Bushfire management plan/Statement addressing the Bushfire Protection Criteria coversheet

Bushfire management plan version number: Rev 1	Site address:	Lot 200 Foster Way, Jarrah	hdale - Mill Managers House	e	
Date of site visit (if applicable): Day 15th Month April Year 2015 Report author: Tim Briggs 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: 40353 Accreditation expiry: Month January Year 2021 Bushfire management plan version number: Rev 1 Bushfire management plan date: Day 11th Month June Year 2015 Client/business name: Entire Fire Management Yes 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)? Ves Unavoidable development (in BAL-40 or BAL-FZ) Strategic planning proposal (including rezoning applications) Minor development (in BAL-40 or BAL-FZ) 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 gover or the WAPC) refer the proposal to DFES for comment. Why has if been given one of the above listed classifications (E.g. Considered vulnerable land-use as the development is for accommodation of the elderiy, etc.)?	Site visit: Yes	No No			
Report author: Tim Briggs WA BPAD accreditation level (please circle): Not accredited			5th	Month April	Year 2019
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: BPAD accreditation number: Bushfire management plan version number: Bushfire management plan date: Bushfire protection citier Fire Management Yes 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)? Ves Unavoidable development (in BAL-40 or BAL-72) Strategic planning proposal (including rezoning applications) Minor development (in BAL-40 or BAL-72) High risk land-use Vulnerable land-use Vulnerable land-use None of the above 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 gover 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.)?		(,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Not accredited Level 1 BAL assessor Level 2 practitioner Level 3 practitioner f accredited please provide the following. BPAD accreditation number: 40353	Report author:	Tim Briggs			
Faccredited please provide the following. BPAD accreditation number: 40353	WA BPAD accre	ditation level (please c	ircle):		
Accreditation expiry: Month January Year 2021 Bushfire management plan version number: Rev 1 Bushfire management plan date: Day 11th Month June Year 2011 Client/business name: Entire Fire Management Yes That she BAL been calculated by a method other than method 1 as outlined in AS3959 flick no if AS3959 method 1 has been used to calculate the BAL)? Adve any of the bushfire protection criteria elements been addressed through the use of a performance principle (flick no if only acceptable solutions have been used to address all of the bushfire protection criteria elements)? Yes Unavoldable development (in BAL-40 or BAL-FZ) Strategic planning proposal (including rezoning applications) Winor development (in BAL-40 or BAL-FZ) High risk land-use Vulnerable land-use Volne of the above None of the above None of the above or the valve of the above listed classifications (E.g. Considered vulnerable land-use as the development is for accommodation of the elderly, etc.)?	Not accredited	Level 1 BAL ass	sessor 🖊 Level 2	practitioner Level 3 pra	actitioner
Sushfire management plan version number: Rev 1 Sushfire management plan date: Day 11th Month June Year 201: Client/business name: Entire Fire Management Yes Has the BAL been calculated by a method other than method 1 as outlined in A\$3959 fitck no if A\$3959 method 1 has been used to calculate the BAL)? Have any of the bushfire protection criteria elements been addressed through the use of a berformance principle (flick no if only acceptable solutions have been used to address all of the bushfire protection criteria elements)? Solutions the proposal any of the following (see SPP 3.7 for definitions)? Ves Unavoidable development (in BAL-40 or BAL-FZ) Strategic planning proposal (including rezoning applications) Winor development (in BAL-40 or BAL-FZ) High risk land-use Volnerable land-use None of the above None of the above None of the above 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.)?	f accredited ple	ease provide the follow	ving.		
Bushfire management plan date: Day 11th Month June Year 2015 Client/business name: Entire Fire Management Yes 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)? Strategic planning proposal (including rezoning applications) Winor development (in BAL-40 or BAL-FZ) High risk land-use Vulnerable land-use Vulnerable land-use Note: Only if one (or more) of the above answers in the tables is yes should the decision maker (e.g. local gover 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.)?	3PAD accreditat	tion number: 40353	Accreditation ex	piry: Month January	Year 2020
Client/business name: Entire Fire Management Yes das the BAL been calculated by a method other than method 1 as outlined in A\$3959 flick no if A\$3959 method 1 has been used to calculate the BAL)? dave 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 pushfire protection criteria elements)? Yes Inavoidable development (in BAL-40 or BAL-FZ) Inavoidable development (in BAL-40 or BAL-FZ) Inavoidable development (in BAL-40 or BAL-FZ) Information deve	Sushfire manage	ement plan version nun	mber: Rev 1		
Adas 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)? Index 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 pushfire protection criteria elements)? Index any of the following (see SPP 3.7 for definitions) and the protection criteria elements)? Yes Unavoidable development (in BAL-40 or BAL-FZ) Strategic planning proposal (including rezoning applications) Winor development (in BAL-40 or BAL-FZ) High risk land-use Vulnerable land-use Note: Only if one (or more) of the above answers in the tables is yes should the decision maker (e.g. local gover or the WAPC) refer the proposal to DFES for comment.	Bushfire manage	ement plan date: Day	11th	Month June	Year 2019
das 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)? dave 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)? In avoidable development (in BAL-40 or BAL-FZ) Interval development (in BAL-40 or BAL-	Client/business r	name: Entire Fire Manag	jement		
das 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)? dave 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)? In avoidable development (in BAL-40 or BAL-FZ) Interdigic planning proposal (including rezoning applications) Minor development (in BAL-40 or BAL-FZ) Idigh risk land-use Volne 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 gover 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.)?					
Actick no if AS3959 method 1 has been used to calculate the BAL)? Indexe 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 pushfire protection criteria elements)? Indexe proposal any of the following (see SPP 3.7 for definitions)? Indexe proposal any of the following (see SPP 3.7 for definitions)? Indexe proposal any of the following (see SPP 3.7 for definitions)? Indexe proposal (in BAL-40 or BAL-FZ) Indexe planning proposal (including rezoning applications) Indexe planning proposal (including rezoning applications) Indexe planning proposal (including rezoning applications) Index planning proposal (Yes N
performance principle (tick no if only acceptable solutions have been used to address all of the bushfire protection criteria elements)? Yes Unavoidable development (in BAL-40 or BAL-FZ) Strategic planning proposal (including rezoning applications) Winor development (in BAL-40 or BAL-FZ) High risk land-use Vulnerable land-use Volne 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 gover 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.)?					
Unavoidable development (in BAL-40 or BAL-FZ) Strategic planning proposal (including rezoning applications) Minor development (in BAL-40 or BAL-FZ) High risk land-use Vulnerable land-use None of the above None of the above Only if one (or more) of the above answers in the tables is yes should the decision maker (e.g. local gover 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.)?			used to calculate the Bi	AL)?	
Strategic planning proposal (including rezoning applications) Minor development (in BAL-40 or BAL-FZ) High risk land-use Vulnerable land-use None of the above None of the above Only if one (or more) of the above answers in the tables is yes should the decision maker (e.g. local gover 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.)?	performance pri	bushfire protection crit	teria elements been ac	ddressed through the use of a	the
Minor development (in BAL-40 or BAL-FZ) 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 gover 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.)?	performance pri pushfire protecti	bushfire protection crit inciple (tick no if only c ion criteria elements)?	teria elements been ac acceptable solutions ho	ddressed through the use of a ave been used to address all of	
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 gover 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.)?	performance pri pushfire protecti s the proposal a	bushfire protection critinciple (tick no if only cition criteria elements)? The protection criteria elements in the following (see	teria elements been acacceptable solutions has see SPP 3.7 for definitions)?	ddressed through the use of a ave been used to address all of	
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 gover 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.)?	performance pri pushfire protecti s the proposal a Unavoidable de	bushfire protection critinciple (fick no if only of ion criteria elements)? The protection criteria elements (see evelopment (in BAL-40 criteria)	teria elements been acceptable solutions has seen acceptable solutions has seen acceptable solutions and seen acceptable solutions acceptable solutions acceptable solutions acceptable solution acceptable solutions acceptable solutions acceptable solution acceptable	ddressed through the use of a ave been used to address all of	
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 gover 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.)?	performance pri bushfire protecti s the proposal a Unavoidable de Strategic planni	bushfire protection critinciple (tick no if only of ion criteria elements)? In yof the following (see evelopment (in BAL-40 of the proposal (including	teria elements been acceptable solutions has seen acceptable solutions has seen acceptable solutions has seen acceptable solutions acce	ddressed through the use of a ave been used to address all of	
Note: Only if one (or more) of the above answers in the tables is yes should the decision maker (e.g. local gover 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.)?	performance pri bushfire protecti s the proposal a Unavoidable de Strategic planni Minor developm	bushfire protection critinciple (tick no if only colon criteria elements)? In yof the following (see evelopment (in BAL-40 colon proposal (including nent (in BAL-40 or BAL-F	teria elements been acceptable solutions has seen acceptable solutions has seen acceptable solutions has seen acceptable solutions acce	ddressed through the use of a ave been used to address all of	
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.)?	s the proposal a Unavoidable de Strategic plannii Winor developm	bushfire protection critinciple (tick no if only colon criteria elements)? In yof the following (see evelopment (in BAL-40 colong proposal (including nent (in BAL-40 or BAL-Fise	teria elements been acceptable solutions has seen acceptable solutions has seen acceptable solutions has seen acceptable solutions acce	ddressed through the use of a ave been used to address all of	Yes
development is for accommodation of the elderly, etc.)?	performance pri bushfire protecti s the proposal a Unavoidable de Strategic planni Minor developm High risk land-us Vulnerable land	bushfire protection criticiple (tick no if only coion criteria elements)? In y of the following (see evelopment (in BAL-40 or BAL-Fise	teria elements been acceptable solutions has seen acceptable solutions has seen acceptable solutions has seen acceptable solutions acce	ddressed through the use of a ave been used to address all of	Yes
Considered Vulnerable Land Use in accordance with SPP 3.7. To be used as Holiday Accommodation	coerformance pricoushfire protections the proposal and unavoidable destrategic planning winor developmental land-us vulnerable land None of the about the proposal and the land None of the about the land Note: Only if or	bushfire protection critinciple (tick no if only of inciple (tick no if only of ion criteria elements)? Inny of the following (see evelopment (in BAL-40 of Including Incit (in BAL-40 or BAL-Fise I-use The (or more) of the about	teria elements been acceptable solutions has acceptable solutions has a SPP 3.7 for definitions)? or BAL-FZ) rezoning applications) FZ)	ddressed through the use of a ave been used to address all of	Yes
	performance pribushfire protections the proposal at Unavoidable de Strategic planning Minor developm High risk land-us Vulnerable land None of the about the West Why has it been	bushfire protection critical inciple (tick no if only continued in criteria elements)? In yof the following (see evelopment (in BAL-40 or BAL-Fine ent (in BAL-40 or BAL-Fine element) The correct of the above given one of the above given one of the above given one of the above	teria elements been acceptable solutions had acceptable solutions acceptable solutions. The solution of th	ddressed through the use of a ave been used to address all of	Yes N
	performance price bushfire protections the proposal at Unavoidable de Strategic planning Minor development is the proposal at Unavoidable de Strategic planning Minor development is the Unavoidable land None of the about the Walley Why has it been development is the Unavoidable land	bushfire protection critical inciple (tick no if only continued in criteria elements)? In yof the following (see evelopment (in BAL-40 or BAL-Fine in BAL	deria elements been acceptable solutions had acceptable solutions had acceptable solutions had acceptable solutions had acceptable solutions acceptable solutions acceptable solutions. The same solutions are solved answers in the table of the elderly, etc.)?	es is yes should the decision ma	Yes N
The information provided within this bushfire management plan to the best of my knowledge is true and correct:	performance pricushfire protections the proposal and unavoidable destrategic planning winor development is the proposal and unavoidable destrategic planning winor development is the proposal and unavoidable development is the proposal and unavoidable development is the protection of the proposal and unavoidable development is the protection of the prot	bushfire protection critical inciple (tick no if only continued in criteria elements)? In yof the following (see evelopment (in BAL-40 or BAL-Fine in BAL	deria elements been acceptable solutions had acceptable solutions had acceptable solutions had acceptable solutions had acceptable solutions acceptable solutions acceptable solutions. The same solutions are solved answers in the table of the elderly, etc.)?	es is yes should the decision ma	Yes N

Signature of report author

Ordinary Council Meeting - 17 May 2021

Date 11/06/2019



Bushfire Management Plan

Prepared for Lot 200 Foster Way, Jarrahdale

Table of Contents

- 1: Proposal Details
- 2: Environmental Considerations
- 2.1: Native Vegetation modification and clearing
- 2.2: Re-vegetation / Landscape Plans
- 3: Bushfire Assessment Results
- 3.1: BAL Assessment
- 4: Identification of Bushfire Hazard Issues
- 5. Assessment against the Bushfire Protection Criteria
- 5.1: Compliance Table
- 5.2: Additional management strategies
- 6: Responsibilities for Implementation and Management of the Bushfire Measures

List of figures

- Figure 1: Copy of strategic planning proposal
- Figure 2: Map of Bushfire Prone Areas for subject site
- Figure 3: Spatial representation of the bushfire management strategies

List of appendices

- A1: APZ Asset Protection Zone Guidelines
- A2: Vehicular access technical requirements
- A3: Shire of Serpentine-Jarrahdale Firebreak and Fuel Hazard Reduction Notice 2018/19



Document control

Report Version	Purpose	Author/reviewer and accreditation details	Date Submitted
Revision 0	For Approval and Implementation	Tim Briggs 40353	11/06/2019
		Gavin Fancote 37922	

Disclaimer

This report is based on the site conditions surveyed at the time the document was prepared. The assessment of the bushfire threat made in this report is made in good faith based on the information available to Entire Fire Management at the time.

The recommendations contained in this report are considered to be minimum standards and they do not guarantee that a building or assets will not be damaged in a bushfire. In the making of these comments and recommendations it should be understood that the focus of this document is to minimise the threat and impact of a bushfire.

Finally, the implementation of the adopted measures and recommendations within this report will contribute to the amelioration of the potential impact of any bushfire upon the development, but they do not and cannot guarantee that the area will not be affected by bushfire at some time.

Section 1: Proposal Details

This BMP has been developed in support of a development application for the refurbishment and new use of the existing Mill Managers House located at Lot 200 Foster Way, Jarrahdale. The subject lot size is 19.3ha in size and is located in a cleared area of the property that is predominantly Jarrah Woodland and Forest.

Lot 200 is located centrally in the town of Jarrahdale however the property is surrounded on all sides by bushfire prone vegetation with exception to residential development on the southern edge of the property. The bushfire risk in this area is extreme.

In accordance with SPP 3.7 this development is considered to be Vulnerable Risk land use and is accompanied with an Emergency Evacuation Plan provided as a separate document and a bushfire risk assessment has been prepared.



FIGURE 1: Copy of the Planning Proposal

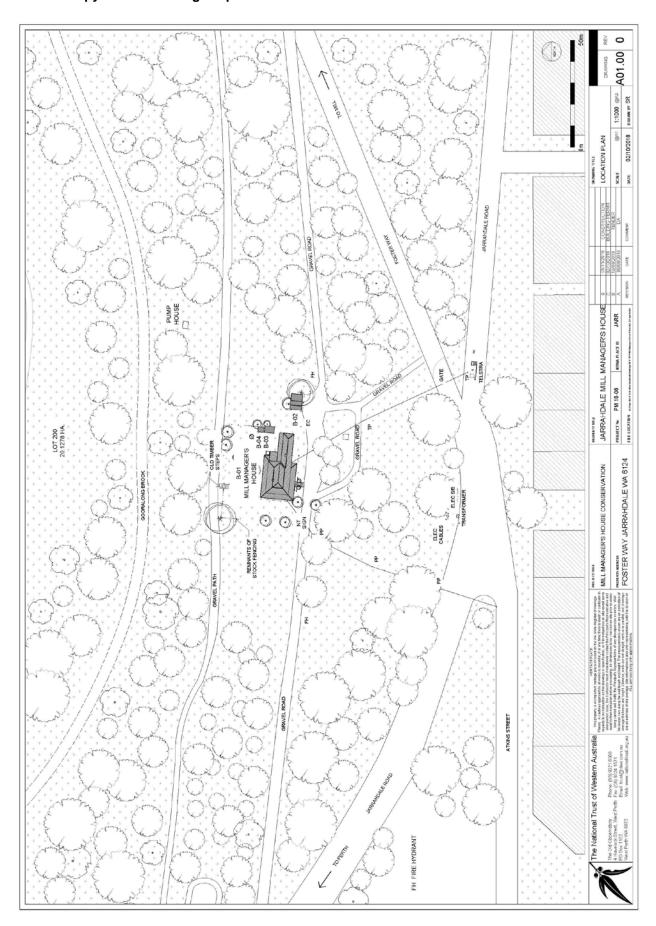




FIGURE 2: Map of Bushfire Prone Areas for Subject Site



Section 2: **Environmental Considerations**

The proposed development site has been assessed for environmental values using the national database set www.nationalmap.gov.au to ensure that any clearing of native vegetation for bushfire protection does not adversely affect recognised conservational elements.

Datasets explored within NationalMap include the following:

Department of Biodiversity, Conservation and Attractions:

- Ramsar Sites (DBCA-010)
- Threatened and Priority Flora (DBCA-036)
- Threatened Ecological Communities (DBCA-038)

Department of Planning:

Bush Forever Areas 2000 (DOP-071)

Department of Water and Environmental Regulation

Clearing Regulations – Environmentally Sensitive Areas (DWER-046)



Subsection 2.1: Native Vegetation – Modification and Clearing

Whilst there is vegetation that will require modification to achieve a suitable BAL rating through the installation of an Asset Protection Zone, the Australian Government National Map indicates there are no conservational values recognised within the local area of the subject property.

Subsection 2.2: Re-vegetation/Landscape Plans

N/A

Section 3: Bushfire Assessment Results

A Bushfire Attack Level (BAL) Assessment has been prepared to support the proposed development application.

The following BAL Assessment has been prepared in accordance with AS 3959 and provides evidence and justification gathered during a site assessment that was conducted to determine the potential BAL rating associated with the proposed development.





AS 3959 Bushfire Attack Level (BAL) Assessment Report

Site Details			
Address: Lot 200 Foster Way (Mill Managers House)			
Suburb:	Jarrahdale	Postcode:	6124
Local Government Area:	Shire of Serpentine-Jarrahdale		
Description of Building Works:	Refurbishment of existing building		

Report Details			
Report Number:BAL 2-1427Report Revision:1			
Assessment Date:	15/04/2019	Report Date:	15/04/2019

BPAD Accredited Practitioner Details				
Name:	Tim Briggs			
Company Details:	Entire Fire Management	I hereby declare that I am a BPAD		
	t I have undertaken the assessment of ed site and determined the Bushfire	accredited bushfire practitioner.		
Attack Level stated above in accordance with the requirements of AS 3959 -2009 (Method 1)		Accreditation No. 40353		
		Signature:		
		Authorised Practitioner Stamp		

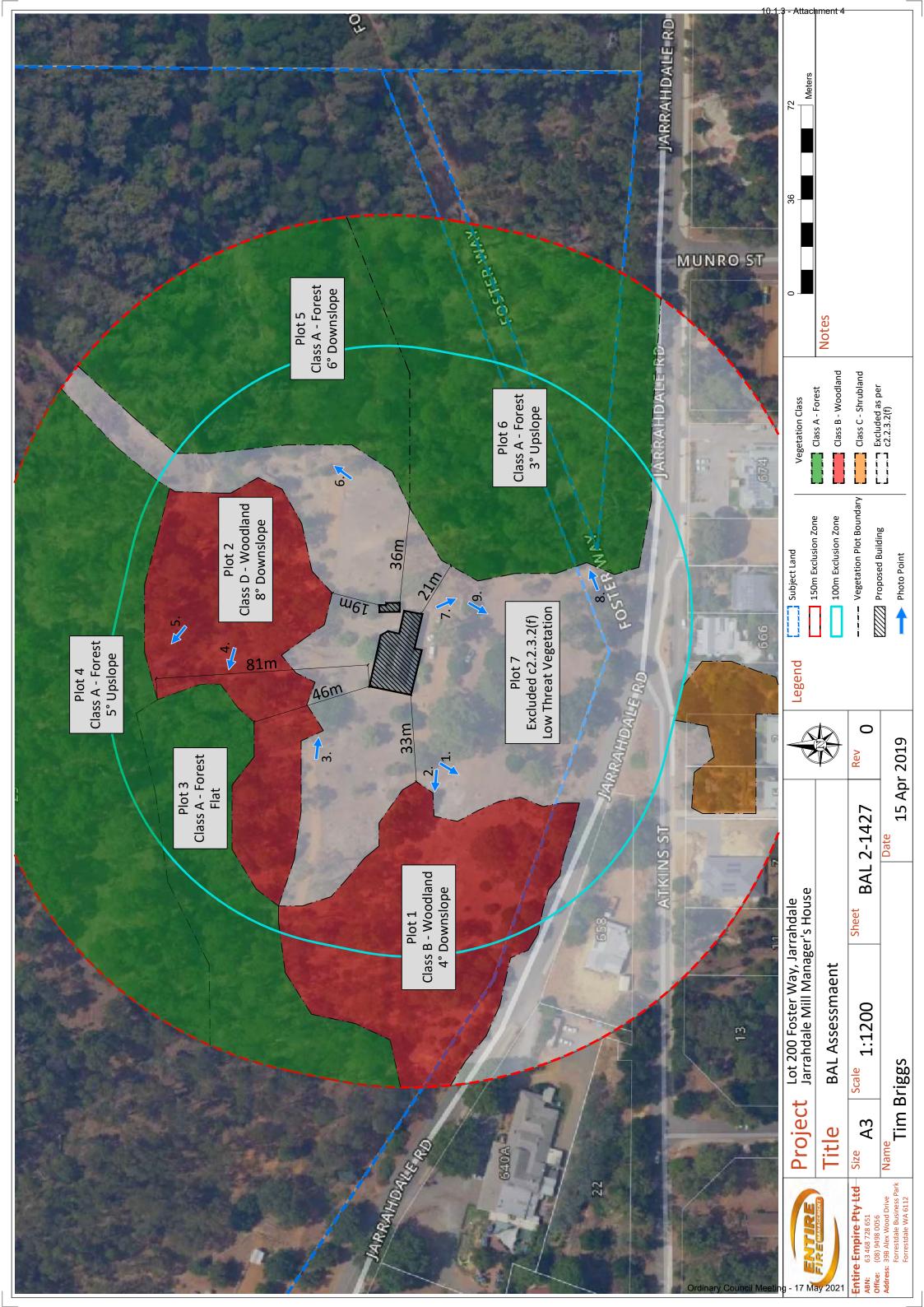
Reliance on the assessment and determination of the Bushfire Attack Level contained in this report should not extend beyond a period of 12 months from the Assessment date. If the assessment was completed more than 12 months ago, it is recommended that the validity of the determination be confirmed with the Accredited Practitioner and where required an updated report issued.

Site Assessment & Site Plans

(Attached as page 2 of this report)

The assessment of this site / development was undertaken on the above-mentioned date by an Accredited BPAD Practitioner for determining the Bushfire Attack Level in accordance with AS 3959 - 2009 Simplified Procedure (Method 1).

Page 1







Vegetation Classification

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2009. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID: Plot no: 1

Vegetation Classification or Exclusion Clause

Class B - Woodland

Description

Mature Eucalypt trees on boundary and re-vegetated area within.

No ground or mid-storey vegetation.



Photo ID: Plot no: 1

Vegetation Classification or Exclusion Clause

Class B - Woodland

Description

Mature Eucalypt trees on boundary and re-vegetated area within.

No ground or mid-storey vegetation.



Photo ID: Plot no: 2

Vegetation Classification or Exclusion Clause

Class B - Woodland

Description

Jarrah/Marri woodland.

Trees 10-12m in height with no ground or mid-storey vegetation.



Page 3





Vegetation Classification (continued)

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2009. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID: 4 Plot no: 3

Vegetation Classification or Exclusion Clause

Class A - Forest

Description

Jarrah-Marri dominated area with dense Cycad mid-storey along Gooralong Brook.



Photo ID: 5 Plot no: 4

Vegetation Classification or Exclusion Clause

Class A - Forest

Description

Jarrah/Marri dominated vegetation with medium density shrub understorey.



Photo ID: 6 Plot no: 4

Vegetation Classification or Exclusion Clause

Class A - Forest

Description

Jarrah/Marri dominated vegetation with Pine trees included also.



Page 4





Vegetation Classification (continued)

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2009. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID: 7 Plot no: 6

Vegetation Classification or Exclusion Clause

Class A - Forest

Description

Dense Jarrah/Marri dominated vegetation.



Photo B Plot no: 6

Vegetation Classification or Exclusion Clause

Class A - Forest

Description

Dense Jarrah/Marri dominated vegetation.



Photo ID: 9 Plot no: 7

Vegetation Classification or Exclusion Clause

Excluded c2.2.3.2(f)

Description

Low Threat Vegetation







Relevant Fire Danger Index

The fire danger index for this site has been determined in accordance with Table 2.1 or otherwise determined in accordance with a jurisdictional variation applicable to the site.

Fire Danger Index FDI 80 Table 2.4.3

Potential Bushfire Impacts

The potential bushfire impact to the site / proposed development from each of the identified vegetation plots are identified below.

Plot	Vegetation Classification	Effective Slope	Separation (m)	BAL
1	Class B - Woodland	4 deg. downslope	33m	19
2	Class B - Woodland	8 deg. downslope	19m	40
3	Class A - Forest	Flat	46m	12.5
4	Class A - Forest	5 deg. upslope	81m	12.5
5	Class A - Forest	6 deg. downslope	36m	29
6	Class A - Forest	3 deg. upslope	21m	29

Table 1: BAL Analysis

Determined Bushfire Attack Level (BAL)

The Determined Bushfire Attack Level (highest BAL) for the site / proposed development has been determined in accordance with clause 2.2.6 of AS 3959-2009 using the above analysis.

Determined Bushfire Attack Level	BAL - 40
----------------------------------	-----------------

Notes:
The determined BAL rating is BAL-40 due to the vegetation in Plot 2.
There is sufficient area on the property to reduce the BAL rating to a suitable level through the
installation of an Asset Protection Zone. Refer to BMP 2-1452 for details.



Section 4: Identification of Bushfire Hazard Issues

N/A

Section 5: Assessment Against the Bushfire Protection Criteria

The proposed plan for development at Lot 200 Foster Way has been assessed against WAPC's Guidelines for Planning in Bushfire Prone Areas - Bushfire Protection Criteria. The table on the following pages assess each element of the criteria and indicates how compliance can be achieved for each.



Bushfire protection	Method of Compliance	Proposed bushfire
criteria	Acceptable solutions	management strategies
Element 1: Location	A1.1 Development location	The proposed development is located sufficiently to be provided with an area at BAL-29 or below.
Element 2: Siting and design	A2.1 Asset Protection Zone	An Asset Protection Zone must be installed in accordance with Figure 3: Spatial Representation of Bushfire Management Strategies and Appendix 1: APZ Standards.
Element 3: Vehicular access	A3.1 Two access routes.	Jarrahdale Road provides access to multiple alternative locations.
	A3.2 Public road	All existing roads meet the minimum technical requirements set out in column 1 of Appendix 2: Vehicular access technical requirements.
	A3.3 Cul-de-sac (including a dead-end-road)	N/A
	A3.4 Battle-axe	N/A
	A3.5 Private driveway longer than 50 m A private driveway is to meet detailed requirements (refer to the Guidelines for detailed private driveway requirements).	The existing driveway exceeds 50m in length. The driveway must meet the minimum requirements as set out in column 3 of Appendix 2: vehicular Access Technical Requirements.
	A3.6 Emergency access way	N/A
	A3.7 Fire service access routes (perimeter roads)	N/A



	A3.8 Firebreak width	3m wide in accordance with the Shire of Serpentine-Jarrahdale Firebreak and Fuel hazard Reduction Notice.
Element 4: Water	A4.1 Reticulated areas	N/A
	A4.2 Non-reticulated areas	A 10,000L Fire Water Tank must be installed on the property and provided with a hardstand of 17.5m x 17.5m within 3 metres of the outlet.
	A4.3 Individual lots within non-reticulated areas (Only for use if creating 1 additional lot and cannot be applied cumulatively)	N/A



FIGURE 3: Spatial Representation of the Bushfire Management Strategies

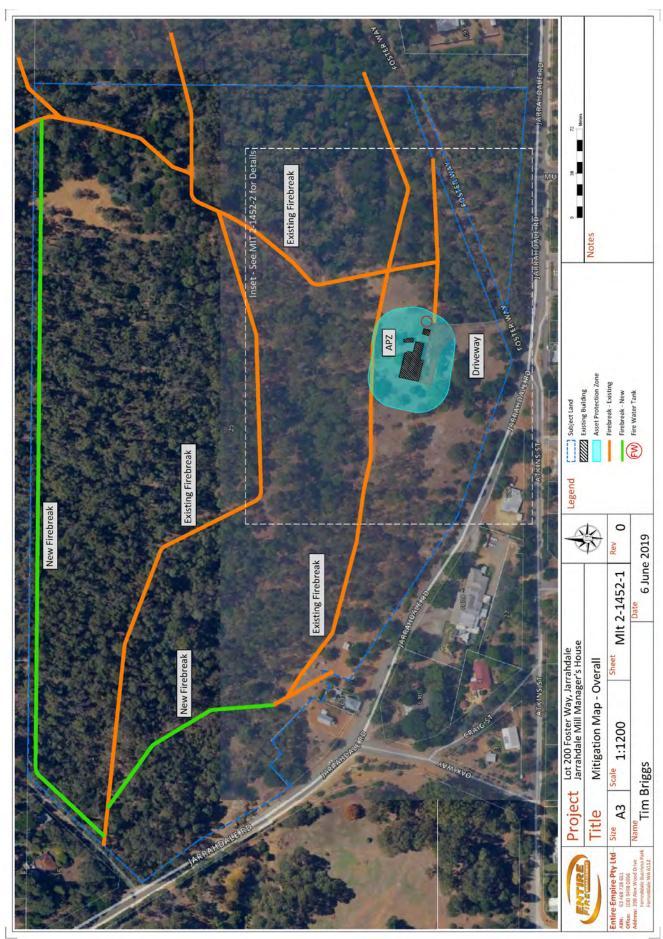
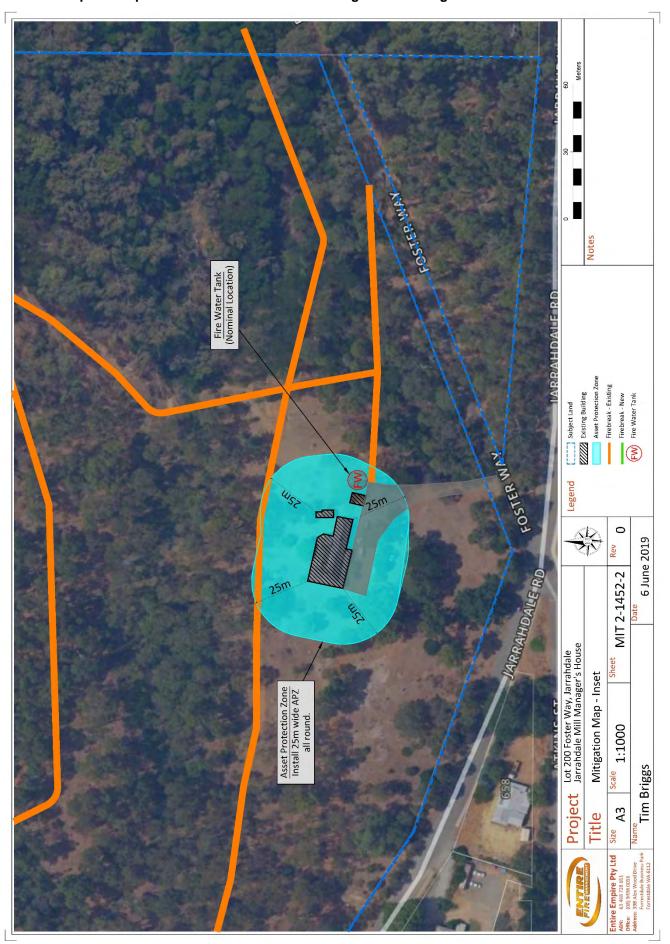




FIGURE 4: Spatial Representation of the Bushfire Management Strategies - Inset





Section 6: Responsibilities for Implementation & Management of the Bushfire Measures

DE	DEVELOPER/SUBDIVIDER – PRIOR TO ISSUE OF CERTIFICATE OF TITLES FOR NEW LOTS				
No.	Implementation action				
1	Landowner - Property owner shall install an Asset Protection Zone in accordance with Figure 3: Spatial Representation of the Bushfire Management Strategies and to comply with the Asset Protection Zone standards provided in Appendix 1 of this BMP.				
2	A dedicated 10,000L Fire Water Tank to be installed on the property and provided with a hardstand of 17.5m x 17.5m within 3 metres of the outlet.				
3	Firebreaks shall be installed/maintained in accordance with the Annual Shire of Serpentine-Jarrahdale Firebreak and Fuel Reduction Notice.				
4	Notification is to be placed on title of the lot that the land is within a designated bushfire prone area and is subject to an existing Bushfire Management Plan.				

	LANDOWNER/OCCUPIER - ONGOING MANAGEMENT		
No.	Management action		
1	Landowner - Property owner shall maintain the Asset Protection Zone in accordance with the standards provided in Appendix 1 of this BMP.		
2	Firebreaks shall be maintained in accordance with the Annual Shire of Serpentine-Jarrahdale Firebreak and Fuel Reduction Notice.		

Appendices

A1: APZ - Asset Protection Zone Guidelines

A2: Vehicular Access Technical Documents

A3: Shire of Serpentine-Jarrahdale Firebreak and Fuel Hazard Reduction Notice 2018/19



A1: APZ - Asset Protection Zone Guidelines

The siting and design of the strategic planning proposal, subdivision, or development application, including roads, paths, and landscaping, is appropriate to the level of bushfire threat that applies to the site. That it incorporates a defendable space and significantly reduces the heat intensities at the building surface thereby minimising the bushfire risk to people, property, and infrastructure, including compliance with AS 3959-2009 if appropriate.

To achieve compliance with this Element the following acceptable solution must be met.

A2.1 Asset Protection Zone (APZ)

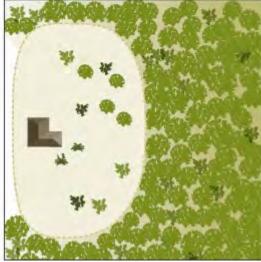
Every habitable building is surrounded by, and every proposed lot can achieve, an APZ depicted on submitted plans, which meets the following requirements:

- 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 output 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 circumstances where the neighbouring lot or lots will be managed in a low-fuel state on an ongoing basis, in perpetuity.
- Management: the APZ is managed in accordance with the requirements of 'Standards for Asset Protection Zones'.

Hazard on one side APZ



Hazard on three sides APZ



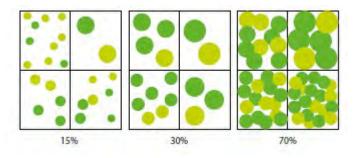


Design of Asset Protection Zone

The proportion of the APZ reflects the distance from the hazard to ensure adequate separation is achieved.

Standards for Asset Protection Zones

- Fences: within the APZ are constructed from non-combustible materials (e.g. iron, brick, metal post and wire). It is recommended that solid or slatted non-combustible perimeter fences are used.
- Objects: within 10 metres of a building, combustible objects must not be located close to the vulnerable parts of the building i.e. windows and doors.
- Fine Fuel Load: combustible dead vegetation matter less than 6 millimetres in thickness reduced to and maintained at an average of two tonnes per hectare.
- Trees (>5 metres in height): trunks at maturity should be a minimum distance of 6 metres from all elevations of the building, branches at maturity should not touch or overhang the building, lower branches should be removed to a height of 2 metres above the ground and or surface vegetation, canopy cover should be less than 15% with tree canopies at maturity well spread to at least 5 metres apart as to not form a continuous canopy.



Tree Canopy Cover – Ranging from 15 to 70 percent at maturity

- Shrubs (0.5 metres to 5 metres in height): should not be located under trees or within 3 metres of buildings, should not be planted in clumps greater than 5m² in area, clumps of shrubs should be separated from each other and any exposed window or door by at least 10 metres. Shrubs greater than 5 metres in height are to be treated as trees.
- Ground Covers (<0.5 metres in height): can be planted under trees but must be properly maintained to remove dead plant material and any parts within 2 metres of a structure, but 3 metres from windows or doors if greater than 100 millimetres in height. Ground covers greater than 0.5 metres in height are to be treated as shrubs.
- Grass: should be managed to maintain a height of 100 millimetres or less.

Reference; WAPC Guidelines for Planning in Bushfire Prone Areas - V1.3



A2: Vehicular Access Technical Requirements

TECHNICAL REQUIREMENTS	1 Public road	2 Cul-de-sac	3 Private driveway	4 Emergency access way	5 Fire service access routes
Minimum trafficable surface (m)	6*	6	4	6*	6*
Horizontal clearance (m)	6	6	6	6	6
Vertical clearance (m)	4.5	N/A	4.5	4.5	4.5
Maximum grade <50 metres	1 in 10	1 in 10	1 in 10	1 in 10	1 in 10
Minimum weight capacity (t)	15	1.5	15	15	15
Maximum crossfall	1 in 33	1 in 33	1 in 33	1 in 33	1 in 33
Curves minimum inner radius (m)	8.5	8.5	8.5	8.5	8.5
*Refer to E3.2 Public roads: Trafficable	surface		•		



Lot 200 Forster Way, Jarrahdale Mill Managers House Emergency Evacuation Plan

Lot 200 Foster Way Jarrahdale WA 6124

Site Emergency Contacts:

- 1- Linda Peyton, 11 Wanliss St. Jarrahdale, Ph: 0409 403 317, E: lpeyton@y7mail.com
- 2- Philip Peyton, 11 Wanliss St. Jarrahdale, Ph: 0429 003 134, E: lpeyton@y7mail.com
- 3- James (Jim) Troeger, 19 McNeil Grove, Jarrahdale, Ph: 0419 917 418, E: mjtroeger@bigpond.com
- 4- Meredith Troeger, 19 McNeil Grove, Jarrahdale, Ph. 0403 773 460, E. mjtroeger@bigpond.com

Fire Warden: Property Manager

Evacuation Plan Objectives

The objective of this emergency evacuation plan is to eliminate or reduce the risk of injury or harm that may occur during an evacuation by undertaking a three-step process of:

- 1. Identifying a potentially hazardous bushfire situation;
- 2. Assessing the risks; and
- 3. Implementation.

This plan has been developed with the threat of bushfires in mind. However, these principles can also be implemented for other emergency situations such as structural/vehicular fire, accidents, bomb threats and other natural disasters.

Daily Responsibilities

To ensure that staff and guests can be provided with sufficient time to respond to a bushfire threat, it is important that some monitoring of guest numbers and weather conditions are made on a daily/continual basis:

- A guest log shall be maintained at all times to ensure that all people can be accounted for in an emergency situation; and
- The designated Fire Warden shall perform checks of the weather and fire danger ratings each day to remain aware of potential threats in the area.

Bureau of Meteorology (BOM)

- BOM issue fire weather warnings when weather conditions are conductive to the spread of dangerous bushfires. Warnings are generally issued within 24 hours of the potential onset of hazardous conditions. Warnings are broadcast on radio and television.
- BOM will also issue daily Fire Danger Ratings for all areas in Australia.
 To check the latest Fire Danger Rating for the Lower West Coast area, use the link below: http://www.bom.gov.au/wa/forecasts/fire-danger.shtml

Page **1** of **5**

Department of Fire and Emergency Services (DFES)

- DFES and DBCA will issue community alerts and warnings for bushfires that have potential to threaten lives and property.
 - To view details of bushfires in the local area visit Emergency WA using the following link: https://www.emergency.wa.gov.au/
- DFES emergency information can also be found by calling 13 DFES (13 3337).

Bushfire Identification

When a bushfire threat has been identified and the property is not yet at risk (DFES: Bushfire Advice):

- Call 000 to notify emergency services, if not already in attendance.
- Remain vigilant in obtaining regular updates on the bushfire situation.
- Be observant to changes in weather conditions that may cause a change in fire behaviour in the area.
- Ensure that all staff can be accounted for and the guest log is available and up to date.
- Be ready to act if the situation changes.

When a bushfire threat has been identified and there is a real risk of bushfire attack (DFES: Bushfire Watch and Act):

- It is necessary to take action.
- Call 000 to notify emergency services, if not already in attendance.
- Identify the current location of the bushfire and the direction that it is heading. A decision must be
 made on whether to evacuate all guests and staff from the property or to seek refuge if the way is
 not clear.
 - The preferred option is for all guests and staff to self-evacuate to a safe location if the way is clear and available. However, early detection of the fire is critical as the only road available for egress is Jarrahdale Road in both directions.
 - If the way is not clear and it is absolutely necessary to evacuate the property, an orderly evacuation should be made to the Assembly Area and await extraction or instruction by emergency services.
- Staff shall methodically advise all guests to assemble at the property's Assembly Area to await further information and instruction from the Fire Warden.
- The Fire Warden will advise if the situation is suitable for guests to self-evacuate to a safe location or to seek refuge at the Assembly Area.
 - o If refuge is to be taken at the Assembly Area, the Fire Warden should also advise if guests have sufficient time to attempt to retrieve/fire proof their belongings and relocate vehicles to a safer location within the property before evacuating. This will depend of the proximity and the speed of the encroaching bushfire.
- Identify any persons with a lesser ability to respond in an emergency situation (i.e. elderly, walking or breathing difficulties etc.). These people should be evacuated as early as possible, assistance may be required and ensure that anyone requiring medication takes it with them.



When an immediate bushfire threat is impeding in the vicinity of the property (DFES: Bushfire Emergency Warning)

- Act now, it is likely too late to self-evacuate to a safe location that is off site.
- Call 000 to notify emergency services, if not already in attendance.
- Implement emergency evacuation procedures as listed above under 'DFES:Watch and Act'.
- Advise guests that evacuation will be made to seek refuge at the Assembly Area.

Evacuation (Implementation)

When a Bushfire has been identified, and evacuation options have been assessed.

Self-Evacuation or Recommended Evacuation (there is sufficient time to prepare)

- Fire Warden/Property Manager shall advise all guests and non-essential staff to drive to an agreed safe location that is off site in an orderly fashion taking any accompanying belongings.
- Roll call shall be conducted at the Assembly Area before evacuating the property using the guest & resident list.
- Fire Warden shall attempt to contact any guests and residents that are not present if they cannot be located at the premises (they may be elsewhere at the time of evacuation).
- Arrangements should be made that all guests and staff evacuating shall meet in an agreed location so that everybody can be accounted for upon arrival.
- Any guests and residents that do not have own transport will require assistance.
- Once all guests and residents are safely at a selected location a second roll call shall be conducted to ensure that all that are present.
- Await further instruction from emergency services personnel or Fire Warden before attempting to return to the property.

Directed Evacuation to Assembly Area (emergency situation, not sufficient time)

- Fire Warden/Property Manager shall advise all guests and non-essential staff of impending evacuation.
- Ensure that assistance is provided to those who have a lesser capacity to respond in an emergency.
- Roll call shall be conducted at the Assembly Area using the guest and guests lists to ensure that all are present.
- Fire Warden shall attempt to contact any guests that are not present if they cannot be located at the facility (they may be elsewhere at the time of evacuation).
- Ensure that only essential items are carried (mobile phones, medication, protective clothing, first aid kits, radios and food etc.).
- Await further instruction from emergency services personnel or Fire Warden before attempting to return to the property.

Page 3 of 5



HAZARD: BUSHFIRE							
Agency / Organisation	Phone No.	Mobile No.	Fax No.				
Police, Fire, Ambulance (emergencies)	000						
Department of Emergency Services (DFES) - Emergency - Public Information Line - Website	000 133 337 www.dfes.wa.gov.au						
Shire of Serpentine-Jarrahdale - Administration	(08) 9526 1111		(08) 9525 5441				
Police - Mundijong	(08) 9526 5111		(08) 9526 5151				
State Emergency Services (SES) - Statewide Emergency Assistance - Public Information Line - Serpentine-Jarrahdale SES Unit	132 500 133 337 (08) 9525 5313						
Department of Biodiversity, Conservation and Attractions (DBCA) - Swan Coastal District	(08) 9303 7700		(08) 9405 0777				
Hospital - Armadale Health Service - St John Ambulance Serpentine	(08) 9391 2000 (08) 9334 1222		(08) 9391 2149				
Bureau of Meteorology - General enquiries - Pre-recorded weather service - Website	(03) 9669 4000 1900 969 905 www.bom.gov.au						
Main Roads – Road Conditions	138 138						
ABC Radio	98.3 FM, 684 AM						



Noticeboard Advice – Bushfire Warning

Date & Time		/	at	AM/PM	
Authority in Charge	☐ DFE	s \square	LEMC	Police	Bushfire Brigade
Emergency Warning Statu	s 🗌 Non	е 🗌	Advice	☐ Watch & Act	Emergency
Position of Fire (if known)	Approximat	ely		kms to the	
Speed of Fire (if known)					
Direction fire travelling (if known)					
Likely impact on Premises			None	Come close	Direct Impact
Estimated impact time (if applicable & if known)	/	/	at	AM/PM	
Evacuation Status	None		Evacuation Compulsory)	Recommended (Not Compulsory)	Directed COMPULSORY
Next update due	/	/	at	AM/PM	
DFES (Dept of Fire & Emer LEMC (Local Emergency M			ree)		

Page **5** of **5**

EMERGENCY EVACUATION PLAN

Lot 200 Foster way, Jarrahdale Mill Managers House

