Influences the flame height
Elevated fuel	Trees and Shrubs up to 6 m	Influences the flame height
Near surface	Grasses and shrubs taller than 100 mm and up to 2 m	Influences the rate of spread and canopy ignition
Surface	On ground material, leaves, twigs, bark	Influences the rate of spread

From CFA (Vic) Overall fuel assessment guide 2010

AS 3959:2018 prescribes six categories of Bushfire Attack Level (BAL): BAL-LOW, BAL-12.5, BAL-19, BAL-29, BAL-40, and BAL-FZ. In addition, BAL-FZ describes only performance solutions where the separation from classified vegetation (on completion) is less than 10 m. The BAL level is used for determining the siting of development (to be less than BAL-40) and in turn the construction standard that is equivalent to the BAL at the proposed building location.

This assessment has followed the guidance of AS 3959:2018. This includes:

- A recognition of excluded vegetation types described at cl.2.2.3.2 (e) and (f), but the underlying vegetation should still be classed e.g. an orchard may be excluded but not the grassland within it.
- A separate plot is applied if there is a variation in the slope greater than 5.0°.
- For various vegetation classes a representation that is less than 10%, does not constitute the predominant class. Foliage cover referred to in AS 3959:2018 for various classes is based on the foliage cover for that class as a percentage of a ha. (shadow cast is not representative of foliage cover).
- The measurement point and the most influential vegetation class (presenting the highest BAL at the building) is used for the determination of the BAL at the building (Figure 2.2 AS 3959:2018).
- Consideration of the predominant vegetation is to consider the likelihood of regeneration.

- Orchards, and single tree rows (planted in a row less than 10 m wide) is determined by underlying the near surface fuel.

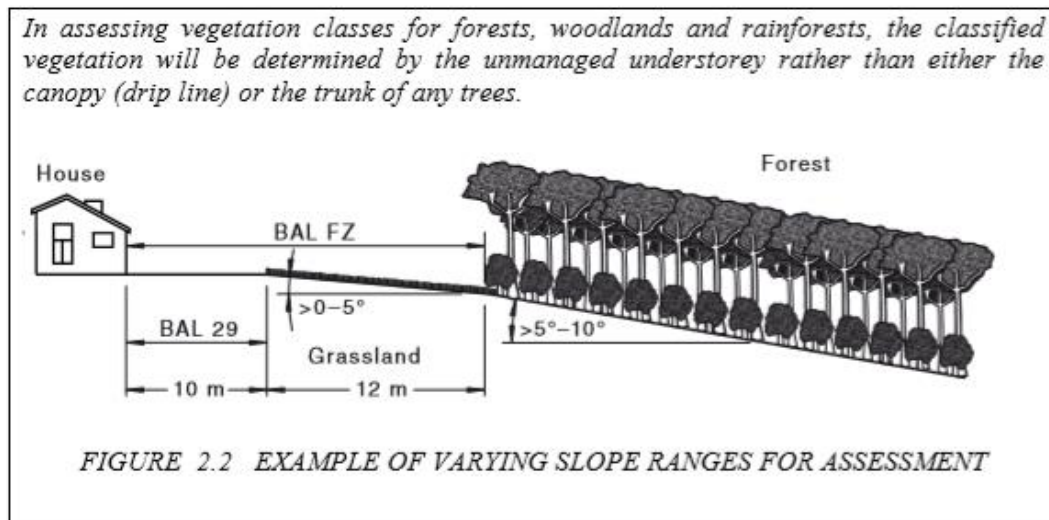


Plate 4: Effective Slope and measurement taken from AS 3959:2018

Effective slope under each vegetation plot was assessed in accordance with the methodology detailed in AS 3959:2018 Construction of buildings in bushfire prone areas (AS 3959) (Standards Australia, 2018 Bushfire Fuels). Slope data was measured on site and cross referenced with Landgate elevation data.

The assessment inputs are shown on Figure 3a and 3b (on following pages).

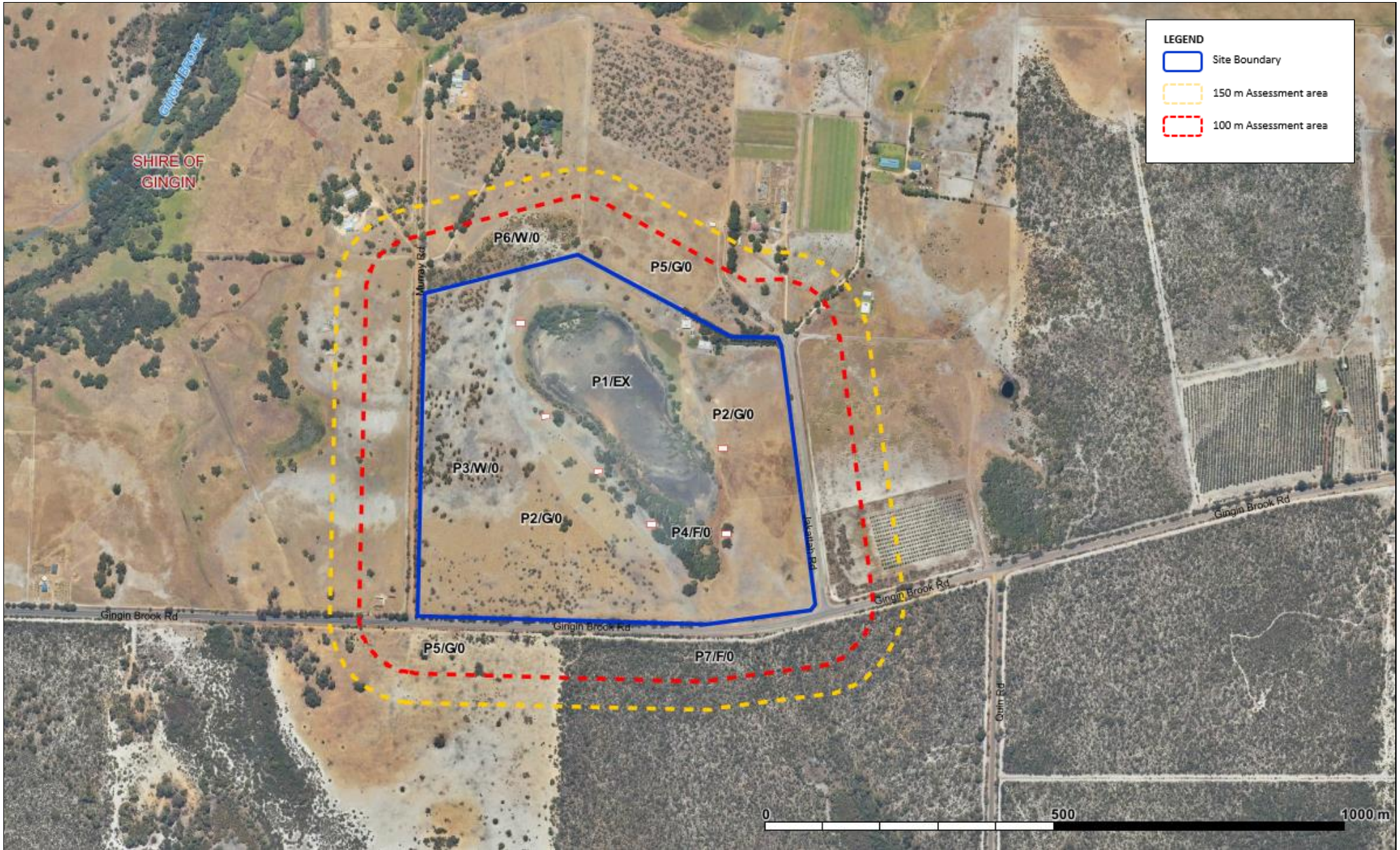


Figure 1: Location



Assessment Date: 19/01/2024
 Prepared: Anthony Rowe | Accreditation Level: BPAD L3
 Accreditation Number: 36690 Accreditation | Expiry: Dec 2024
 FPAAs FIRE MAP 2024 | GDA 1994 MGA Zone 50

© 2024 Any conclusions drawn, or recommendations made in this report are made in good faith. No responsibility is taken for how this information and the report are used subsequently by others.



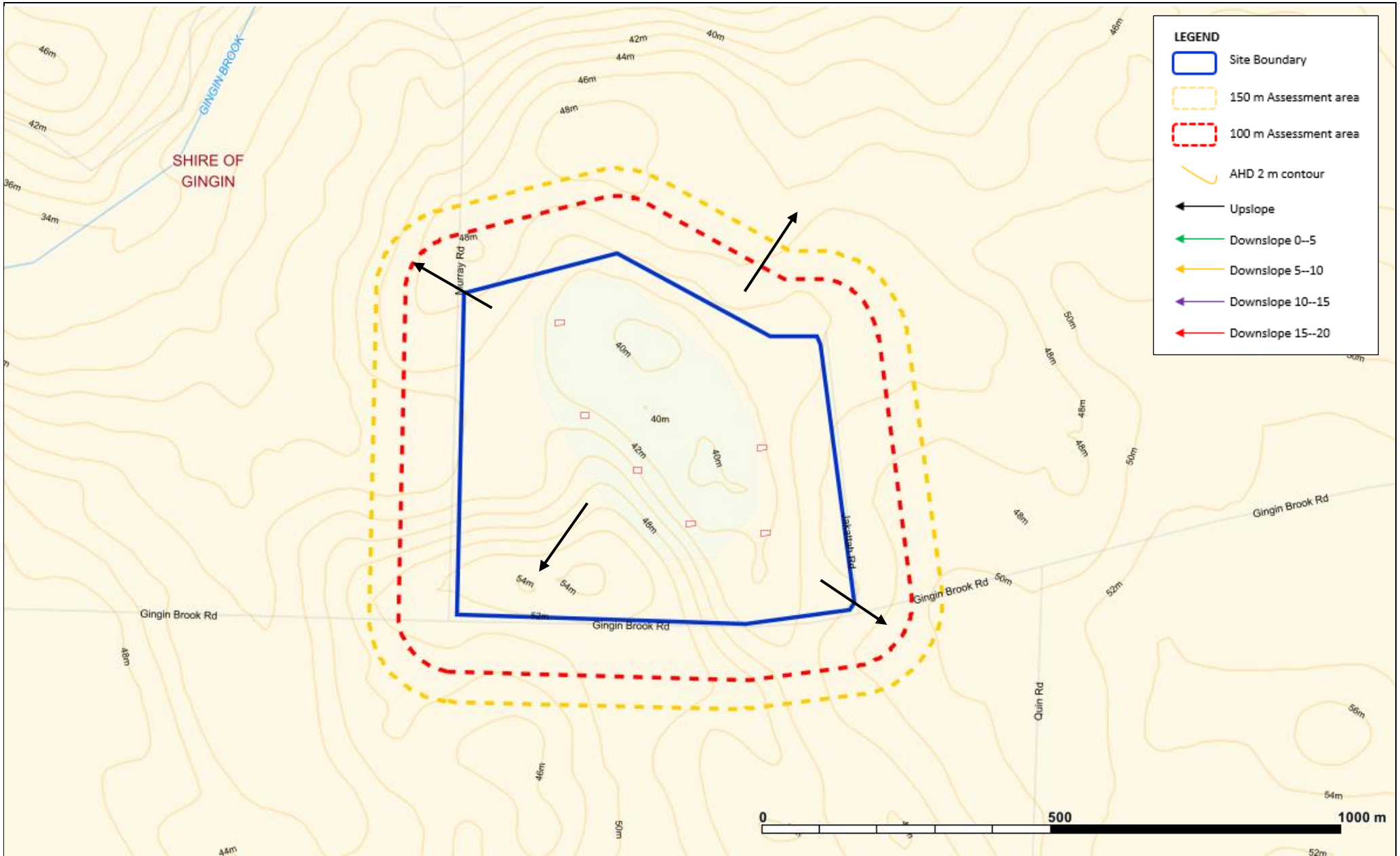


Figure 2: Topography



Assessment Date: 19/01/2024
 Prepared: Anthony Rowe | Accreditation Level: BPAD L3
 Accreditation Number: 36690 Accreditation | Expiry: Dec 2024
 FPAF FIRE MAP 2024 | GDA 1994 MGA Zone 50

© 2024 Any conclusions drawn, or recommendations made in this report are made in good faith. No responsibility is taken for how this information and the report are used subsequently by others.



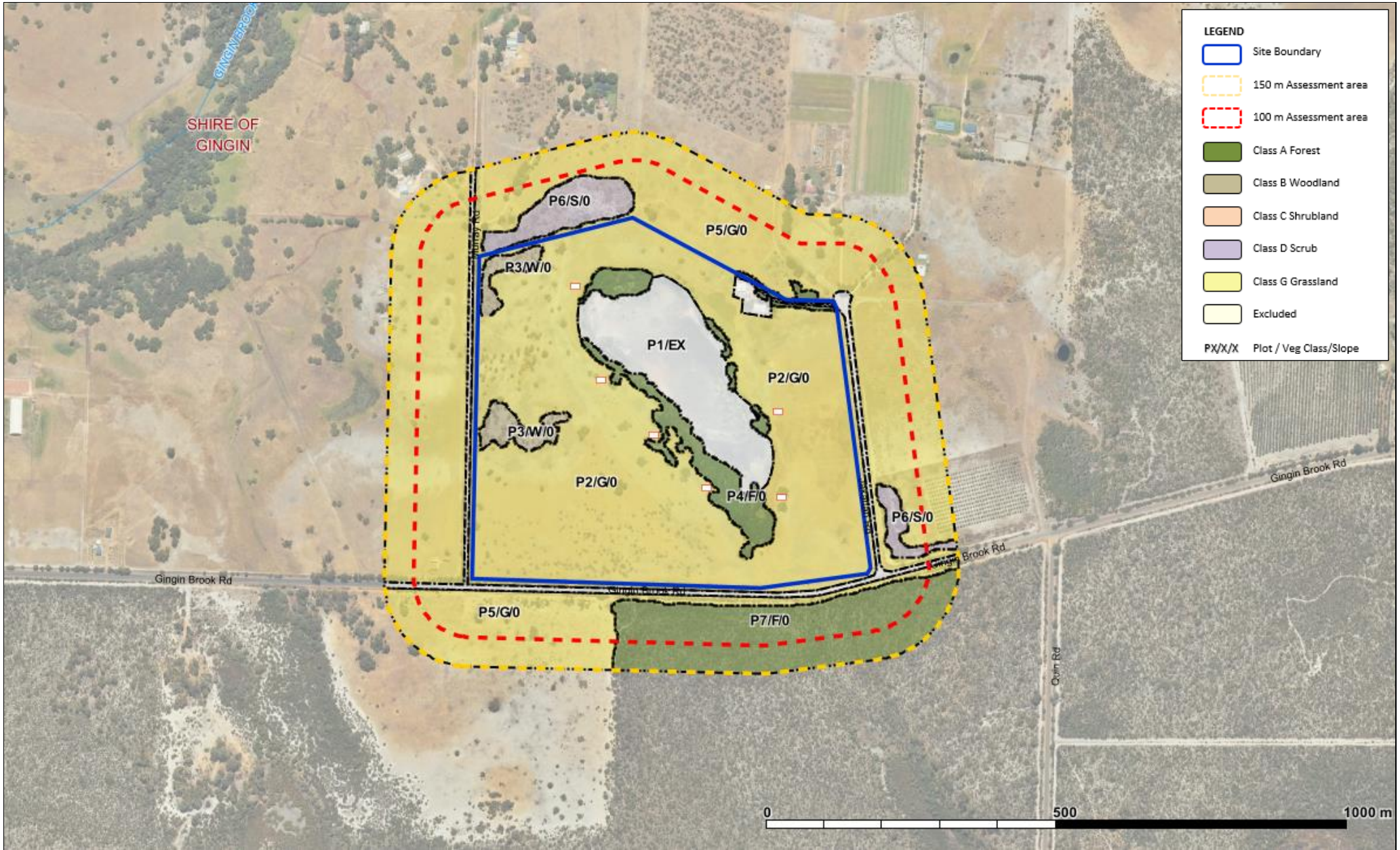


Figure 3a: Vegetation Classification



Assessment Date: 19/01/2024
 Prepared: Anthony Rowe | Accreditation Level: BPAD L3
 Accreditation Number: 36690 Accreditation | Expiry: Dec 2024
 FPAA FIRE MAP 2024 | GDA 1994 MGA Zone 50

© 2024 Any conclusions drawn, or recommendations made in this report are made in good faith. No responsibility is taken for how this information and the report are used subsequently by others.









Figure 3b: Vegetation Classification photo positions











Assessment Date: 19/01/2024
 Prepared: Anthony Rowe | Accreditation Level: BPAD L3
 Accreditation Number: 36690 Accreditation | Expiry: Dec 2024
 FPAA FIRE MAP 2024 | GDA 1994 MGA Zone 50





© 2024 Any conclusions drawn, or recommendations made in this report are made in good faith. No responsibility is taken for how this information and the report are used subsequently by others.








PLOT: 1				
Vegetation Classification			Slope	
Excludable - 2.2.3.2(f) Low Threat Vegetation			Flat	
Observation/Justification for classification				
Fuel Hazard	Surface	Near surface	Elevated	Bark
Low	✓	✓	✓	✓
Moderate				
High				
Very High				
Extreme				
Vegetation Description (AS 3959)				
<p>f. Vegetation regarded as low threat due to factors such as flammability, moisture content or fuel load. This includes grassland managed in a minimal fuel condition, mangroves and other saline wetlands, maintained lawns, golf courses (such as playing areas and fairways), maintained public reserves and parklands, vineyards, orchards, banana plantations, market gardens (and other non-curing crops) cultivated gardens, commercial nurseries, nature strips and windbreaks.</p>				
Post development				
Low threat				
				
Photo 1.1: Central lake		Photo 1.2: Site residence west and south elevation		
				
Photo 1.3: Central compound, house to outbuildings		Photo 1.4: Site residence east and north elevation		





PLOT: 2				
Vegetation Classification			Slope	
Class G Grassland – Spare open tussock G-24			Flat	
Observation/Justification for classification				
Fuel Hazard	Surface	Near surface	Elevated	Bark
Low		✓	✓	✓
Moderate	✓			
High				
Very High				
Extreme				
Vegetation Description (AS 3959)				
<p>All forms (except tussock moorlands) including situations with shrubs and trees if the overstorey foliage cover is less than 10%. Includes pasture and cropland.</p> <p>NOTE: Grassland managed in a minimal fuel condition and non-curing cropland is regarded as low threat vegetation for the purposes of Clause 2.2.3.2.</p>				
Post development				
Grassland				
				
Photo 2.1: Campsite 1.		Photo 2.2: Campsite 2.		
				
Photo 2.3: Campsite 3.		Photo 2.4: Campsite 4.		




PLOT: 2				
Vegetation Classification			Slope	
Class G Grassland – Spare open tussock G-24			Flat	
Observation/Justification for classification				
Fuel Hazard	Surface	Near surface	Elevated	Bark
Low		✓	✓	✓
Moderate	✓			
High				
Very High				
Extreme				
Vegetation Description (AS 3959)				
All forms (except tussock moorlands) including situations with shrubs and trees if the overstorey foliage cover is less than 10%. Includes pasture and cropland. NOTE: Grassland managed in a minimal fuel condition and non-curing cropland is regarded as low threat vegetation for the purposes of Clause 2.2.3.2.				
Post development				
Grassland				
				
Photo 2.5: Campsite 5.		Photo 2.6: Campsite 6.		
				
Photo 2.7: Pasture grass northern section of site.		Photo 2.8: Pasture grass western section of site.		



PLOT: 2				
Vegetation Classification			Slope	
Class G Grassland – Spare open tussock G-24			Flat	
Observation/Justification for classification				
Fuel Hazard	Surface	Near surface	Elevated	Bark
Low		✓	✓	✓
Moderate	✓			
High				
Very High				
Extreme				
Vegetation Description (AS 3959)				
<p>All forms (except tussock moorlands) including situations with shrubs and trees if the overstorey foliage cover is less than 10%. Includes pasture and cropland.</p> <p>NOTE: Grassland managed in a minimal fuel condition and non-curing cropland is regarded as low threat vegetation for the purposes of Clause 2.2.3.2.</p>				
Post development				
Grassland				
				
Photo 2.9: Pasture grass south western section of site.		Photo 2.10: Pasture grass view from west		
				
Photo 2.11: Pasture grass view from south		Photo 2.12: Pasture grass from north		

PLOT: 3				
Vegetation Classification			Slope	
Class B Woodland - Woodland B-05			Flat	
Observation/Justification for classification				
Fuel Hazard	Surface	Near surface	Elevated	Bark
Low		✓		
Moderate	✓			✓
High			✓	
Very High				
Extreme				
Vegetation Description (AS 3959)				
<p>Trees 10 m - 30 m high; 10% - 30% foliage cover dominated by eucalypts and/or callistris with a prominent grassy understorey. May contain isolated shrubs.</p> <p>Authors Note: Woodland is classed by its understorey for the purpose of determining the fire intensity – Table B3 AS3959:2018.</p>				
Post development				
Woodland, Photo 3.2 – Low threat				
				
Photo 3.1: Spread trees over grass		Photo 3.2 Trees over grass		

PLOT: 4				
Vegetation Classification			Slope	
Class A Forest - Open forest A-03			Flat	
Observation/Justification for classification				
Fuel Hazard	Surface	Near surface	Elevated	Bark
Low				
Moderate	✓			
High		✓		✓
Very High			✓	
Extreme				
Vegetation Description (AS 3959)				
Trees up to 30 m high; 30%-70% foliage cover (may include understorey of sclerophyllous low trees or shrubs). Typically dominated by eucalypts, melaleuca or callistemon (may include riverine and wetland environments) and callitris. Includes eucalypt plantations.				
Post development				
Forest				
				
Photo 4.1: Trees north of lake		Photo 4.2: Trees west of lake		
				
Photo 4.3: Trees south of lake				

PLOT: 5				
Vegetation Classification			Slope	
Class G Grassland – Spare open tussock G-24			Flat	
Observation/Justification for classification				
Fuel Hazard	Surface	Near surface	Elevated	Bark
Low		✓	✓	✓
Moderate	✓			
High				
Very High				
Extreme				
Vegetation Description (AS 3959)				
All forms (except tussock moorlands) including situations with shrubs and trees if the overstorey foliage cover is less than 10%. Includes pasture and cropland. NOTE: Grassland managed in a minimal fuel condition and non-curing cropland is regarded as low threat vegetation for the purposes of Clause 2.2.3.2.				
Post development				
Grassland				
				
Photo 5.1: Pasture grass east of site.		Photo 3.2: Pasture grass north of site		
				
Photo 5.3: Pasture grass west of site.		Photo 5.4: Pasture grass view south of site		

PLOT: 6				
Vegetation Classification			Slope	
Class D Scrub - Closed scrub D-13			Flat	
Observation/Justification for classification				
Fuel Hazard	Surface	Near surface	Elevated	Bark
Low			✓	✓
Moderate	✓			
High				
Very High		✓		
Extreme				
Vegetation Description (AS 3959)				
<p>Found in wet areas and/or areas affected by poor soil fertility or shallow soils; >30% foliage cover. Dry heaths occur in rocky or sandy areas. Shrubs >2 m high. Typical of coastal areas and tall heaths up to 6 m in height. May be dominated by Banksia, Melaleuca or Leptospermum with heights of up to 6 metres</p>				
Post development				
Scrub				
				
Photo 6.1: North of site		Photo 6.2: North of site		
				
Photo 6.3: East of site				

PLOT: 7				
Vegetation Classification			Slope	
Class A Forest - Open forest A-03			Flat	
Observation/Justification for classification				
Fuel Hazard	Surface	Near surface	Elevated	Bark
Low				
Moderate	✓			
High		✓		✓
Very High			✓	
Extreme				
Vegetation Description (AS 3959)				
Trees up to 30 m high; 30%-70% foliage cover (may include understorey of sclerophyllous low trees or shrubs). Typically dominated by eucalypts, melaleuca or callistemon (may include riverine and wetland environments) and callitris. Includes eucalypt plantations.				
Post development				
Forest				
				
Photo 7.1: South of site		Photo 7.2: South of site		

3.2 Assessment Outputs

The proposal is to provide unstructured camp sites.

BAL is a distance between a habitable building and classified vegetation. The BAL assessment is therefore applicable to the existing residence, as the host and control building.

The **Determined** Bushfire Attack Levels (BAL) are based upon the conditions at the time of inspection and applying the methodology described in AS 3959:2018. The Determined BAL is the highest present BAL Level at the dwelling.

The **Indicative BAL** is the proposed BAL at the building after the establishment of the Asset Protection Zone. The required maximum BAL is BAL 29.

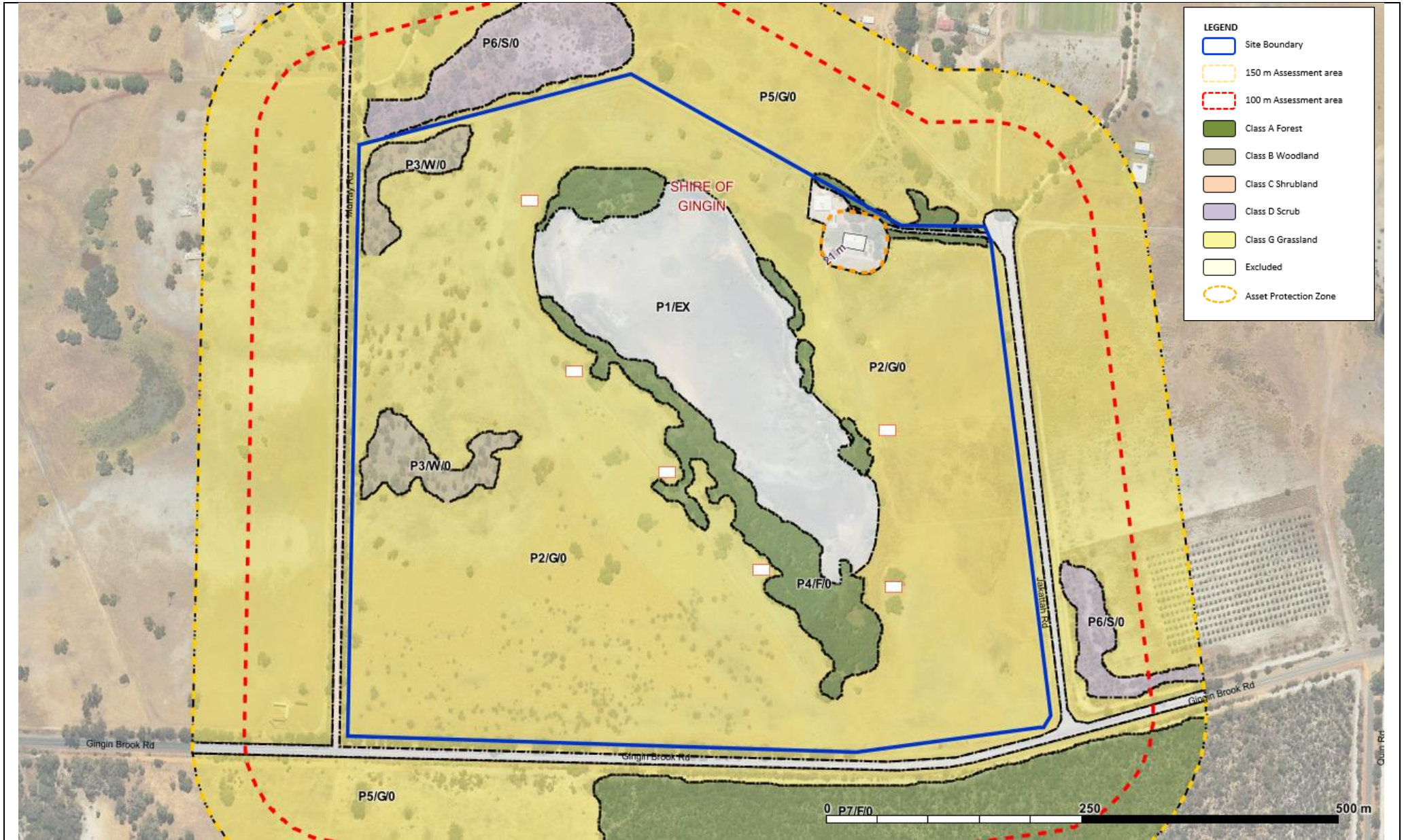
Table 3 below indicates the determined BAL, and the separation distance required from the classified vegetation to achieve BAL 29 for the dwelling.

Table: 3 – Distances from the dwelling

Plot no.	Vegetation Classification	Effective slope	Separation closest element	Determined BAL	Distance for BAL 29
1	Excluded	N/A	N/A	BAL Low	0
2	Grassland	Flat	4 m	BAL FZ	8m
3	Woodland	Flat	381 m	BAL Low	14
4	Forest	Flat	9 m	BAL FZ	21 m
5	Grassland	Flat	26 m	BAL 12.5	8m
6	Scrub	Flat	266 m	BAL Low	13m
7	Forest	Flat	26 m	BAL 29	21 m

The outputs for the Indicative BAL (BAL at completion after the establishment of the APZ) is shown on Figure 4 (vegetation at completion) and Figure 5 (BAL at completion).

The campsites are informal positions, and the use (short stay) is restricted during the summer period (bushfire season). The camp sites are exempt from the siting requirement of BAL 29, avoiding the need to clear or modify vegetation, other than pasture grasses.



LEGEND

- Site Boundary
- 150 m Assessment area
- 100 m Assessment area
- Class A Forest
- Class B Woodland
- Class C Shrubland
- Class D Scrub
- Class G Grassland
- Excluded
- Asset Protection Zone

Figure 4: APZ for BAL 29 and Post development



Assessment Date: 19/01/2024
 Prepared: Anthony Rowe | Accreditation Level: BPAD L3
 Accreditation Number: 36690 Accreditation | Expiry: Dec 2024
 FPAA FIRE MAP 2024 | GDA 1994 MGA Zone 50

© 2023 Any conclusions drawn, or recommendations made in this report are made in good faith. No responsibility is taken for how this information and the report are used subsequently by others.



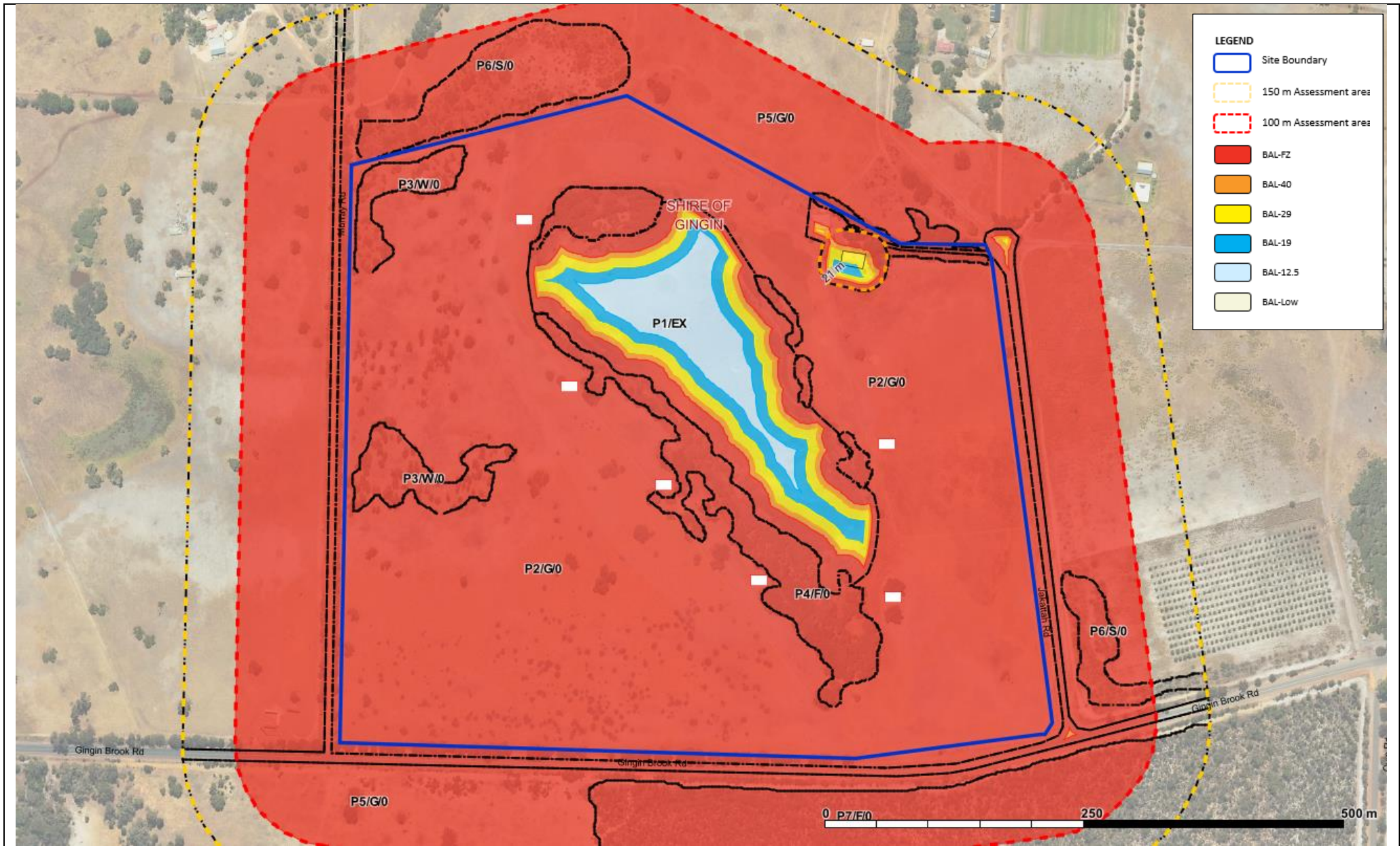


Figure 5: BAL Contour



Assessment Date: 19/01/2024
 Prepared: Anthony Rowe | Accreditation Level: BPAD L3
 Accreditation Number: 36690 Accreditation | Expiry: Dec 2024
 FPAA FIRE MAP 2024 | GDA 1994 MGA Zone 50

© 2024 Any conclusions drawn, or recommendations made in this report are made in good faith. No responsibility is taken for how this information and the report are used subsequently by others.



4. IDENTIFICATION OF BUSHFIRE HAZARD ISSUES

The purpose of SPP 3.7 and its policy intent is to preserve life and reduce the impact of bushfire on property and infrastructure through effective risk-based land use planning. Importantly, it is risk-based and is not a prohibition, the provisions in SPP3.7 and the Guidelines are not to be applied inflexibly as affirmed by the West Australian Administrative Tribunal (WASAT),

*SPP 3.7 does not require that there be no increase at all in the threat of bushfire to people property or infrastructure. Rather, as is seen in clause 2 of SPP 3.7, the intention of the policy is to 'implement effective, risk-based land use planning and development to preserve life and **reduce the impact of bushfire on property and infrastructure**'. (emphasis added)¹*

Risk for the purpose of SPP 3.7 (section 4) is determined using the methodologies in AS3959: 2018. AS3959 is site specific, the nature of the risk and context consideration that may exacerbate or reduce the risk includes considerations for access to and from the site and water to support active suppression at the site, explicitly by emergency services. This is addressed in the Bushfire Protection Criteria (minimum compliance criteria) which represents the acceptable risk treatment in response to the Bushfire Attack Level at the site, the available access to the site, and water for Emergency service fire suppression.

Applicants are encouraged to strive for the lowest practical risk, notwithstanding the achievement of compliance; but it is only the compliance matters that must be achieved for approval. SPP3.7 is not retrospective, applicants may wish to volunteer improvements to existing buildings, or provide additional resources for fire suppression independent to the requirements for Emergency Services.

These should be informed by an As Low as Reasonably Practical (ALARP) approach for the applicants' consideration.

This BMP has used the methodology (applicable principles) from the National Emergency Risk Assessment Guidelines 2020 (NERAG), and a risk treatment approach has been further categorised (as an orderly method) into the National (USA) Fire Protect Association (NFPA) treatment that are also adopted by the Australian Building Construction Board.

The National Emergency Risk Assessment Guidelines 2020 (NERAG) is an adaption of the Australian Standard AS/NZS ISO 31000:2018 *Risk management – principles and guidelines*, making it applicable to all natural disasters.

The following table is the authors alignment of SPP3.7 to the NERAG methodology.

NERAG	Scale response
Scope and Objective	SPP 3.7 Policy Intent
Risk identification	Bushfire
Risk Analysis	Bushfire Behaviour (contributing attributes) Climate (local) Existing mitigations (controls) relied upon
Risk Evaluation	Cumulative risk: Likelihood (risk of ignition): Inherit fuels, history, external activities. Consequence:

¹ Harmanis Holdings No. 2 Pty Ltd and Western Australian Planning Commission [2019] WASAT 43 (Harmanis).

	<p>Social (human harm - minimising exposure evacuate or shelter)</p> <p>Economic (Asset threat – managing the fire, sources and building resistance)</p>
Risk Treatments	<p>Bushfire Protection Criteria</p> <p>Bushfire Emergency Evacuation Plan</p> <p>(Additional) As Low as reasonably practical measures (ALARP) addressing:</p> <ul style="list-style-type: none"> – Minimising Ignition – Minimising exposure – Managing (reducing) the fire effects².
Communication	<p>Bushfire Management Plan</p> <p>Bushfire Emergency Evacuation Plan</p>

The risk treatments aligning the Policy Intent with the NFPA 550 (2012)³ and its risk treatment methods are illustrated in the following table.

SPP 3.7	NFPA	Impact Mitigation
	Prevent Ignition	Nullify potential externalities
Preserving life	Manage the exposed	Evacuation
		Shelter
Property and assets	Manage the fire	Vegetation management (APZ)
		Building construction
		Fire suppression

4.1 Scope and objective

The intent of this policy is to implement effective, risk-based land use planning and development to preserve life and reduce the impact of bushfire on property and infrastructure.

4.2 Risk Identification

Bushfire attack risks include extreme heat (flame immersion, accumulated embers, and radiant heat – fatal and property destroying), harmful (fatal) convective heat, strong winds (blown object injuries, opening of the building envelope), particle injuries (embers small burns and eye injury) heavy smoke (obscured vision, trips, falls, collision and respiratory impacts (fatal), and trauma (bushfires are terrifying).

²

³ Guide to the fire safety concepts tree. Quincy: National Fire Protection Association, 2012.

4.3 Risk Analysis –

4.3.1 Bushfire Behaviour

Bushfire behaviour, as it increases in intensity and speed of travel, can exceed human control measures and when this occurs the risk increases to humans and property. Bushfire behaviour is a result of climate, topography, and the availability of bushfire fuel (vegetation).

- Climate (drought and season) & weather (temperature, humidity, wind, atmospheric instability).

Wind

Bushfires are influenced by the wind direction and the speed. The wind direction generally determines the direction of the fire and wind speed, along with ground slope, generally determines the speed a fire will travel over ground. As wind strength increases it increases the availability of oxygen allowing the fire intensity to increase.

Atmospheric conditions determine the potential for the uplift of embers and particles that can be distributed by the prevailing wind direction well ahead of the fire, up to 9 km, to create spot fires that can advance the location of the fire front.

Fire Danger Index FDI

FDI is an indicator of potential fire intensity and behaviour based upon weather conditions; temperature, humidity, and wind speed, together with climate measures, drought factor representing the dryness of the ground fuels.

The FDI is an indicator of the potential for house loss and fatalities.

The FDI is used as a basis for determining the required design performance of a building.

- Topography (slope of the ground, aspect) – fire travels faster uphill, (flame length doubles for every slope increase of 10°) and in some conditions may determine the direction of the fire. The landform can also channel and increase the windspeed steeper valleys and create turbulence and erratic behaviour where it crosses valleys and ridge lines, including eddies/vortexes that ruin a fire up the lee side of a slope.
- Vegetation (horizontal and vertical structure, flammability, mass, and availability). Measured as a vegetation classification, or an exclusion, in AS 3959 (Method 1). The arrangement of fuel has a greater effect upon the intensity of a fire than just its mass; its exposure to oxygen is referred to as its availability in a bushfire.

Grass fires are fast moving and influenced by the wind direction. Forest fires are characterised by the high fuel mass and have the highest fire line intensity requiring the largest separations to reduce radiant heat. Forest fires, if of sufficient size, continuity, and intensity can eject embers in advance of the fire front up to 5 km (and greater distances but rare). Ember attack is the cause of the highest building loss, either finding gaps and flammable materials within a building or igniting flammable materials near a building that can expose the building to direct flame contact.

It is assumed that a bushfire will achieve a steady-state and be fully developed to maximum intensity over a 100 m (minimum) fire run. Grass fires travel faster (GFDI) than a forest canopy fire, but a forest canopy fire can eject a higher level of embers and also eject them over a greater distance. Crown fires occur when the ground fire is intense, and conversely, when ground fuels are managed, the resultant fire intensity may not be sufficient to involve the crown or sustain a fire.

Fuel reduction initiatives such as slashing and controlled burns are intended to reduce the fuel availability to a level where the intensity of the fire remains controllable.

4.3.2 Climate

The nearest weather station to the site is at the Pearce RAAF airport (36 km south from site). The site is within an area described as having a Mediterranean climate of dry summers and mild, wet winters. The majority of rainfall is between May and September. The prohibited burning period is from mid-December to mid-March.

The Bushfire Danger Season has traditionally been between November and April each year, but recent climatic conditions have caused fire danger conditions to be present either side of this period.

Severe bushfire conditions FDI 50+, occur mostly between January and March. Extreme and Catastrophic conditions occur mostly in the afternoon and typically with south-south easterly winds (BoM Busseton airport). A bushfire can however come from any direction.

Bushfires generally travel in the direction of the prevailing wind. The direction of the prevailing wind conditions can affect the options for evacuation and anticipated fire intensity depending upon the slope and fuel.

The wind roses below (see Plates 5 and 6) for February (averaged) recorded at 9 am and 3 pm, illustrate the winds are strongest and most frequent from the south-east and east in the morning. Morning wind directions are predominantly from the southeast. Afternoon winds have a higher frequency from the southern hemisphere, with a component 30% from the north west.

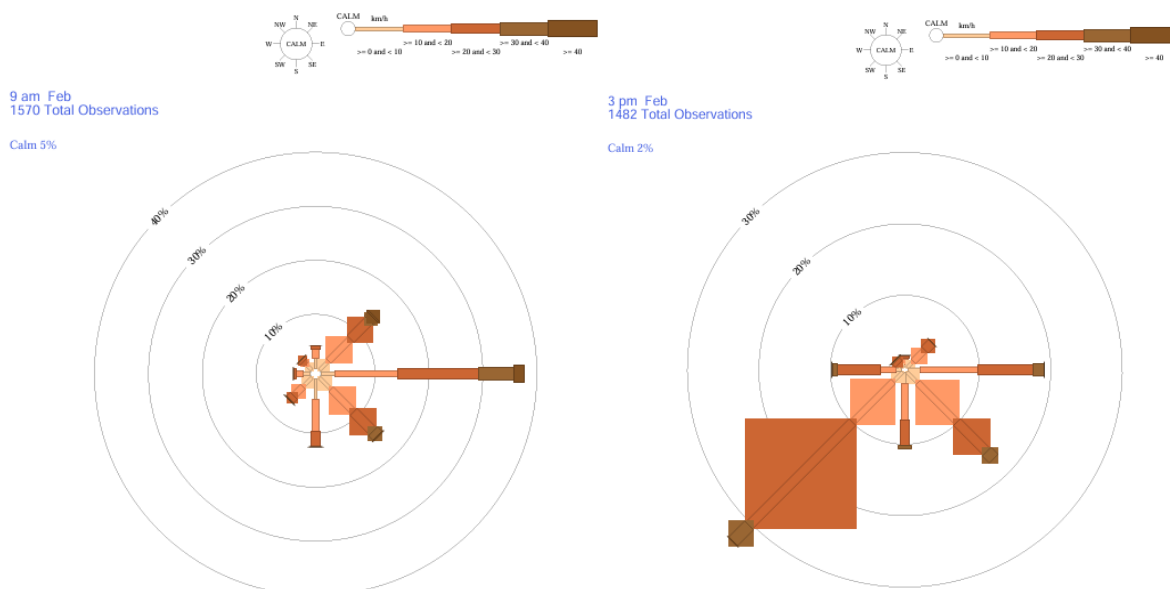


Plate 5: prevailing wind directions at 9 am

Plate 6: prevailing wind directions at 3 pm

The wind roses do not preclude the possibility of a fire coming from other directions; a bushfire can come from any direction that may require an immediate response to evacuate in the opposite direction.

The intensity of a bushfire is affected by the conditions that make up the Fire Danger Index. The Fire Danger Index (Fire Danger Rating) is a grading of conditions ranging from moderate to catastrophic. DFES issue Fire Danger Ratings daily during summer. The ratings range from 'moderate', 'high' (FDI 50+), 'extreme' (FDI 75+) through to 'catastrophic' (FDI 100+).

The Fire Danger Index for Western Australia is 80, and the fire season is inclusive of December and March each year.

Extreme days are rare but occur mostly in January and February. It should, however, be noted that all bushfires, can destroy buildings and be fatal, regardless of the daily FDI rating.

Site Context

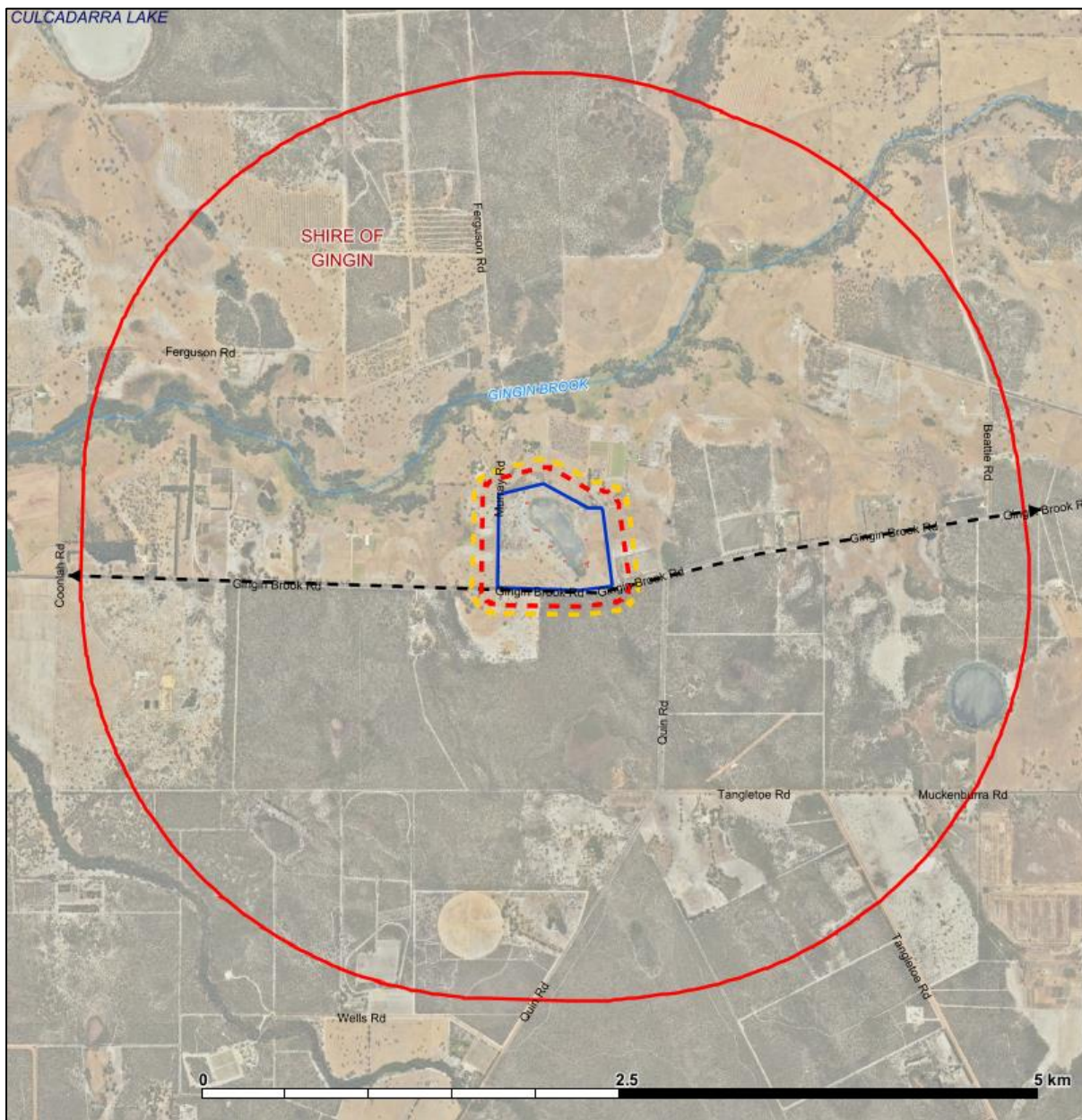


Plate7: Illustrates the surrounding area, within 2.5 km is predominantly pasture with the exception of forest 1 km to the west of the site. Site access Routes are available through pasture - moderate bushfire hazard.

Topography

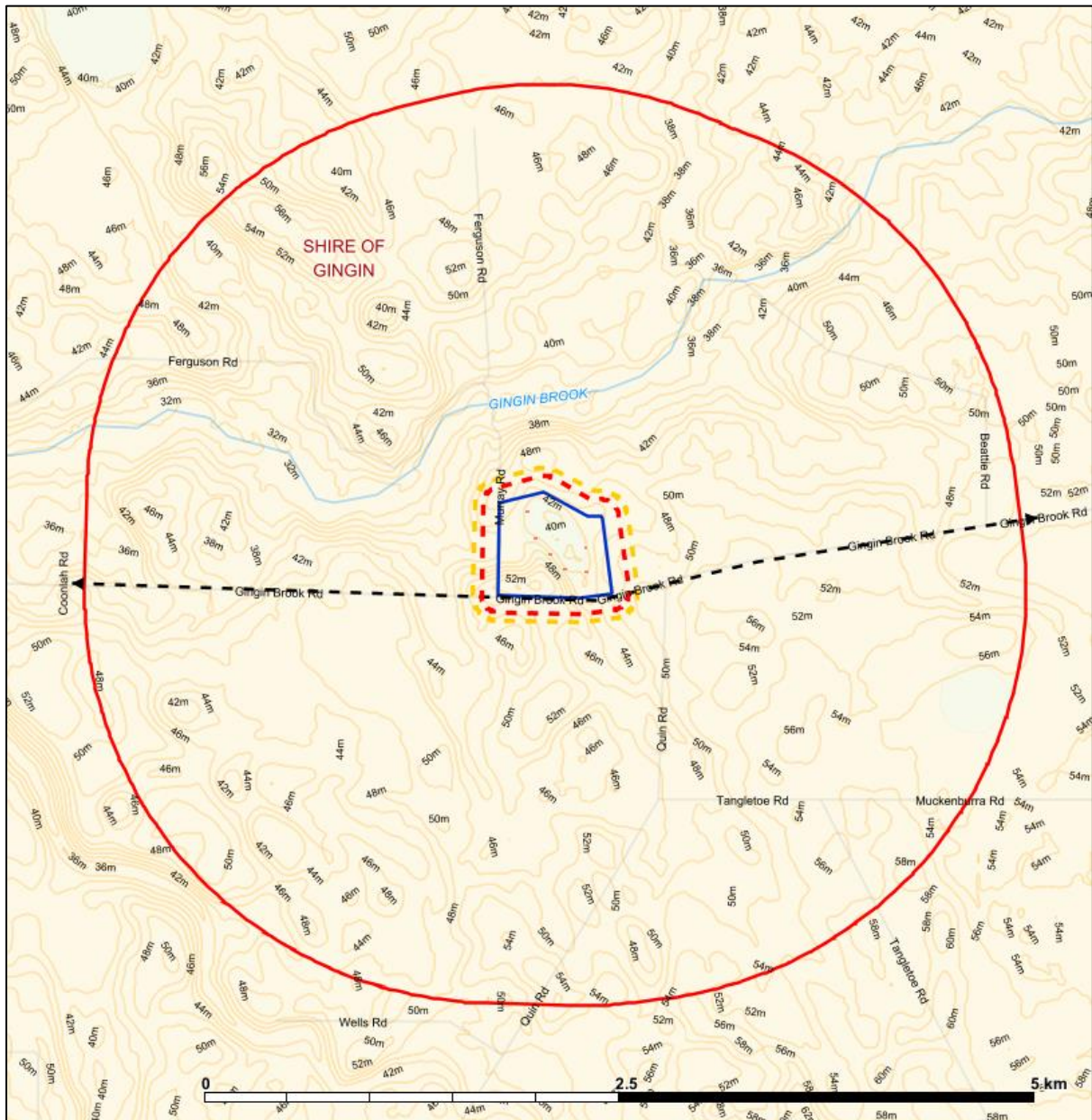


Plate8: The site is within a gently undulating area with predominantly non uniform slopes up to 5.0°.

Frequency

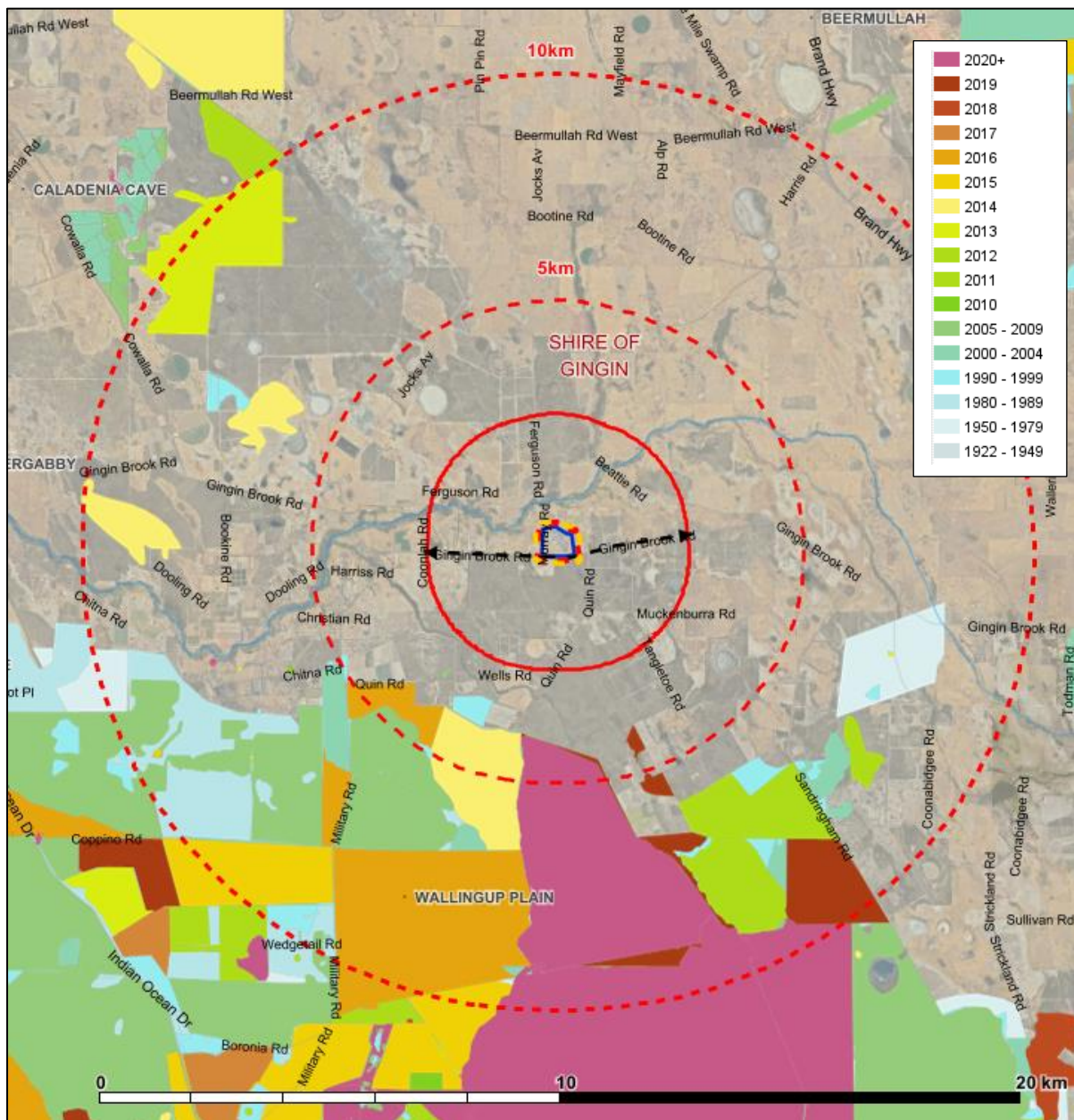


Plate 9: DBCA landscape fire history within a broader landscape 5 km and 10 km from the site. It is indicative as a level of activity and a possible gauge of fuel age. It does not distinguish between controlled and uncontrolled fires. It does not show the level of incidents and therefore is not indicative of all ignitions. Ignitions quickly responded to may not be recorded.

It is also not a determinant of frequency, notwithstanding an area may not show activity, there is a risk if fuels are present.

It provides an insight about land use patterns and activity in an area. There is often a counter balance between increased ignition potential from human activity, and land management and responsiveness.

Existing controls (that reduce the risk to life and property)

Existing controls are features and activities that presently reduce the harm to humans and assets.

These include:

- The Shire Firebreak Notice to maintain all land to limit the spread of bushfire, including within urban areas.
- The Shire and WAPOL enforcement of total fire ban days (to reduce the potential for ignition) and the Shire's enforcement of its annual notice *Bush Fires Act 1954*, to reduce ignition of a bushfire.
- The site is within a 4G network, mobile phones are automatically alerted to fires in the area, supporting an early and safe evacuation.
- A local fire brigade is located at Gingin (Volunteer Bushfire Brigade) 15 km east from the site to serve the community including the site.

Risk Evaluation

The following bushfire hazards were identified as applicable to the site:

The development site is within an area that is predominantly pasture grass (northern hemisphere), with contiguous forest extending south (southern hemisphere) from the site but separated from the site by Gingin Brook Road.

The proposed camp sites are to be located within grassland near to a lake with a narrow line of forest. The development site is predominantly pasture grass with pockets of trees over grass at the western section (woodland)

The development site may be affected by grassfire approaching through adjoining pasture land and is within range of ember attack from forest to the south.

Evacuation from the site is available along Gingin Brook Road east (15 km) and west to Indian Ocean Drive and onto Lancelin (54 km). Gingin Brook Road is joined by sporadic areas of forest on its south in both directions, but the landscape is open enabling extended views to avoid a fire.

The site does not have access to a reticulated water supply and the nearest rural fire brigade is located at Gingin (15 km).

Likelihood

The likelihood of a bushfire affecting the site is considered 'likely' (less than 1 in 10 years). Rather than by the historic frequency this is based upon the presence of bushfire fuels and activities in the locality.

Consequence – Do nothing

A do-nothing response may expose guests to grass fire and fatal levels of heat.

Smoke from grass fire will cause respiratory harm for guests with respiratory sensitivity.

Bushfire/grass fire is terrifying and may result in ongoing trauma.

The proposal is only to provide a camp site, guests are to be self-sufficient (responsible for their accommodation and supplies). No permanent structures are proposed, other than a fire pit. No buildings are proposed that may provide an opportunity for shelter.

Risk treatments

Prevent Ignition -not increasing external impacts

The proposal is not an activity that would introduce bushfire fuels that may prolong a bushfire duration resulting in high quantities of dangerous, uncontrolled substances harming adjacent land and occupants.

The proposal is not a high traffic generator that may affect congestion and cause delay for an evacuating community.

The proposal will not detract from the capacity of firefighting resources, and as a tolerable loss, imposes no additional burden or competition for attendance from emergency services.

Preserve Life - Manage the exposed

The proposal is to avoid operation during the bushfire season and outside the season provide for pre-emptive closure on days declared forecast to have an Extreme or Catastrophic fire danger rating.

A fire is less likely to occur outside the fire season (subject to seasonal conditions that support sustained combustion and also affect its speed and intensity). The site will be hosted whilst guests are present, the host providing early warning and instruction to minimise the exposure of guests to bushfire.

The site has the opportunity to evacuate in a direction opposite to an approaching fire.

The Bushfire Emergency Evacuation Plan is a risk treatment that describes the procedures to be followed in a bushfire event.

Occupant awareness of an approaching bushfire and clear instruction will maximise the opportunity to evacuate

Reduce the impact of bushfire on property - Manage the Fire

The proposal does not introduce additional buildings to the site during the bushfire season. The risk to assets at the site is unchanged.

The existing dwelling would benefit from the establishment of an Asset Protection Zone and seasonal maintenance. The existing dwelling, however, is not intended to be used as a place of last resort; increasing the resistance of the dwelling would serve to minimise disruption to the activity (economic risk) because the dwelling is essential for the operation of the site for short stay.

5. BUSHFIRE PROTECTION MEASURES

5.1 Guidelines for Planning in Bushfire Prone Areas Version 1.4 (the Guidelines)

The Bushfire Protection Criteria in the Guidelines v1.4 is divided into five elements – location, siting and design, vehicular access, water and tourism land uses.

Elements 1 – 4 should be applied for all strategic planning proposals, subdivision or development applications.

Element 5 is applicable for vulnerable tourism land uses, and it incorporates the bushfire protection criteria in Elements 1 – 4 but caters them specifically to tourism land uses.

This proposal for the purpose of Element 5 is classed as ***camping ground only or nature-based park***.

Table 4: Bushfire Protection Criteria – compliance assessment Element 5

✓	Acceptable solution provided	C	An Acceptable Solution to be conditioned
N/A	Not Applicable	P	Performance Principle solution see 5.2

Bushfire Protection Criteria	Method of Compliance	AS	PP	Proposed Bushfire Management Strategies
Element 5 intent: To provide bushfire protection for tourism land uses relevant to the characteristics of the occupants and/or the location, to preserve life and reduce the impact of bushfire on property and infrastructure.				
<i>The intent may be achieved where:</i>		<i>To achieve the intent, <u>all applicable</u> 'acceptable solutions' must be addressed:</i>		
P5x Habitable buildings are sited and designed to: – minimise clearing of existing vegetation; and – provide hazard separation between classified vegetation and a development site, that is managed in perpetuity, to prevent the spread of fire and direct flame contact to the building.	A5.10 Siting and design A5.10a Siting and design to reduce levels of radiant heat, on the camping ground area, to meet the following criteria: <ul style="list-style-type: none"> Where the BMP identifies camping sites as a tolerable loss in the event of a bushfire, then these can be sited in areas above 29kW/m²; and Consideration to be given to clustering of camp sites and the provision of hazard separation, between areas of classified vegetation and the camping ground. 	✓		The proposal is to provide a space, camp site. The camp sites are proposed as a tolerable loss , The short stay is only to operate outside the bushfire season, and pre-emptively closed on days forecast as Extreme or Catastrophic. Early evacuation is the preferred response but increasing the resistance of the existing dwelling (by practical measures) is recommended to provide a place of last resort. No permanent structures are proposed requiring defence. Guests are to be self-reliant, responsible for their accommodation and supplies.
	A5.10b Fire pits are to be used at all times to ensure the fire is contained, in accordance with the <i>Bush Fires Act 1954</i> .	✓		Fire pits are to be provided at each campsite. The facility is only to operate outside the bushfire season, and not on days declared Extreme or Catastrophic.

Bushfire Protection Criteria	Method of Compliance	AS	PP	Proposed Bushfire Management Strategies
Element 5 intent: To provide bushfire protection for tourism land uses relevant to the characteristics of the occupants and/or the location, to preserve life and reduce the impact of bushfire on property and infrastructure.				
<i>The intent may be achieved where:</i>	<i>To achieve the intent, <u>all applicable</u> 'acceptable solutions' must be addressed:</i>			
	Where an on-site shelter is proposed, to comply with A5.11d , it is to meet all the following requirements: .	N/A		Evacuation is the preferred option. Destinations in the opposite direction are available to be taken from the site. Shelter is not proposed as an alternate strategy. This is separate to the providing a contingency for the dwelling to act as a place of last resort. Vehicle entrapment in a fire can be fatal and less safe than taking shelter in a prepared building /dwelling, that can provide shelter (tenability) until tenable conditions resume outside of the dwelling.
	A5.10c Pedestrian paths to any on-site shelter are to be provided on-site and be clearly signposted	N/A		
	A5.10d Where an open space area is to function as an on-site shelter, there is to be sufficient separation distance from the predominant bushfire prone vegetation to avoid exposure to a radiant heat flux exceeding 2kW/m ² (with an assumed flame temperature of 1200K).	N/A		

Bushfire Protection Criteria	Method of Compliance	AS	PP	Proposed Bushfire Management Strategies
Element 5 intent: To provide bushfire protection for tourism land uses relevant to the characteristics of the occupants and/or the location, to preserve life and reduce the impact of bushfire on property and infrastructure.				
<i>The intent may be achieved where:</i>	<i>To achieve the intent, <u>all applicable</u> 'acceptable solutions' must be addressed:</i>			
P5xi The design and capacity of vehicular access and egress allows the community to evacuate to a suitable destination before a bushfire arrives to the site, whilst allowing emergency service personnel to attend the site; or it is demonstrated through a risk assessment that the risk can be managed.	A5.11 Vehicular access A5.11a Vehicular access to be provided in two different directions to at least two different suitable destinations.	✓		The subject site is compliant with A5.11b. It has access to Gingin Brook Road, a through road providing destinations (Shire evacuation centres) at the Gingin township, 15 km east, west to Indian Ocean Drive (15 km) and on to Lancelin 54 km.
	A5.11b All public roads to be through roads. No-through roads are not recommended but if unavoidable, or they are existing, the following requirements apply: <ul style="list-style-type: none"> • No more than 200 metres in length, where the adjoining classified vegetation, excluding the road reserve, has an extreme BHL; or • No more than 500 metres in length, where the adjoining classified vegetation, excluding the road reserve, has a moderate BHL; or • No limitation, where the adjoining classified vegetation, excluding the road reserve, has a low BHL or is not identified as bushfire prone. 	✓		The site is adjoined by three public roads. The primary access to the dwelling is from Jakattah, a 483 m cul-de-sac along the east boundary. The site is also accessed from Murray Road at the west boundary. Murray Road is a 573 m cul-de-sac. Both roads connect to Gingin Brook Road at the south boundary of the site.

Bushfire Protection Criteria	Method of Compliance	AS	PP	Proposed Bushfire Management Strategies
Element 5 intent: To provide bushfire protection for tourism land uses relevant to the characteristics of the occupants and/or the location, to preserve life and reduce the impact of bushfire on property and infrastructure.				
<i>The intent may be achieved where:</i>	<i>To achieve the intent, <u>all applicable</u> 'acceptable solutions' must be addressed:</i>			
	<p>A5.11c Where it is demonstrated that A5.11a and A5.11b cannot be achieved, an emergency access way can be considered as an acceptable solution. An emergency access way to meet all of the following requirements:</p> <ul style="list-style-type: none"> • Requirements in Table 6, Column 2; • Provide a through connection to a public road; • Be no more than 600 metres in length; and • Must be signposted and if gated, gates must open the whole trafficable width and remain unlocked. 	N/A		A5.11a can be achieved
	<p>A5.11d Where A5.11a, A5.11b and A5.11c cannot be achieved, and the proposed development has a capacity of up to a maximum of 100 guests and staff at any one time, an on-site shelter is to be provided in accordance with A5.10c and A5.10d Siting and Design.</p>	N/A		A5.11a can be achieved

Bushfire Protection Criteria	Method of Compliance	AS	PP	Proposed Bushfire Management Strategies
Element 5 intent: To provide bushfire protection for tourism land uses relevant to the characteristics of the occupants and/or the location, to preserve life and reduce the impact of bushfire on property and infrastructure.				
<i>The intent may be achieved where:</i>	<i>To achieve the intent, <u>all applicable</u> 'acceptable solutions' must be addressed:</i>			
	A5.11e Internal vehicular access/private driveway is to provide emergency egress/ access for all patrons and staff, in the event of a bushfire. Where possible, this is to include the provision of at least two internal access/egress points to the public road network.	✓		<p>The site adjoins Gingin Brook Road but is also bordered east by Jakattah Road and west by Murray Road. The camp site access is primarily to be from Murray Road at the north west corner. An alternative access will be available at the north east and onto Jakattah Road.</p> <p>Either access will require travel northwards within the site before turning south to connect onto Gingin Brook Road, this is time consuming; an additional emergency access 6 m wide is to be provided extending from the southern extent of the driveway and onto Gingin Brook Road; as a direct route to save time.</p>
	A5.11f Internal access/private driveway longer than 50 metres are to meet all the following requirements: <ul style="list-style-type: none"> • Requirements in Table 6, Column 4; • Passing bays every 200 metres with a minimum length of 20 metres and a minimum additional trafficable width of two metres (that is, the combined trafficable width of the passing bay and constructed access to be a minimum six metres); • Turn-around area as shown in Figure 28 	✓		<p>The site is predominantly pasture around a central lake. A 6 m wide mineral earth private driveway is to be maintained around the lake to provide a continuous access to each camp site and a connection to both Murray Road and Jakattah Road.</p> <p>The site is open and flat the private driveway will be compliant with the gradient requirement, the turn radius and the traversable width (both horizontal 6 m and vertical – through grassland).</p> <p>The private driveway will not require a turnaround Figure 28 because it is a throughway that connects Murray Road and Jakattah Road.</p>

Bushfire Protection Criteria	Method of Compliance	AS	PP	Proposed Bushfire Management Strategies
Element 5 intent: To provide bushfire protection for tourism land uses relevant to the characteristics of the occupants and/or the location, to preserve life and reduce the impact of bushfire on property and infrastructure.				
<i>The intent may be achieved where:</i>	<i>To achieve the intent, <u>all applicable</u> 'acceptable solutions' must be addressed:</i>			
	<p>A5.11g Signage to be provided advising of:</p> <ul style="list-style-type: none"> • Where each access route travels to and the distance; • Where vehicular access is 4-wheel drive only; and • What to do in the event of a bushfire. 	✓		<p>A Bushfire Emergency Evacuation Plan has been provided and instructs that the Emergency Evacuation Diagram is to be provided to each guest.</p> <p>It identifies the Alert, and the evacuation routes.</p> <p>A directional signage will be placed at the exit on to Murray Drive</p> <p>A directional sign is to be provided at the access onto Gingin Brook Road.</p> <p>Both signs will provide instruction consistent with the BEEP.</p> <p>Reflective way finders will be installed along the private driveway to provide guidance in conditions of poor light and visibility.</p>

Bushfire Protection Criteria	Method of Compliance	AS	PP	Proposed Bushfire Management Strategies
Element 5 intent: To provide bushfire protection for tourism land uses relevant to the characteristics of the occupants and/or the location, to preserve life and reduce the impact of bushfire on property and infrastructure.				
<i>The intent may be achieved where:</i>	<i>To achieve the intent, <u>all applicable</u> 'acceptable solutions' must be addressed:</i>			
<p>P5xii Where drinking water is provided on-site and the intention is to actively defend the site in the event of a bushfire, a permanent water supply is to be provided that is:</p> <ul style="list-style-type: none"> – sufficient and available for firefighting purposes; – constructed from non-combustible materials (e.g. steel), or able to maintain its integrity throughout a bushfire; and – accessible, with legal access for maintenance and re-filling by tankers and emergency service vehicles. 	<p>A5.12 Provision of water</p> <p>A5.12a Where drinking water is not provided on-site, there is no requirement for a water tank for firefighting purposes, unless specifically requested by the local government.</p> <p>A5.12b Where drinking water is provided on-site and the intention is to actively defend the site in the event of a bushfire, provision of at least 20,000 litres of static water supply for firefighting purposes, to the satisfaction of the local government; and</p> <p>A5.12c Provision of a water tank(s) in accordance with Element 4, Schedule 2, 2.2 Technical requirements.</p>	✓		<p>The proposal is the provision of a camping space (site). The guests are expected to be self sufficient.</p> <p>Drinking water is not provided there is therefore no requirement for a water tank for firefighting purposes, or a structure to defend.</p> <p>A mobile fire fighting unit is provided at the site (farmers unit) to address grass fire at the site.</p>

5.2 Bushfire Management Strategies

Further bushfire management strategies to those addressed under the bushfire protection criteria are addressed in this instance by the Bushfire Emergency Evacuation Plan (BEEP).

The principles of Emergency Management (listed below) that may apply to the proposal can be divided across the BMP and BEEP working in unison – the BMP determines the suitability of the location, and the BEEP describes the management actions. The two align with emergency management principles as follows:

- Prevention – avoidance and mitigation works undertaken in advance i.e. (Planned Asset Protection Zone).
- Preparation – education, procedures, training i.e., Seasonal maintenance APZ, regular review of (BEEP) requirements, contacts, responsibilities, and warning systems
- Response – actions taken in an event for saving lives (primary) - early evacuation if safe or shelter as a last resort with survival procedures described (BEEP).
- Recovery – return and restoration procedures described (BEEP).

5.2.1 Vulnerable Development Emergency Evacuation (CI 6.6)

The proposed BEEP is included at Attachment 2 and follows the State Government’s (WAPC) *A Guide to developing a Bushfire Emergency Evacuation Plan* October 2019 and the *Emergency Evacuation Plan template* V1.1. The BEEP has also been developed consistent with the Australian Standard AS 3745-2010, Planning for Emergencies in facilities.

The BEEP has also had regard to the Shire of Gingin Bushfire Emergency Evacuation Plan template, but where there is conflict or omission the BEEP has followed the authority of the WAPC *A Guide to developing a Bushfire Emergency Evacuation Plan* October 2019.

The attached BEEP has incorporated the requirements listed under section 5.5.4 Guidelines for Planning in Bushfire Prone areas V1.4. This is acknowledged in the **Table 5** check list.

Table 5: Compliance with section. 5.5.4 *Guidelines for Planning in Bushfire Prone Areas*

The emergency evacuation plan should be concise and consider:	Addressed in Emergency Evacuation Plan
The number of persons at the facility.	Maximum of 24 guests.
Whether the occupants are permanent or transient.	Transient.
Whether there is a caretaker on site.	Yes.
Whether there are people with a disability, medically dependant, young children, or the elderly.	Visitors are able-bodied or expected to be in the care of a patron.
Effective warning and communication methods for persons on site.	<p>The owner/manager is the Chief Warden and responsible for checking the DFES Alerts and Warnings web page at regular intervals and for advising guests if it is necessary to evacuate.</p> <p>The owner/manager will</p> <ul style="list-style-type: none"> • Remain informed of DFES Emergency Warnings by monitoring public information sources. • Oversee Emergency Evacuation. • Be the primary contact for guests and emergency services

The emergency evacuation plan should be concise and consider:	Addressed in Emergency Evacuation Plan
The potential level of exposure of evacuees to untenable conditions including air temperature, radiant heat and smoke at the facility, and assembly and evacuation locations.	Evacuation routes east and west are through sporadic forest on the south side of Gingin Brook Road. The landscape is open affording distant views to avoid entrapment within bushfire.
Identification of a safe alternative location if there was a need for evacuation/relocation.	Town of Gingin 15 km east is the nominated evacuation destination. If the Gingin township is not accessible evacuation to Indian Ocean Drive will provide options in the opposite direction to an approaching fire i.e. the Shire nominated evacuation centre north at Lancelin or south to the Perth urban area.
Pre-planned and agreed resources, responsibilities, and procedures for the movement of occupants to safe locations.	Private vehicles.
Details of suitable access/egress routes for the expected type/volume of traffic, including alternatives when suitable roads are inaccessible, insufficient or inappropriate.	Gingin Brook Road east and west, is a sealed public road with low catchment areas. The proposal will not affect congestion and delay travel times.
Transport options for those without access to private vehicles.	Visitors are expected to arrive by private vehicle.
Locations for control points to assist with traffic management including the rerouting of private traffic away from the emergency.	Not applicable to a development application. This is determined by emergency services and is affected by the location of the bushfire.
Options to shelter in place as a last resort.	Early evacuation is the preferred response as per DFES instruction.
Provision and location of medical supplies and services.	A first aid kit will be provided on site.
Pre-planned and agreed responsibilities and resources for assistance to those that shelter in place.	Instructions are provided on the Emergency Response Plan.
Roles and responsibilities of facility personnel and emergency services.	The owner/manager is responsible for checking the DFES Alerts and Warnings web page at regular intervals and for advising guests if it is necessary to evacuate. The owner/manager is responsible to maintain contact with guests during evacuation.

The emergency evacuation plan should consider if actions will change based on a series of triggers, such as:	Addressed in Emergency Evacuation Plan
Effective warning methods appropriate for the occupants (including consideration of at-risk persons and the demographics of the occupants).	The owner/manager will be responsible to inform guests and oversee their evacuation.
Closure of facility and early relocation of occupants appropriate to the fire danger rating (FDR) and bushfire warnings.	The owner/manager will be responsible to monitor the media for Fire Danger Rating information. The owner/manager will maintain contact with guests and confirm their safe arrival to a safe destination or alert authorities.
Any local government bushfire requirements (for example, harvest and vehicle movement bans).	N/A
A suitably qualified emergency management professional should prepare the emergency evacuation plan in collaboration with relevant stakeholders including the landowner/developer and the local government (refer to section 6.14 of the Guidelines).	Anthony Rowe Accreditation Level 3 Accreditation Number: 36690

5.3 Spatial representation of the bushfire management strategies

Further to the assessment against the bushfire protection criteria, the key features demonstrating compliance should be represented spatially in the *Spatial representation of the bushfire management strategies*. It represents the required bushfire risk management measures that must be implemented and maintained.

A *Spatial Representation of the Proposed Risk Management Strategies* (Figure) is provided in Figure EX1 and illustrates the site bushfire protection measures.

6. RESPONSIBILITIES FOR IMPLEMENTATION AND MANAGEMENT OF THE BUSHFIRE MEASURES

The responsibilities for implementation and management of the bushfire measures, summarises the measures identified to achieve compliance with the bushfire protection measures following SPP 3.7.

The details contained within the planning application authorised by the responsible decision maker are enforceable under section 214 of the *Planning and Development Act 2005*.

The items addressed in the table responsibilities for implementation and management of the bushfire measures form part of the planning authorisation and where there is conflict supersede the detail of the planning application.

- | | |
|---|--------------------------------|
| 1. The adoption of the (Bushfire) Emergency Evacuation Plan, including the seasonal maintenance requirement, the roles and responsibilities and the emergency response. | Prior to operation and ongoing |
|---|--------------------------------|

The (Bushfire Emergency Evacuation Plan is included at Attachment 2 and is to be review annually.

- | | |
|---|--------------------------------|
| 2. The establishment and maintenance of the site as an Asset Protect Zone 21 m from the dwelling: the extent is shown on Figure Ex1 (| Prior to operation and ongoing |
|---|--------------------------------|

The Asset Protection Zone is to be established and maintained in compliance with Schedule 1 Standards for Asset Protection Zones (Guidelines 1.4).

- | | |
|---|--------------------------------|
| 3. Practical measures are undertaken increase the resistance of the building to bushfire attack in addition to the Asset Protection Zone, to provide a shelter of last resort, include: | Prior to operation and ongoing |
|---|--------------------------------|

- Enclosure or screening of the underside of the dwelling (*see AS3959:2018 at s.3 and s.7*) to prevent underside ignition.
- The screening of the openable portion of windows (*AS3959:2018 at s.3.6 (maximum aperture 2mm)*).
- Maintaining a separation of flammable buildings around the dwelling through out the period of operation.
- The provision of fire hoses, shielded from radiant heat, capable of applying water to all external parts of the dwelling and 10m all around the dwelling, from an independent water supply of at least 20,000 litres without reliance on a mains power supply; i.e. an independent firefighting or pressure pump that can operate up to 400 lpm⁴

These items are not comprehensive nor a guarantee of the building's survival or provision of a place of safety; the owner is encouraged to compare the building with the construction requirements AS3959:2018 at s.3 and s.7, and follow to preparation for stay and defend as provided by DFES <https://mybushfireplan.wa.gov.au/stay-and-defend>.

The applicant (recommended) is encouraged to screen or seal any gaps and open spaces on the outside of the building (roof and walls) that may permit ember access to flammable materials in the roof or wall cavity, and in the building.

⁴ DFES <https://mybushfireplan.wa.gov.au/stay-and-defend>

- | | |
|---|---|
| <p>4. The construction of the driveway serving each camp site is to be provided and maintained in accordance with the technical specifications in Table 6 column 4 (Guidelines v1.4). The private driveway is a 6 m continuous loop (all weather surface) providing access to each camp site and connecting to Murray Road and Jakattah Road.</p> | <p>Prior to operation and ongoing</p> |
| <p>5. The driveway is to be provided with reflective way finding at 50 m intervals.</p> | <p>Prior to operation and ongoing</p> |
| <p>6. A 6 m wide emergency access is to be provided from the southern extent of the driveway and onto Gingin Brook Road</p> | <p>Prior to operation and ongoing</p> |
| <p>7. Directional signage is to be provided at the exit onto Murray Road indicating the Evacuation destinations consistent with the Bushfire Emergency Evacuation Plan.</p> | <p>Prior to operation and ongoing</p> |
| <p>8. A notification, pursuant to Section 70A Transfer of Land Act 1893 is to be placed on the certificate(s) of title:</p> <p><i>“This land is within a bushfire prone area as designated by an Order made by the Fire and Emergency Services Commissioner and is subject to a Bushfire Management Plan. The Short Stay accommodation is restricted from operation during the bushfire season (Shire of Gingin).</i></p> | <p>Evidence of lodgement is to be provided prior to operation of the short stay (camp sites).</p> |

Acknowledgment - Proponent

The proponent acknowledges the responsibilities as listed above and the requirement to ensure that should the land transfer to a new owner, that the new owner is aware of the BMP and their ongoing responsibility.

ATTACHMENT 1 - Emergency Evacuation Plan

BUSHFIRE EMERGENCY EVACUATION DOCUMENTS

Lot 49 (No. 45) Jakattah Road, Muckenburra.

15 February 2024

This document contains two parts:

1. The preparation compliance with the WAPC *A Guide to developing a BUSHFIRE EMERGENCY EVACUATION PLAN* October 2019: and
2. The Emergency Evacuation Plan contained in Appendix 1. The Emergency Evacuation Plan incorporates the requirement of AS3745-2010 where relevant in the WAPC Emergency Evacuation Plan Template.

1. ESTABLISHING THE EMERGENCY CONTROL ORGANISATION

In accordance with the DPLH Guidelines for preparing a bushfire emergency evacuation plan an accredited bushfire practitioner was engaged (Anthony Rowe BPAD L3 36690).

The bushfire planning practitioner has been responsible for assisting the Emergency Planning Committee with -

- The establishment and implementation of emergency plans and procedures
- Formulation of emergency procedures
- Reviewing the local emergency services

The Emergency Planning Committee with feedback from the Emergency Control Organisation should regularly review the emergency evacuation plan to ensure it remains practical and current.

Emergency Planning Committee (EPC)

The Emergency Planning Committee shall comprise of the owners of Lot 49 (No. 45) Jakattah Road, Muckenburra.

The **Emergency Planning Committee** is responsible for overseeing the preparation of the site buildings and grounds for the approaching bushfire season, including attendance to any maintenance required to minimise the risk of damage from bushfire attack.

The Committee is responsible for reviewing the BEEP and overseeing the education and training of the allocated **Emergency Control Organisation**. It is to ensure appropriate resources are provided to prepare for the bushfire season.

Emergency control organisation (ECO)

The Emergency control organisation shall comprise of the owner as Chief Warden, or the person supervising the site when guests are in attendance. A single position in this instance the Chief Warden will also fulfill the subordinate roles of:

- Transport Warden: and
- First Aid Warden

The Chief Warden will be responsible for responding to a bushfire event and ensuring the safety of guests.

2. PREPARING THE EMERGENCY PLAN

The emergency plan applies to the Lot 49 (No. 45) Jakattah Road, Muckenburra.

The Bushfire Management Plan dated **15 February 2024** articulates bushfire safety measures that include:

- Identification of the Asset Protection Zone and maintenance.
- Establishment and maintenance of a safer place - dwelling.
- Provision of firefighting equipment.

The Bushfire Management Plan identified there is a risk of exposure to fatal heat from a grassfire at the site.

The risk treatments in order of preference are:

- The campsites are restricted from operating in the bushfire season
- The site is pre-emptively evacuated on days forecast as extreme or catastrophic
- The existing dwelling is to be prepared as a place of last resort

This Emergency Plan has been prepared in response to bushfire threats identified in the BMP.

It is the responsibility of the Chief Warden to ensure visitors to resort are alerted to conditions where the risk is elevated and of any bushfire likely to threaten the facility.

- The Chief Warden is responsible for checking the DFES Alerts and Warnings web page <https://www.emergency.wa.gov.au> at regular intervals.
- The Chief Warden is responsible for advising guests to evacuate and maintaining contact with guests during any evacuation.

On days where the forecast FDR is Extreme or Catastrophic guests staying at resort accommodation should be advised to confine travel to townships.

Evacuate before the fires arrival when safe to do so.

3. DETERMINE EMERGENCY ACTION

The **primary action** in response to bushfire threat, when the facility is operating, is **early** evacuation.

Time Required to Evacuate including alarm, briefing and exiting the site and destination is addressed below:

- Granville Civic Centre Weld Street Gingin, via Gingin Brook Road 30 minutes (excluding site pack up).

If the fire is between the site and the town of Gingin, then evacuation should be taken west to Indian Ocean Drive and to the town of Lancelin.

- Lancelin Community Sporting Centre Lancelin Road Lancelin, via Gingin Brook Road Indian Ocean Drive 30 minutes (excluding site pack up).

Important note Self reliant campsites may take time to pack, and it will vary from site to site. If time permits it may be possible to allow for pack up and leave safely. Otherwise the required evacuation time allows only to gather small personal belongings and leave immediately.

If shelter as a last resort is to be taken at the dwelling, guests should immediately assemble at the house without packing up.

The transportation arrangements for evacuation is by private vehicles.

Vehicles provide poor protection for occupants if within flame contact. If evacuation cannot be completed prior the arrival of the firefront, shelter at the dwelling as a place of last resort should be taken.

In a bushfire event, announcements will be made via electronic media and online, regarding bushfire incidents and potential threats to the site.

- Monitor the DFES Alerts and Warnings web page <https://www.emergency.wa.gov.au>
The On-site Manager is responsible for monitoring this site at regular intervals during the bushfire season

The Trigger to evacuate.

- Emergency WA public advice – Watch and Act or Emergency warnings
- if directly advised to leave by DFES or the police
- If smoke or a fire is seen nearby

Alarm

The sounding of an airhorn three times, repeated, will be used to communicate a bushfire alarm, and for assembly to be taken at the safer place.

Guests will also be contacted directly by mobile phone.

4. EVACUATION / SHELTER REQUIREMENTS

Visitors will arrive by their own transport and would evacuate via their own transport.

The primary evacuation destination is east to the Granville Civic Centre Weld Street Gingin 18 km, or west to Lancelin Community Sporting Centre Lancelin Road Lancelin 54 km.

In a bushfire emergency, announcements will be made via media and online confirming availability, locations and routes to evacuation centres and safer places.

An alternative evacuation centre, to those identified may be nominated.

PRIMARY AND SECONDARY EMERGENCY PROCEDURES

The Emergency Evacuation Plan must be reviewed annually, ensuring all information, procedures, contact details and any attached publications (e.g. DFES) are current.

The Bushfire management Plan has identified the following works at the existing dwelling:

- Establishment of the Asset Protection Zone
- The enclosure of the building underside
- The screening of the openable portion of windows
- The provision of fire hoses

Recommended works

The screening or sealing of gaps and open spaces on the outside of the building (roof and walls) that may permit ember access to flammable material in the roof or wall cavity and in the building.

Annual review should include:

- The Asset Protection Zone is maintained
- Roofs and gutters are free of leaf litter and debris.
- Flammable materials are removed from near the dwelling 3 m from the base.
- Access is to be clear and easily trafficable, a clearway 6 m wide up to 4.5 m high is to be maintained for access to the campsites and from the campsites to the house.
- Directional signage is in place and is clear and accurate.
- Fire hoses are in working order.
- The air horn is in working order.
- The first aid kit and PPE are complete and ready for use (stored at the dwelling).

A current copy of the emergency plan must be kept at the dwelling, and an evacuation diagram must be provided to each guest party on arrival.

5. TRAINING REQUIREMENTS

Emergency Control Organisation

The emergency control organisation is responsible for managing the site during a bushfire event.

Where it is a small facility, the Emergency Control Organisation may be the owner, or supervisor at the time, who has the role of the ECO and Chief Warden. Larger facilities may assign a single role to an individual, whereas the owner of a small facility must multi task.

Holders of specific roles within the ECO should receive relevant training.

- The Chief Wardens should be trained to maintain awareness of fire danger and incident alerts
 - Awareness of firefighting procedure and use of PPE. use of firefighting equipment and personal safety awareness (extreme heat and toxic materials).
 - Awareness of DFES Sheltering in your home procedures.
 - Awareness of structural fire damage.
 - Awareness to administer first aid including injuries expected in a bushfire.

Emergency Evacuation Plan Preparation Checklist

The following questions will assist the individual in developing or reviewing the Emergency Evacuation Plan to identify an off-site location. For an appropriate off-site location	
If there are occupants with support needs that require a similar facility to support them, is the off-site location suitable?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Comment: Guests with support needs may attend the facility but would have a carer or family member in attendance with them to provide the required support.	
Is the off-site location in an area away from the effects of a bushfire?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comment: Shire nominated emergency evacuation facility	
Are there amenities (toilets, food, water etc.) available at the off-site location? (if applicable)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Can the off-site location accommodate the number of occupants?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comment: Shire nominated emergency evacuation facility	
Does the route to the off-site location require transporting through bushfire affected areas or areas that may be affected by an approaching bushfire?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comment: Gingin Brook Road is adjoined by forest at its south. Evacuation east west should be taken in the opposite direction to an approaching fire. Early evacuation is required, and advice is to be sought from emergency services to confirm the evacuation destination and the availability of a safe route in a bushfire event.	
Has the owner of the off-site location advised that they are happy to accommodate occupants if evacuation from a bushfire emergency occurs?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comment: Shire nominated emergency evacuation facilities have been identified.	

Consider the following questions to assist in planning transport arrangements.	
Do you have your own transport for all occupants? If no what transport provider will you use?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Comment: Visitors will have their own transport	
Are private vehicles to be used?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comment: Visitors will have their own transport	
If using private vehicles will there be sufficient vehicles to transport all the occupants, will they be available when you need them, and will there be drivers available? If no, consider another mode of transport	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comment: Visitors will have their own transport	
Will there be sufficient vehicles to transport all occupants?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comment: All visitors will arrive by private transport	
Have occupants with support needs been considered when determining transport types and necessary timing to evacuate?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comment: Occupants with support needs are expected to arrive with their carer by private transport retained on site	
Do you require ambulances? If yes, St John Ambulance Australia needs to be consulted.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Comment:	
Is a community bus available?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Comment: All visitors will arrive by private transport	
Will community buses be available when you need them and will drivers be available?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Comment: All visitors will arrive by private transport	
Are other means of transport available?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Comment: All visitors will arrive by private transport.	
Do you need any other type of special transport?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

The following questions will assist the individual in developing or reviewing the Emergency Evacuation Plan to identify an on-site building. For an appropriate building, the answers to the below questions should receive a 'yes'.

Is the property well maintained and kept free from a build-up of fuel and leaf litter in gutters and around buildings?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Comment: The standards for Asset Protection Zones in the Guidelines for Planning in Bushfire Prone Areas should be used as a reference to maintain the area around dwelling, and the dwelling inspected annually to avoid the storage or accumulation of fuels near the building.		
Is there a building on-site that is away from bushland and is unlikely to be impacted by bushfire?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Comment: The existing dwelling is BAL 29, with the establishment and maintenance of the Asset Protection Zone.		
Is the building constructed in a manner that minimises bushfire attack with appropriate Asset Protection Zones?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Comment: The building predates contemporary bushfire construction standard. It is required to provide shelter long enough for tenable conditions to establish outside after the passing of the fire front. Measures such as the APZ, restricting flammable material near the building, enclosing the underside and eliminating gaps that embers may penetrate will improve the resistance of the building. Fire hoses will assist the building survival after the passage of the fire from by enabling the quick extinguishment of small fires, before they become a big one.		
Can the building accommodate the number of occupants and visitors?	Yes <input checked="" type="checkbox"/>	No <input checked="" type="checkbox"/>
Comment: The dwelling has an internal dimension of 150 m ² exceeding the area of 1.2 m ² per guest (24 guests).		
Is there ease of accessibility to the building, and is it easily identifiable?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Comment: the driveway is continuous to the dwelling		
Is there access to amenities (toilets, food, water, etc.) away from the effects of a bushfire?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
The dwelling has amenities toilets, food, water.		

BUSHFIRE EMERGENCY PLAN

NAME OF FACILITY Private Camping

ADDRESS Lot 49 (No. 45) Jakattah Road, Muckenburra

PREPARED BY Anthony Rowe, L3 BPAD 36690

OWNER Cornelia Labuschagne and Stephannes Labuschagne

OPERATOR Owners

DATE 15 February 2024

VERSION NUMBER 1

Document Control

Version	Date	Details	Undertaken by
1	15/02/2024	submission	Anthony Rowe

Emergency Management Team

Name	Role	Contact Details
Cornelia Labuschagne	Owners	0415 509 490
Stephannes Labuschagne		

FACILITY DETAILS

Lot 49 (No. 45) Jakattah Road, Muckenburra

The plan outlines procedures for both **evacuation** and **shelter-in-place (last resort only)** to enhance the protection of occupants from the threat of a bushfire.

The primary action to follow in a bushfire emergency is to:

Evacuate



Shelter in place last
resort only



NAME OF CONTACT PERSON		Cornelia Labuschagne Stephannes Labuschagne	
POSITION / ROLE OF CONTACT PERSON		Owners and operators	
PHONE NUMBER		0415 509 490	
FACILITY TYPE	Short stay accommodation	NUMBER OF BUILDINGS	6 campsites
NUMBER OF STAFF	TBA	<u>NUMBER OF OCCUPANTS</u> guests and owners	26 persons
NUMBER OF OCCUPANTS WITH SUPPORT NEEDS		Not applicable	
DESCRIPTION OF SUPPORT NEEDS		Not applicable	

1. Introduction

1.1 Outline of the Bushfire Emergency Evacuation Plan

This Bushfire Emergency Evacuation Plan (BEEP) is based on guidance provided in the following:

- The Department of Planning Land and Heritage *A Guide to Developing a Bushfire Emergency Evacuation Plan 2019*.
- *Australian Standard 3745-2010, Planning for Emergencies in Facilities* (Standards Australia 2010).

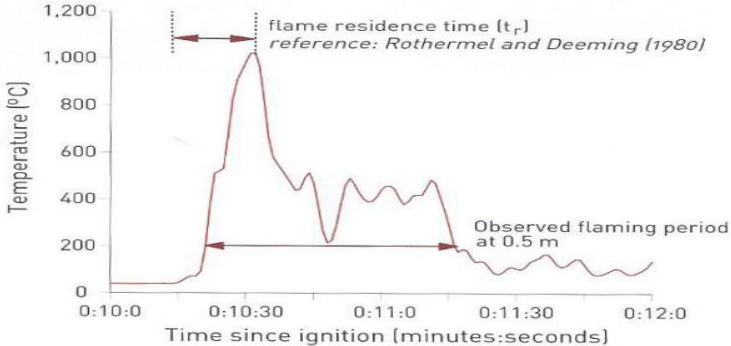
The purpose of this Bushfire Emergency Evacuation Plan is to provide guidance and direction to all staff and visitors by providing:

- Understanding the risks.
- Preparing the facility for a bushfire event, with the responsibility assigned to the Emergency Planning Committee (owners).
- Responding to a bushfire. The establishment of the Emergency Control Organisation with responsibility to implement the Emergency Evacuation Plan (primarily the chief warden or delegate).
- Recovery – determine when to re-open and de-briefing and continuous improvement identified by the Emergency Management Committee.

The Bushfire Emergency Evacuation Plan is a 'living document' with guidelines that should be reviewed annually and adapted to changing circumstances.

DEFINITIONS

TERM	DEFINITION
Asset Protection Zone	Horizontally and vertically arrange fuels that prevent continuity and the spread of bushfire.
Bushfire Attack Level (BAL)	Arranged in seven categories representing a maximum radiant heat flux for each category i.e. BAL 19 = up to 19 kWm ² as determined by the methodology in AS3959:2018. The BAL rating reduces as the separation from heat source increases. BAL 29 and less is outside of flame contact. Safe outside shelter is 2 kWm ² injury occurs above 3 kWm ² and prolonged exposure > 30 seconds can be fatal at 10 kWm ² 10 kWm ² is considered the maximum protection provided by a vehicle.
Chief Warden	The Chief Warden is responsible for the management of a bushfire emergency.
Emergency Planning Committee (EPC)	The Emergency Planning Committee includes the owners. The EPC is responsible for the emergency preparedness arrangements, to ensure resources are available to effectively implement the emergency plan. It oversees the preparation of facilities, the training of staff and the receiving of results from practice drills and event debriefs.
Emergency Control Organisation (ECO)	The Emergency Control Organisation is appointed by the EPC to direct and control implementation of the resort's emergency response. <i>The safety of the guests is prioritised above the protection of any asset.</i> All positions are to be approved by the EPC and appropriate training provided and assured by the EPC.

Evacuation	The orderly movement of people from a place of danger.
Flame Residence time	<p>Resident time is the passing of the firefront, peak flaming.</p> <p>Heat builds prior to the arrival of the fire front and decays quickly and progressively after its passing.</p>  <p>From NCC Handbook: Bushfire Verification Method 2021</p> <p>The ABCB Design and Construction of Community Bushfire Refuges provides the following time allowance:</p> <ul style="list-style-type: none"> • Pre event 10 minutes • Firefront 10 minutes • consequential fires up to 30 minutes after the passage of the firefront
Preparedness	The measures taken to eliminate the incidence of emergencies. These include measures to ensure that emergencies are prevented, and adverse impacts are minimised.
Recovery	Measures immediately following the passing of the fire to return to operation.
Response	Actions taken immediately prior to, during and immediately after an emergency or critical incident to ensure that its effects are minimised.
RSET - Require Safe Egress/Evacuation Time	The time taken from alarm to the last person leaving the site. This should be determined through practice drills.
ASET – Available Safe Egress/Evacuation Time	The time available before the facility is directly impacted by the bushfire (fatal conditions) when exposure becomes unsafe. The ASET will require verification with Emergency Services (DFES). Unless certain that the ASET + 50% is greater than the RSET, then refuge should be taken as a last resort.
The site	45 Jakattah Road, Muckenburra

1.2 Understanding the risk

Risk identification

The development site is within an area that is predominantly pasture grass, with forest to the south of the site, separated by Gingin Brook Road.

The proposed campsites (self-reliant) are to be located within grassland. No built structure is involved.

The development site may be affected by grassfire spread into the site and from ember attack, including spotting grass fires from a fire in forest south of the site.

Evacuation from the site is available east (town of Gingin 18 km) and west (town of Lancelin 54 km) by Gingin Brook Road. The routes are predominantly through open pasture land but forest adjoins Gingin Brook Road south of the site. The open landscape affords expansive view of the fire location and provides opportunity for avoidance.

Early evacuation from the site is preferred but if evacuation from the site is not safe (Gingin Brook Road to either destination is not safe) then the dwelling on site is nominated as a shelter of last resort, for shelter until tenable conditions establish outside and it is safe to evacuate.

The aspects of bushfire attack that affect human safety (harm) include:

- Burns from direct flame contact from the bushfire front, including embers, or other ignited materials.
- Burns from radiant heat from the bushfire front or other ignited materials.
- Convective heat carried from the bushfire front – heat stress, lung damage.
- Injuries from airborne particles – eye damage.
- Injuries from blown objects.
- Trips and falls.
- Smoke inhalation – asthma, excessive breathing stress and heart attack.
- Poisoning from Toxic smoke can occur during a bushfire- medical oxygen may be required.
- Dehydration.
- Poisoning from hazardous proceeds of firefighting, contaminated water.
- Poisoning from exposed hazardous building materials i.e. asbestos.
- Building collapse, and sharp object penetrations – cuts.
- Psychological trauma – bushfires are terrifying.

The **primary action** in response to bushfire threat, when the site is operating short stay, is **early** evacuation in the opposite direction to an approaching fire.

The campsites are restricted from operation during the bushfire season. Bushfires can however occur outside a bushfire season and can come from any direction. The site is surrounded by bushfire fuels (grassland north, east, and west and forest south).

2. Prepare

2.1 Administration

2.1.1 Emergency Planning Committee

The **Emergency Planning Committee (Owner)** is responsible for overseeing the preparation of the buildings and grounds for the approaching bushfire season, including attendance to any maintenance required to minimise the risk of damage from bushfire attack. A seasonal preparation checklist is provided at **Attachment A**.

The Owner is responsible for reviewing the BEEP and broader Emergency Response Plan.

The Owner will assign roles and responsibilities to staff (the persons, in attendance or likely to be in attendance) when the facility is operating; and is responsible for ensuring their training to supervise an emergency response.

The Owner is responsible for ensuring the dwelling is prepared to serve as a shelter of last resort.

The Owner is responsible for ensuring all firefighting equipment is in working order, and first aid kits are complete.

2.1.2 Emergency Control Organisation (person supervising the site when the campsites are operation – Owner)

The facility is to have an Emergency Control Organisation responsible for undertaking the emergency response identified in this Bushfire Emergency Evacuation Plan (the owner).

This is the person, in attendance and supervising the facility when it is in operation. The supervisor should not be absent for extended periods without maintaining surveillance and the potential to raise alarm and initiate the emergency plan remotely, i.e. retain a list of mobile phones to contact guests when the campsites are operating.

Officer Position	Hat	Duties
Chief Warden	White	Determine the evacuation requirement. Communicate response to guests (mobile phone initial, and face to face for assurance). Verify the safety to evacuate and destination or supervise shelter. Attend to any injuries, burns, eye injury, and respiratory distress. Check the grounds are clear of guests (all guests have departed to safety or they are assembled at the dwelling).

2.1.3 - Training

Emergency Control Organisation

Holders of specific roles within the ECO should receive relevant training.

- awareness of fire danger and the monitoring for incident alerts.
- awareness of role and responsibility, including:
 - contacts to determine the safe route and safety for evacuation;
 - the decision to evacuate or stay;

- the duty of care for the guests;
- means to raise alarm; and
- conduct safe shelter in the dwelling and the supervision of guests
- use of PPE, use of firefighting equipment and personal safety awareness (extreme heat and toxic materials).
- awareness to administer first aid including the types of injuries expected in a bushfire, burns, eye injury, smoke.

2.2.1 Firefighting equipment

The campsites are self-reliant and have no structures and offer no shelter.

Evacuation relies upon maintaining mobile phone contact and way finding along the private driveway in the site, either to access Gingin Brook Road or the dwelling.

The dwelling will have onsite firefighting equipment including:

- Fire hose reels capable of applying water to all external parts of each cabin and 10 m around the cabin.
- Evacuation maps and diagrams.
- Bottled water 1 L for each person to be stored at the dwelling.
- Towels for blocking smoke
- First aid kit (small burns and eyewash)
- PPE including: coveralls, gloves, eye protection, smoke mask – Enclosed shoes should also be provided.

All equipment should be maintained annually (as a minimum) in accordance with equipment specifications and the relevant standards, including (but not limited to) *Australian Standard 1851 – 2005 Maintenance of Fire Protection Equipment* (Standards Australia 2012).

Any equipment expended must be replaced prior to reopening the facility for short stay/campsites.

2.2.3 Evacuation and Emergency Equipment

First aid kits must be maintained in complete and up to date condition at all times at the dwelling.

First aid kits are available from various suppliers that provide the requirement for bushfire type injuries, i.e. burns, eye injuries – eye wash. The requirements and the capacity of the kit should be informed by the First Aid Warden.

The dwelling is the control centre. It is to be:

- provided with a printed register of all guest mobile phone numbers.
- provided with a printed list of emergency contacts.
- Provided with PPE equipment.

2.2.4 Communication Equipment

Air horn – 3 separate blasts are required to sound the alarm to commence the evacuation of guests to the safer place. This should be followed by mobile phone contact and face to face attendance.

Important Note – Guests may not have time to pack their site. It is important to be aware of the Safe Available Time before it becomes unsafe to leave. It is important to convey accurately to guests and if in doubt encourage shelter at the dwelling.

Guest should evacuate or collect essential belongings and assemble at the dwelling.

Guests, if sheltering at the dwelling will remain assembled until instructed to evacuate.

All guests are to have a mobile phone registered for access by the Chief Warden, to be used for coordination throughout the bushfire event.

3. Response

3.1 Monitoring for bushfires

The Chief Warden or delegate should monitor current fire danger ratings and fire activity from a range of official information sources:

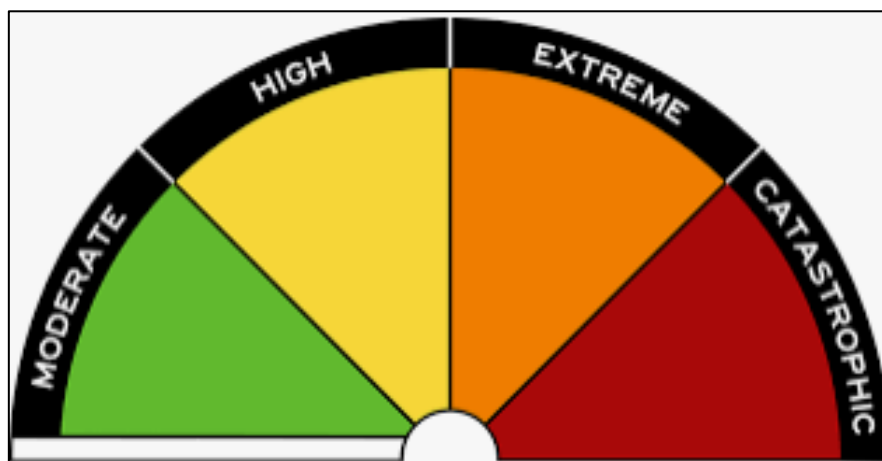
- Bureau of Meteorology – Western Australia Fire Danger Ratings
- Emergency WA website
- Department of Fire and Emergency Services
 - Information line – 13 33 37
 - DFES on Twitter
- Local radio
 - ABC local radio 720 AM

3.2 Pre-emptive Evacuation

**No operation during the fire season: and
Closure on days forecast Extreme or Catastrophic.**

The Fire Danger Ratings are based on predicted conditions such as temperature, humidity, wind and the dryness of the landscape and give an indication of the possible consequences of a fire, if one was to start; the higher the fire danger rating, the more dangerous the conditions.

Fire Danger Ratings are issued by the Bureau of Meteorology twice daily (morning and afternoon).






Fire Danger Rating categories

The following list the responses to the Fire Ratings. These are precautionary measures, a fire may not have started.

Fire Danger Rating	Public Advice	Resort Action
No Rating	Monitor conditions during the bushfire season	Maintain normal operations. – Monitor Emergency WA
Moderate 12-23	Plan and prepare	Maintain normal operations. – monitor Emergency WA – Plan and prepare.
High 24-49	Be ready to act	Maintain normal operations but: – monitor Emergency WA – know the triggers and be ready to evacuate
Extreme 50-99	Take action now to protect your life and property	Close facility - Evacuate if safe (confirmed)
Catastrophic 100+	Catastrophic - For your survival, leave bush fire risk areas	Close facility - Evacuate if still safe (confirmed)

3.3 Response to a sudden (active) bushfire event

The following are public alerts to a fire that has started

Bushfire warning stages	
<p>ADVICE</p> 	<p>A fire has started, but there is no known danger.</p> <p>This is general information to keep the public informed and up to date with developments.</p> <p>Chief Warden:</p> <ul style="list-style-type: none"> – check and patrol the facility regularly for bushfire activity
<p>WATCH AND ACT</p> 	<p>There is a possible threat to lives and property. Conditions are changing.</p> <p>Evacuate if safe to do so</p> <p>It is vital that the Chief Warden:</p> <ul style="list-style-type: none"> – accesses bushfire information from official sources – makes an informed decision to stay onsite or evacuate offsite based on advice from Emergency Services. – verifies the evacuation route is safe for the time require to evacuate the resort.
<p>EMERGENCY</p> 	<p>The site and evacuation routes are in danger and will be impacted by fire.</p> <p>Take immediate action to survive.</p> <p>The Chief Warden will verify no safe evacuation is available</p> <p>THERE IS NOT TIME TO PACK THE CAMPSITES. Guests must collect essentials and move immediately to the house</p> <p>It is vital that the Chief Warden makes an informed decision whether to stay onsite or evacuate offsite based on the advice.</p>
<p>The Chief Warden should not wait for a direction to act if the site is threatened by bushfire; if a safe route is confirmed to be available for the duration required to complete evacuation, evacuate.</p> <p>Or</p> <p>If the availability of safe evacuation cannot be confirmed prepare to shelter as a last resort</p>	

3.4 Bushfire Incident Procedure – Evacuation Procedure

3.3.1 Alarm

- The Chief Warden will
 - Determine the emergency response.
 - Sound the Alarm 3 separate horn soundings (to alert guest to a mobile phone call to follow).
 - Alert each guest party by mobile phone.
 - Attend to each campsite to ensure the alarm is being action – Evacuate or move to dwelling for shelter

3.3.3 Evacuation

- The Chief Warden will verify the evacuation route to the evacuation destination will be safe for the required safe evacuation time (RSET).
- The Chief Warden commences the evacuation.
- Members of the ECO will evacuate the site following evacuation of all guests, visitors and other staff.

3.3.4 Arrival at Evacuation destination

The Chief Warden will determine maintain communication with guests to confirm if and when it will be safe to return to the estate, or if guests should return to their home destinations.

3.3.5 DFES advise safe to return

If the facility has been evacuated, and DFES have advised it is safe to return, the **Chief Warden** will return to make a preliminary assessment of any site damage.

If no building is damaged nor has damage occurred to the grounds and the access route was not directly affected by the fire front, or its impact was insignificant, the Chief Warden will give instructions for the facility to reopen.

3.5 Bushfire Incident Procedure – Shelter On Site

3.4.1 Alarm

- The Chief Warden will
 - Verify the evacuation route is not safe.
 - Determine the emergency response.
 - Sound the Alarm 3 separate horn soundings.
 - Contact guests by mobile phone
 - Attend campsite confirm immediate shelter to be taken at the house.

3.4.2 Assembly

- Guests are to assemble at the house
- Guests are to
 - Collect their essential belongings.
 - Bring a bath towel.
 - Move to the house.
 - Stay assembled at the house.
- All guests are to be accounted for at the safer place.
- The area around the house is to be pre-wet and the roof and gutters saturated, whilst safe to do so.
- Close all windows and doors.
- Spare towels can be wetted and used to block smoke ingress.
- Dry towels are to be retained, as a personal covering, and to filter smoke if the building must be evacuated.

3.4.4 Arrival of the Firefront

The site will be subject to an extreme heat.

The fire front (peak) will typically pass within 4 minutes; external heat will begin to decay rapidly after the passing of the fire front.

- The Chief Warden should ensure.
 - Guests are protected from radiant heat, keep away from walls windows and heat sources.
 - Guests should stay hydrated (allocate bottled water to each person).
 - Guests may use towels to filter smoke and provide protection from radiant heat.
- The Chief Warden will monitor the passage of the fire.
- The Chief Warden is to determine when evacuation from the site is available.

If the building catches fire

- A fire front passes quickly. If the building has ignited stay as long as practical because survivable conditions will quickly establish outside and continue to improve after the passing of the fire front.
- Observe the passing of the fire's peak.
- Instruct guests to cover their head and breath through the dry towel. Do not prewet the towels.
- Move guests to the irrigated and unburnt area. The coolest air is close to the ground less than 50 mm - **keep calm take shallow breaths - do not gulp hot air.**
- Keep low until comfort returns.

3.4.7 After the passing of the fire

- The chief warden will inspect the site and extinguish any small fires if safe to do so.
- Chief Warden
 - Seek DFES/Police advice on the availability for public access to the site.
 - The Chief Warden is to determine if evacuation from the site is available.

4. Recovery – following the bushfire incident

4.1 Guest wellbeing

Bushfires are terrifying. The potential for trauma will be affected by whether the site was calmly (orderly) evacuated, whether any buildings were significantly damaged, and whether shelter was taken on site.

4.2 Damaged buildings and grounds

- The Chief Warden will inspect the buildings and grounds and audit any damage observed to buildings and grounds. Damaged buildings should not be entered or disturbed and should be left (invited) for investigation by DFES.

4.3 Replacement of consumed materials

Bushfires can occur more than once in a bushfire season, and even affect the same place in a year.

Any materials consumed during a bushfire event, i.e. first aid supplies, discharged extinguishers, PPE should be replaced immediately, or before operation of the facility commences.

4.4 Debrief

The Chief Warden review the incident and identify and act upon improvement where deficiencies were found.

– **Attachment 1**

PREPAREDNESS

Action	
To be completed just prior to the bushfire season (by November 30 each year)	Confirmed Date of inspection
1. The owner must ensure any person who may supervise the site when it is operating understands the emergency plan and the operation of equipment.	
2. The Evacuation Diagram is clearly displayed (given to guests) and a copy of the Emergency Response Plan is stored at the dwelling.	
3. The Asset Protection Zone at the dwelling is compliant with the Standard for Asset Protection Zones, and the first 3 m around the base is clear of flammable materials	
4. The dwelling should be maintained: <ul style="list-style-type: none"> • Eliminate external gaps >2mm on the building surface, • Ensure all window screens have a maximum aperture of 2 mm, are undamaged, and enclose the openable portions of windows. 	
5. The vehicle directional signage is present clear and unambiguous.	
6. Fire hoses supplied for firefighting are protected from radiant heat (non-flammable fire reel cover) and in working order, capable of applying water to the external surface of the dwelling and 10 m around the dwelling.	
7. A fully stocked first aid kit is maintained at the dwelling.	
8. Bottled water 1 L per person is stored at the dwelling.	
9. Personal Protective Equipment (coveralls, gloves, goggles and smoke mask) is available at the dwelling.	

– **Attachment 2**

EMERGENCY PROCEDURE, LOCATION AND TRANSPORT DETAILS

Evacuation

The following destinations and routes may be available in a bushfire event however current public advice from Emergency WA advice should always be followed to ensure you use the safest evacuation route to the safest destination.

Off-site location (East)

Name of venue	Granville Civic Centre		
Address of venue	Weld Street, Gingin		
Nearest cross street	Jones Street	Map reference	MW23+4X Gingin
Primary route to location	Turn left onto Gingin Brook Road, left onto Brand Highway and right onto Dewar Road follow to Weld Street and onto Weld Street.		
	Total distance is 18 km.		

Required evacuation time:	30 minutes
Mobilisation	Minimum safety margin: 40 minutes (Alert and leave immediately in the opposite direction, unpacked, if the direction will not be affected).

A wide fire front from the north or south may affect Gingin Brook Road
The safety margin is additional to the time taken for a traveller to reach and clear the expected contact of the fire with Gingin Brook Road, in the chosen direction.

Off-site location (West) - If the fire is between the site and the town of Gingin, then evacuation should be taken west to Indian Ocean Drive and on to the town of Lancelin.

Name of venue	Lancelin Community Sporting Centre		
Address of venue	Lancelin Road Lancelin		
Nearest cross street	Old Ledge Point Road	Map reference	X83W+4J Lancelin
Primary route to location	Right onto Gingin Brook Road, right onto Indian Ocean Drive, left into Lancelin Road		
	Total distance is 54 km.		

Required evacuation time: Mobilisation	70 minutes
	Minimum safety margin: 40 minutes (Alert and leave immediately in the opposite direction unpacked) if the direction will not be affected).

Transportation arrangements – PRIVATE VEHICLES

Guests must have transport adequate for all members of their party.

BUSHFIRE EMERGENCY RESPONSE PLAN – FACILITIES BUILDING

Location - 45 Jakattah Road, Muckenburra.

Facility – Private camp ground

Visitors – Maximum 24

CONTACT PERSONS

Managers Cornelia Labuschagne 0415 509 490
Stephannes Labuschagne

Evacuation advice- call and confirm safe evacuation route

- DFES assistance 132 500
- Police 131 444

Chief Wardens Role

- monitoring Emergency Warnings sources (listed below).
- ensure sufficient vehicles remain onsite and available for evacuation of guests at all times during the bushfire season.
- **oversee Emergency Evacuation if safe.**
- Maintain contact with guests.

AUSTRALIAN WARNING SYSTEM



INFORMATION SOURCES

Local ABC radio	720
DFES information line	13 33 37
Police	000 (threat to life) 131 444 (advice and information)
Emergency WA	www.emergency.wa.gov.au

ADVICE - prepare to evacuate

Trigger: Fire is greater than 10 km away

An ADVICE warning has been issued across telecommunications media of an incident nearby (within 10 km).

Response:

The Chief Warden will take the following information into consideration when determining if and when to evacuate:

- The severity of the bushfire incident.
- The location and distance of the bushfire from the site.
- Approximate time for the bushfire to impact the facility.
- Emergency services advice – direct or via public information.

If the decision is made to evacuate, follow the procedure under Watch and Act.

WATCH AND ACT- Evacuate

DFES or Police have advised **EVACUATION IS REQUIRED** (Public Notice) OR smoke or fire is observed from the site and DFES or emergency services have confirmed safe evacuation is available.

Confirm with DFES or police the evacuation route which should be taken and is safe and the time available.

Response:

SOUND ALARM 3 HORNS

- **Contact guests by Mobile phone.**
- **Attend each campsite – confirm awareness.**

EVACUATE while safe

EMERGENCY - Survival

Trigger:

DFES or Police have advised evacuation by road is not safe.

Response

Follow the DFES instructions for ‘Sheltering in Your Own Home’.

SOUND ALARM 3 HORNS

- **Contact guests by Mobile phone**
- **Attend each campsite - confirm awareness.**

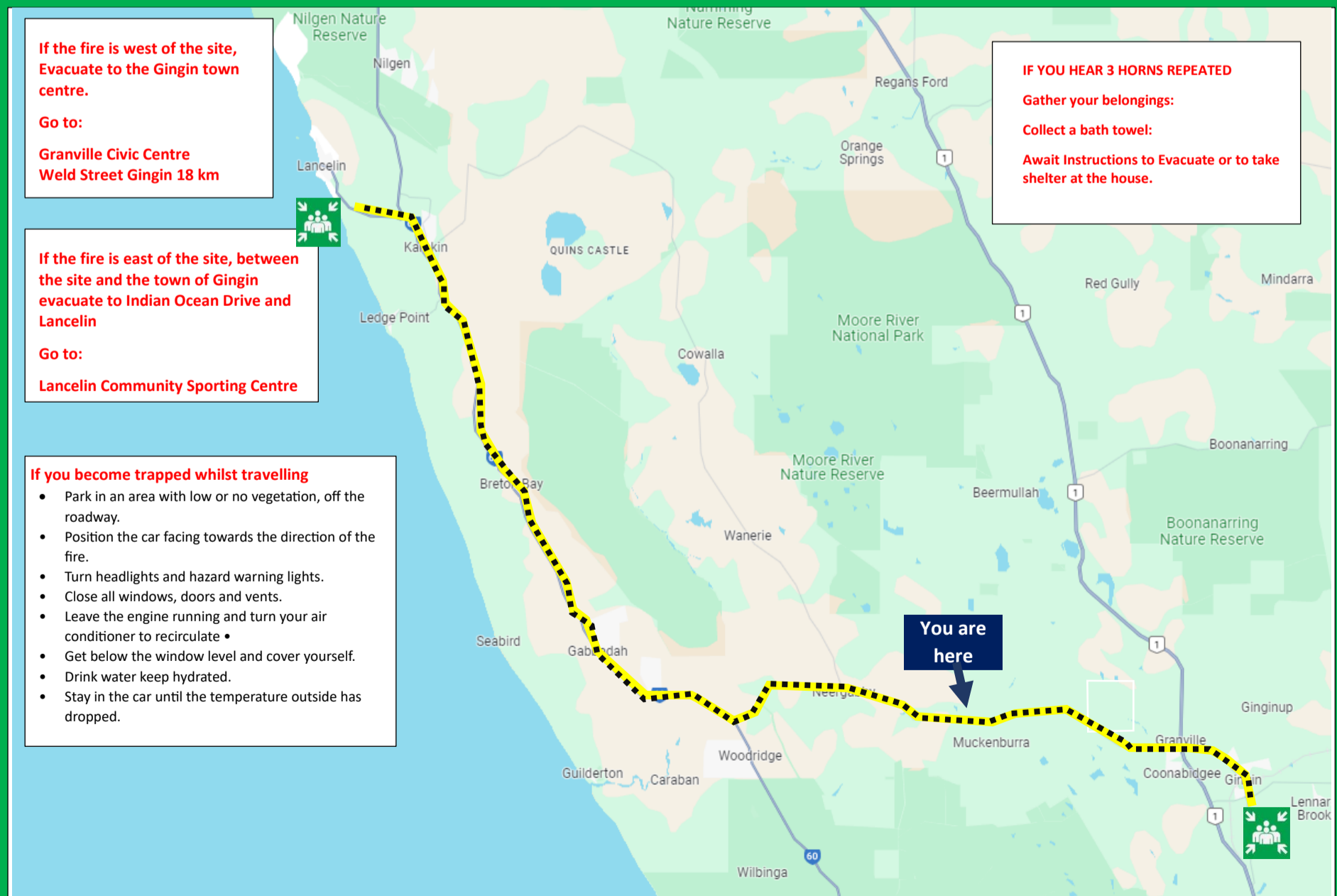
There is not time to pack the campsites

- Assemble guests at the dwelling:
 - Guests are to bring towels to be used to filter smoke and provide protection from radiant heat.
 - Close all windows and doors, use surplus towels to block smoke.
 - Close curtains and blinds to block radiant heat but monitor/observe the fire’s passing.

If the building ignites,

- Delay leaving for as long as possible, but do not stay in a burning building.
- Use towels for protect and to filter smoke, do not wet towels – go to an irrigated area or driveway
- Stay hydrated.
- Advise Police/DFES of your condition – Do you need assistance to evacuate.

EMERGENCY EVACUATION DIAGRAM



ATTACHMENT 2 - APZ Guidelines



ELEMENT 2: SITING AND DESIGN OF DEVELOPMENT

SCHEDULE 1: STANDARDS FOR ASSET PROTECTION ZONES

OBJECT	REQUIREMENT
Fences within the APZ	<ul style="list-style-type: none"> Should be constructed from non-combustible materials (for example, iron, brick, limestone, metal post and wire, or bushfire-resisting timber referenced in Appendix F of AS 3959).
Fine fuel load (Combustible, dead vegetation matter <6 millimetres in thickness)	<ul style="list-style-type: none"> Should be managed and removed on a regular basis to maintain a low threat state. Should be maintained at <2 tonnes per hectare (on average). Mulches should be non-combustible such as stone, gravel or crushed mineral earth or wood mulch >6 millimetres in thickness.
Trees* (>6 metres in height)	<ul style="list-style-type: none"> Trunks at maturity should be a minimum distance of six metres from all elevations of the building. Branches at maturity should not touch or overhang a building or powerline. Lower branches and loose bark should be removed to a height of two metres above the ground and/or surface vegetation. Canopy cover within the APZ should be <15 per cent of the total APZ area. Tree canopies at maturity should be at least five metres apart to avoid forming a continuous canopy. Stands of existing mature trees with interlocking canopies may be treated as an individual canopy provided that the total canopy cover within the APZ will not exceed 15 per cent and are not connected to the tree canopy outside the APZ.
<p>Figure 19: Tree canopy cover – ranging from 15 to 70 per cent at maturity</p>	
<p>The figure consists of three 2x2 grids of circles representing tree canopies. The first grid, labeled '15%', shows sparse, widely spaced circles. The second grid, labeled '30%', shows a moderate density of circles. The third grid, labeled '70%', shows a very dense, overlapping canopy of circles.</p>	
Shrub* and scrub* (0.5 metres to six metres in height). Shrub and scrub >6 metres in height are to be treated as trees.	<ul style="list-style-type: none"> Should not be located under trees or within three metres of buildings. Should not be planted in clumps >5 square metres in area. Clumps should be separated from each other and any exposed window or door by at least 10 metres.
Ground covers* (<0.5 metres in height. Ground covers >0.5 metres in height are to be treated as shrubs)	<ul style="list-style-type: none"> Can be planted under trees but must be maintained to remove dead plant material, as prescribed in 'Fine fuel load' above. Can be located within two metres of a structure, but three metres from windows or doors if >100 millimetres in height.



ELEMENT 2: SITING AND DESIGN OF DEVELOPMENT

SCHEDULE 1: STANDARDS FOR ASSET PROTECTION ZONES

OBJECT	REQUIREMENT
Grass	<ul style="list-style-type: none"> • Grass should be maintained at a height of 100 millimetres or less, at all times. • Wherever possible, perennial grasses should be used and well-hydrated with regular application of wetting agents and efficient irrigation.
Defendable space	<ul style="list-style-type: none"> • Within three metres of each wall or supporting post of a habitable building, the area is kept free from vegetation, but can include ground covers, grass and non-combustible mulches as prescribed above.
LP Gas Cylinders	<ul style="list-style-type: none"> • Should be located on the side of a building furthest from the likely direction of a bushfire or on the side of a building where surrounding classified vegetation is upslope, at least one metre from vulnerable parts of a building. • The pressure relief valve should point away from the house. • No flammable material within six metres from the front of the valve. • Must sit on a firm, level and non-combustible base and be secured to a solid structure.

* Plant flammability, landscaping design and maintenance should be considered – refer to explanatory notes

ATTACHMENT 3 – Access

Table 6: Vehicular access technical requirements

TECHNICAL REQUIREMENTS	1 Public roads	2 Emergency access way¹	3 Fire service access route¹	4 Battle-axe and private driveways²
Minimum trafficable surface (metres)	In accordance with A3.1	6	6	4
Minimum horizontal clearance (metres)	N/A	6	6	6
Minimum vertical clearance (metres)	4.5			
Minimum weight capacity (tonnes)	15			
Maximum grade unsealed road ³	As outlined in the IPWEA Subdivision Guidelines	1:10 (10%)		
Maximum grade sealed road ³		1:7 (14.3%)		
Maximum average grade sealed road		1:10 (10%)		
Minimum inner radius of road curves (metres)		8.5		

Notes:

¹ To have crossfalls between 3 and 6%.

² Where driveways and battle-axe legs are not required to comply with the widths in A3.5 or A3.6, they are to comply with the Residential Design Codes and Development Control Policy 2.2 Residential Subdivision.

³ Dtps must have no more than a 1 in 8 (12.5% -7.1 degree) entry and exit angle.

ATTACHMENT 4 – Firebreak Notice



Firebreak Order & Bush Fire Information

BUSH FIRE SEASON 2023-24



**REPORT ALL
FIRES TO 000**

This Notice is to all landowners and occupiers within the Shire of Gingin and is issued pursuant to Section 33 of the *Bush Fires Act 1954*.

Bush Fires Act 1954 - Your Responsibilities

This Firebreak Order applies to all owners and occupiers of land within the Shire of Gingin (the Shire). As a measure to assist in the control of bush fires and pursuant to the powers contained in Section 33 of the *Bush Fires Act 1954*, you have a legal requirement to carry out fire prevention works on your property.

Your property must be compliant from **1 November** and be maintained through to **15 May** each year.

This Firebreak Order details what you must do to comply. Failure to comply may result in a modified penalty and or the Shire entering your land to install firebreak works at your expense.

Compliance inspections will commence on **1 November 2023**.

This Firebreak Order and information is effective from **1 October 2023**. All previous Firebreak Orders are hereby cancelled.



Bush Fires Act 1954 - Your Responsibilities

Firebreak Compliance Requirements

What you need to do

Under Section 33 of the *Bush Fires Act 1954*, it is your legal responsibility to install and maintain a firebreak in accordance with the specifications listed below for your land category. Compliance is required by **1 November** and must be maintained until **15 May** each year.

What is a firebreak?

A firebreak is a strip of land that has been cleared of all trees, shrubs, grass, and other flammable materials providing a 'fuel free' area for emergency vehicles to gain safe access to your property, and prevents fire travelling under vehicles or underfoot. **Flammable material** is any vegetation (bushes, grasses, trees, mulch, leaves and green waste), object, or material that is likely to catch fire.

All land LESS than 4,000m² (0.4 hectares) - Owners/Occupiers of vacant land are required to:

- Ensure the entire vacant block of land is cleared of weeds or long grass by slashing, mowing, or other means to a height no greater than 50mm, and keep maintained in this state.
- Where a property is affected by an approved bush fire management plan, property owners must still comply with all requirements in this Firebreak Order and with any additional requirements outlined within that plan.

All land GREATER than 4,000m² (0.4 hectares) - Owners/Occupiers of developed and vacant land are required to:

- Install a 3-metre-wide by 4-metre-high trafficable firebreak as close as possible to the inside perimeter of the land, free of flammable material, with all overhanging vegetation trimmed back to provide clear emergency vehicle access.
- Install and maintain a 20 metre APZ (Asset Protection Zone) surrounding all buildings, large haystacks and/or fuel dumps.
- Where a property is affected by an approved bush fire management plan, property owners must still comply with all requirements in this Firebreak Order and with any additional requirements outlined within that plan.

Plantation land with an area LESS than 30,000m² (3 hectares) -

Owners/Occupiers of developed and vacant land are required to:

- Install a 10-metre-wide by 4-metre-high trafficable firebreak as close as possible to the inside perimeter of the land, free of flammable material, with all overhanging vegetation trimmed back to provide clear emergency vehicle access.

Plantation land with an area GREATER than 30,000m² (3 hectares) -

Owners/Occupiers of developed and vacant land are required to:

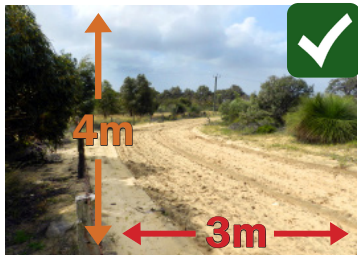
- Install a 15-metre-wide by 4-metre-high trafficable firebreak as close as possible to the inside perimeter of the land, free of flammable material, with all overhanging vegetation trimmed back to provide clear emergency vehicle access.

AND

- For compartments not larger than 300,000m² (30 hectares) install a 6-metre-wide by 4-metre-high trafficable firebreak as close as possible to the inside perimeter of the land, free of flammable material, with all overhanging vegetation trimmed back to provide clear emergency vehicle access.
- You must also maintain a water supply of 25,000L for every 50 hectares of plantation or part thereof. Water sources are required to be positioned to provide a maximum 20 minute refill turn-around from anywhere within the plantation. The water source point must have a hardstand area for heavy trucks to park on whilst drawing water.

Any owner and/or occupier who engages a contractor to undertake firebreak works on their behalf is responsible for ensuring that the completed works meet the requirements of this Firebreak Order.

Example of a Compliant Firebreak



Firebreak Compliance Requirements

Variation to the Firebreak Order

If you are unable to clear a firebreak in the manner specified in this Firebreak Order, you may apply for a variation requesting permission to install the firebreak in an alternative position or take alternative action to comply with the Firebreak Order.

An application for a variation to the Firebreak Order must be made no later than **15 October** in any given year.

You may apply to vary your firebreak if:

- It would be impractical or dangerous to construct a firebreak on your land due to its landscape.
- A normal firebreak would encroach on a reticulated lawn. You need to keep the lawn green and maintained to a height less than 25mm from 1 November to 15 May each year.
- A normal firebreak would encroach on reticulated feed paddocks. You need to keep the paddocks green and maintained to a height of less than 50mm from 1 November to 15 May each year.
- A normal firebreak would encroach on reticulated garden beds, orchards or other sustained cultivation. You need to ensure clear trafficable access for emergency vehicles to your buildings and land.
- Trees were previously planted where the firebreak would normally be placed, so an alternative firebreak is required.



Variation to the Firebreak Order

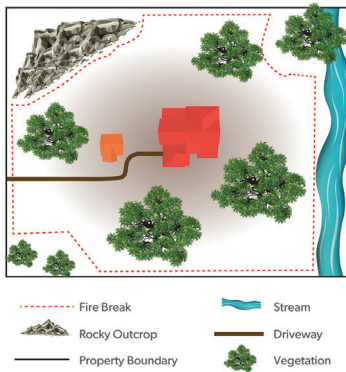
To apply for a variation:

- Download a Firebreak Order Variation Form from gingin.wa.gov.au/fire-information

OR

- Visit the Shire of Gingin Office or Lancelin Office and request a hard copy.

Below is an example of a Firebreak Variation.



Once you have submitted your Firebreak Order Variation to the Shire, it will be assessed by a Ranger who will then contact you. If approved, all firebreak conditions will be as per your approved Variation. If your Variation is not approved or your previous Variation is cancelled, you must comply with the requirements of this Firebreak Order within 14 days.



Asset Protection Zone

Installing and maintaining an Asset Protection Zone is one of the most effective things you can do to reduce risks to your property in the event of a bush fire.

An Asset Protection Zone is an area extending for at least 20 metres around a building on all sides where there is a low fuel loading area.

Reducing vegetation, rubbish, log stacks and anything that can burn will increase its chances of surviving a bushfire.

You should prepare your property to survive a fire, even if your plan is to leave.



Image above supplied by DFES

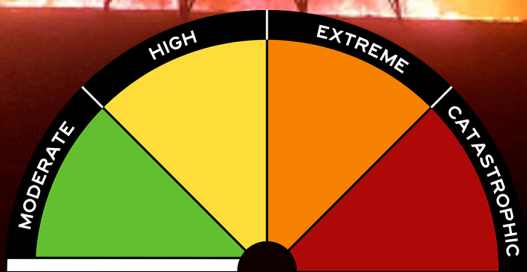
Are your firebreaks compliant throughout the bush fire season?

Rainfall can cause your firebreaks to regenerate with fresh green growth. Your firebreaks must remain compliant throughout 1 November to 15 May.

Make sure your firebreaks are bare of any vegetation/debris during this time to avoid infringement.

Asset Protection Zone

Fire Danger Ratings



Moderate: Plan and prepare.

High: Be ready to act.

Extreme: Take action now to prepare your life and property.

Catastrophic: For your survival, leave bushfire risk areas.

Burning Periods

The Burning Periods below specify the times of the year when burning is permitted or not. The Shire however, may vary these Burning Periods depending on the weather or other conditions.

RESTRICTED

Permits required

* See next page for garden refuse and fire pit permissions.

**1 October to
30 November (midnight)**

PROHIBITED

No burning permitted

**1 December to
31 March (midnight)**

RESTRICTED

Permits required

* See next page for garden refuse and fire pit permissions.

**1 April to 15 May
(midnight)**

UNRESTRICTED

No permits required

**16 May to
30 September (midnight)**

HELP OUR FIRE FIGHTERS

Register ANY burn you plan to undertake at ANY time of the year with DFES on (08) 9395 9209.

By notifying DFES, you will assist us in preventing any unnecessary call-outs to our local fire fighters when members of the public call 000.

Permissions During Restricted Burning Period

Burning garden refuse or operating a fire pit is permissible WITHOUT A PERMIT during the Restricted Burning Period, ensuring the following is adhered to:

- The fire is lit between 6pm and 11pm and is completely extinguished before midnight on the same day.
- The garden refuse must be on the ground or in a fire pit, and be no more than 1 metre wide and 1 metre high.
- There is no flammable material (other than that being burned) within 5 metres of the fire at any time (garden refuse).
- At least one person is always present at the site of the fire until it is completely extinguished.
- Only one heap may be burnt at one time.
- Let your neighbours know you will be burning material (eg, garden refuse).
- Keep a hose or spray pack on hand to dampen down fierce fires (eg, garden refuse).

Examples below of a fire pit and garden refuse pile 1 metre wide by 1 metre high acceptable for burning without a permit between 6pm and 11pm during Restricted Burning Period.



Burning Permit

To apply for a permit:

- Visit the Shire's website gingin.wa.gov.au and click on 'Fire Information'

OR

- Contact your Local Fire Control Officer

OR

- Scan the QR code below.



Please ensure that you read all the conditions on your permit before you start to burn.

Bush Fire Service WA - Become a Volunteer

West Australians in rural and pastoral areas rely heavily on Bush Fire Brigades for protection against the threat and devastation of fire.

Over 19,000+ bush fire service volunteers protect WA from bush fires through fire prevention and risk management, fire suppression and fire safety education.

To become a volunteer or a support member with your local Bush Fire Brigade please contact Phil Barrett, Chief Bush Fire Control Officer for the Shire of Gingin, on 0408 943 576 during Shire office hours or your local Bush Fire Brigade Captain.

Firebreak Contractors

Any owner and/or occupier who engages a contractor to undertake firebreak works on their behalf is responsible for ensuring that the completed works meet the requirements of this Firebreak Order.

Failure to install firebreaks on your property may result in the Shire engaging a contractor to complete the required works at your expense.



FIREBREAK CONTRACTORS

Bushfire Season 2023/24

Disclaimer: Contractor details are included at the Contractor's request and should not be taken as endorsement by the Shire of Gingin of any particular contractor.

CONTRACTOR	CONTACT	AREA
Anspach Agricultural Contracting	9655 7074	All areas
Colin Santoro	0427 751 213 or csantoro3@bigpond.com	All areas
Exterior Enhancement	0419 962 431	All areas
Graham Knight	0427 982 134 or 9655 1094	Seaview Park & Ledge Point
Kim Gray	0408 321 955 or 9575 2426	Gingin & surrounds
Limestone Park Earthmoving	0418 908 538	All areas
Luke Crowe	0427 386 952 or 9575 2339 or melcrowe98@yahoo.com.	Gingin & surrounds
Mick Basile	0427 553 032	Ocean Farm & Seaview Park
MR Mulching	0400 852 477 or 9655 1296	All areas
Paddy Murphy	0419 900 471 or 9575 7537	Gingin West & Neergabby
Perth's Bobcat Buddy	0467 570 060	Woodridge
Richard Dean	9577 1677	Woodridge
Charlie George	0428 632 451 or chazz55@bigpond.com	Seaview Park & surrounds

Fire Control Officers List

A Bushfire Control Officer (BFCO) is a delegated representative of the Shire responsible for administering provisions of the *Bush Fires Act 1954*.

Please see below for the list of Fire Control Officers in the Shire of Gingin.



FIRE CONTROL OFFICERS

Bushfire Season 2023/24

To obtain a Fire Permit during Restricted Burning Periods:

- ⇒ Go to gingin.wa.gov/fire-information to apply online, or
- ⇒ Contact your local Fire Control Officer below

CHIEF BUSHFIRE CONTROL OFFICER / COMMUNITY EMERGENCY SERVICES MANAGER

Phillip Barrett	All Areas	0408 943 576
------------------------	-----------	--------------

DEPUTY CHIEF BUSHFIRE CONTROL OFFICERS

Wayne Fewster	Beermullah	0428 754 017
Murray Hyne	Gingin Town Site	9575 2250 or 0407 380 708
James Morton	Gingin West/Neergabby/ Woodridge	0427 141 078
Gary Barrett	Ledge Point	9655 1456 or 0419 961 048

FCO NAME	AREA	CONTACT No
Brad Alp	Beermullah	0427 476 529
David Roe	Beermullah	0427 754 059
Gary Brown*	Cowalla	9655 3142 or 0407 384 357
Jenifer French*	Cowalla	0417 171 425
Peter Crowe	Gingin Area	0427 385 287
Craig Hyne	Gingin Area	0448 825 833
James Morton	Gingin West/Woodridge	0427 141 078
Tom Kusters	Lancelin/Seaview Park	0438 943 156
Colin Walker*	Lancelin/Seaview Park	0404 600 530
Brendon Ladner	Seabird/Guilderton/ Sovereign Hill/Redfield Park/Ledge Point	0410 540 190
Rod Croucher	Ocean Farm	0427 085 499
Mike Regan	Ocean Farm	0400 852 477
Allister Butcher	Red Gully	0409 591 244
Ranger Services (all areas)		9575 5140

* Permits Only

Fire Bans & Their Differences

We've all heard that there are different types of fire bans but do you know the difference?

Under the *Bush Fires Act 1954* local governments and DFES have the power to place a fire ban. In the Shire of Gingin there are 2 x types of bans that you will hear about most commonly which are:

Total Fire Bans - are set by the **Department of Fire & Emergency Services (DFES)**. Generally they will set this ban the day before it is due to commence and it will usually be put in place from midnight that night until midnight the following night.

Harvest, Hot Works & Vehicle Movement Bans - are set by the **Shire of Gingin**. The Shire will impose this type of ban when the predicted weather conditions (as classified by the Bureau of Meteorology) are rated High, Extreme or Catastrophic.

BOTH BANS SHARE THE FOLLOWING CONDITIONS:

- Open fires for the purpose of cooking, camping or outdoor entertainment including fire pits, bonfires and garden refuse are **prohibited**.
- Undertaking of hot works such as metal work, grinding, welding and gas cutting in the open air are **prohibited**, except for business and industry if regulatory conditions are met.
- Undertaking of off-road activity using a four-wheel drive, quad bike, motorcycle, bobcat or similar vehicle are **prohibited**, except for agricultural purposes or by business and industry if regulatory conditions are met.
- Can be placed at any time of year.

The main difference between the 2 types of bans is that the Harvest, Hot Works & Vehicle Movement Ban also prohibits the use of harvest vehicles for harvesting operations which is not prohibited if there is only a Total Fire Ban in place.

Either one or both of these bans may be active at the same time.

A fire ban will generally be enacted during the hotter months of the year (usually the Prohibited or Restricted Burning Periods) but if the Fire Danger Rating (FDR) is high enough during the Unrestricted Burning Period (June - September) then a ban can also be placed during that period if deemed necessary by the Shire or DFES.

It is **YOUR RESPONSIBILITY** to find out if there is a ban of either kind in place. Subscribe to the Shire's SMS service to receive free notifications when either type of ban is placed. To subscribe or for more information visit gingin.wa.gov.au/fire-breaks-bans-information.



Infringements & Penalties

In accordance with the *Bush Fires Act 1954*, penalties apply for the following offences and infringements:

\$250.00

S.17(12) - Setting fire to bush during Prohibited Burning Times

\$250.00

S.18 - Offences relating to burning of bush

\$100.00

S.24B(3)(a) - Failure to produce permit to Burn

\$100.00

S.24B(3)(b) - Failure or refusal to identify person who issued permit to burn

\$250.00

S.27(1) - Offences relating to the operation of tractors, or self-propelled harvesters, engines, machinery and vehicles during the prohibited and restricted burning times

\$250.00

S.28(1) - Failure of occupier of land to extinguish a bush fire burning on that land

\$250.00

S.33(3) - Failure of owner or occupier of land to comply with a notice requiring him to take action to plough or clear firebreaks or take other action to prevent the outbreak or spread of bush fires

\$250.00

R.15(2) - Applying to another bush fire control officer for permit where permit already refused or granted subject to special conditions

\$250.00

R.15B(1) - Failure to comply with conditions in regulation 15B in relation to the burning of the bush

\$250.00

R.39CA(5) - Failure to comply with directions of bush fire Control Officer

Infringements & Penalties



For more firebreak and bush fire information visit:
gingin.wa.gov.au/fire-information

FIRES AND EMERGENCIES CALL 000

**TUNE INTO ABC LOCAL RADIO (630AM and 558AM)
FOR CURRENT EMERGENCY INFORMATION**

Current alerts, warnings, and other important information available at the following websites:

- abc.net.au/radio
- emergency.wa.gov.au
- dfes.wa.gov.au
- dfes.wa.gov.au/totalfirebans

For more information please contact the Shire of Gingin:

Gingin Administration Centre

7 Brockman St,
Gingin WA 6503
T: (08) 9575 5100

Lancelin Office

255 Vins Way,
Lancelin WA 6044
T: (08) 9575 5155

E: mail@gingin.wa.gov.au

W: gingin.wa.gov.au

 facebook.com/ShireOfGingin



ATTACHMENT 5 – References

GENERAL REFERENCES

Blanchi R., Whittaker J., Haynes K., Leonard J., Opie K., Holland M., Dreyfuss S., 2015 *Sheltering practices during bushfire*, CSIRO Land and Water Report to the Emergency Management Victoria Natural Disaster Resilience Grants Scheme.

SA Department of Environment and Natural Resources, Government of South Australia, 2012 *Overall Fuel Hazard Guide for South Australia*

Standards Australia, *Australian Standard AS 3745:2010 Planning for emergencies in facilities*

Standards Australia, *AS 3959:2018 Construction of buildings in bushfire-prone areas*, Sydney

Western Australian Planning Commission (WAPC) 2019 *A Guide to developing a Bushfire Emergency Evacuation Plan* October 2019.

Western Australian Planning Commission (WAPC) *Position Statement: Planning in bushfire prone areas – Demonstrating Element 1: Location and Element 2: Siting and design* November 2019

WA Department of Planning Land and Heritage 2016, *Visual Guide for bushfire risk assessment in Western Australia*

Western Australian Planning Commission (WAPC) 2015, *State Planning Policy 3.7 Planning in Bushfire Prone Areas*, Western Australian Planning Commission, Perth, Perth

Western Australian Planning Commission and Department of Fire and Emergency Services (WAPC and DFES) 2017, *Guidelines for Planning in Bushfire Prone Areas Version 1.4*, Western Australia

Online references

Office of Bushfire Risk management (OBRM), Map of Bush Fire Prone Areas,
< <https://maps.slip.wa.gov.au/landgate/bushfireprone/> >