

# 155 RHEBAN ROAD, ORFORD Proposed 90 – lot subdivision

Bushfire Report and Hazard Management Plan

3/11/2022

(SHE015)

For Neil Shephard



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#### ACKNOWLEDGMENTS

Client: Neil Shepard

Survey and report: Philip Barker and Cameron Geeves

Mapping: Eric Hong



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## **1** INTRODUCTION

The following proposal is for the development of a 90-lot subdivision at 155 Rheban Road, Orford. The project area is within the municipality of Glamorgan-Spring Bay. The Tasmanian Planning Scheme – Glamorgan-Spring Bay identifies the land as being within the Bushfire Prone Areas overlay. A Bush Fire Hazard Management Plan (BHMP) is required demonstrating compliance with Section C13.0: Bushfire-Prone Areas Code of the Tasmanian Planning Scheme with reference to the setbacks to achieve the required Bushfire Attack Level (BAL) for the proposal and the proposed mitigation in compliance with the AS3959:2018 Construction of Buildings in Bushfire Prone Areas.

This bushfire hazard management plan addresses the requirements for all lots within the proposed subdivision. New dwellings are proposed for all lots. All lots will be dependent upon one another for hazard management. The subdivision is intended to be built in six stages.

## **2** SITE DESCRIPTION

The project area is on a title of approximately 10.26 ha which sits between Rheban Road and East Shelly Road. The project area is situated on land that slopes gently from north to south. The headwater off a small watercourse runs north to south through the land and includes a small dam. Another watercourse runs along the western boundary of the land. Both watercourses flow into Prosser Bay at Shelly Beach. The proposed subdivision is accessed from Rheban Road.

The land proposed for subdivision is currently zoned future urban, as is the surrounding land to the east and west. Land directly south of the proposal, over Rheban Road is zoned Rural while the entire northern boundary of the proposal is zoned General Residential. Aerial imagery shows that the land has previously been use as a horse trotting track, currently it is used for sheep grazing.

See Figure 1 for the context and locality of the proposal and figure 2 for lot design and stages.

## 2.1 LIMITATIONS

This report on based on site measurements at the time of inspection and from information provided by the proponent. The report is limited in scope to bushfire hazard assessment only. The assessment is based on this subdivision proposal and its findings are for this site only. Future changes to the subdivision proposal or changes in the vegetation that affect bushfire hazard have not been considered.

## 3 PROPOSED USE

The proposal is for a 90-lot residential subdivision.

The site is located within a water serviced area and it is intended that each lot will be reliant upon reticulated water for firefighting purposes.



Figure 1. The location and context of the site.



Figure 2. Subdivision plan

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## **4** BUSHFIRE SITE ASSESSMENT

## 4.1 VEGETATION

Gardens and lawns surrounding houses backing on to the project area's northern boundary from East Shelly Road are considered managed, low threat vegetation.

A patch of riparian woodland follows the waterway along the western boundary of the project area while to the east and south is unmanaged grassland within 100 m of the project area. Grassland areas east of the project area also contain paddock trees and shelter belts of Eucalypts, as does the road reserve for Rheban Road. These patches of vegetation are either less than 0.25 ha in size or less than 20 m in width and therefore have been excluded from the BAL assessment.

The existing vegetation is depicted in Figure 2 and tabulated in Table 1.

#### 4.2 SLOPE AND FIRE PATHS

The project area consistently slopes very gently from north to south, towards the coast.

Given the expanse of undeveloped land to the south and west of the project area, this is the most likely direction of a fire run.

The slopes are also tabulated in Table 1. Only the slopes that affect the BAL rating of lots within the proposed subdivision are reported although there are small changes in slope within the 100m zone beyond the distance that affects the BAL rating.

The fire history layer from the LIST shows no fire has occurred on the site. The closest mapped bushfire occurred in 2018/19 fire season which burned ~ 5 ha. Historically, a much larger bushfire came within 1.3 km of the proposals southern boundary (1994/95 fire season) (theLIST accessed 27/06/2022).

The site was inspected on 27<sup>th</sup> of June 2022.

## 4.3 DISTANCE

West

North

East

South

West

Grassland

Grassland

Low Threat

Vegetation Low Threat

Vegetation

Grassland

Flat / upslope

0-50

Flat / upslope

Flat / upslope

Flat / upslope

Table 1 and Figure 2 indicate the site characteristics for a 100 m radius that have been assessed to determine the bushfire attack level of the building and provide the dimensions for the BHMA for a BAL 19 solution as per Section 2 of AS 3959. All aspects have been resolved to BAL 19 by the bushfire hazard management plan (Appendix 1).

NOTE: All distances are based on notional building areas illustrated in Figure 2.

Quadrant	Effective Vegetation class Table 2.3 AS3959	Effective slope (degrees)	Distance under effective slope (m)	Compliant defendable space required for BAL- 19 (m)	Compliant defendable space required for BAL- 12.5 (m)	Exclusions o low threat vegetation under 2.2.3.2 AS3959		
	Stage 1 – Lots 1 & 2							
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV		
East	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV		
South	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV		

Stage 1 – Lot 3

10 m

11 m

0 m

0 m

10 m

0 - 100 m

0 – 100 m

0 - 100 m

0 - 100 m

0 - 100 m

Table 1. Slope and vegetation characteristics and AS3959 solution for BAL 19 & BAL 12.5

14 m

16 m

0 m

 $0 \,\mathrm{m}$ 

14 m

LTV

NA

LTV

ITV

LTV

	Effe ellere					
Quadrant	Vegetation class Table 2.3 AS3959	Effective slope (degrees)	Distance under effective slope (m)	Compliant defendable space required for BAL- 19 (m)	Compliant defendable space required for BAL- 12.5 (m)	Exclusions of low threat vegetation under 2.2.3.2 AS3959
			Stage 1 – Lot	s 31 - 34		
North	Grassland	0 – 5 °	0 - 100 m	11 m	16 m	NA
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
			Stage 1 – Lot	s 35 - 39		
North	Low Threat Vegetation	0 – 5 º	0 - 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
			Stage 2 – Lo	ts 4 & 5		
North	Low Threat Vegetation	0 – 5 °	0 - 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 - 25 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
West	Grassland	Flat / upslope	0 - 100 m	10 m	14 m	NA
			Stage 2 – Lots 4	0, 56 & 57		
North	Grassland	0 – 5 °	0 - 100 m	11 m	16 m	NA
East	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 75 m	0 m	0 m	LTV
	T		Stage 2 – Lot	s 53 - 55	<u> </u>	
North	Low Threat Vegetation	0 – 5 °	0 - 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
			Stage 2 – I	ot 52		
North	Low Threat Vegetation	0 – 5 °	0 - 35 m	0 m	0 m	LTV
East	Grassland	Flat / upslope	0 - 100 m	10 m	14 m	NA
South	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
	1		Stage 2 – Lots	\$ 50 & 51		
North	Grassland Low Threat	0 – 5 °	0 - 100 m	11 m	16 m	NA
East	Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
South	Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
	Crassidirid		Stage 2 – I	Lot 25	14111	

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Quadrant	Vegetation class Table 2.3 AS3959	Effective slope (degrees)	Distance under effective slope (m)	Compliant defendable space required for BAL- 19 (m)	Compliant defendable space required for BAL- 12.5 (m)	Exclusions of low threat vegetation under 2.2.3.2 AS3959
North	Grassland	0 – 5 °	0 – 85 m	ll m	16 m	NA
East	LTV	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
			Stage 2 – Lots	s 26 – 30		
North	Low Threat Vegetation	0 – 5 °	0 – 18 m	0 m	0 m	LTV
East	LTV	Flat / upslope	0 – 100 m	10 m	14 m	NA
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
			Stage 3 – I	Lot 46		
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Grassland	Flat / upslope	0 – 60 m	10 m	14 m	NA
West	Grassland	Flat / upslope	0 – 100 m	10 m	14 m	NA
			Stage 3 – I	Lot 13		
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Grassland	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Woodland	Flat / upslope	0 – 55 m	15 m	22 m	NA
			Stage 3 – I	Lot 14		
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 18 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 8 m	0 m	0 m	LTV
West	Woodland	Flat / upslope	8 – 65 m	15 m	22 m	NA
		Sto	ige 3 – Lots 15 -	- 20 & 47 - 49		
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
			Stage 3 – Lot	s 21 - 24		
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	LTV	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
			Stage 4 – Lot	s 41 - 45		

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Quadrant	Effective Vegetation class Table 2.3 AS3959	Effective slope (degrees)	Distance under effective slope (m)	Compliant defendable space required for BAL- 19 (m)	Compliant defendable space required for BAL- 12.5 (m)	Exclusions of low threat vegetation under 2.2.3.2 AS3959
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
			Stage 4 – Lo	ts 6 - 12		
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Woodland	Flat / upslope	0 – 50 m	15 m	22 m	NA
			Stage 5 – Lot	s 58 – 64		
North	Low Threat	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat	Flat / upslope	0 – 100 m	0 m	0 m	LTV
	Vegetation		Stars 5			
		0.50	sidge 5 - I	101 05		
North	Grassland	0 - 5 0	0 – 100 m	IIm	16 m	NA
East	Low Inreat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Inreat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Inreat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
	1		Stage 5 – I	Lot 85		
North	Grassland	0 – 5 °	0 – 100 m	11 m	16 m	NA
East	Grassland	Flat / upslope	0 – 100 m	10 m	14 m	NA
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
			Stage 5 – Lot	s 86 - 91		
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Grassland	Flat / upslope	0 – 100 m	10 m	14 m	NA
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
			Stage 6 – Lot	s 66 - 77	•	
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
		Sto	ıge 6 – Lots 78 -	- 80 & 83 - 84		

90 lot subdivision, 155 Rheban Road, Orford

Quadrant	Effective Vegetation class Table 2.3 AS3959	Effective slope (degrees)	Distance under effective slope (m)	Compliant defendable space required for BAL- 19 (m)	Compliant defendable space required for BAL- 12.5 (m)	Exclusions of low threat vegetation under 2.2.3.2 AS3959
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Grassland	Flat / upslope	0 – 100 m	10 m	14 m	NA
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
			Stage 6 – Lots	s 81 & 82		
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 30 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV



Proposed subdivision		Base data and magery from theLIST (www.thelist.tas.gov.au) ⇒ State of Tasmania. Grid: MGA.Zone 55 Datum: GDA94, AHD
I Building area		
Lot boundaries		GDA GDA
Vegetation		0 50 100 m
(Classified in accordance with AS3959: 2018)		
Grassland		nerthbarker
Woodland		ECOSYSTEM SERVICES
Low threat vegetation		
	The mapping has been undertaken using a hand held GPS and subjective interpretation. Consequently it should be considered indicative only.	SHE015 09/09/2022 E. Hong

Figure 2. Vegetation and contours in relation to the site



Plate 1: Typical grassland in the project area.



Plate 3: Typical managed gardens from residential lots north of the project area



Plate 2: Remnant riparian woodland runs along the western boundary of the project area.



Plate 4: A small patch of remnant riparian woodland that is proposed to be retained as public open space and maintained by council



Plate 5: Understory of woodland within the public open space.



Plate 6: Grassland to the east of the project area.





Plate 7: Grassland to the west of the project area

Plate 8: Grassland south of the project area

## 5 BUSHFIRE PRONE AREAS MANAGEMENT OBJECTIVES

The Bushfire-Prone Areas Code of the Tasmanian Planning Scheme C13.0 applies to the subdivision of land that is located within, or partially within, a bushfire prone area. This code has been developed to ensure that use and development is designed, located, serviced and constructed to reduce the risk to human life and property, and the cost to the community, caused by bushfires.

Appendix 2 of this report tabulates the specifications for standards set out in C13.6 for subdivisions. This proposal must comply with this directive as set out in Table 3 below.

	Deemed to satisfy requirements (Elements)	Requirement (Appendix 2)	Compliance		
C13.0	Construction requirements	AS 3959 – 2018 or to NASH standard for steel framed houses	Yes – All construction specifications will be compliant and verified by a building surveyor.		
C13.6.1	Hazard management area	C13.1.6 A1 (b)	Subject to implementing the proposed BHMP, a BAL 12.5 and BAL 19 area with appropriate hazard management areas as determined by using Table 2.6 of AS3959-2018 will be provided for all lots. The entirety of each lot will be managed in a low fuel environment.		
			Each lot must have the HMA established prior to sealing of titles and maintained by the respective owners.		
C13.6.2	Public and Firefighting access	Table C13.1 Public Roads (A)	<ul> <li>Yes. Proposed public access will comply with Table C13.1 requirements a – k as follows:</li> <li>(a) two-wheel drive, all-weather construction;</li> <li>(b) load capacity of at least 20 tonnes, including for bridges and culverts;</li> <li>(c) minimum carriageway width is 7m for a through road, or 5.5m for a dead-end or cul-desac road;</li> <li>(d) minimum vertical clearance of 4m;</li> </ul>		

Table 2: Compliance of the subdivision proposal with the TPS 13.0 Bushfire Prone Areas Code.

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			(e) minimum horizontal clearance of 2m from the edge of the carriageway;	
			(f) cross falls of less than 3 degrees (1:20 or 5%);	
			(g) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads;	
			(h) curves have a minimum inner radius of 10m;	
			(i) dead-end or cul-de-sac roads are not more than 200m in length unless the carriageway is 7m in width;	
			(j) dead-end or cul-de-sac roads have a turning circle with a minimum 12m outer radius; and	
		Table C13.2	(k) carriageways less than 7m wide have 'No Parking' zones on one side, indicated by a road sign that complies with Australian Standard, AS 1743:2018 Road signs- Specifications.	
		property access	Each private access will comply with Table C13.2 of the code - Standards for property access. Property access for all lots excepting lots 42, 43, 51 and 53 will be less than 30 m and therefore no specific design requirements are required.	
				Lots 20, 21, 42, 43, 51 and 52 have access 30 – 200 m in length and therefore access to each property must comply with Table C13.2 element B including:
			<ul> <li>Property access must terminate with and "hammerhead" T or Y turning head 4 m wide and 8 m long. Compliant access must be verified by a building surveyor prior to occupation of dwellings.</li> </ul>	
C13.6.4	Provision of water supply for firefighting purposes -	C13.4 (A)	Yes - Following installation all parts of the proposed habitable building areas will be within 120 m of the nearest hydrant as measured by hose lay, thereby achieving compliance.	
	reticulated	(B)	Consultation with TasWater is required and additional fire hydrants to be installed.	
			The fire hydrant system must be designed and constructed in accordance with TasWater Supplement to Water Supply Code of Australia WSA 03 – 2011-3.1 MRWA Edition 2.0 and are not to be installed in parking areas.	
		(C)	A hardstand for fire appliances must be provided which is no more than 3 m from the hydrant and no closer than 6 m from the building area to be protected, with a minimum width of 3 m constructed to the same standard as the carriageway; and connected to each	

	property access by a carriageway equivalent to the standard for the property access.

## 6 MANAGEMENT OF THE HMA AND LANDSCAPING

The bushfire hazard management plan (Appendix 1) has resolved all aspects to BAL 19 and BAL 12.5 as per Table 2. All vegetation within the HMA of the site will be managed in a low fuel state and the following recommendations are made.

- 1. Required Maintain HMA in a low fuel state. Ground cover vegetation less than 100 mm tall this can be achieved by mowing and raking; larger trees pruned to at least 2m; and if necessary, remove sufficient trees to maintain a 3 m canopy separation; selectively removing small trees and shrubs to create clumps.
- 2. Required All lots are reliant upon one another for mutual protection, so the timing of hazard management area implementation needs to be considered.
- 3. Recommended Gardens exclude shrubs from within 5 m of the building.
- 4. Recommended All aspects to be mineral surface to a minimum of 0.5 m from the building.
- 5. Recommended No trees or shrubs within 10 m to exceed the height of the gutters.

## 7 REFERENCES

Australian Standard AS 3959 (2018) Construction of Buildings in Bushfire Prone Areas.

Department of Natural Resources and Environment, The LIST, viewed 28/06/2022 (www.thelist.tas.gov.au)

Tasmanian Planning Scheme – Bushfire-Prone Areas Code.

#### **APPENDIX 1. BUSHFIRE HAZARD MANAGEMENT PLAN**

Assessment date: 27/06/2022 Assessor: Philip Barker BFP- 147 (1, 2, 3A, 3B, 3C)

#### **BUSHFIRE ATTACK LEVEL ASSESSMENT REPORT**

Bushfire Attack Level (BAL) assessment conducted in accordance with Clause 2.2 Simplified Procedure (Method 1) of AS 3959 – 2018.

This BAL Assessment Report has been provided to determine the BAL (in accordance with AS3959-2018) for the site and where necessary provide recommendations for BAL reduction methods to comply Directors Determination 2.1. Requirements for water supply for fire fighting and vehicle access and egress for fire fighting have been included; and should part of the Building Surveyors Certificate of Likely Compliance assessment.

#### Limitations

All measurements have been made using standard practices and may contain small errors of precision.

Compliance with the AS3959 building standards referred to in this assessment does not mean that there is no risk to life or property as a result of bushfire.

A primary limitation is that the BAL value is determined under an FDI of 50. The FDI can be higher under certain weather and fuel conditions and consequently the BAL may also be higher than determined here.

#### **Property Details**

Applicants Name: Neil Shepard

Municipality: Glamorgan-Spring Bay

PID: 2775205

Certificate of title / number: CT 149641/2

Address: 155 Rheban Road, Orford

Proposal: 90-lot subdivision

#### Bush Fire Attack Level (BAL) 19

#### Relevant fire danger index: (see clause 2.2.2) FDI 50

#### Summary of Compliance Requirements (see Figure 1):

Building materials and design must comply with BCA for BAL 19. Building construction requirements for this aspect are a min of BAL 19.

Each lot must have the HMA established before construction as a building permit condition and confirmed by council.

Each private access will comply with the relevant elements of Table C13.2: Standards for property access (elements A and B).

All habitable building areas on all lots will have a water supply compliant with Table C13.4: Reticulated water supply for firefighting, and be within 120 m of a fire hydrant as measured by hose lay. Water supply must be installed and operation all before the sealing of titles and verified by a building surveyor.

Quadrant	Effective Vegetation class Table 2.3 AS3959	Effective slope (degrees)	Distance under effective slope (m)	Compliant defendable space required for BAL- 19 (m)	Compliant defendable space required for BAL- 12.5 (m)	Exclusions of low threat vegetation under 2.2.3.2 A\$3959			
Stage 1 – Lots 1 & 2									
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV			
East	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV			
South	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV			
West	Grassland	Flat / upslope	0 - 100 m	10 m	14 m	LTV			
			Stage 1 –	Lot 3					
North	Grassland	0 – 5 °	0 – 100 m	llm	16 m	NA			
East	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV			
South	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV			
West	Grassland	Flat / upslope	0 - 100 m	10 m	14 m	LTV			
			Stage 1 – Lot	s 31 - 34					
North	Grassland	0 – 5 °	0 - 100 m	llm	16 m	NA			
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV			
South	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV			
West	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV			
			Stage 1 – Lot	s 35 - 39					
North	Low Threat Vegetation	0 – 5 °	0 - 100 m	0 m	0 m	LTV			
East	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV			
South	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV			
West	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV			
			Stage 2 – Lo	ts 4 & 5					
North	Low Threat Vegetation	0 – 5 °	0 - 100 m	0 m	0 m	LTV			
East	Low Threat Vegetation	Flat / upslope	0 - 25 m	0 m	0 m	LTV			
South	Low Inreat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV			
West	Grassland	Flat / upslope	0 - 100 m	10 m	14 m	NA			
	[		Stage 2 – Lots 4	0, 56 & 57					
North	Grassland	0 – 5 °	0 - 100 m	llm	16 m	NA			
East	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV			
South	Low Inreat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV			
West	Vegetation	Flat / upslope	0 – 75 m	0 m	0 m	LTV			
			Stage 2 – Lot	s 53 - 55					
North	Low Threat Vegetation	0 – 5 °	0 - 100 m	0 m	0 m	LTV			
East	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV			
South	Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV			
West	Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV			

### Determination of vegetation and slope within 100m in all directions.

North Barker Ecosystem Services – SHE015

Quadrant	Effective Vegetation class Table 2.3 AS3959	Effective slope (degrees)	Distance under effective slope (m)	Compliant defendable space required for BAL- 19 (m)	Compliant defendable space required for BAL- 12.5 (m)	Exclusions of low threat vegetation under 2.2.3.2 AS3959
		I	Stage 2 – I	Lot 52		
North	Low Threat Vegetation	0 – 5 °	0 - 35 m	0 m	0 m	LTV
East	Grassland	Flat / upslope	0 - 100 m	10 m	14 m	NA
South	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
			Stage 2 – Lots	s 50 & 51		
North	Grassland	0 – 5 °	0 - 100 m	11 m	16 m	NA
East	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 - 100 m	0 m	0 m	LTV
West	Grassland	Flat / upslope	0 - 100 m	10 m	14 m	NA
			Stage 2 –	Lot 25		
North	Grassland	0 – 5 °	0 – 85 m	11 m	16 m	NA
East	LTV	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
		Γ	Stage 2 – Lot	s 26 – 30		
North	Low Threat Vegetation	0 – 5 °	0 – 18 m	0 m	0 m	LTV
East	LTV	Flat / upslope	0 – 100 m	10 m	14 m	NA
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
	1	ſ	Stage 3 –	Lot 46		
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Grassland	Flat / upslope	0 – 60 m	10 m	14 m	NA
West	Grassland	Flat / upslope	0 – 100 m	10 m	14 m	NA
	1	1	Stage 3 –	Lot 13		
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Grassland	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Woodland	Flat / upslope	0 – 55 m	15 m	22 m	NA
			Stage 3 –	Lot 14		
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 18 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 8 m	0 m	0 m	LTV
West	Woodland	Flat / upslope	8 – 65 m	15 m	22 m	NA
		Sto	ige 3 – Lots 15 -	- 20 & 47 - 49		

Quadrant	Effective Vegetation class Table 2.3 AS3959	Effective slope (degrees)	Distance under effective slope (m)	Compliant defendable space required for BAL- 19 (m)	Compliant defendable space required for BAL- 12.5 (m)	Exclusions of low threat vegetation under 2.2.3.2 AS3959
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
			Stage 3 – Lot	s 21 - 24		
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	LTV	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
			Stage 4 – Lot	s 41 - 45	r	r
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
			Stage 4 – Lo	ts 6 - 12		
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Woodland	Flat / upslope	0 – 50 m	15 m	22 m	NA
	Stage 5 – Lots 58 – 64					
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
	1	r	Stage 5 – I	Lot 65		
North	Grassland	0 – 5 °	0 – 100 m	11 m	16 m	NA
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
		1	Stage 5 –	Lot 85		
North	Grassland	0 - 5 °	0 – 100 m	11 m	16 m	NA
East	Grassland	Flat / upslope	0 – 100 m	10 m	14 m	NA
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
Stage 5 – Lots 86 - 91						

Quadrant	Effective Vegetation class Table 2.3 AS3959	Effective slope (degrees)	Distance under effective slope (m)	Compliant defendable space required for BAL- 19 (m)	Compliant defendable space required for BAL- 12.5 (m)	Exclusions of low threat vegetation under 2.2.3.2 AS3959
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Grassland	Flat / upslope	0 – 100 m	10 m	14 m	NA
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
			Stage 6 – Lot	s 66 - 77		
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
Stage 6 – Lots 78 – 80 & 83 – 84						
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Grassland	Flat / upslope	0 – 100 m	10 m	14 m	NA
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
Stage 6 – Lots 81 & 82						
North	Low Threat Vegetation	0 – 5 °	0 – 100 m	0 m	0 m	LTV
East	Low Threat Vegetation	Flat / upslope	0 – 30 m	0 m	0 m	LTV
South	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV
West	Low Threat Vegetation	Flat / upslope	0 – 100 m	0 m	0 m	LTV

#### Determination of Bushfire Attack Level (BAL 19)

#### **Recommendations**

The bushfire hazard management plan (Appendix 1) has resolved all aspects to BAL 19 and BAL 12.5 as per Table 2. All vegetation within the HMA of the site will be managed in a low fuel state and the following recommendations are made.

- 1. Required Maintain HMA in a low fuel state. Ground cover vegetation less than 100 mm tall this can be achieved by mowing and raking; larger trees pruned to at least 2m; and if necessary, remove sufficient trees to maintain a 3 m canopy separation; selectively removing small trees and shrubs to create clumps.
- 2. Recommended Gardens exclude shrubs from within 5 m of the building.
- 3. Recommended All aspects to be mineral surface to a minimum of 0.5 m from the building.
- 4. Recommended No trees or shrubs within 10 m to exceed the height of the gutters.
- 5. Recommended Fences should be non combustible if within 6 m of the building.

Accessed by Philip Barker	<b>D</b>	/				
BFF 147 - 1, 2, 3A, 3B, 3C	Proposed subdivis	sion				B
Applicants name: Ben Comelli	(Source: Design_CI	V 22E96-1 B)				
Municipality: Glamorgan - Spring Bay	Building area					
Certificate of title / number:	LOT boundary					
CT 149641/2	Public open space					
Address Distan David	Driveway			16 16		
Address: Rheban Road Proposal: Rheban Road subdivision	Road		10		13 52865	45.1 mE 5 536.0,mN 5
	Temporary turning	area				
Ultimate building setbacks	Proposed shared	l walking / cycle path		Stage 3		# 573136.9 mE
Lot BAL 19 setback BAL 12.5 setback	k (2.5 m wide)		45			5286524.3 mN
1 to 5 10 m 14 m			3 43	$  \mathbf{h}  $ . T		
6 to 13 15 m 22 m	Hazard manageme	ent area		44 - 43		5286488.3 mN
21 0 m 10 m	BAL 12.5 Hazar	d management area	Stage 4		49	
22 to 23 2.5 m 9.5 m	BAL 19 Hazard	management area				
24 3 m 7 m	Temporary stage	BAL 12.5			24	
26 3.7 m 7.8 m		blic Open Space		51 50		573155.5 mE
27 3.2 m 7.2 m	to be managed i	n a low fuel	41 42		23 1 5	286445.4 mN
28 2.6 m 6.7 m	environment for	bushfire management.		52	26 57310	9.8 mE
29 & 30 3.6 m 7.4 m	Proposed infrastr	ucture		53 Stat	102	
58 to 60 6.5 m 10.5 m	Proposed Fire hy	drant system				
61 6 m 10 m		A	50		23	
62 2.5 m 6.5 m	4			54 / 19		
63 & 64 2 m 6 m	4				29 573074 6 mE	
65 3 m 7 m			34		5286376.1 mN	
67 6m 13m		E Contraction				
68 to 70 8.8 m 15.8 m			35 38 20		573062.5 mE 5286353.8 mN	62
71 6.1 m 13.5 m	Inforthhar	kor	Stage 1	31	57314	2.9 mE
72 5.3 m 12.3 m		Kel			528633	8.7 mN 61
77 to 91 10 m 14 m	ECOSYSTEM SER	VICES	<u></u>			
Staged hazard management areas	-			63		60
Stage Lot	Boundary to be protected	Distance from boundary BAL 12.5 setba	ck ban Road			59
Stage 1 Lots 3 & 31 to 34	North	16 m				
Stage 2 Lots 5, 25, 40, 50 to 52, 56 to 57	North	16 m		0		53
51 - 52	West	14 m			573132.1 m	NE CONTRACTOR
Stage 3 13	West	22 m	0 50	100 m	5286283.5 m	nN
46	West	14 m				
46	South	14 m	The mapping has been undertaken using a hand l	held GPS and subjective interpretation.	Consequently it should be considered indicative only.	
Stage 5 65 & 85	North	16 m	SHEUTS 14/10/2022 L. Drummond	20		
Hazard management area						
					Firefighting access	Provision of wat
Subject to implementing the propose	ed BHMP, a BAL 12.5 and E	3AL 19 area with appropriate hazard mana	gement areas as determined by u	sing Table 2.6 of		
AS3959-2018 will be provided for all lots. The entirety of each lot will be managed in a low fuel environment.				Proposed public access	Consultation with	
A setback for the build area is provided for each lot ensure minimum HMA's are met.					of PD 5.1	constructed in a
Supply Cod				Supply Code of		
A bushfire management easement will be established with in the POS. This is to be kept in a low fuel environment and is to be bounded by the cycle / path Each private access will and are not way. Where this extends beyond the cycleway coordinates mark the boundary.			and are not to b			
way. where this extends beyong the cycleway coordinates mark the boundary.						
Each lot must have the HMA establis	shed prior to sealing of titles	s and maintained by the respective owners	. The bushfire eeasment must be	established before	must be verified by a	areas will be wit
sealing of titles.					building surveyor prior to	hose lay, thereb
Before each stade commences cons	truction of the temporary s	tage HMA must be established and verified	by council.		occupation of dwellings.	vernied by a bui
		-				

Figure 1. Bushfire Hazard Management Plan



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# APPENDIX 2. SPECIFICATIONS FOR ACCESS, WATER SUPPLY AND HAZARD MANAGEMENT AREAS.

#### Table C13.1: Standards for Roads

Element		Requirement
A	Roads	Unless the development standards in the zone require a higher standard, the following apply:
		(a) two-wheel drive, all-weather construction;
		(b) load capacity of at least 20t, including for bridges and culverts;
		(c) minimum carriageway width is 7m for a through road, or 5.5m for a dead-end or cul-de-sac road;
		(d) minimum vertical clearance of 4m;
		(e) minimum horizontal clearance of 2m from the edge of the carriageway;
		(f) cross falls of less than 3 degrees (1:20 or 5%);
		(g) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads;
		(h) curves have a minimum inner radius of 10m;
		(i) dead-end or cul-de-sac roads are not more than 200m in length unless the carriageway is 7 metres in width;
		(j) dead-end or cul-de-sac roads have a turning circle with a minimum 12m outer radius; and
		(k) carriageways less than 7m wide have 'No Parking' zones on one side, indicated by a road sign that complies with Australian Standard AS1743-2001 Road signs-Specifications.

#### Table C13.2: Standards for property access

Elemer	nt	Requirement
A	Property access length is less than 30m; or access is not required for a fire appliance to access a fire fighting water point.	There are no specified design and construction requirements.
В	Property access length is 30m or greater; or access is required for a fire appliance to a fire fighting water point.	The following design and construction requirements apply to property access: (a) all-weather construction; (b) load capacity of at least 20t, including for bridges and culverts; (c) minimum carriageway width of 4m; (d) minimum vertical clearance of 4m; (e) minimum horizontal clearance of 0.5m from the edge of the carriageway; (f) cross falls of less than 3 degrees (1:20 or 5%); (g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle; (h) curves with a minimum inner radius of 10m; (i) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and
		(j) terminate with a turning area for fire appliances provided by one of the following:

		(i) a turning circle with a minimum outer radius of 10m; or	
		(ii) a property access encircling the building; or	
		(iii) a hammerhead "T" or "Y" turning head 4m wide and 8m long.	
С	Property access length is 200m or greater.	The following design and construction requirements apply to property access:	
		(a) the requirements for B above; and	
		(b) passing bays of 2m additional carriageway width and 20m length provided every 200m.	
D	Property access length is greater than 30m, and	The following design and construction requirements apply to property access:	
	more properties.	(a) complies with requirements for B above; and	
		(b) passing bays of 2m additional carriageway width and 20m length must be provided every 100m.	

#### Table C13.3: Standards for fire trails

Element		Requirement
Α.	All fire trails	The following design and construction requirements apply: (a) all-weather, 4-wheel drive construction;
		(b) load capacity of at least 20t, including for bridges and culverts;
		(c) minimum carriageway width of 4m;
		(d) minimum vertical clearance of 4m;
		(e) minimum horizontal clearance of 2m from the edge of the carriageway;
		(f) cross falls of less than 3 degrees (1:20 or 5%);
		(g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle;
		(h) curves with a minimum inner radius of 10m;
		(i) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed fire trails, and 10 degrees (1:5.5 or 18%) for unsealed fire trails;
		(j) gates if installed at fire trail entry, have a minimum width of 3.6m, and if locked, keys are provided to TFS; and
		(k) terminate with a turning area for fire appliances provided by one of the following:
		(i) a turning circle with a minimum outer radius of 10m; or (ii) a hammerhead "T" or "Y" turning head 4m wide and 8m long.
В	Fire trail length is 200m or greater.	The following design and construction requirements apply: (a) the requirements for A above; and
		(b) passing bays of 2m additional carriageway width and 20m length provided every 200m.

Element		Requirement
Α.	Distance between building area to be protected and water supply.	The following requirements apply:
		<ul> <li>(a) the building area to be protected must be located within 90 m of fire fighting water point of a static water supply; and</li> </ul>
		(b) the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area.
В.	Static Water Supplies	A static water supply: (a) may have a remotely located offtake connected to the static water supply; (b) may be a supply for combined use (fire fighting and other uses) but the specified minimum quantity of fire fighting water must be available at all times; (c) must be a minimum of 10,000l per building area to be protected. This volume of water must not be used for any other purpose including fire fighting sprinkler or spray systems; (d) must be metal, concrete or lagged by non-combustible materials if above ground; and (e) if a tank can be located so it is shielded in all directions in compliance with section 3.5 of Australian Standard AS 3959-2009 Construction of buildings in bushfire-prone areas, the tank may be constructed of any material provided that the lowest 400mm of the tank exterior is protected by: (i) metal; (ii) non-combustible material; or (iii) fibre cement a minimum of 6mm thickness.
C.	Fittings, pipework and accessories (including stands and tank supports)	<ul> <li>(a) have a minimum nominal internal diameter of 50mm;</li> <li>(b) be fitted with a valve with a minimum nominal internal diameter of 50mm;</li> <li>(c) be metal or lagged by non-combustible materials if above ground;</li> <li>(d) if buried, have a minimum depth of 300mm2;</li> <li>(e) provide a DIN or NEN standard forged Storz 65mm coupling fitted with a suction washer for connection to fire fighting equipment;</li> <li>(f) ensure the coupling is accessible and available for connection at all times;</li> <li>(g) ensure the coupling is fitted with a blank cap and securing chain (minimum 220mm length);</li> <li>(h) ensure underground tanks have either an opening at the top of not less than 250mm diameter or a coupling compliant with this Table; and</li> <li>(i) visible;</li> <li>(ii) accessible to allow connection by fire fighting equipment;</li> <li>(iii) at a working height of 450 - 600mm above ground level; and</li> <li>(iv) protected from possible damage, including damage by vehicles.</li> </ul>
D.	Signage for static water connections	The fire fighting water point for a static water supply must be identified by a sign permanently fixed to the exterior of the assembly in a visible location. The sign must: (a) comply with water tank signage requirements within Australian Standard AS 2304-2011 Water storage tanks for fire protection systems; or (b) comply with the Tasmania Fire Service Water Supply Guideline published by the Tasmania Fire Service.
E.	Hardstand	<ul> <li>A hardstand area for fire appliances must be:</li> <li>(a) no more than 3m from the hydrant, measured as a hose lay;</li> <li>(b) no closer than 6m from the building area to be protected;</li> <li>(c) a minimum width of 3m constructed to the same standard as the carriageway; and</li> <li>(d) connected to the property access by a carriageway equivalent to the standard of the property access.</li> </ul>

## C13.6.1 Development standards for subdivision: Provision of Hazard management areas

**Objective:** Subdivision provides for hazard management areas that:

(a) facilitate an integrated approach between subdivision and subsequent building on a lot;

(b) provide for sufficient separation of building areas from bushfire-prone vegetation to reduce the radiant heat levels, direct flame attack and ember attack at the building area; and

(c) provide protection for lots at any stage of a staged subdivision.

Acceptable Solution	Performance Criteria
A1	P1
(a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant the provision of hazard management areas as part of a subdivision; or	A proposed plan of subdivision shows adequate hazard management areas in relation to the building areas shown on lots within a bushfire-prone area, having regard to:
(b) The proposed plan of subdivision:	(a) the dimensions of hazard management areas;
(i) shows all lots that are within or partly within a bushfire-prone area, including those developed at each stage of a staged subdivision:	(b) a bushfire risk assessment of each lot at any stage of staged subdivision;
(ii) shows the building area for each lot;	(c) the nature of the bushfire-prone vegetation including the type, fuel load, structure and flammability:
(iii) shows hazard management areas between bushfire-prone vegetation and each building area that have dimensions equal to, or greater than, the	(d) the topography, including site slope;
separation distances required for BAL 19 in Table 2.4.4 of Australian Standard AS 3959 – 2009 Construction of buildings in bushfire-prone areas; and	(e) any other potential forms of fuel and ignition sources;
(iv) is accompanied by a bushfire hazard management plan that addresses all the individual lots and that is certified by the TFS or accredited	(f) separation distances from the bushfire-prone vegetation not unreasonably restricting subsequent development;
person, showing hazard management areas equal to, or greater than, the separation distances required for BAL 19 in Table 2.4.4 of Australian Standard AS 3959 – 2009 Construction of buildings in bushfire-prone areas; and	(g) any agreement under section 71 of the Act that will be registered on the title of the neighbouring property providing for the affected land to be managed in accordance with a bushfire hazard management plan; and
(c) If hazard management areas are to be located on land external to the proposed subdivision the application is accompanied by the written consent of the owner of that land to enter into an agreement under section 71 of the Act that will be registered on the title of the neighbouring property providing for the affected land to be managed in accordance with the bushfire hazard management plan.	(h) any advice from the TFS.

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## **BUSHFIRE-PRONE AREAS CODE**

## CERTIFICATE<sup>1</sup> UNDER S51(2)(d) LAND USE PLANNING AND APPROVALS ACT 1993

#### **1.** Land to which certificate applies

The subject site includes property that is proposed for use and development and includes all properties upon which works are proposed for bushfire protection purposes.

Street address:

155 Rheban Road, Orford

Certificate of Title / PID:

PID: 2775205 Certificate of title / number: 149641/2

#### 2. Proposed Use or Development

Description of proposed Use and Development:

90 lot subdivision

Applicable Planning Scheme:

Tasmanian Planning Scheme 2020 – Glamorgan-Spring Bay

#### 3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version

<sup>age</sup>25

<sup>&</sup>lt;sup>1</sup> This document is the approved form of certification for this purpose and must not be altered from its original form.

#### 4. Nature of Certificate

The following requirements are applicable to the proposed use and development:

E1.4 / C13.4 – Use or development exempt from this Code		
Compliance test	Compliance Requirement	
E1.4(a) / C13.4.1(a)	Insufficient increase in risk	

E1.5.1 / C13.5.1 – Vulnerable Uses		
Acceptable Solution	Compliance Requirement	
E1.5.1 P1 / C13.5.1 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.	
E1.5.1 A2 / C13.5.1 A2	Emergency management strategy	
E1.5.1 A3 / C13.5.1 A2	Bushfire hazard management plan	

E1.5.2 / C13.5.2 – Hazardous Uses			
Acceptable Solution	Compliance Requirement		
E1.5.2 P1 / C13.5.2 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.		
E1.5.2 A2 / C13.5.2 A2	Emergency management strategy		
E1.5.2 A3 / C13.5.2 A3	Bushfire hazard management plan		

	E1.6.1 / C13.6.1 Subdivision: Provision of hazard management areas		
	Acceptable Solution	Compliance Requirement	
	E1.6.1 P1 / C13.6.1 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.	
	E1.6.1 A1 (a) / C13.6.1 A1(a)	Insufficient increase in risk	
$\boxtimes$	E1.6.1 A1 (b) / C13.6.1 A1(b)	Provides BAL-19 for all lots	
	E1.6.1 A1(c) / C13.6.1 A1(c)	Consent for Part 5 Agreement	

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	E1.6.2 / C13.6.2 Subdivision: Public and fire fighting access			
	Acceptable Solution	Compliance Requirement		
	E1.6.2 P1 / C13.6.2 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.		
	E1.6.2 A1 (a) / C13.6.2 A1 (a)	Insufficient increase in risk		
$\boxtimes$	E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables		

	E1.6.3 / C13.1.6.3 Subdivision: Provision of water supply for fire fighting purposes		
	Acceptable Solution	Compliance Requirement	
	E1.6.3 A1 (a) / C13.6.3 A1 (a)	Insufficient increase in risk	
$\boxtimes$	E1.6.3 A1 (b) / C13.6.3 A1 (b)	Reticulated water supply complies with relevant Table	
	E1.6.3 A1 (c) / C13.6.3 A1 (c)	Water supply consistent with the objective	
	E1.6.3 A2 (a) / C13.6.3 A2 (a)	Insufficient increase in risk	
	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant Table	
	E1.6.3 A2 (c) / C13.6.3 A2 (c)	Static water supply consistent with the objective	

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5. Bu	shfire Ha	zard Practitioner		
Name:	Philip Bo	arker	Phone No:	0438250713
Postal Address:	163 Cai	mpbell Street Hobart 7000	Email Address:	pbarker@northbarker.com.au
Accreditat	lion No:	BFP – 147	Scope:	1,2,3A,3B,3C

#### 6. Certification

I certify that in accordance with the authority given under Part 4A of the Fire Service Act 1979 that the proposed use and development:

Is exempt from the requirement Bushfire-Prone Areas Code because, having regard to the objective of all applicable standards in the Code, there is considered to be an insufficient increase in risk to the use or development from bushfire to warrant any specific bushfire protection measures, or

The Bushfire Hazard Management Plan/s identified in Section 3 of this certificate is/are in accordance with the Chief Officer's requirements and compliant with the relevant **Acceptable Solutions** identified in Section 4 of this Certificate.

Signed: certifier	esse		
Name:	Philip Barker	Date:	3/11/22
		Certificate Number:	SHE015
		(for Practitic	oner Use only)