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	ər	
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 A\$3959 method 1 has been used to calculate the BAL)?		
(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)?		
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	Yes	N
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)?	Yes	N
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Bushfire Management Plan (Statement)

Lot 4 (81) Canning Road, Kalamunda JULY 2024





LIMITATIONS STATEMENT

This Bushfire Management Statement has been prepared in support a Scheme amendment for additions and extensions private recreation, consulting rooms, and restaurant/café at Lot 4 (81) Canning Road, Kalamunda. The site is located within the City of Kalamunda (decision maker).

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Version Control

Lot 4 (81) Canni	Lot 4 (81) Canning Road, Kalamunda						
Version	Date	Author					
V1	24 June 2024	Anthony Rowe	Client review				
V2	8 July 2024	Anthony Rowe	submission				

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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

OThe scope of the assessment 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, have 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

that

Anthony Rowe Level 3 - BPAD36690 Principal Bushfire Consultant I Town Planner BPAD Accredited Practitioner Level 3 | PIA Registered Practicing 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.



ASSESSMENT STATEMENT

Preface

A Scheme amendment is proposed to enable additional land use to facilitate additions and extensions for private recreation, consulting rooms, and restaurant/café at Lot 4 (81) Canning Road, Kalamunda. The site is located within the City of Kalamunda (decision maker).

The site is **partially** within a declared bushfire prone area.

State Planning Policy 3.7 *Planning in Bushfire Prone Areas* (**'SPP 3.7**') and the bushfire protection criteria described in the Guidelines v1.4, apply to the assessment of development (Planning and Development Act 2005) that is located within the Bushfire Prone Area.

The purpose of this Statement is to determine the Bushfire Attack Level at the site and demonstrate the ability for the intended land use to achieve compliance with the bushfire protection criteria.

Proposal details

The proposal is to facilitate additional land uses, for 'Recreation- Private', 'Consulting Rooms' and 'Restaurant/Cafe' at the site being Lot 4 (81) Canning Road, Kalamunda.

The site is 0.32 ha, a triangular shape and faces onto Canning Road (south boundary) and Collins Road, north northwest boundary and residential land use at the east boundary.

The site is cleared of native vegetation and contains a large single building that is used as a gymnasium. The vehicle access is from Collins Road and the car park is north of the building. A Scheme Amendment is a strategic level document, for the purpose of SPP 3.7

The site adjoins developed land with the exception of forest 91 m to the northeast and upslope of the building. The forest extends > 1 km from the site and is characterised by fragmented areas of residential living and retained reserves.

The site is within a built out urban area with access to reticulated power and water. Hydrants are located in Canning Road and Collins Road within 100 m from the site.

The nearest fire brigade (Kalamunda Fire Station) is located at 38 Central Rd, Kalamunda, 700 m north west to the site.

Application of 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*.

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**.

State Planning Policy 3.7, and section 4 identifies the policy is to be read in conjunction with certain document that includes the Deemed Provisions contained in the Planning and Development Local Planning Schemes Amendment Regulation 2015. The relevant provision from Deemed Provisions (Schedule 2) is Part 10A of the *Planning and Development (Local Planning Scheme) Regulations 2015*.

The proposal is only for a scheme amendment for the additional uses. Such additional use may or may not result in additions/extensions to the existing building. However, considerations are being given to the proposed use and future additions.



Additions and extensions

The term construction is explicitly provided at Part 10A (specific to the Part), but it exempts alterations and extensions of a building, with no limit on the size.

"78A Terms used

construction of a building includes the erection, assembly or placement of a building but does not include the renovation, alteration, extension, improvement or repair of a building;"

"78B. Application of Part to development

- (1) This Part does not apply to development unless the development is ----
 - (a) the construction or use, or construction and use, of a single house or ancillary dwelling on a lot or lots with a total area of 1 100 m 2 or more; or
 - (b) the construction or use, or construction and use, of ----
 - (i) a habitable building other than a single house or ancillary dwelling; or

(ii) a specified building."

Future development at the site if it is an addition or an extension to the existing building will not be affected by the policy measures described in SPP 3.7

Whilst development, not a "construction" is exempt under the Planning and Development Act 2005, the Building Act 2011 independently applies bushfire construction requirements where development is within the map of the Bushfire Prone Area (OBRM 2021).

The Building Act 2011 applies the National Construction Code 2019 (NCC 2022 applicable from 1 May 2025) to class 1-3 and 10a buildings, and from 1 May 2005, bushfire construction standards for certain class 9 buildings, healthcare, childcare, schools and residential care buildings. For other building classes, a bushfire construction standard can be volunteered, but should provide no lesser protection than the construction requirements for the building class under the Building Act 2011 and the NCC.

The Building Regulations 2012 at Regulation 31 BA Applicable building standards for buildings and incidental structures in bush fire prone areas (class 1-3) provides exemption and limitations from the application of construction standards applicable to a declared bushfire prone area.

"excluded building work means building work that is the renovation, alteration, extension, improvement or repair of a relevant building if —

or

(b) the renovation, alteration, extension, improvement or repair does not increase the risk of ignition from bushfire attack for the relevant building;"

The risk of ignition from bushfire attack for the relevant building is increased if:

- more vulnerable elements are applied to the building envelope, alterations, which are a lower level of bushfire resistance than had been authorised. This may include alterations changing materials specified for BAL 29 to a lower construction standard, such as certain timbers, wall constructions, exposed floors, new openings.
- the addition is a lesser bushfire standard than the building it is attached to, and it is not constructed to a standard that is commensurate to the BAL at its location. An addition that is located closer to classified vegetation than the existing building may be an increased risk of ignition.

The proposed private recreation, consulting rooms, and restaurant/café, and are not within a class (industrial) that may be declared a 'high risk' by SPP 3.7.

Medical consulting rooms are a class 5 unless including treatments that leave patients unconscious.

The proposed development additions are not classed as vulnerable; visitors are expected to be familiar with the area.



Environmental considerations

No clearing of regulated vegetation is proposed.

Bushfire assessment results

A Bushfire Attack Level assessment following Method 1 AS 3959:2018, and using an FFDI of 80, has been undertaken and provided in Attachment 1.

The assessment has applied the methodologies described in AS 3959:2018, and the DPLH Visual guide for bushfire risk assessment in Western Australia. The assessment has followed the presentation of information described in the Guidelines and promoted by Fire Protection Association Australia 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 site is within a residential built out area. A bushfire Attack Level Assessment is attached together with a BAL contour Map that displays the BAL Level across the site.

The closest classified vegetation to the building is located 91 m, and 61 m from the northeast corner to forest located upslope from the site.

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.

The closest point of the site to classified vegetation is 61 m (BAL 12.5) and the closest point of the building (north elevation) is 91 m from forest (BAL 12.5). The southern elevation of the existing building and the site is > 100 m from forest and BAL Low.

Identification of bushfire hazard issues

The site, and the existing building, is partially BAL 12.5 (north) and BAL Low (south Canning Road). The site may be subject to low levels of radiant heat< 4 kWm² (at the building) and serviceable for evacuation, and attendance by emergency services, throughout a bushfire event.

The site may be subject to ember attack, with the potential to ignite flammable materials, and if located near the building can expose the building to a secondary and direct flame contact. This can be avoided by site management. The site may also be affected by smoke and is would be recommended to be evacuated in a bushfire event; to avoid guest exposure to smoke.

Any addition or extension will not affect the current risk to the existing building, if constructed to a similar standard as the existing building. Any redevelopment of the site is a BAL level lower than the maximum acceptable level of BAL 29 and will not require the removal of any vegetation on site or external to the site (i.e. by agreement) to achieve a BAL level not exceeding BAL 29.

The redevelopment of the site will not affect regulated vegetation.



Assessment against the Bushfire Protection Criteria (Guidelines v.1.4)

The consideration of a Scheme Amendment requires satisfaction that the future development of the land is capable of compliance with the bushfire protection criteria in the Guidelines.

An assessment of the site with the relevant acceptable solutions is provided below

Acceptable solution	Method of Compliance
Element 1: Location	
Intent: To ensure that strategic planning proposals, sul located in areas with the least possible risk of bushfire infrastructure	
A1.1 Development location	The site is within a residential built out area.
The strategic planning proposal, subdivision, and development application is located in an area that is or will, on completion, be subject to either a moderate or low bushfire hazard level, or BAL–29 or below.	Development at the site will, on completion, be subject to either a moderate or low bushfire hazard level, or BAL–29 or below.
Element 2: Siting and Design	
Intent: To ensure that the siting and design of develop	ment minimises the level of bushfire impact.
A2.1 Asset Protection Zone	No habitable building is sited to exceed BAL 12.5.
Every habitable building is surrounded by, and every proposed lot can achieve, an APZ depicted on submitted plans, which meets the following requirements:	
 Width: Measured from any external wall or supporting post or column of the proposed building, and of sufficient size to ensure the potential radiant heat impact of a bushfire does not exceed 29kW/m² (BAL-29) in all circumstances. 	
 Location: the APZ should be contained solely within the boundaries of the lot on which the building is situated, except in instances where the neighbouring lot or lots will be managed in a low-fuel state on an ongoing basis, in perpetuity (see explanatory notes). 	
• Management: the APZ is managed in accordance with the requirements of 'Standards for Asset Protection Zones.' (see Schedule 1).	
Defendable space : A three-metre-wide area adjacent to a building that is kept free from vegetation (excluding ground covers and grass) and provides a relatively safe space from which firefighters and appropriately prepared homeowners may defend the property.	



Acceptable solution	Method of Compliance		
Element 3: Vehicular Access Intent: To ensure that the vehicular access serving a su a bushfire event.	bdivision/development is available and safe during		
A3.1 Public roads The minimum requirements under this acceptable solution are applicable to all proposed and existing public roads. Public roads are to meet the minimum technical requirements in Table 6, Column 1. The trafficable (carriageway/pavement) width is to be in accordance with the relevant class of road in the Local Government Guidelines for Subdivisional Development (IPWEA Subdivision Guidelines), Liveable Neighbourhoods, Austroad standards and/or any applicable standards for the local government area.	The site has frontage to both Canning Road and Collins Road; both are sealed roads compliant with IPWEA requirements.		
A3.2a Multiple access routes Public road access is to be provided in two different directions to at least two different suitable destinations with an all-weather surface (two-way access). If the public road access to the subject site is via a no-through road which cannot be avoided due to demonstrated site constraints, the road access is to be a maximum of 200 metres from the subject lot(s) boundary to an intersection where two-way access is provided.	Canning Road and Collins Road are public through roads providing at least two suitable destinations in two (opposite) different directions		
A3.2b Emergency access way	The proposal has direct access to a public road.		
A3.3 Through-roads	A3.3 applies to a subdivision, where new roads are to be created, but does not apply to a development application		
A3.4a Perimeter roads	A3.4a applies to a subdivision but does not apply to a development application		
A3.4b Fire service access route	A3.4b applies to a subdivision but does not apply to a development application.		
A3.5 Battle-axe access legs	A3.5 applies to a subdivision, to create a battle axe, but does not apply to a development application		

O envision

Acceptable solution	Method of Compliance				
 A3.6 Private driveways There are no private driveway technical requirements where the private driveway is: within a lot serviced by reticulated water; no greater than 70 metres in length between the most distant external part of the development site and the public road measured as a hose lay; and accessed by a public road where the road speed limit is not greater than 70 km/h. 	No part of the site is more than 70 m from a public road. The technical requirement for private driveways is not applicable.				
Element 4: Water Intent: To ensure that water is available to enable people, property and infrastructure to be defended from bushfire.					
A4.2 Provision of water for firefighting purposes Where a reticulated water supply is existing or proposed, hydrant connection(s) should be provided in accordance with the specifications of the relevant water supply authority.	The site has access to a Water Corporation WA reticulated water supply. Hydrants are located in Canning Road and Collins Road				



Additional Bushfire Management Strategies

No Additional Bushfire Management Strategies/provisions are required for guidance in the Scheme amendment. Future development is subject to the routine provisions applicable by SPP 3.7 (siting) and the NCC (construction).

Spatial representation of the bushfire management strategies

No additional bushfire management strategies are proposed that should be reflected in a spatial representation for guidance.

Synthesis

The site is not restricted by bushfire requirement. A replacement building unless it is class 1-3 or a childcare centre will not be subject to any siting requirements under the planning and development Act or construction standards under the building code.

Should the site seek development for either a class 1-3 or certain class 9 building, the are no siting requirements applicable under the Guidelines v1.4, and any development will be required to satisfy the construction requirements under the Building Act 2011.

The site may also be suitable to accommodate vulnerable land uses (i.e. childcare) and/or residential/commercial accommodation. It has a low bushfire attack level and suitable vehicle access routes to evacuate throughout a bushfire event to a destination outside of the area affected by the bushfire.

No additional provisions are required in the Scheme amendment to address the bushfire risk at the site. The site is less than BAL 29 and already compliant with the requirements for Vehicle Access and Water at site.



ATTACHMENT 1 – BUSHFIRE ATTACK LEVEL ASSESSMENT











PLOT:1								
Vegetation Classification			Slope					
Excludable - 2.2.3.2(e) Non Vegetated Areas			Cl-+					
Excludable - 2.2.3.2(f) Low Threat Vegetation			Flat					
Observation/Justification for classification								
Fuel Hazard	Surface	Near s	urface	Elevated	Bark			
Low	✓	۰	/	\checkmark	✓			
Moderate								
High								
Very High								
Extreme								
Vegetation Description	n (AS 3959)							
 (e) Non-vegetated areas, that is, areas permanently cleared of vegetation, including waterways, exposed beaches, roads, footpaths, buildings and rocky outcrops. (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. Post development Low threat								
Photo 1.	Photo 1.1 Garden east of site Photo 1.2 Garden east of site							
					The Light			
Photo 2		Photo 1.4 View south west						



		PLC	DT:1					
Vegetation Classification			Slope					
Excludable - 2.2.3.2(e) Non Vegetated Areas			- 1 ·					
Excludable - 2.2.3.2(f) Low Threat Vegetation			Flat					
Observation/Justification for classification								
Fuel Hazard	Surface	Near s	urface	Elevated	Bark			
Low	\checkmark	```	/	\checkmark	✓			
Moderate								
High								
Very High								
Extreme								
Vegetation Description	n (AS 3959)							
includes grassland lawns, golf course orchards, banana	led as low threat due to managed in a minimal f s (such as playing areas a plantations, market garc strips and windbreaks.	uel conditio and fairways	n, mangrove s), maintaine	s and other saline wetla d public reserves and pa	ands, maintained arklands, vineyards,			
Photo 1.5 Isolated trees < 0.25 ha Photo 1.6 North east elevation, towards threat								
Phot	o 1.7 Urban west		F	Photo 1.8 Adjoining resid	dential north			

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PLOT:2							
Vegetation Classification			Slope				
Class A Forest - Open forest A-03			Flat				
Observation/Justification for classification							
Fuel Hazard	Surface	Near s	urface	Elevated	Bark		
Low		~	/	\checkmark	\checkmark		
Moderate	\checkmark						
High							
Very High							
Extreme							
Vegetation Description				y of sclerophyllous low t			
callitris. Includes eucalypt plantations. Post development Retained Photos 2.1 and 2.2 (outside of site). Low Threat – Phots 2.3 - 2.4 hardstand and buildings Image: Image							
FILOLO 2.1 VIEW S	south grassland north of	SILE	PHOL	to 2.2 View north (from r	loi (il boullual y)		
Photo 2.3	Fonkin Hwy Road verge		Pł	noto 2.4 From Collins Roa	ad to the east		

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Assessment Outputs

The Determined Bushfire Attack Levels are based upon the conditions at the time of inspection and applying the methodology described in AS 3959:2018.

The Indicative BAL is the expected BAL at completions. In this instance the whole site will be low threat at completion, the resulting BAL level is derived from the presence of classified vegetation upon adjoining land that is assumed to remain.

Table: 2.1 Existing building

Plot no.	Vegetation Classification	Effective slope	Separation m	BAL	Required for BAL 29
1	Excluded	N/A	N/A	N/A	
2	Forest	Level/Upslope	91	BAL - Low	21 m

BAL construction levels in context (from page 20 Guidelines v1.4)



Direct exposure to flames, radiant heat and embers from the fire front.

Increasing ember attack and windborne debris, radiant heat between 19 kW/m2 and 29 kW/m2. between 29 kW/m2 and 40 kW/m2. Exposure to flames from fire front likely.

Increasing ember attack and windborne debris, radiant heat betw 12.5 kVV/m2 and 19 kW/m2

below 12.5 kW/m2.

There is insufficient risk to warrant any specific construction requirements, but there is still some risk.