



# Application for Planning Permit

PLA0271/19

Rec 2134514

Any material submitted with this application, including plans and personal information, will be made available for public viewing, including electronically, and copies may be made for interested parties for the purpose of enabling consideration and review as part of a planning process under the *Planning and Environment Act 1987*. If you have any concerns, please contact Council's planning department on 5624 2411.

The personal information requested on this form is being collected to enable council to consider the application. Council will use this information for this purpose or one directly related and may disclose this information as required by law in accordance with the *Privacy and Data Protection Act 2014*. The applicant may apply to council for access and/or amendment of the information by contacting council's freedom of information/privacy officer on 5624 2411

## Section 1: The Land

Unit Number  Street Number  Street Name   
 Town  Postcode

### Formal Land Description

Complete either Section A or **B**

#### Section A

Lot Number  Type of Plan  Lodged plan  Title Plan  Plan of Subdivision Number

#### Section B

Crown Allotment Number  Section Number  Parish/Township Name   
 Vol 02820 Folio 870

## Section 2: Applicant and Owner Details

### Applicant

The person who wants the permit.

Title  First Name  Last Name

Organisation (if Applicable)

Email

Postal Address

Unit Number  Street or Post Box Number

Street Name  Town  Postcode

DROUIN SERVICE CENTRE  
 RECEIVED BY... BOC  
 DATE 20.11.19 TIME .....

**Contact Person's Details**

Please provide details of the preferred contact person if this is different from the applicant.

Same as applicant

Title  First Name  Last Name

Organisation (if applicable)

**Postal Address**

Unit Number  Street or Post Box Number

Street Name  Town  Postcode

**Contact Information**

Best Contact Phone Number  E-mail

Fax Number

**Owner**

The person or organisation who owns the land.

Same as applicant

Title  First Name  Last Name

Organisation (if applicable)

**Postal Address**

Unit Number  Street or Post Box Number

Street Name  Town  Postcode

I declare that I am the owner of the above stated property; and that the details above are true and correct.

Signature: 

**Section 3: Estimated Cost of development for which the permit is required:**

## Section 4: The Proposal

You must give full details of your proposal and attach the information required to assess the application. Insufficient or unclear information will delay your application.

For what use, development or other matter do you require a permit?

### DEVELOPMENT:

- |                                                                          |                                                                                       |
|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <input type="checkbox"/> Advertising Signage                             | <input type="checkbox"/> Development of 2 or more dwellings Qty: <input type="text"/> |
| <input type="checkbox"/> Agricultural Outbuildings                       | <input type="checkbox"/> Mixed Use Development and Reduction of Carparking            |
| <input type="checkbox"/> Buildings and Works and Reduction in Carparking | <input type="checkbox"/> Residential Outbuildings                                     |
| <input type="checkbox"/> Commercial or Industrial Buildings and Works    | <input checked="" type="checkbox"/> Single Dwelling                                   |
| <input type="checkbox"/> Extension / Alteration to Dwelling              | <input type="checkbox"/> Telecommunications                                           |

### USE:

- |                                                                |                                              |
|----------------------------------------------------------------|----------------------------------------------|
| <input type="checkbox"/> Buildings and Works and Change of Use | <input type="checkbox"/> Home Based Business |
| <input type="checkbox"/> Change of Use                         | <input type="checkbox"/> Liquor Licence      |
| <input type="checkbox"/> Change of Use and Single Dwelling     |                                              |

### SUBDIVISION

- |                                                                           |                                                                                |
|---------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| <input type="checkbox"/> Boundary Realignment or Variation of Restriction | <input type="checkbox"/> 3 or more Lot Subdivision Qty: <input type="text"/>   |
| <input type="checkbox"/> 2 Lot Subdivision                                | <input type="checkbox"/> 100 or more Lot Subdivision Qty: <input type="text"/> |

### OTHER:

- |                                                                                              |                                                                          |
|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| <input type="checkbox"/> Native Vegetation Removal or Lopping                                | <input type="checkbox"/> Non Native Vegetation Removal or Lopping (ESO4) |
| <input type="checkbox"/> Subdivision and Removal of Vegetation and Alteration of access RDZ1 | Qty: <input type="text"/>                                                |

### FURTHER DETAILS (optional):

Use and development of a single storey dwelling and carport.

**Section 5: Existing Conditions:**

Describe how the land is used and developed now

Dwelling burnt down in 2009  
Existing shed.

Provide a plan of Existing Conditions. Photos are helpful

**Section 6: Pre-Application Meeting**

Has there been a Pre-Application meeting with a Council Planning Officer?

No

Yes

If Yes with Whom?

NATALIE O'SHEA

Date of this meeting

7/11/19

**Section 7: Title Information TITLE MUST NOT BE OLDER THAN 60 DAYS**

**Encumbrances on title**

Does the proposal breach, in any way, an encumbrance on title such as a restrictive covenant, Section 173 agreement or other obligation such as an easement or building envelope?

Yes (if 'yes' contact Council for advice on how to proceed before continuing with this application).

No

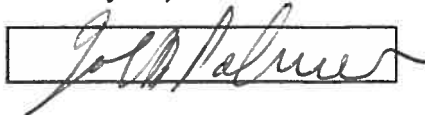
Not applicable (no such encumbrance applies).

Provide a full, current copy of the title for each individual parcel of land forming the subject site. The title includes: the covering register search statement, the title diagram and the associated title documents (known as instruments).

### Section 8: Declaration

I declare that I am the applicant; and that all the information in this application is true and correct; and the owner if not myself) has been notified of the permit application.

Signature:



---

### Section 9: Checklist

Have you:

- Filled in the form completely
- Paid or included the application fee
- Provided a full, current copy of the title information for each individual parcel of land, forming the subject site
- Provided a plan of the existing conditions
- Provided plans showing the layout and details of the proposal
- Provided any information required by the planning scheme, requested by Council
- Provided a description of the likely effect of the proposal (if required)
- Completed the relevant Council planning permit checklist
- Completed the declaration in Section 7
- Provided a contact phone number and e-mail address

---

### Section 10: Lodgement

Lodge the completed and signed form, the fee payment and all documents:

**By Email:**

planning@bawbawshire.vic.gov.au

**By Post:**

Planning Department  
Baw Baw Shire Council  
PO Box 304  
Warragul, VIC, 3820

**In Person:**

Customer Service Centre  
90 Smith Street Warragul  
33 Young Street Drouin  
Contact information:  
Telephone: 5624 2411  
Fax: 5622 2287

20/11/2019  
Revised 12/02/2020

**Baw Baw Shire Council  
Planning Department**

To Whom It May Concern

Please find attached documentation as required and as specified in your fact sheet.  
**'Information Requirements for a Planning Permit Application'**  
as well as the completed **'Application for Planning Permit'**

**Written Summary**

This Planning Permit Application is to replace a previous Planning Permit **PLA0066/13** which was applied for in March 2013.

That application was approved and we were notified in writing by Council dated 02 April 2013.

We applied for several extensions of time and these were also approved up until the last extension of time which was refused by Council (letter dated 16 April 2019) due to the introduction of Bushfire Management Overlay (BMO) to the subject site.

We had the house plans ready to go prior to that application so our timing was unfortunate. After consulting with Baw Baw Shire Planning Department we went ahead and engaged SBA Fire (Geoffrey Stone 0477287862) to produce for us a Bushfire Management Statement for the subject site. That rather large document accompanies and supports this application.

**Purpose**

The purpose of the proposal is as for the previous permit ie for the ***use and development of a single storey dwelling and carport*** the Plans of which are also attached with this application.

**Site Plans**

I have included ( 3 ) A3 Site Plans

i/ Site Context Plan

ii/ NozTec Site Plan

iii/ Proposed Location in relation AHD

The Bushfire Management Statement also contains a lot of Site Plan related information

**REGISTER SEARCH STATEMENT (Title Search) Transfer of  
Land Act 1958**

Page 1 of 1

VOLUME 06928 FOLIO 514

Security no : 124079436370X  
Produced 24/09/2019 11:42 AM**LAND DESCRIPTION**

Crown Allotment 13B Parish of Drouin East.  
PARENT TITLE Volume 02820 Folio 878  
Created by instrument 2035877 01/11/1946

**REGISTERED PROPRIETOR**

Estate Fee Simple  
Joint Proprietors

JOHN BRENTON PALMER  
ANNE CECELIA PALMER both of RMB 5035 MAIN NEERIM RD DROUIN WEST  
L700162H 30/05/1985

**ENCUMBRANCES, CAVEATS AND NOTICES**

For details of any other encumbrances see the plan or imaged folio set out  
under DIAGRAM LOCATION below.

**DIAGRAM LOCATION**

SEE TP391339K FOR FURTHER DETAILS AND BOUNDARIES

**ACTIVITY IN THE LAST 125 DAYS**

NIL

-----END OF REGISTER SEARCH STATEMENT-----

Additional information: (not part of the Register Search Statement)

Street Address: 875 MAIN NEERIM ROAD DROUIN WEST VIC 3818

See MI306664J for WATER FRONTAGE LICENCE details

DOCUMENT END



# Imaged Document Cover Sheet

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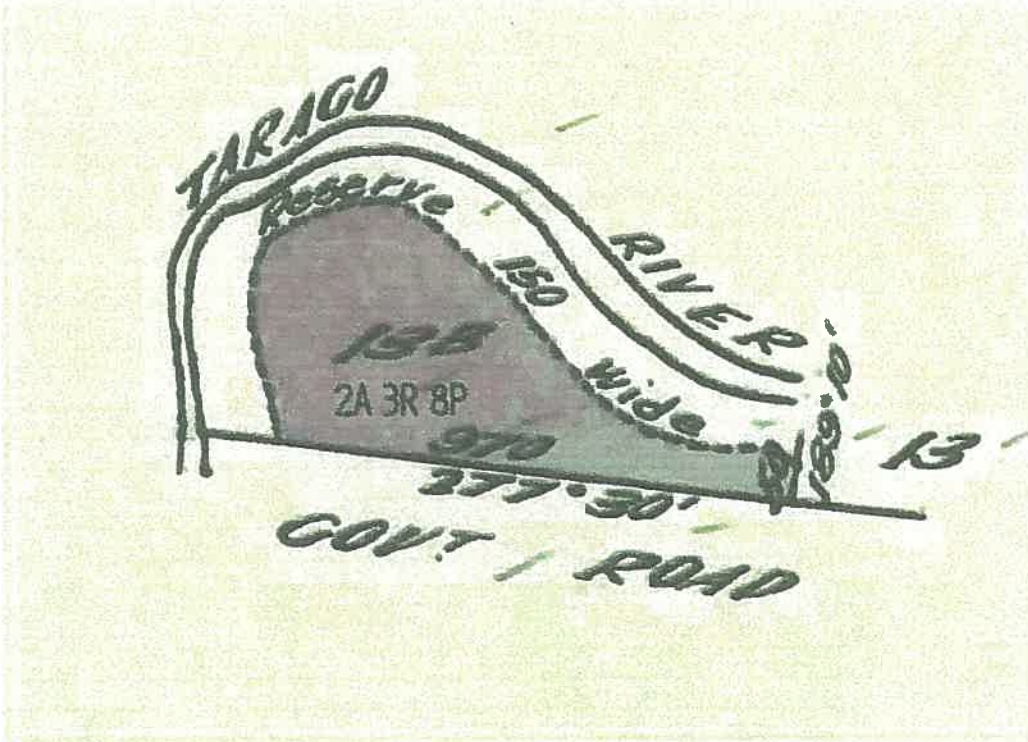
Document Type	<b>Plan</b>
Document Identification	<b>TP391339K</b>
Number of Pages (excluding this cover sheet)	<b>1</b>
Document Assembled	<b>24/09/2019 11:47</b>

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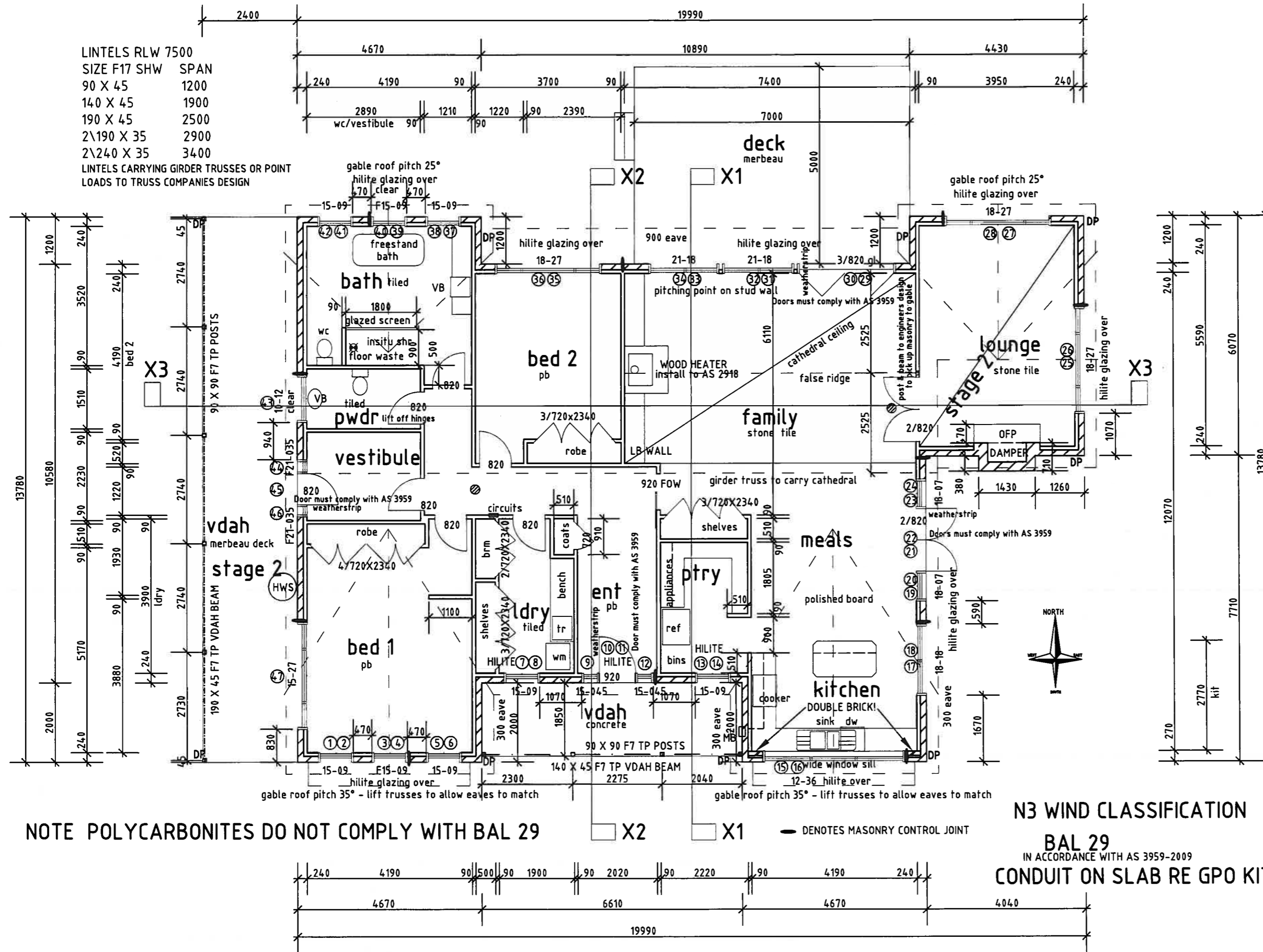


TITLE PLAN		EDITION 1	TP 391339K
<b>Location of Land</b> Parish: DROUIN EAST Township: Section: Crown Allotment: 13B Crown Portion:  Last Plan Reference: Derived From: VOL 6928 FOL 514 Depth Limitation: 50 FEET		<b>Notations</b> WATERWAY NOTATION: LAND IN THIS PLAN MAY ABUT CROWN LAND THAT MAY BE SUBJECT TO A CROWN LICENCE TO USE  ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN	
<b>Description of Land / Easement Information</b>		THIS PLAN HAS BEEN PREPARED FOR THE LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES AS PART OF THE LAND TITLES AUTOMATION PROJECT COMPILED: 07/04/2000 VERIFIED: P.C.	
			
LENGTHS ARE IN LINKS	Metres = 0.3048 x Feet Metres = 0.201168 x Links		Sheet 1 of 1 sheets

LINTELS RLW 7500  
 SIZE F17 SHW SPAN  
 90 X 45 1200  
 140 X 45 1900  
 190 X 45 2500  
 2\190 X 35 2900  
 2\240 X 35 3400  
 LINTELS CARRYING GIRDER TRUSSES OR POINT  
 LOADS TO TRUSS COMPANIES DESIGN

AREA  
 Stage one dwelling 192.4m<sup>2</sup>  
 20.7sq  
 Stage 2 dwelling 26.2m<sup>2</sup>  
 2.82sq  
 Total dwelling 218.6m<sup>2</sup>  
 23.5sq  
 V'dahs 45.2m<sup>2</sup> 4.8sq  
 TOTAL 263.8m<sup>2</sup> 28.4sq

- ALL GAPS AND CRACKS TO BE SEALED
- WINDOWS AND DOORS AVERAGE GAP SMALL
- EXTERNAL DOORS TO BE WEATHERSTRIPPED AND SEALED
- PROVIDE TEMPERATURE CONTROL DEVICE TO REGULATE HOT WATER SUPPLY TO BATHROOM AND ENSUITE TO CONFORM WITH PLUMBING AND DRAINAGE CODE
- PROVIDE MIN 2000 litre WATER TANK TO BE CONNECTED TO WC's (MIN 50m<sup>2</sup> ROOF ATTACHED) TANK TO HAVE MAINS BACK UP AND VALVE INSTALLED TO ENSURE NO BACKFLOW INTO MAINS WATER
- ALUMINIUM THERMALLY IMPROVED WINDOW FRAMES ALL GLAZING TO AS 1288 & AS 2047 & ENERGY RATING WINDOW SIZES NOMINATED ARE NOMINAL ONLY AND MAY VARY ACCORDING TO MANUFACTURERS SPECIFICATIONS. WINDOWS TO BE FLASHED ALL ROUND
- R1.7 FOAMEX TO UNDERSIDE OF CONCRETE FLOOR
- R2.5 INSULATION TO UNDERSIDE OF TIMBER FLOOR
- R2.5 BULK EXTERNAL WALL INSULATION
- R5.0 BULK CEILING INSULATION & R1.3 BLANKET INSULATION
- ANTI GLARE FOIL TO EXTERNAL WALLS (FOIL TO HAVE FLAMMABILITY INDEX NOT EXCEEDING 5)
- SMOKE DETECTORS MAINS WIRED WITH BATTERY BACK UP TO AS 3786 ALL INTERCONNECTED



NOTE POLYCARBONITES DO NOT COMPLY WITH BAL 29

N3 WIND CLASSIFICATION  
 BAL 29  
 IN ACCORDANCE WITH AS 3959-2009  
 CONDUIT ON SLAB RE GPO KITCHEN

PRELIMINARY

WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE  
 ALL DIMENSIONS AND LEVELS TO BE CHECKED AND VERIFIED ON SITE.  
 ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGNER BEFORE WORKS BEGIN.

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FLOOR PLAN  
 COPYRIGHT

NOZ TECH DRAFTING  
 DENISE PANOZZO  
 PH 0427 343327  
 BP NO DPAD 14.48  
 P.O. BOX 656, WARRAGUL 3820  
 denise.noztech@gmail.com

PRELIMINARY DESIGN	30-8-16 10-2-17
COMPLETED DRAWINGS	27-2-17
AMENDMENT 1	12-11-19
AMENDMENT 2	

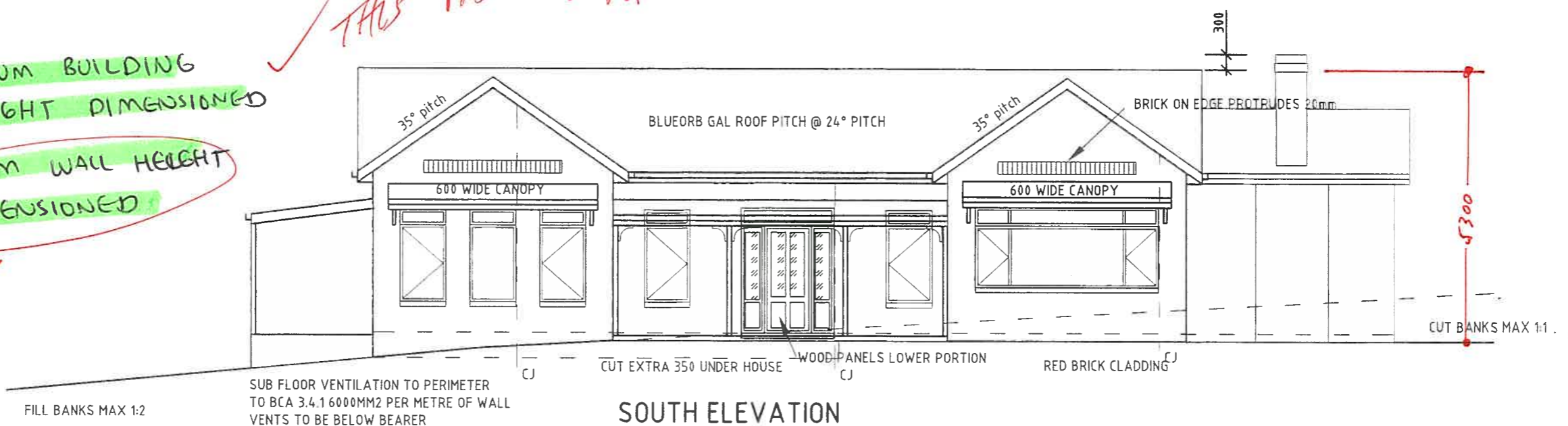
J. PALMER  
 875 MAIN NEERIM ROAD  
 DROUIN WEST  
 SCALE 1:100 DRAWN DP

✓ THIS PAGE OF PAGE 6

MAXIMUM BUILDING HEIGHT DIMENSIONED

MAXIMUM WALL HEIGHT DIMENSIONED

page 7



SOUTH ELEVATION

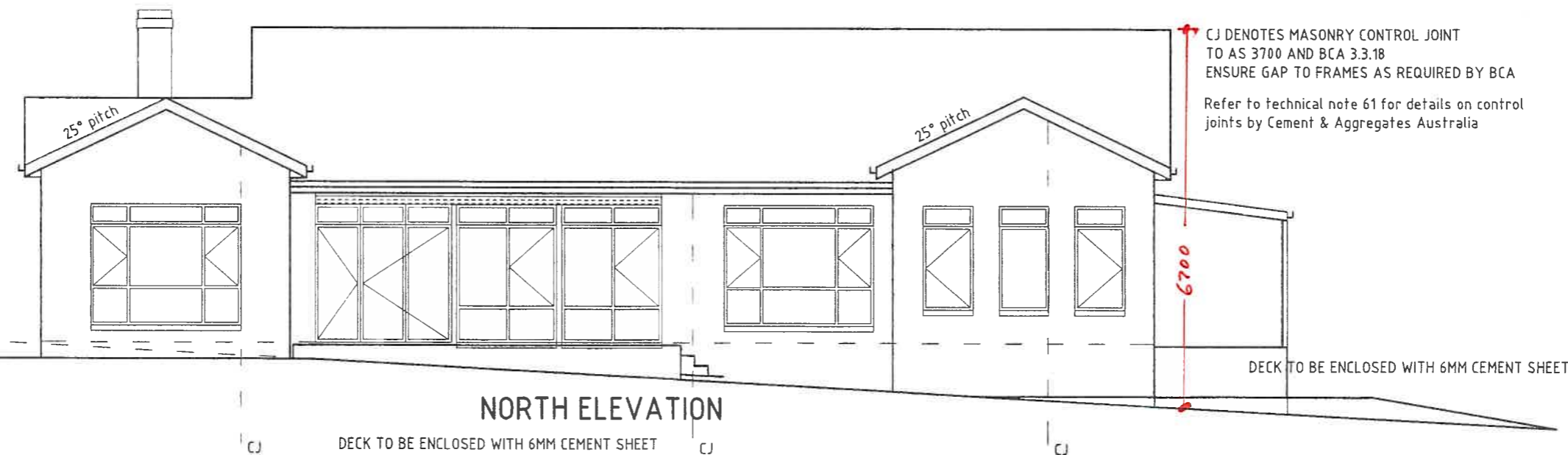
STEPS TO BCA 3.9.1  
 RISERS MAX 190mm HIGH (MAX 125mm GAP BEHIND)  
 GOINGS MINIMUM 240mm WIDE  
 2R + G = 500mm MIN AND 700mm MAX  
 ALL STEPS AND LANDINGS TO HAVE A SUITABLE NON SLIP FINISH OR NON SKID STRIP NEAR EDGE OF NOSING  
 A 125mm SPHERE MUST NOT BE ABLE TO PASS THROUGH RISERS  
 MINIMUM HEADROOM 2000mm

HANDRAILS TO BCA 3.9.2  
 REQUIRED WHERE DECK TO GROUND LEVEL IS 1000mm OR MORE FROM FINISHED FLOOR LEVEL,  
 REQUIRED WHERE A BED ROOM WINDOW IS 2M OR MORE FROM SURFACE BELOW -  
 THE WINDOW MUST NOT OPEN MORE THAN 125mm OR PROVIDE A SCREEN TO COMPLY WITH BCA 3.9.2.2 & AS 1170.1  
 REQUIRED WHERE ANY WINDOW WHICH IS 4M OR MORE FROM GROUND LEVEL AND A PERSON MAY FALL THROUGH  
 HANDRAILS 1000mm HIGH FROM FINISHED FLOOR LEVEL AND 865mm HIGH ABOVE STAIR TREAD NOSING  
 BALUSTERS / RAILS MAX 125mm APART - A 125mm SPHERE MAY NOT PASS THROUGH  
 BALUSTRADES AND RAILINGS AND THEIR SUPPORTS SHOULD  
 BE CONSTRUCTED TO SUSTAIN IMPOSED ACTIONS IN ACCORDANCE WITH AS 1170

WHERE THE ROOF SHEETING IS FIXED TO METAL BATTENS OR PURLINS AND HAS A CEILING FIXED DIRECTLY TO THOSE BATTENS/PURLINS, THERE MUST BE A THERMAL BREAK OF R0.2 INSTALLED BETWEEN ROOFING AND SUPPORT MEMBER REFER TO BCA 3.12.1.2

ROOFS, EXTERNAL WALLS, EXTERNAL FLOORS AND OPENINGS SUCH AS WINDOWS AND DOORS SHALL BE CONSTRUCTED TO MINIMIZE AIR LEAKAGE AND SHALL BE ENCLOSED BY AN INTERNAL LINING SYSTEM THAT IS CLOSE FITTING AT CEILING, WALL AND FLOOR JUNCTIONS AND SEALED BY CAULKING, SKIRTING, ARCHITRAVES AND CORNICES AND THE LIKE.

SERVICES (HOT WATER SYSTEM AND HEATING AND COOLING DUCTWORK MUST COMPLY WITH BCA 3.12.5



NORTH ELEVATION

WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE  
 ALL DIMENSIONS AND LEVELS TO BE CHECKED AND VERIFIED ON SITE.  
 ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGNER BEFORE WORKS BEGIN.  
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ELEVATIONS  
 COPYRIGHT

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 denise.noztech@gmail.com

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AMENDMENT 2	

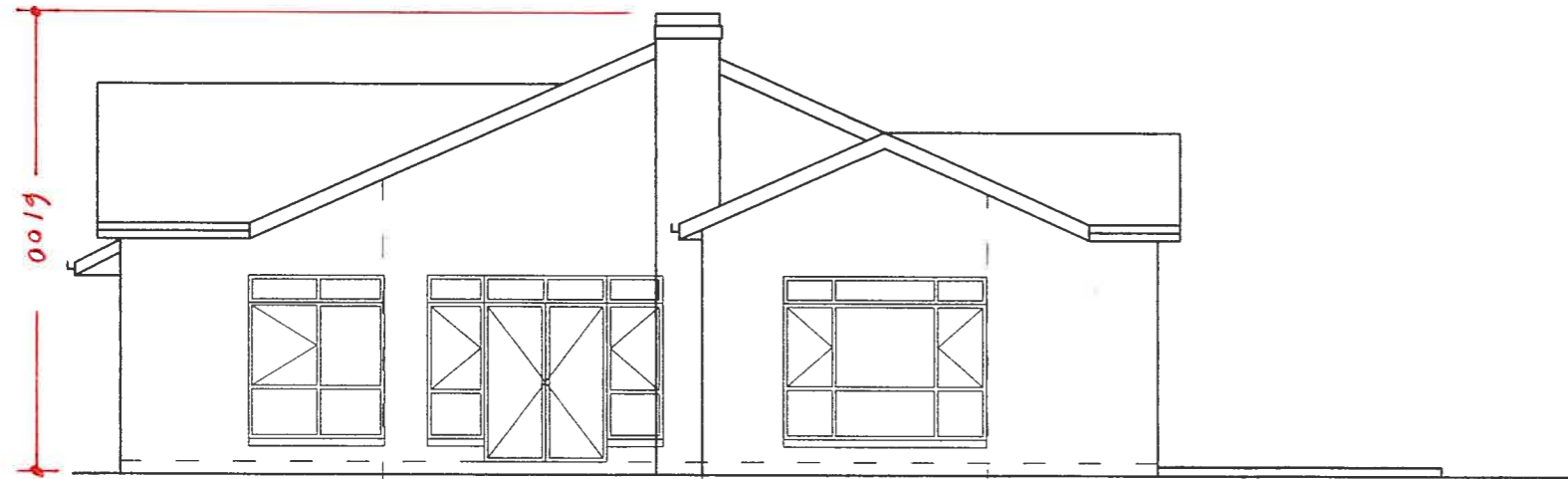
J. PALMER  
 875 MAIN NEERIM ROAD  
 DROUIN WEST

SCALE 1:100 DRAWN DP



BACKFILL TO ENSURE DECK TO GROUND LEVEL DOES NOT EXCEED 900

WEST ELEVATION



EAST ELEVATION

WINDOW SCHEDULE			
No.	Code	SIZE H x W	TYPE
W.01	STG 024 47 A	1500X900 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.02	STG 024 47 A	300X900 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.03	STG 024 47 A	1500X900 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.04	STG 024 47 A	300X900 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.05	STG 024 47 A	1500X900 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.06	STG 024 47 A	300X900 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.07	STG 024 47 A	1500X900 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.08	STG 024 47 A	300X900 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.09	TIM 002 01W	1500X450 nom.	Single glazed timber FIX U value 5.4 SHGC 0.63
D.10	TIM 001 01W	1500X920 glazed portion	Single glazed timber door U value 5.4 SHGC 0.56
W.11	TIM 002 01W	1500X450 nom.	Single glazed timber FIX U value 5.4 SHGC 0.63
W.12	TIM 002 01W	300X1800 nom.	Single glazed timber FIX U value 5.4 SHGC 0.63
W.13	STG 024 47 A	1500X900 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.14	STG 024 47 A	300X900 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.15	STG 024 47 A	1200X3600 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.16	STG 024 47 A	300X3600 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.17	STG 024 47 A	1800X1800 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.18	STG 024 47 A	300X1800 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.19	STG 024 47 A	1800X700 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.20	STG 024 47 A	300X700 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
D.21	TIM 003 01W	2100X1600 nom.	Double glazed timber doors U value 3.0 SHGC 0.48
W.22	STG 024 47 A	300X1600 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.23	STG 024 47 A	1800X700 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.24	STG 024 47 A	300X700 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.25	STG 024 47 A	1800X2700 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.26	STG 024 47 A	300X2700 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.27	STG 024 47 A	1800X2700 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.28	STG 024 47 A	300X2700 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
D.29	TIM 003 01W	2100X2400 nom.	Double glazed timber doors U value 3.0 SHGC 0.48
W.30	STG 024 47 A	300X2400 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.31	STG 024 47 A	2100X1800 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.32	STG 024 47 A	300X1800 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.33	STG 024 47 A	2100X1800 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.34	STG 024 47 A	300X1800 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.35	STG 024 47 A	1800X2700 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.36	STG 024 47 A	300X2700 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.37	STG 024 47 A	1500X900 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.38	STG 024 47 A	300X900 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.39	STG 024 47 A	1500X900 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.40	STG 024 47 A	300X900 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.41	STG 024 47 A	1500X900 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.42	STG 024 47 A	300X900 nom.	Double glazed argon aluminium FIX U value 3.24 SHGC 0.45
W.43	STG 024 47 A	1000X1200 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45
W.44	TIM 002 01W	1500X350 nom.	Single glazed timber FIX U value 5.4 SHGC 0.63
D.45	TIM 001 01W	1500X920 glazed portion	Single glazed timber door U value 5.4 SHGC 0.56
W.46	TIM 002 01W	1500X350 nom.	Single glazed timber FIX U value 5.4 SHGC 0.63
W.47	STG 024 47 A	1500X2700 nom.	Double glazed argon aluminium CASE U value 3.24 SHGC 0.45

WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE  
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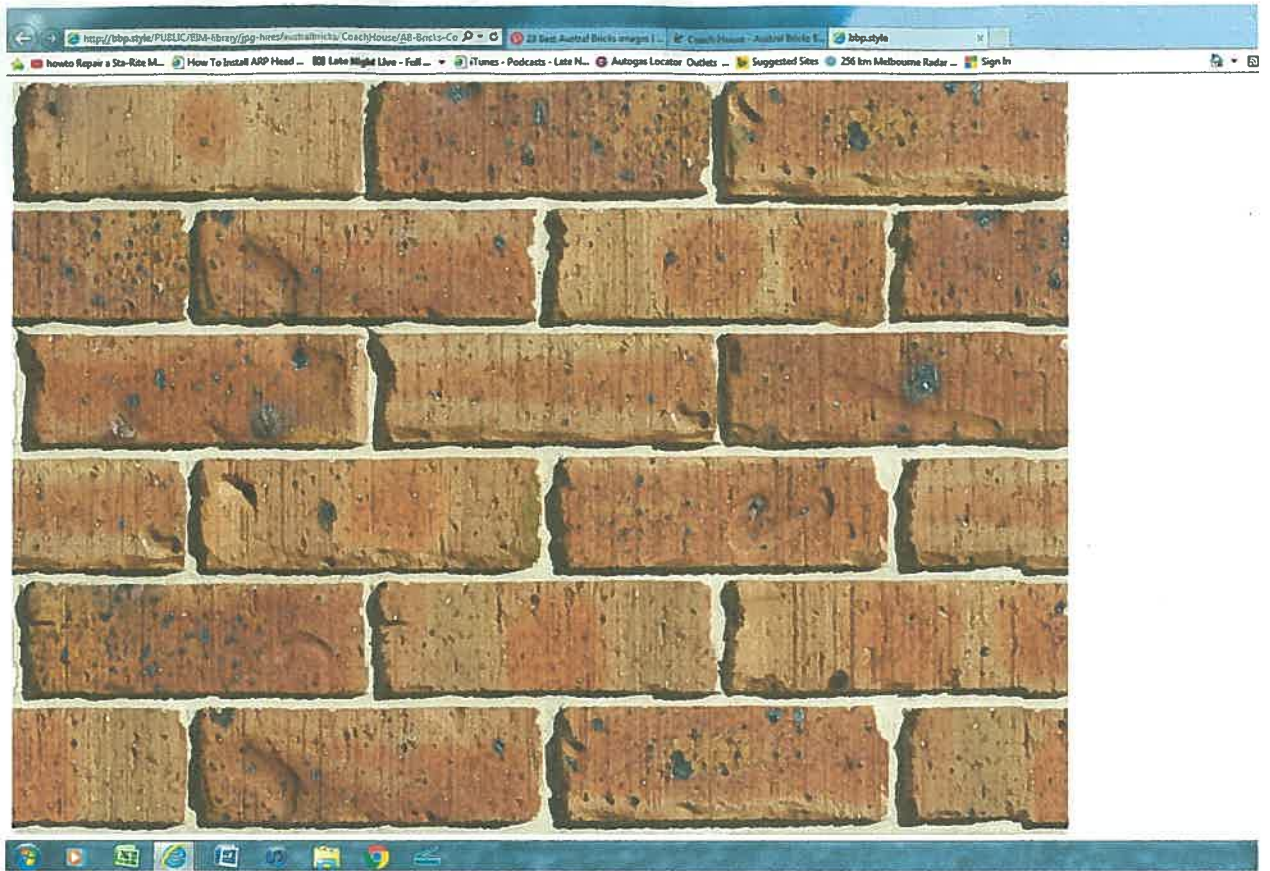
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NOZ TECH DRAFTING  
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[denise.noztech@gmail.com](mailto:denise.noztech@gmail.com)

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J. PALMER  
 875 MAIN NEERIM ROAD  
 DROUIN WEST

SCALE 1:100 DRAWN DP



Modoseu Brick

austral bricks - coach house

centennial blend.

Colorbond® Shale Grey™ W  
BC2

Colorbond® Surfmist® W  
BC1

**SBA  
Fire**



**SBAFire – Bushfire Advisory**

*“Commercial in Confidence”*

## **Bushfire Management Statement**

Relating to proposed dwelling at 875 Main Neerim Road Drouin West 3818 Victoria

**Report prepared for  
John Palmer**

20 September 2019

Prepared by:

**SBA  
Fire**

PO Box 913 Templestowe Vic 3106 T: 1300 287 862 M: 0477 287 862  
W: [www.sbafire.com](http://www.sbafire.com) E: [info@sbafire.com](mailto:info@sbafire.com)

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## Executive Summary

The subject site is in a Designated Bushfire Prone Area and is also covered by a Bushfire Management Overlay, therefore requiring a Bushfire Management Statement (BMS) (Pathway 2) as Clause 53.02-4 applies, under Clause 53.02. This Bushfire Management Statement (BMS) (Pathway 2) has been prepared by SBAFire Bushfire Advisory for the property owners and should be read in conjunction with the planning and building application for the property.

This statement outlines how the proposed construction development on the site responds to the purpose and objectives of Clause 53.02-4: – Bushfire Planning, Bushfire protection objectives, including the decision guidelines of Clause 44.06 – Bushfire Management Overlay.

The proposal involves a proposed dwelling and carport at 875 Main Neerim Road Drouin West 3818 Victoria and is located in a Bushfire Management Overlay, requiring a BMS and BAL report.

The Bushfire Management Statement includes the following:

1. A **Bushfire Hazard Site Assessment** including a plan that describes the bushfire hazard within 150 metres of the proposed development;
2. A **Bushfire Hazard Landscape Assessment** including a plan that describes the bushfire hazard of the general locality more than 150 metres from the site;
3. A **Bushfire Management Statement** describing how the proposed development responds to the requirements of Clause 53:02 and Clause 44.06.
4. A **Bushfire Attack Level Assessment** – Detailed procedure (Method 2) AS3959-2009

It will be important for the owners to maintain a high level of property vegetation management and maintenance, in order to ensure minimal fuel loading on the property, particularly within the defined defensible space area and the site generally. The nature of the grassland, woodland and forest vegetation on and impinging on and surrounding the site will present a very high bushfire risk, particularly on days of extreme fire weather conditions.

The proposed development appropriately prioritises the protection of human life, and strengthens community resilience to bushfire, through strategic siting, design and construction measures that reduce the bushfire risk to life and property to an acceptable level.

The proposed development takes into account site constraints, the closest vegetation threat and incorporates measures to mitigate bushfire risk. When considering factors of vegetation threat, slope and vegetation character, this report demonstrates that: *BAL 29 Construction level will be achieved for the dwelling and carport.*

The proposal is appropriate for CFA and Council approval and support.

## Document Control

### DOCUMENT CONTROL:

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Project Name: 875 Main Neerim Road Drouin West 3818 Victoria

Document Reference: BMS/BAL Report 875 Main Neerim Road Drouin West

### PREPARED FOR:

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## DISCLAIMER

This report is prepared on the basis the subject site and land that is identified to be 'at risk' of bushfire. Any buildings or structures located on such land subsequently inherit this risk. This report does not seek to remove this risk but provides a bushfire management and assessment report outline of issues relating to bushfire management and planning to assist the ability of the land owner to manage the threat of this risk.

This assessment is prepared based upon local, State and Federal legislative provisions relating to bushfire protection, as relevant at the time of production. SBAFire maintains relevant knowledge with regard to planning and development in bushfire prone areas. However, it is important to note that whilst bushfires generally maintain certain scientific attributes, bushfire events vary in intensity, duration, location and 'typical' behavioural characteristics. Bushfires do not always conform to scientific and widely understood predictabilities and remain subject to variation across fire seasons by virtue of changes in ground fuel loads and vegetation, prevailing weather and wind conditions and topography.

It remains the land owner's responsibility to understand and prepare for the event of bushfire, which requires year-round property maintenance, a proficient understanding of local bushfire knowledge and what do in the event of a bushfire. A personal bushfire safety plan is recommended, and decisions regarding what to do in an event should be made well in advance of any particular bushfire threat. Regular contact with your local fire authority is advised.

Whilst every care has been taken in the preparation of this report to advise upon the bushfire risk of the property, it forms no guarantee with respect to the safeguard of life and property. SBAFire accepts no responsibility for any damage or loss of life or property as a result of bushfire or any other cause which may in any way be taken to be the subject of this report. This report and the information within it are provided on the understanding that reasonable care will be taken when using it. If there remains any uncertainty regarding the application of the information within the report in a specified circumstance, further professional advice should be sought. SBAFire does not accept responsibility for how the information within this report is applied or relied upon.

Further comment: We reiterate that this report has been prepared to assist you in determining the nature of bushfire management requirements set out in the approved documentation for this property that is stated in this report. We have given careful consideration to the statutory requirements and specific requirements of various authorities. We SBAFire have made our recommendations on the basis of the information made available to us and our understanding of the requirements and using our best endeavors. The information may be of assistance to you. Before relying on information in this report, users should carefully evaluate the accuracy, completeness and relevance of the information provided for their purposes. SBAFire, its directors and employees do not guarantee that it is without flaw or omission of any kind or is wholly appropriate for your particular purposes and therefore disclaim all liability for any error, loss or other consequence that may arise from you relying on any information in this report.

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### Qualifications

- *Chief Fire Officer (CFO) Designation CPSE/Commission on Professional Credentialing USA*
- *Member of The Institution of Fire Engineers UK - MIFireE*
- *Advanced Diploma of Public Safety - Emergency Management*
- *Major Incident Controller/Commander AIIMS - Australasian Inter-service Incident Management System*
- *Certificate IV in Training and Assessment*
- *Certificate IV in Public Safety (Firefighting Supervision)*
- *Certificate III in Public Safety (Firefighting Operations)*
- *Certificate II in Public Safety (Firefighting Operations)*
- *Senior Executive Fire Officer Assessment V – CFA*
- *Operations Management - CFA*
- *Operations Officer – CFA*
- *Fire Officer III Assessment - CFA*
- *Brigade Officer - QFES*
- *Crew Leader - CFA & QFES*
- *Leading Firefighter/Fire Officer I – CFA*
- *Forest Fire Management – Former DCFL - Forests Commission Victoria*
- *Master of Business Administration - The University of Melbourne Victoria*
- *Graduate Diploma in Business Administration - The University of Ballarat Victoria*
- *Diploma of Leadership and Management*
- *Fellow of Australian Institute of Management – FAIM*
- *Certified Professional Manager – CPMgr current*

### Area of Expertise

Bushfire management, planning, design and operations. Large scale bushfire incident command and operations. Fire and Emergency Services delivery, operations, policy, management, corporate, strategic and operational planning. Leadership and management of large-scale complex public, private and non-profit organisations.

### Experience

Geoffrey Stone has more than 35 years' experience, knowledge, skills and qualifications as a Senior Fire and Emergency Services Officer with the Country Fire Authority Victoria (CFA), Queensland Fire and Emergency Services (QFES), Queensland Fire and Rescue Service (QFRS) and Rural Fire Service Queensland (RFSQ), and recognised industry wide as one of the top experts in the field. He has previously served as CFA Director Strategic and Operational Planning, State Fire Commander, Assistant Chief Officer in various departments and locations, and in other senior state, regional command, group and brigade level positions.

## Instructions and scope

SBAFire has been engaged by the property owners of the subject site to undertake a Bushfire Management Statement (BMS) and Bushfire Attack Level (BAL) Assessment report, relating to the proposed construction of a dwelling and carport at 875 Main Neerim Road Drouin West 3818 Victoria (subject site).

The subject site is in a Designated Bushfire Prone Area and is also covered by a Bushfire Management Overlay, therefore requiring a Bushfire Management Statement (BMS) (Pathway 2) as Clause 53.02-4 applies, under Clause 53.02. The BMS is required to be prepared in response to the requirements of Clause 44.06 – Bushfire Management Overlay and in accordance with the application requirements of Clause 53.02 (31/07/2018 VC148) Bushfire Planning, in-line with the Bushfire Management Statement framework and Planning Policy Framework Clause 13.02-1S.

The bushfire management statement aims to mitigate the risk to life and property from bushfire threat and the impact of bushfire attack.

This bushfire management statement report does not seek to remove the bushfire risk, but provides detailed siting, building and general bushfire hazard related information to assist in the ability of the land-owner to manage the risk associated with living in a bushfire environment. This bushfire management statement has been prepared in accordance with AS3959-2009, planning scheme Clauses 53.02 and Clause 44.06, best practice standards as applied in Victoria and in accordance with Local and State Government bushfire planning, guidelines and policies.

## Location and Site Description

The subject site is located at 875 Main Neerim Road Drouin West 3818 Victoria, surrounding properties and existing land use and the landscape context will be considered as part of this report.

### The Site

The site at 875 Main Neerim Road Drouin West 3818 Victoria, comprises 20,355 sqm (2.0 ha) of Rural Activity Zone land, with grassland, woodland and forest vegetation areas on and beyond the subject site to the north, east, west and south.

### Application Details & Site Description

<b>Municipality:</b>	Baw Baw Shire Council
<b>Title description:</b>	Council Property Number Part of 9101 SPI 13B\PP2547
<b>Overlays:</b>	Bushfire Management Overlay (BMO) Development Contribution Plan Overlay (DCPO) Floodway Overlay (FO)
<b>Zoning:</b>	Rural Activity Zone (RAZ)

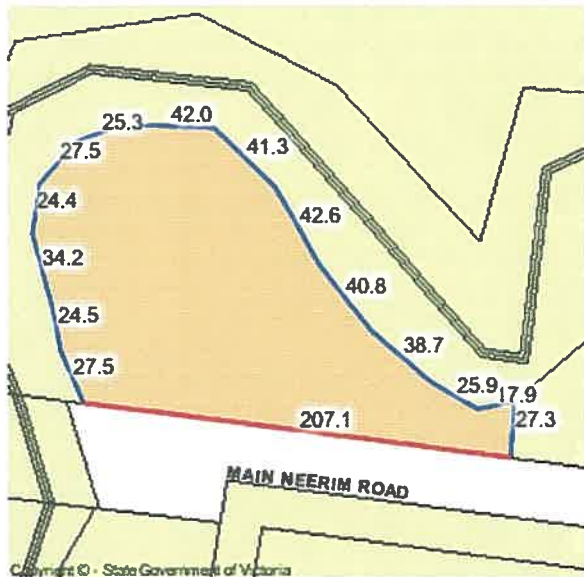
### Site Description

<b>Site shape:</b>	Irregular polygon
<b>Site Dimensions:</b>	As shown in following
<b>Site Area:</b>	20355 sqm
<b>Existing use and siting of buildings and works on and near the land:</b>	Land is currently not occupied by a dwelling.
<b>Existing vehicle arrangements:</b>	The primary access to the new dwelling site is via Main Neerim Road Drouin West  The dwelling site is located approximately 120 metres off Main Neerim Road to the rear of the proposed dwelling site via the proposed main accessway/driveway.
<b>Location of nearest fire hydrant:</b>	There are no fire hydrants in the area or within 120 metres of the rear of the dwelling.
<b>Any other features of the site relevant to bushfire considerations:</b>	The subject site is surrounded by rural residential properties on large lots. Within 150 metres radius of the dwelling site there is very high-risk grassland, woodland and forest vegetation. There are extensive very high to extreme risk forest and woodland areas to the north, south, east and west  There is potential for long run bushfires beyond 30 km from the north, northwest, northeast, southwest, west and southeast.

Site Plan

**Site Dimensions**

All dimensions and areas are approximate. They may not agree with the values shown on a title or plan.



**Area:** 20355 sq. m  
(2.0 ha)

**Perimeter:** 647 m

For this parcel:

- Site boundaries
- Road frontages

Dimensions for individual parcels require a separate search, but dimensions for individual units are generally not available.

For more accurate dimensions get copy of plan at [Title and Property Certificates](#)

**Parcel Details**

This is 1 parcel of 3 parcels comprising the property. The parcel searched for is marked with an \* in the table below.

Lot/Plan or Crown Description	SPI
Lot 1 TP216481	1\TP216481
Lot 1 TP883458	1\TP883458
DROUIN EAST *Allot. 13B	13B\PP2547

SBAFire Drone Aerial Image of Dwelling Envelope 875 Main Neerim Road Drouin West



### Overall Site Image

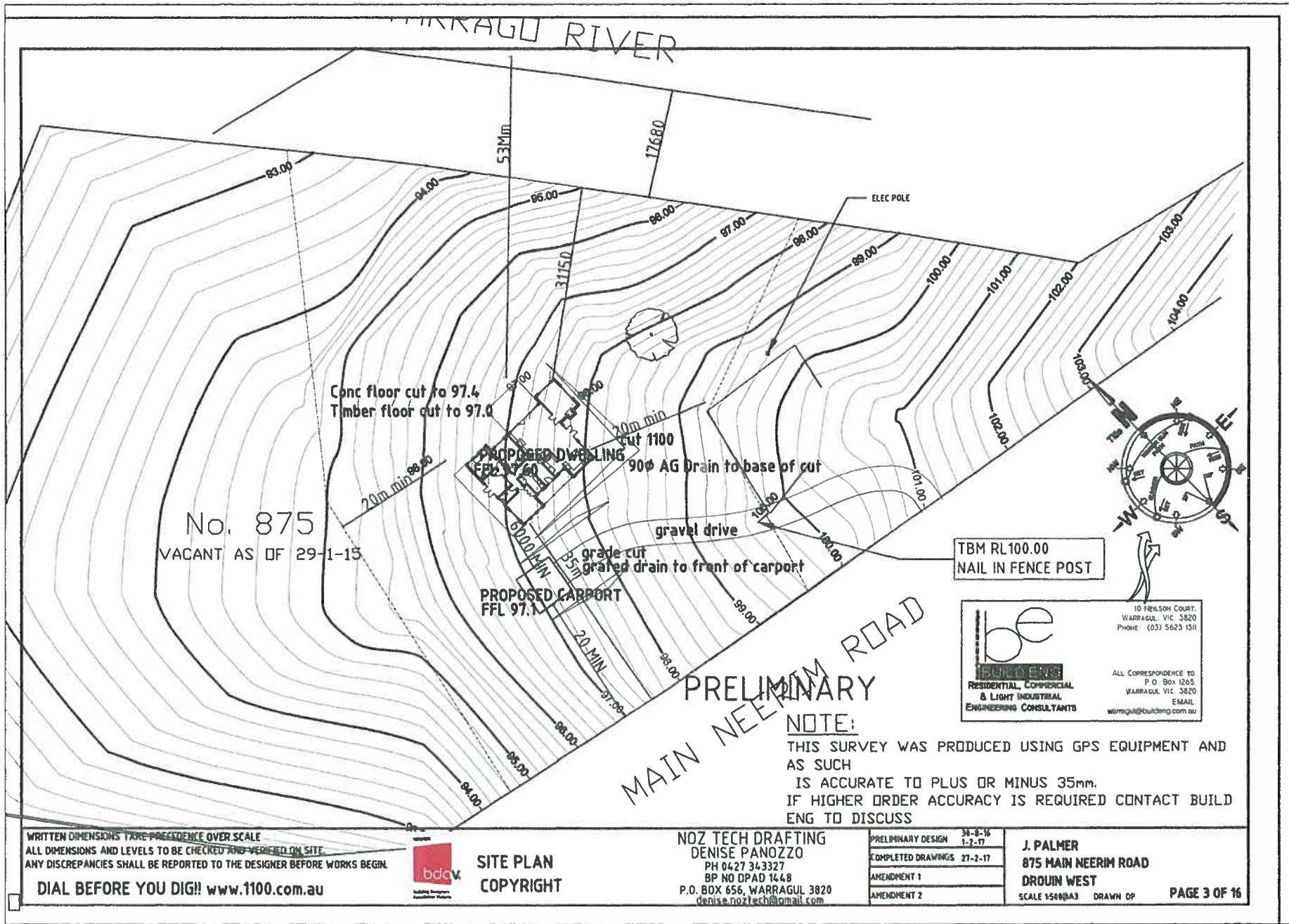


Source Neamap Image 2 April 2019

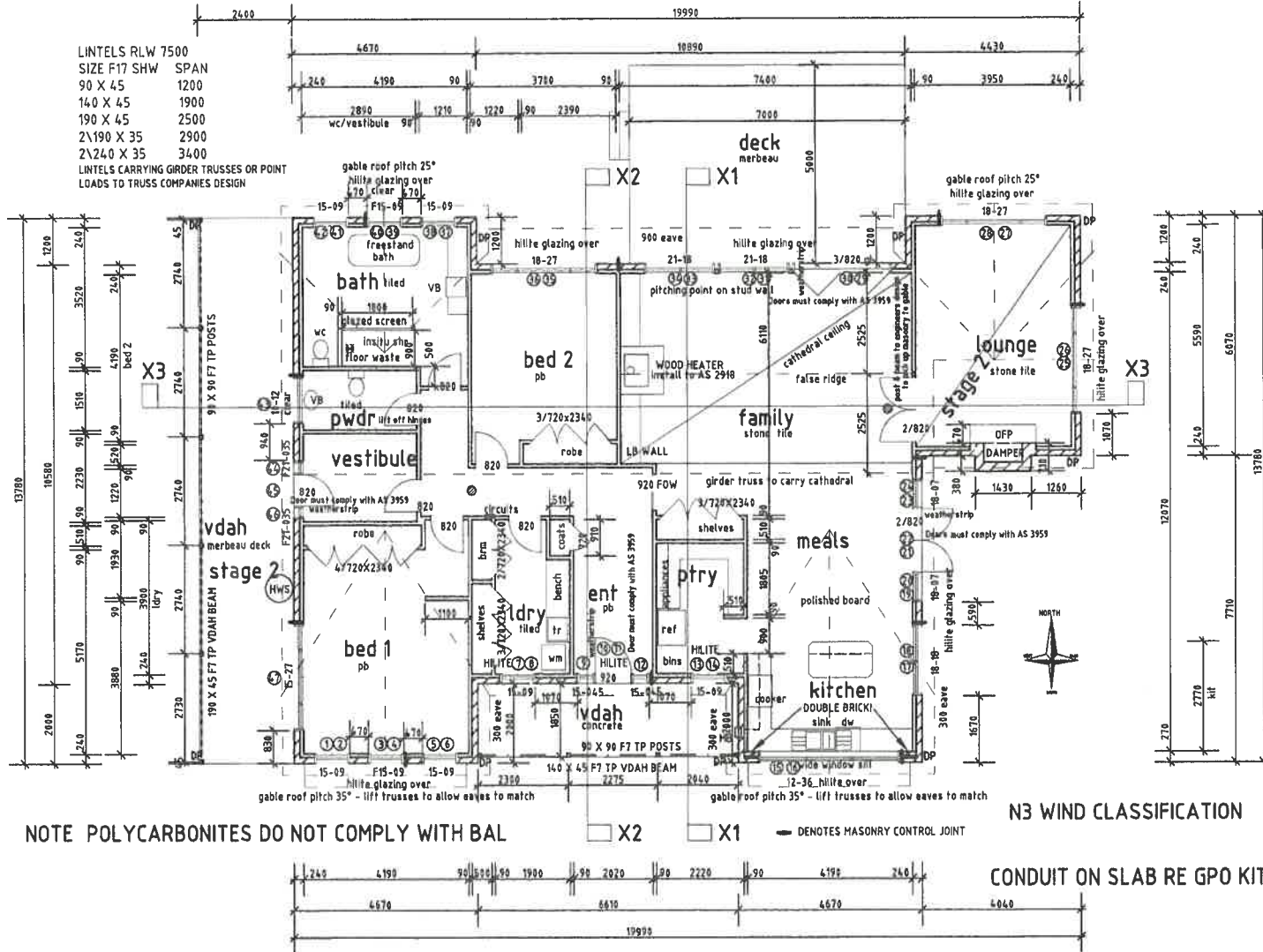


Nearmap Image 2 April 2019 of Site and Surrounding Area





LINTELS R/LW 1500  
 SIZE F17 SHW SPAN  
 90 X 45 1200  
 140 X 45 1900  
 190 X 45 2500  
 2\190 X 35 2900  
 2\240 X 35 3400  
 LINTELS CARRYING GIRDER TRUSSES OR POINT  
 LOADS TO TRUSS COMPANIES DESIGN



**AREA**  
 Stage one dwelling 192.4m<sup>2</sup>  
 20.7sq  
 Stage 2 dwelling 26.2m<sup>2</sup>  
 2.82sq  
 Total dwelling 218.6m<sup>2</sup>  
 23.5sq  
 V'dahs 45.2m<sup>2</sup> 4.8sq  
 TOTAL 263.8m<sup>2</sup> 28.4sq

- ALL GAPS AND CRACKS TO BE SEALED
- WINDOWS AND DOORS AVERAGE GAP SMALL
- EXTERNAL DOORS TO BE WEATHERSTRIPPED AND SEALED
- PROVIDE TEMPERATURE CONTROL DEVICE TO REGULATE HOT WATER SUPPLY TO BATHROOM AND ENSURE TO CONFORM WITH PLUMBING AND DRAINAGE CODE
- PROVIDE MIN 2000 litre WATER TANK TO BE CONNECTED TO WC's (MIN 50m<sup>2</sup> ROOF ATTACHED) TANK TO HAVE MAINS BACK UP AND VALVE INSTALLED TO ENSURE NO BACKFLOW INTO MAINS WATER
- ALUMINIUM THERMALLY IMPROVED WINDOW FRAMES ALL GLAZING TO AS 1288 & AS 2047 & ENERGY RATING WINDOW SIZES NOMINATED ARE NOMINAL ONLY AND MAY VARY ACCORDING TO MANUFACTURERS SPECIFICATIONS. WINDOWS TO BE FLASHED ALL ROUND
- R17 FOAMEX TO UNDERSIDE OF CONCRETE FLOOR
- R2.5 INSULATION TO UNDERSIDE OF TIMBER FLOOR
- R2.5 BULK EXTERNAL WALL INSULATION
- R5.0 BULK CEILING INSULATION & R1.3 BLANKET INSULATION
- ANTI GLARE FOIL TO EXTERNAL WALLS (FOIL TO HAVE FLAMMABILITY INDEX NOT EXCEEDING 5)
- SMOKE DETECTORS MAINS WIRED WITH BATTERY BACK UP TO AS 3786 ALL INTERCONNECTED

NOTE POLYCARBONITES DO NOT COMPLY WITH BAL

N3 WIND CLASSIFICATION

CONDUIT ON SLAB RE GPO KITCHEN

PRELIMINARY

WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE  
 ALL DIMENSIONS AND LEVELS TO BE CHECKED AND VERIFIED ON SITE  
 ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGNER BEFORE WORKS BEGIN.

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FLOOR PLAN  
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 P.O. BOX 656, WARRAGUL 3820  
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PRELIMINARY DESIGN	30-8-16
COMPLETED DRAWINGS	27-2-17
AMENDMENT 1	
AMENDMENT 2	

J. PALMER  
 875 MAIN NEERIM ROAD  
 DROUIN WEST

SCALE 1:100 DRAWN DP

PAGE 4 OF 16

### Aerial Drone Images of Site and Surrounds



Drone Aerial Images of subject site

View West



View North



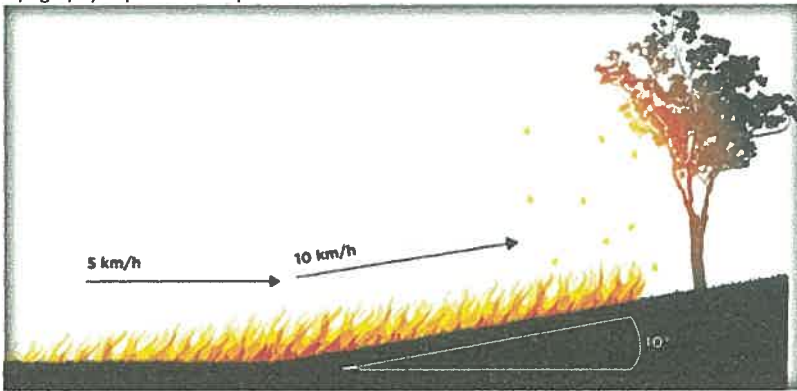


The BAL relies on a generalised description of vegetation based on the AUSLIG (Australian Natural Resources Atlas: - Native Vegetation) classification system. If more than one vegetation type is present, the 'worst case scenario' is applied - the predominant vegetation type present is not necessarily the worst-case scenario applied (AS3959:2009 2.2.3.1).

## Topography

Topography can significantly influence the rate of spread and intensity of a bushfire. Fire burns faster uphill – as the slope increases so does the speed of the fire and its intensity. For every 10° slope, the fire will double its speed. Fires move more slowly down-hill because the flames reach less fuel, and less radiant heat preheats the vegetation in front of the fire. For every 10° of downhill slope, the fire will halve its speed<sup>3</sup>. When winds are light the slope will be the dominant influence on the direction of fire spread.

Topography impact on fire speed



## Fire Weather

Hot, dry and windy days provide ideal conditions for a bushfire. In summer, these are common weather conditions that increase the flammability of vegetation. Low humidity and high temperatures, which are fueled by hot winds, dry out vegetation, allowing it to readily ignite.

Fire weather is a significant part of bushfire hazard. Vegetation types, fuel loads, effective slope and a range of other factors can be assessed, fire weather can vary greatly across days and seasons, and can have a significant impact on the potential for bushfire threat and bushfire behaviour and intensity.

The Fire Danger Index (FDI) was developed in the 1960's by Scientist A. G. McArthur to measure the degree of danger of fire in Australian forests. The index combines a record of dryness, based on rainfall and evaporation, with meteorological variables for wind speed, temperature and humidity. The FDI is a key component for calculating the Bushfire Attack Level (BAL) combined with vegetation type, distance to classified vegetation and slope.

The FDI is the primary method used to communicate the level of fire danger at a point in time and the likely ability of fire suppression agencies being able to suppress a fire.

## Bushfire planning and policy

This section identifies the existing planning, policy and building controls that apply to the site, which have bushfire related implications for the subject site.

### Planning Policy Framework (PPF)

The Planning Policy Framework (PPF) planning scheme Clause 13.02-1S<sup>4</sup> deals with bushfire planning strategies and principles. The objective of the PPF is to assist to strengthen community resilience to bushfire.

The overarching strategies prioritise the protection of human life over other policy considerations in planning and decision-making in areas at risk from bushfire.

Where appropriate, apply the precautionary principle to planning and decision-making when assessing the risk to life, property and community infrastructure from bushfire.

### ***Bushfire hazard identification and risk assessment strategies***

Apply the best available science to identify vegetation, topographic and climatic conditions that create a bushfire hazard.

Assess the risk to life, property and community infrastructure from bushfire at a regional, municipal and local scale.

Identify in planning schemes areas where the bushfire hazard requires that:

- Consideration needs to be given to the location, design and construction of new development and the implementation of bushfire protection measures.
- Development should not proceed unless the risk to life and property from bushfire can be reduced to an acceptable level.

### ***Strategic and settlement planning strategies***

Ensure that strategic and settlement planning assists with strengthening community resilience to bushfire.

Consult with the relevant fire authority early in the strategic and settlement plan making process and implement appropriate bushfire protection measures.

Ensure that planning to create or expand a settlement in an area at risk from bushfire:

- Addresses the risk at both the local and broader context.
- Reduces the risk to future residents, property and community infrastructure from bushfire to an acceptable level.
- Ensures any biodiversity and environmental objectives specified in the planning scheme are compatible with planned bushfire protection measures.
- Ensures the risk to existing residents, property and community infrastructure from bushfire will not increase as a result of future land use and development.
- Ensures future residents can readily implement and manage bushfire protection measures within their own properties.

---

<sup>4</sup> Planning Scheme State Planning Policy Framework Clause 13.02-1S



### ***Planning scheme implementation strategies***

Specify in planning schemes the requirements and standards for assessing whether the risk to a proposed development from bushfire is acceptable and the conditions under which new development may be permitted.

Ensure that planning schemes, in particular the Municipal Strategic Statement, Local Planning Policies and zones applying to land, provide for use and development of land in a manner compatible with the risk from bushfire.

Ensure that planning schemes support bushfire management and prevention and emergency services actions and activities.

Ensure that planning schemes do not prevent the creation of required defensible space around existing development through the removal and management of vegetation.

### ***Development control strategies***

In areas identified in the planning scheme as being affected by the bushfire hazard, require a site-based assessment to be undertaken to identify appropriate bushfire protection measures for development that has the potential to put people, property or community infrastructure at risk from bushfire.

*Only permit new development where:*

- The risk to human life, property and community infrastructure from bushfire can be reduced to an acceptable level.
- Bushfire protection measures, including the siting, design and construction of buildings, vegetation management, water supply and access and egress can be readily implemented and managed within the property.
- The risk to existing residents, property and community infrastructure from bushfire is not increased.<sup>3</sup>

---

<sup>3</sup> Planning Scheme - Planning Policy Framework Clause 13.02-1S

## Bushfire Management Overlay (BMO)

The BMO currently covers the subject site.

The BMO is a planning scheme provision used to guide the development of land in areas of high bushfire hazard. The location, design and construction of any development and the implementation of bushfire protection measures must be considered under a BMO<sup>4</sup>.

The BMO applies to areas where there is potential for extreme bushfire behaviour, such as a crown fire and extreme ember attack and radiant heat.

The BMO deals with bushfire hazard and risk in the following ways:

1. The BMO is applied to areas based on the bushfire hazard following the methodology and criteria outlined in advisory note 46.
2. When a planning permit application is required under the BMO a site-based assessment of the bushfire hazard is undertaken and submitted as part of the application. This localised assessment considers vegetation types and slope to give an accurate picture of the bushfire hazard as it relates to a specific site.
3. A risk assessment of a proposal is undertaken as part of a planning permit application. This involves considering a proposal against the objectives, standards and decision guidelines of the BMO and Clause 53.02 and 44.06 of the planning scheme.

The ways that a bushfire can impact a structure informs the criteria used to define the areas where the BMO will apply.

The three main ways a bushfire can impact a structure are ember attack, radiant heat and direct flame contact. Each of these elements can impact a structure at different distances beyond vegetation itself. The BMO mapping takes this variable distance into account.

Matters to be considered in the BMO include:

- Location, layout and siting;
- Building construction and defensible space;
- Water supply and access; and
- Implementation of bushfire protection measures.

The BMO site assessment process is used to determine how far away from unmanaged vegetation a building would need to be to receive less than a certain level of radiant heat e.g. a building constructed Bushfire Attack Level (BAL) to BAL-29 has been designed to withstand a radiant heat flux of 29 kW/m<sup>2</sup>. This analysis is used to determine the best combination of Defensible Space and BAL construction standard for a proposed development.

---

<sup>4</sup> Advisory Note 46 | Bushfire Management Overlay Mapping Methodology and Criteria

## Bushfire Prone Area (BPA)

The whole of the subject site and adjoining properties are within a designated Bushfire Prone Area (BPA). BPA are those areas subject to or likely to be subject to bushfires, as determined by the Minister for Planning. Those areas of highest bushfire risk within the BPA are designated as Bushfire Management Overlay (BMO) areas.

The Building Regulations, through application of the Building Code of Australia, apply bushfire protection standards for building works in designated BPA. A minimum construction standard applies to all new buildings in a BPA. Buildings must be constructed to a minimum BAL-12.5, or higher as determined by a site assessment or planning scheme requirement.

A bushfire attack level (BAL) is a means of measuring the severity of a building's potential exposure to ember attack, radiant heat and direct flame contact. There are six BALs that form part of AS 3959-2009 (Standards Australia, 2009b). The level of risk and expected fire outcomes at each BAL are explained in Table 1.

## Bushfire Attack Levels and Corresponding Sections of AS3959-2009

The Bushfire Attack Level for the property has been assessed. The following table outlines the key elements of the BAL risk level and potential radiation exposure during a major bushfire.

**BUSHFIRE ATTACK LEVELS AND CORRESPONDING SECTIONS FOR  
SPECIFIC CONSTRUCTION REQUIREMENTS**

Bushfire Attack Level (BAL)	Classified vegetation within 100 m of the site and heat flux exposure thresholds	Description of predicted bushfire attack and levels of exposure	Construction Section
BAL—LOW	See Clause 2.2.3.2	There is insufficient risk to warrant specific construction requirements	4
BAL—12.5	"12.5 kW/m <sup>2</sup>	Ember attack	3 and 5
BAL—19	>12.5 kW/m <sup>2</sup> "19 kW/m <sup>2</sup>	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux	3 and 6
BAL—29	>19 kW/m <sup>2</sup> "29 kW/m <sup>2</sup>	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux	3 and 7
BAL—40	>29 kW/m <sup>2</sup> "40 kW/m <sup>2</sup>	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux with the increased likelihood of exposure to flames	3 and 8
BAL—FZ	>40 kW/m <sup>2</sup>	Direct exposure to flames from fire front in addition to heat flux and ember attack	3 and 9

Table 1: Source Table 3.1 AS3959-2009

## Bushfire Hazard Site Assessment

The Bushfire Hazard Site Assessment describes the subject site and bushfire hazard within 150m of the proposed development.

We acknowledge that, pursuant to Clause 53.02, "the description of the hazard must be prepared in accordance with Sections 2.2.3 to 2.2.5 of AS3959:2009 Construction of buildings in bushfire prone areas (Standards Australia) excluding paragraph (a) of section 2.2.3.2".

This assessment:

- Provides factual information on the bushfire hazard (vegetation type and slope);
- Informs defensible space and building construction requirements; and
- Utilises the methodology contained in Australian Standard AS3959:2009 Construction of buildings in bushfire prone areas (AS3959) to provide contextual information on a site.

The following summarises the characteristics which are present within the site and surrounding environs:

### Assessment area and analysis of the site

<p>Assessment area and analysis of the site</p>	<p>The irregular polygon shaped allotment at 875 Main Neerim Road Drouin West, occupies an area of 20146 sqm (2.0 ha) and contains grassland, scattered woodland and forest vegetation on the site. With grassland, woodland and forest areas to the north, west, south and east of the site beyond 150 metres.</p> <p>The subject site is located in a Rural Activity Zone and is also affected by the following overlays:  <i>Bushfire Management Overlay (BMO)</i>  <i>Development Contributions Plan Overlay (DCPO)</i>  <i>Floodway Overlay (FO)</i></p> <p>The subject site is set amongst rural properties in an established setting of Main Neerim Road Drouin West and surrounding areas, featuring rural properties and housing on various large lot sizes and configurations.</p> <p>The proposed dwelling site is on the eastern side of the site and based on a dwelling envelope.</p> <p>The dwelling site will require ongoing vegetation management of the grassland, woodland and forest areas surrounding the dwelling site, to be managed to achieve the require defensible space. In addition, the accessway will provide the required access and egress from the site.</p> <p>Access to the dwelling is approximately 120 metres long from Main Neerim Road entry gate to the site to the dwelling envelope. Main Neerim Road is a wide sealed public road. The rear of the dwelling is approximately 120 metres off Main Neerim Road. Firefighting vehicles will be able to access the dwelling, and the firefighting water supply tank from the proposed main accessway/driveway.</p>
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<p><b>Vegetation classification</b></p> <p><i>This is Section 2.2.3 in AS3959</i></p>	<p>When considering vegetation within the assessable area (150 metre radius) the vegetation includes grassland, woodland and forest vegetation. Beyond the site the primary risk is the grassland, forest and woodland vegetation areas to the north, west, east and west. There are extensive very high to extreme risk forest and woodland areas well beyond the site to the north, northwest and northeast, that are essentially, unmanaged.</p> <p>The grassland, woodland and forest vegetation areas within 150 metres are set out in the Bushfire Hazard Site Assessment Plan, and beyond 150 metres in the Bushfire Hazard Landscape Assessment.</p>
<p><b>Exclusions – low-threat vegetation and non-vegetated areas</b></p> <p><i>This is Section 2.2.3.2 in AS3959</i></p>	<p>Pursuant to AS3959-2009, 2.2.3.2 (f), vegetation exclusions within the assessable area.</p> <p>The vegetation and properties adjoining the subject site are such that there are no areas that the consultant is prepared to class as excludable, due to the overall bushfire landscape risk and the extensive road verge vegetation. Thus, there are no areas that are excludable pursuant to AS3959-2009 2.2.3.2 (f).</p>
<p><b>Distance to classifiable Vegetation</b></p> <p><i>This is Section 2.2.4 AS3959</i></p>	<p>The subject site dwelling building site is located 35 metres from the classified woodland vegetation to the south, 38 metres from the forest to the northeast, 74 metres from the forest to the north and 74 metres to the forest to the west. Also, the grassland on the site is within 20 metres of the dwelling building.</p>
<p><b>Slope under the classifiable vegetation</b></p> <p><i>This is Section 2.2.5 in AS3959</i></p>	<p>The effective slope under the classified vegetation is as follows:</p> <p>North: Upslope/Flat</p> <p>East: Downslope/0-5 (Northeast)</p> <p>South: Upslope/Flat</p> <p>West: Upslope/Flat</p> <p><i>Note: where the vegetation classification is "Low Threat" the prevailing slope has no bearing on the BAL rating.</i></p>
<p><b>Reticulated Water Supply, Fire Hydrant</b></p>	<p>There are no fire hydrants located within 120 metres of the dwelling site</p> <p><i>Note: Measurements are to the rear of the proposed dwelling.</i></p>

## Classified Vegetation Table:

Classified vegetation within 150 metres of the proposed development in accordance with AS3959:2009  
Construction of buildings in bushfire prone areas.

	Direction (Aspect)			
	Northern	Southern	Eastern/NE	Western
<b>Vegetation</b> (within 150 metres of proposed building / works)	Excludable / Low Threat <input type="checkbox"/>	Excludable / Low Threat <input type="checkbox"/>	Excludable / Low Threat <input type="checkbox"/>	Excludable / Low Threat <input type="checkbox"/>
Modified	<input type="checkbox"/>	Modified <input type="checkbox"/>	Modified <input type="checkbox"/>	Modified <input type="checkbox"/>
Forest	<input checked="" type="checkbox"/>	Forest <input checked="" type="checkbox"/>	Forest <input checked="" type="checkbox"/>	Forest <input checked="" type="checkbox"/>
Woodland	<input type="checkbox"/>	Woodland <input checked="" type="checkbox"/>	Woodland <input type="checkbox"/>	Woodland <input checked="" type="checkbox"/>
Scrub (tall)	<input type="checkbox"/>	Scrub (tall) <input type="checkbox"/>	Scrub (tall) <input type="checkbox"/>	Scrub (tall) <input type="checkbox"/>
Shrubland (short)	<input type="checkbox"/>	Shrubland (short) <input type="checkbox"/>	Shrubland (short) <input type="checkbox"/>	Shrubland (short) <input type="checkbox"/>
Mallee	<input type="checkbox"/>	Mallee <input type="checkbox"/>	Mallee <input type="checkbox"/>	Mallee <input type="checkbox"/>
Rainforest	<input type="checkbox"/>	Rainforest <input type="checkbox"/>	Rainforest <input type="checkbox"/>	Rainforest <input type="checkbox"/>
Grassland	<input checked="" type="checkbox"/>	Grassland <input checked="" type="checkbox"/>	Grassland <input checked="" type="checkbox"/>	Grassland <input checked="" type="checkbox"/>
<b>Effective Slope</b> (under the classifiable vegetation within 150 metres)	Upslope / Flat <b>DOWNSLOPE</b> <input checked="" type="checkbox"/>	Upslope / Flat <b>DOWNSLOPE</b> <input checked="" type="checkbox"/>	Upslope / Flat <b>DOWNSLOPE</b> <input type="checkbox"/>	Upslope / Flat <b>DOWNSLOPE</b> <input checked="" type="checkbox"/>
>0 to 5 °	<input type="checkbox"/>	>0 to 5 ° <input type="checkbox"/>	>0 to 5 ° <input checked="" type="checkbox"/>	>0 to 5 ° <input type="checkbox"/>
>5 to 10°	<input type="checkbox"/>	>5 to 10° <input type="checkbox"/>	>5 to 10° <input type="checkbox"/>	>5 to 10° <input type="checkbox"/>
>10° to 15°	<input type="checkbox"/>	>10° to 15° <input type="checkbox"/>	>10° to 15° <input type="checkbox"/>	>10° to 15° <input type="checkbox"/>
>15 to 20°	<input type="checkbox"/>	>15 to 20° <input type="checkbox"/>	>15 to 20° <input type="checkbox"/>	>15 to 20° <input type="checkbox"/>
>20°	<input type="checkbox"/>	>20° <input type="checkbox"/>	>20° <input type="checkbox"/>	>20° <input type="checkbox"/>
<b>Distance (m) to Classifiable Vegetation</b>	74	20	38	74
<b>Primary vegetation</b>	Forest	Grassland	Forest	Forest
<b>BAL rating</b>	12.5	12.5	29	12.5
<b>Defendable Space in metres</b>	35 metres	35 metres	35 metres	35 metres

## Bushfire Attack Level (BAL) Assessment

### Property Details:

Lot and Plan Number: SPI 13B\PP2547

Address: 875 Main Neerim Road Drouin West 3818 Victoria

### Description of building work:

This report has been prepared to provide an understanding of the Bushfire Attack Level and the construction requirements flowing from the BAL, as set out in Australian Standard AS3959-2009 and BCA measures required as part of any construction of a residential dwelling building at the site as outlined above.

### Bushfire Attack Level Analysis and modelling

The development of the site assessment has used the detailed procedure to determine the BAL for the subject site.

The fire danger index (FDI) for Victoria has been applied at FDI 100.

The Bushfire Attack Level (BAL) shall be determined by using either;

1. (a) simplified procedure described in Clause 2.2 (Method 1); or
2. (b) detailed procedure described in Appendix B (Method 2).

BALs are based on levels of exposure defined in Table 3.1. of AS3959-2009 p34.

There are two methods for determining BALs as outlined above:

Method 1 - a simplified procedure that involves five procedural steps to determine BALs, and is subject to limitations on the circumstances in which it can be used (see Appendix C) of AS3959-2009.

Method 2 - a detailed procedure using calculations to determine BALs where a more specific result is sought or where the site conditions are outside of the scope of the simplified procedure (Method 1) (see Appendix B) ASS3959-2009.

BALs are used to determine which, if any, construction requirements contained in Sections 3 to 9 of AS3959-2009 Construction of buildings in bushfire prone areas, are appropriate for a particular site.

The table of calculations on page 31 sets out the Method 2 modelling of BALs for the subject site.

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## Bushfire Attack Level Assessment – Method 2 – Modelling

### Bushfire Attack Level Calculations for Subject Site

<b>Bushfire Attack level (BAL) Method 2</b>	<b>North</b>	<b>East/NE</b>	<b>West</b>	<b>South</b>
<b>Inputs</b>				
Fire Danger Index	100	100	100	130
Vegetation Type	Forest	Forest	Forest	Grassland
Surface fuel Load (t/ha)	25	25	25	4.5
Overall fuel Load (t/ha)	35	35	35	4.5
Effective Slope (°)	0	5	0	0
Site Slope (°)	0	0	0	0
Distance to Vegetation	74 m	38 m	74 m	20 m
Flame width (m)	100	100	100	100
Windspeed km/h	45	45	45	45
Heat of Combustion (kJ/kg)	18,600	18,600	18,600	18,600
Flame Temperature (K)	1090	1090	1090	1090
<b>Outputs</b>				
Rate of Spread (km/h)	3 km/h	4.23 km/h	3 km/h	16.9 km/h
Flame Length (m)	23.7 m	31.74 m	23.7 m	7.47 m
Flame Angle	76°	61°	76°	79°
Elevation of Receiver	11.49 m	13.87 m	11.49 m	3.66 m
Fire Intensity	54,250 kW/m	76,600 kW/m	54,250 kW/m	39,292 kW/m
Transmissivity	0.743	0.804	0.743	0.833
Viewfactor	0.1097	0.3873	0.1097	0.1828
Radiant Heat Flux	6.2 kW/m <sup>2</sup>	23.68 kW/m <sup>2</sup>	6.2 kW/m <sup>2</sup>	11.58 kW/m <sup>2</sup>
<b>Bushfire Attack Level</b>	<b>BAL – 12.5</b>	<b>BAL – 29</b>	<b>BAL – 12.5</b>	<b>BAL – 12.5</b>

References: Rate of Spread – Noble et al. 1980, Flame length – Purton 1982, Elevation of receiver – Douglas & Tan 2005, Flame angle – Douglas & Tan 2005, Radiant heat flux – Drysdale 1999, Sullivan et al. 2003, Douglas & Tan 2005





### Site and Surrounds Images

The following photographs illustrate the subject site and surrounding vegetation characteristics:

1 View north from entry gate 2 to site shed



2 View east to entry gate



3 View southeast above dwelling site to sheds and entry gate



4 View northeast above dwelling site



5 View 120m above dwelling site



6 View northwest to site area and forest



7 View east on Main Neerim Rd at site entry gate on left



8 View west on Main Neerim Rd entry gate on right



9 View north to proposed dwelling site



10 View north to proposed dwelling site



11 View east from dwelling site to site grounds



12 View west from dwelling site to forest and grassland on site



## Bushfire Hazard Landscape Assessment

The bushfire hazard landscape assessment (the 'landscape assessment') provides information on the bushfire hazard more than 150 metres away from a development site.

Considering bushfire from this broader landscape perspective is important as it affects the level of bushfire risk a development and its future occupants may be exposed to.

This landscape assessment:

- Provides factual information on the bushfire hazard (vegetation extent and slope)
- Provides information on key features of the general locality that are relevant to better understanding the protection provided by the location
- Provides contextual information on a site.

The landscape assessment does not assess a specific development proposal and is only required where Clause 53.02-4 requires consideration of the bushfire risk from the landscape beyond the site.

### Overview

**Victoria is one of the most fire-prone areas in the world, with a history of catastrophic bushfires. The history of major bushfires goes back more than 150 years. Some of the past major bushfires include: Black Thursday 6 February 1851 12 lives lost, 1926 Warburton 31 lives lost, Black Friday 13 January 1939 71 lives lost, 1942 1 life lost, 1943 10 lives lost, 1944 14 January 32 lives lost, 1952 several lives lost, 1962 The Basin, Dandenong Ranges, Christmas Hills, Hurstbridge, Warrandyte 8 lives lost, 1965 Gippsland, 1968 Dandenong Ranges, The Basin, Upwey and Upper Ferntree Gully 64 houses lost, 1969 Lara, Daylesford and Upper Ferntree Gully 22 lives and 230 houses lost, 1972 Mount Buffalo, 1977 Western District 4 lives and 108 houses lost, 1978 Gippsland 2 lives lost, 1983 1 February Mount Macedon 50 houses lost, Ash Wednesday 16 February 1983 47 lives and more than 2,000 buildings lost, 1985 various areas of Victoria 3 lives and 182 houses lost, 1991 1 life and 17 houses lost, 1997 Dandenong Ranges, Arthurs Seat, Gippsland and Creswick 3 lives and 41 houses lost, 1998 5 lives lost, 2003 Alpine Fires 1 life and 41 house and 213 structures lost, 2005-6 Grampians, Kinglake, Murrindindi and western district 2 lives and 41 houses and 359 buildings lost, 2006-7 Great Divide Complex 33 houses 255 buildings and 1.2 million ha lost, 2009 January Delburn 44 houses lost, 2009 7 February Black Saturday Bushfires 173 lives, 2,056 houses and 1,600 buildings lost. There have been many other major bushfires in the past.**

There are a variety of bushfire causes, that can ignite a bushfire. Some examples include, lightning strikes are natural and cannot be prevented while others result from human activity. The high bushfire risk in Victoria is the consequence of a combination of factors including:

- Large areas of highly flammable dry eucalypt forest, woodland and expanses of highly flammable grassland
- A climate pattern of mild, moist winters followed by hot dry summers and protracted droughts
- Agricultural practices that include the use of fire
- Increasing population density in bushfire-prone areas, such as in the rural/urban interface (fringe)

**The subject site and vegetation extent in the broader area,** including all of the surrounding properties adjoining the subject site are located in the Drouin West rural activity zone, set amongst rural residential properties in an established setting, featuring properties and housing on various large lot sizes and configurations. The vegetation within the immediate and wider area includes primarily grassland, woodland and forest vegetation. Beyond the site, there are extensive very high to extreme threat grassland, forest and woodland vegetation areas. The vegetation across the area is largely unmanaged to the north, south, east and west. The majority of the vegetation well beyond 150 metres of the subject is very high-risk to extreme forest and woodland vegetation which is mostly associated with public and private forest and woodland areas, to the northwest, north, northeast and southwest. These areas are essentially unmanaged.

The primary threat to the subject site is from the north, northwest, northeast, west and southwest, with extensive very high to extreme threat forest and woodland vegetation beyond the site. In addition, the area well beyond the site has extensive very high to extreme threat grassland, woodland and forest vegetation, that can potentially carry a bushfire from more than km away to more than 30 km away, deep into the subject site area of Main Neerim Road, and the wider Drouin West area. The area surrounding the subject site and Drouin West and the wider area has a long history of major bushfires.

**Road networks.** The primary road serving the site is Main Neerim Road, a wide well maintained sealed public road. Other roads and tracks in the subject site area are generally narrow sealed and unsealed roads with extensive road verge vegetation, with a mix of scrub, grassland and scattered woodland and forest vegetation. There are road verge areas and other strips of vegetation that directly link to the very high-risk woodland and forest areas, and therefore can act like candle wicks driving bushfires deep into the subject site and Main Neerim Road and the wider Drouin West area.

**Bushfire history.** Drouin West and the surrounding areas to the north, west, south and east of the site, has a history of major bushfires. There have been many major fires impact the wider area and region, including; Black Friday Bushfires of 1939 and the Black Saturday Bushfires of 2009.

The Black Saturday 2009 Bunyip State Park bushfire was just to the northwest of the subject site. Bunyip State Park bushfire occurred over the period 4-6 February 2009. The losses included 31 houses and 26,200 hectares of forest and grassland were destroyed. Also, the Bunyip State Park – Tonimbuk Bushfire in March 2019, was also close to the subject site to the west/northwest, the bushfire occurred in early March 2019 and destroyed 29 houses, 67 outbuildings/sheds and a large area of the State Park and private grassland and property.

**Bushfire direction of travel.** Bushfires will primarily approach the subject site and Drouin West from the northwest, north, northeast, west and southwest. There is also the potential for bushfires to approach from the south and southeast due to the vegetation types, including scrub, forest and woodland surrounding and beyond the site.

**Fire runs into site.** The most likely bushfire runs into the subject site, include more than 30 km from the north, more than 20 km from northwest and 30 km from the northeast. In addition, there is potential for short run bushfires, in particular, less than 1 km from all directions and from the

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north, northwest and west from less than 150 metres from the subject site.

**The nearest Township/Urban area is Drouin.** The subject site at 875 Main Neerim Road Drouin West, has access to the Drouin township, which is to the southwest of the subject site. The Drouin urban area is within 8.5 km and 7 minutes travel time from the subject site at 875 Main Neerim Road Drouin West. The main shopping precinct of Drouin and the carpark of Woolworths at 45 Commercial Place Drouin, is also suitable for a place of last resort, with a travel distance of 10.5 km and 10 minutes travel time from the subject site.

Drouin township as an urban area can provide potential protection from the impact of extreme bushfire behaviour, where fuel is managed in a minimum fuel condition and there is sufficient distance or shielding to protect people from direct flame contact or harmful levels of radiant heat, and with potentially suitable short travel distances. There is some significant potential for bushfire risks to arise on the travel journey from the subject site to a place of greater protection, the risk issues related to high risk roadside vegetation or road traffic congestion, that may make it impossible to reach a nearby Township.

**Neighbourhood Safer Place (NSP)** – Bushfire Place of Last Resort, there is no NSP located in Drouin West and surrounding areas. A potential location that may be suitable to shelter in place is the urban area of Drouin township, primarily south of Waddell Road Drouin. With a travel distance of approximately 8.5 km and 7 minutes travel time from 875 Main Neerim Road Drouin West.

**Likely bushfire scenarios.** The most likely bushfire scenarios that could impact the site, will be from the north, northeast, northwest, west, and southwest, whereby there is extensive very high threat grassland, woodland and forest vegetation both adjoining and beyond 150 metres radius of the site. Also, within and beyond 1 km of the subject site there is extensive very high to extreme risk grassland, forest and woodland vegetation. In addition, the area well beyond the site has extensive very high to extreme threat, forest and woodland vegetation, associated with state and private forest and woodland areas. The grassland, woodland and forest areas surrounding the subject site and Drouin West, can potentially carry a bushfire from more than 30 km away, deep into the subject site and Main Neerim Road area, and the wider surrounding area and the Drouin West area.

**Bushfire management and prevention within the wider area.** There is limited bushfire mitigation planning and action, in the very high to extreme bushfire risk areas to the northwest, north, northeast, east, southeast and west/southwest surrounding the site. It will be critical that the vegetation and ground fuel near and across the subject site is managed in a similar way to that of the defendable space area. The area surrounding and beyond the subject site is a very high to extreme risk bushfire landscape environment, capable of producing Extreme to Catastrophic bushfires.

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***Dwelling siting, landscape and bushfire protection measures.***  
 The subject dwelling site at 875 Main Neerim Road Drouin West, has been located in the most suitable location on the subject site. The dwelling will be constructed to BAL 29 and provided with defensible space of 35 metres around the dwelling. In addition, to defensible space, there will be a 10,000 firefighting water supply tank located on the site, as set out in the bushfire management plan and the bushfire hazard assessment plan.

#### Landscape typology and conclusions

It is deemed the subject site and broader landscape type can be described as type 3 as referred to within Practice Note 65:

- *The type and extent of vegetation located more than 150 metres from the site may result in neighbourhood-scale destruction as it interacts with the bushfire hazard on and close to a site.*
- *Bushfire can approach from more than one aspect.*
- *The site is located in an area that is not managed in a minimum fuel condition.*
- *Access to an appropriate place that provides shelter from bushfire is not certain.*

#### Neighbourhood Safer Place (NSP) – Bushfire Place of Last Resort

***Neighbourhood Safer Place (NSP) – Bushfire Place of Last Resort*** – Bushfire Place of Last Resort, there is no NSP located in Drouin West and surrounding areas. A potential location that may be suitable to shelter in place in the urban area of Drouin township, primarily south of Waddell Road Drouin. With a travel distance of approximately 8.5 km and 7 minutes travel time from 875 Main Neerim Road Drouin West.





## Defendable Space and Bushfire Attack Level (BAL)

This section outlines appropriate design and development responses pursuant to the development controls in relation to bushfire prone area and bushfire management overlay areas.

### Defendable space setbacks

Defendable space is an area of land around a building where vegetation (fuel) is modified and managed to reduce the effects of flame contact and radiant heat associated with a bushfire. Defendable space is one of the most effective ways of reducing the impact of bushfire on a building. Table 2 of Clause 53.02.5

Defendable space provides a break between the building and the fuel available to the bushfire (e.g. vegetation, brush fencing, flammable material). Providing an area of defendable space can prevent direct flame contact on a building, reduce the effects of radiant heat on the building and to mitigate the effects of ember attack.

### Bushfire Attack Level (BAL)

Bushfire Attack Level (BAL) Construction standards are set out in AS3959-2009

Clause 53.02-5 sets out tables for defendable space and construction standards.

Defendable space required is determined by assessing and determining the classified vegetation type, slope, and the distance to the classified vegetation and the building façade, then the BAL construction standard is determined.

The defendable space for dwelling at 875 Main Neerim Road Drouin West 3818 Victoria is set out below.

Defendable Space and BAL level

Aspect	Vegetation Type	Effective Slope	Defendable Space	Dwelling
North	Forest	Upslope	35 metres	BAL – 12.5
South	Grassland	Upslope	35 metres	BAL – 12.5
East/Northeast	Forest	Downslope 0-5°	35 metres	BAL – 29
West	Forest	Upslope	35 metres	BAL – 12.5

## Defendable Space Plan



Defendable Space = 

Defendable space for dwelling is provided for a distance of 35 metres north, west, east and south and managed in accordance with the following:

- Grass must be short cropped and maintained during the declared fire danger period.
- All leaves and vegetation debris must be removed at regular intervals during the declared fire danger period.
- Within 10 metres of a building, flammable objects must not be located close to the vulnerable parts of the building.
- Plants greater than 10 centimetres in height must not be placed within 3m of a window or glass feature of the building.
- Shrubs must not be located under the canopy of trees.
- Individual and clumps of shrubs must not exceed 5 sq. metres in area and must be separated by at least 5 metres.
- Trees must not overhang or touch any elements of the building.
- The canopy of trees must be separated by at least 5 metres.
- There must be a clearance of at least 2 metres between the lowest tree branches and ground level.

## Bushfire Impact on Urban Areas at Urban/Rural Interface

The following seeks to highlight the very high bushfire risk nature of living at the urban/rural interface. Recent bushfire examples have been used to show bushfire behavior under extreme fire weather bushfire conditions at the interface, including:

*Black Saturday Bushfires 2009, in particular Marysville.*

*Also, a dramatic example is the recent Northern California bushfires in which more than 8,000 homes were destroyed and significant loss of life. See Image 2 Coffee Park subdivision Santa Rosa California.*

The following images are aimed at emphasising the before and after impact of bushfires on essentially urban areas under extreme fire weather conditions.

Marysville Black Saturday Bushfires 2009



Coffee Park subdivision Santa Rosa California Bushfire October 2017



### Black Saturday Bushfire 2009 Marysville Impact

Image 1:

Marysville Murchison St and Lyell St intersection Before and After Black Saturday Bushfire 2009



### Northern California Bushfires October 2017 Coffee Park Santa Rosa Impact

Image 2:

Before and After images Coffee Park subdivision in Santa Rosa California USA

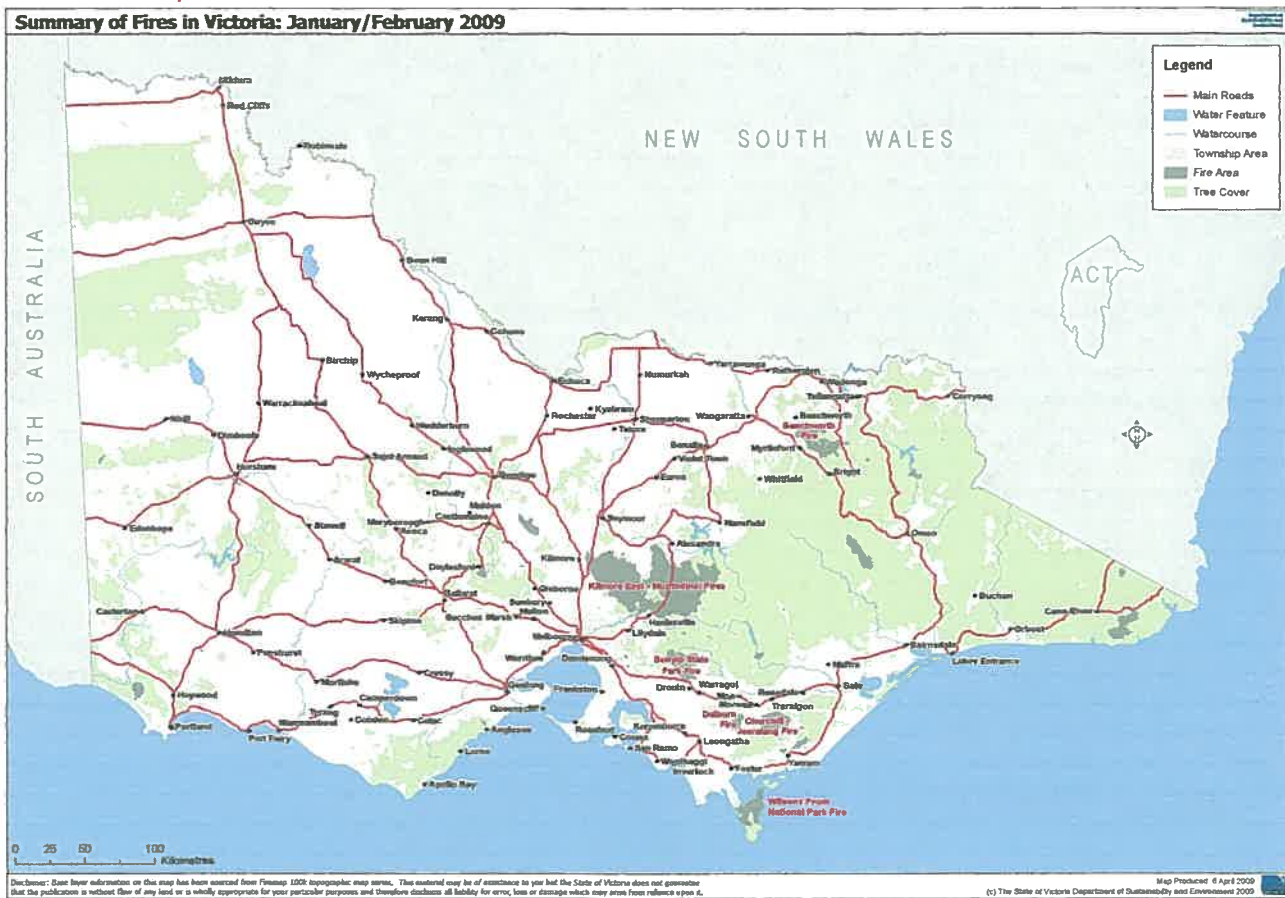


## Bushfire Fire History Summary - Major Bushfires Since 1851

Year	Location	Size (ha)	Losses
1851	Dandenong Ranges (Black Thursday)	Unknown	12 people
1898	South Gippsland	260,000	12 people, 2000 buildings
1926	Warburton, Noojee, Kinglake, Erica, Dandenong Ranges	Unknown	31 people
1939	Noojee, Warrandyte, Yarra Glen, Warburton, Erica (Black Friday)	2,000,000	71 people, 650 houses
1942	South Gippsland	Unknown	1 person, 20 houses
1944	Beaumaris	Unknown	63 houses
1944	Yallourn, Morwell, Traralgon	Unknown	9 people, 136 houses
1962	The Basin, Christmas Hills, Kinglake, St Andrews, Hurstbridge, Warrandyte, Mitcham	30,321	32 people, 450 houses
1968	The Basin, Upwey	1920	53 houses, 10 other buildings
1983	Belgrave South, Cockatoo, Beaconsfield Upper (Ash Wednesday)	93,500	47 people, 2000 houses or other buildings
1997	Dandenong Ranges, Arthurs Seat	569	3 people, 41 houses
2005-06	Yea, Moondarra, Kinglake	25,000	4 people
2006-07*	Walhalla (Great Divide bushfire)	1,048,238	1 person, 51 houses
2009	Kilmore East, Churchill, Kinglake, Marysville, Yarra Valley, Dandenong Ranges, Narre Warren, Upper Ferntree Gully, Wilsons Promontory, Bunyip State Park, Delburn (Black Saturday)	232,300	173 people, 2007 houses
2014	Warrandyte, Darraweit Guim, Hernes Oak	41,000 +	40+ houses

### Black Saturday Bushfires 2009

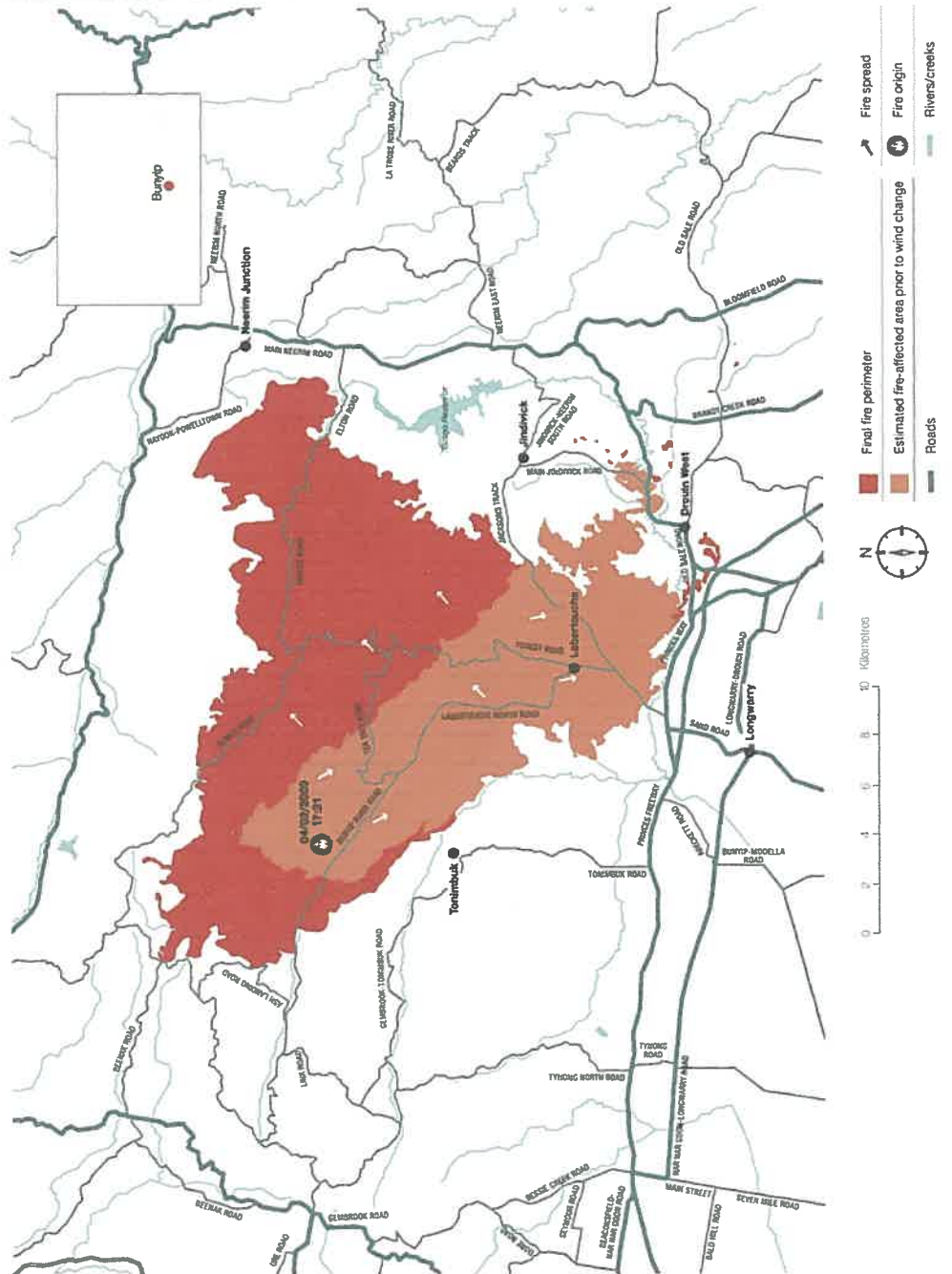
Summary of Fires in Victoria: January/February 2009



Bunyip State Park Bushfire Black Saturday February 2009

The Bunyip fire

Figure 4.1 The Bunyip fire



Source: Exhibit 994 – Bunyip Fire – Fire Spread Map.<sup>13</sup>

Bunyip State Park – Tonimbuk Bushfire March 2019



Bunyip State Park Bushfire Black Saturday February 2009



Pine plantation fire adjacent to Hume Highway at Wandong Victoria Black Saturday 7 February 2009

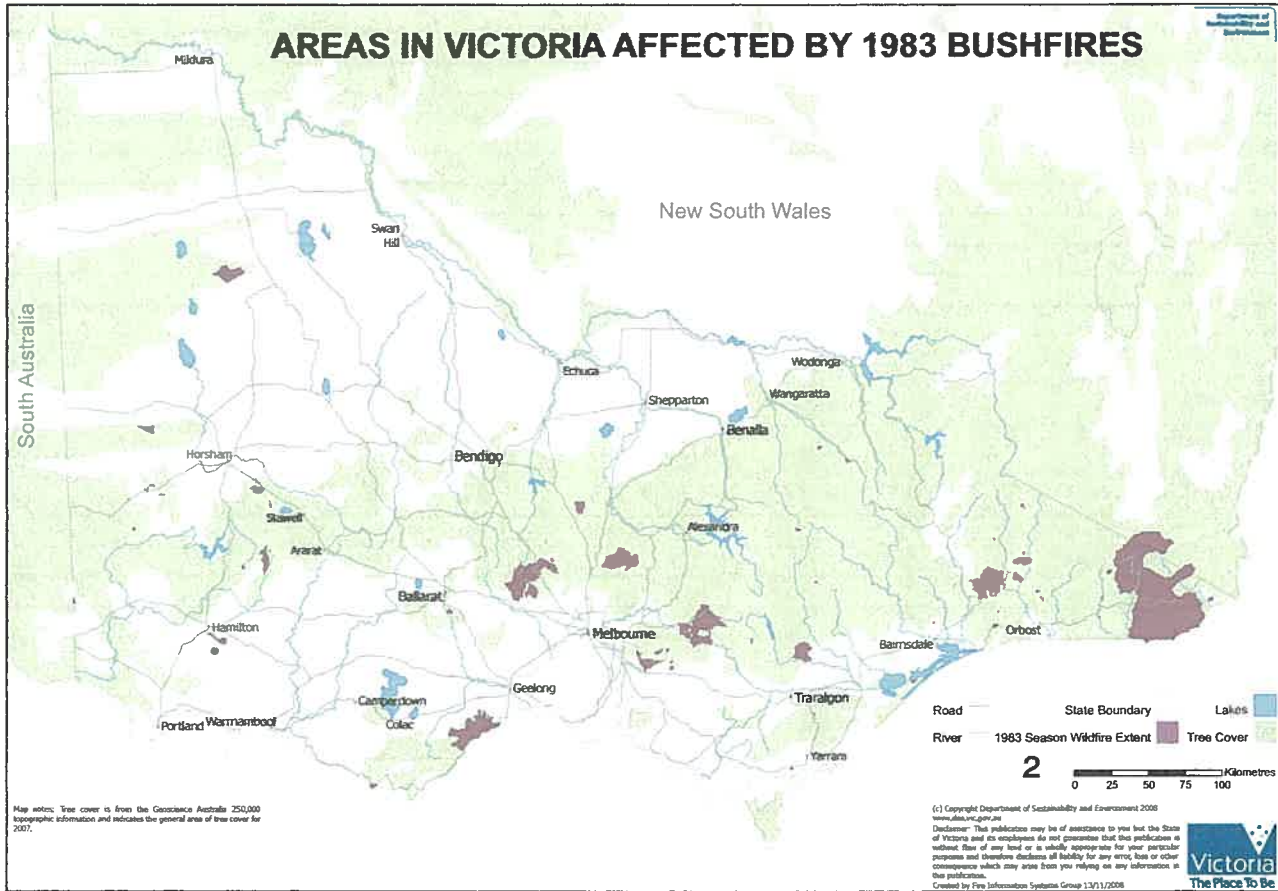


Black Saturday 7 February 2009

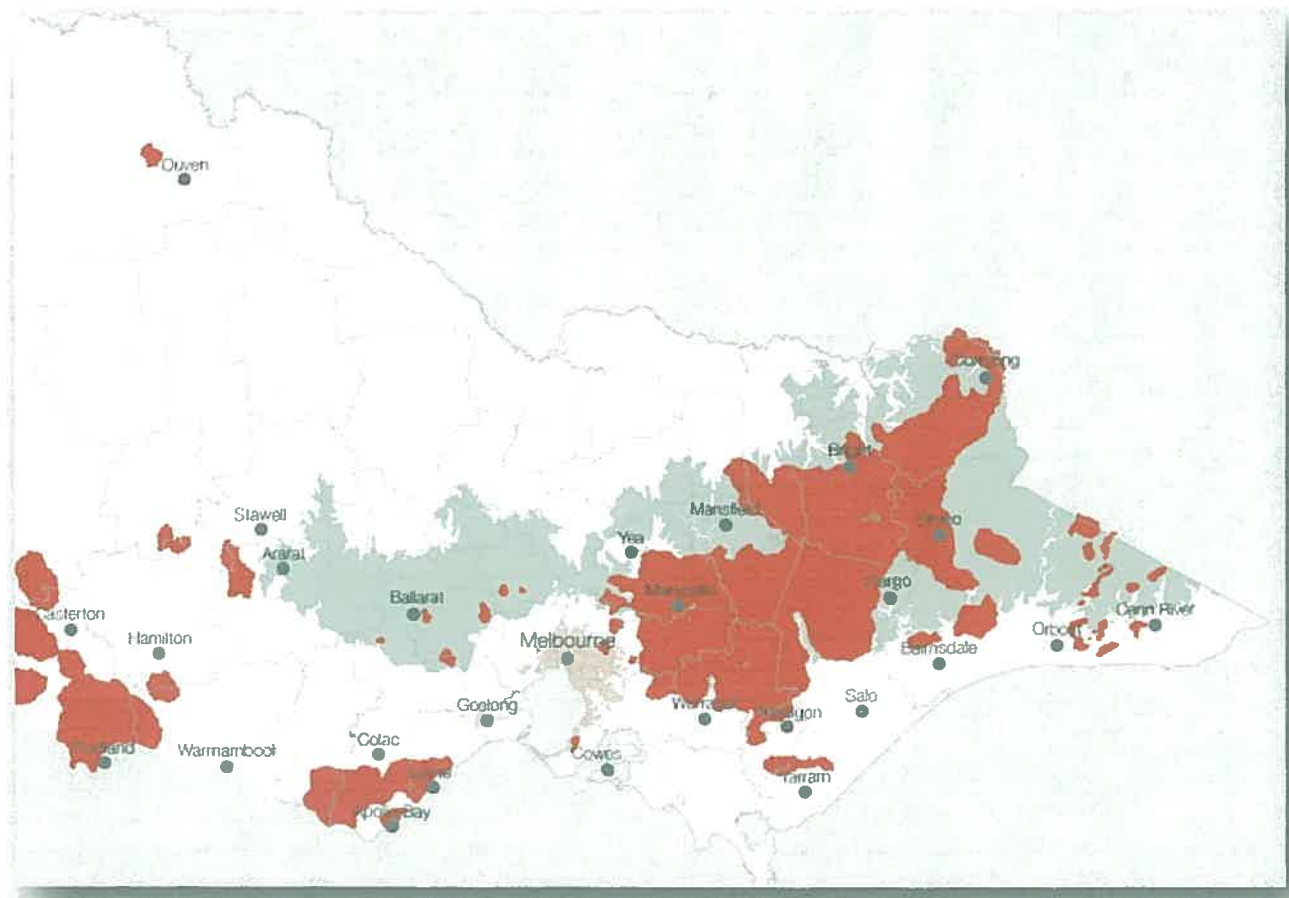




### Ash Wednesday Bushfires 1983



### Black Friday Bushfires – 13<sup>th</sup> January 1939



### Context of Bushfire Risk and Wider Area

The bushfire images below, have been included with the aimed of illustrating an example of the likely real view of a bushfire in vegetation similar to that adjoining and near 875 Main Neerim Road Drouin West. The vegetation type and fuel loads in the images are similar to the subject site and the surrounding areas. *It should be noted that the images primarily depict essentially woodland type vegetation. The subject site is primarily surrounded by grassland, woodland and forest vegetation.*



## Bushfire Management Statement

This Bushfire Management Statement Pathway 2 has been developed in response to Clause 53.02-4 Bushfire Protection Objectives.

### 53.02-4.1 Landscape, Siting and design objectives

- *Development is appropriate having regard to the nature of the bushfire risk arising from the surrounding landscape.*
- *Development is sited to minimise the risk from bushfire.*
- *Development is sited to provide safe access for vehicles, including emergency vehicles.*
- *Building design minimises vulnerability to bushfire attack.*

### Approved Measure AM 2.1 - Landscape

*The bushfire risk to the development from the landscape beyond the site can be mitigated to an acceptable level.*

The property landscape is currently and will continue to be planned to ensure suitable effective vegetation design, planning and management to support the defensible space requirements, on the property and where possible adjoining properties.

The primary threat within 150 metres is from the grassland, woodland and forest vegetation on and adjoining the site. To the south of the site is Main Neerim Road, a wide sealed public road that provides a level of risk mitigation to the south. The grassland, woodland and forest on the subject site, is partly managed and thus partly reduces the bushfire threat from the road verge vegetation adjoining the property to the south, east and west.

The primary threat to the subject site is from the north, northwest, northeast, west and southwest, with extensive very high to extreme threat forest and woodland vegetation on and beyond the site. In addition, the area well beyond the site has extensive very high to extreme threat grassland, forest and woodland vegetation, that can potentially carry a bushfire from a few hundred metres away to more than 30 km away, deep into Main Neerim Road, and the wider Drouin West area. The area surrounding the subject site and Drouin West has a long history of major bushfires, including the most recent Bunyip State Park bushfire of March 2019 just to the west/northwest of the subject.

Clearly, under extreme fire weather conditions, combined with the right mix of fuel and fuel dryness, there is potential for complex extreme fire behaviour scenarios to play out. As the comments above highlight Main Neerim Road and the surrounding areas present a complex bushfire risk challenge to people, properties, and fire agencies. Main Neerim Road and surrounding areas are best viewed as a very high to extreme risk bushfire environment, with the area dominated by rural properties on large lots, that often have extensive unmanaged vegetation, combined with the extensive grassland, forest and woodland areas in the wider landscape, associated with forests and woodland areas, that are largely unmanaged. We have presented a range of strategies to assist in mitigating the bushfire risk on the site, including, management of the grassland on the site at a low height, defensible space of 35 metres north, west, east and south, thus providing great depth for the defensible space. The proposed accessway needs to comply with the BMO requirements of a 3.5 metre width accessway that is managed to achieve and maintain the required 3.5 metres width. There will also be a 10,000 litre firefighting water supply tank on the site and located near the dwelling envelope on the accessway of the site. The dwelling will be constructed to BAL 29. Also, the dwelling site is within 7 to 10 minutes travel time of the urban area of Drouin. There is **no Neighbourhood Safer Place** located in Drouin West and the surrounding areas. The urban area of Drouin can potentially provide a place of shelter and place of last resort. Also, the main shopping precinct of Drouin and the carpark of Woolworths at 45 Commercial Place Drouin, is also suitable for a place of last resort, with a travel distance of 10.5 km and 10 minutes travel time from the subject site.

Approved Measure AM 2.1 has been met

Yes



No



### Approved Measure AM 2.2 - Siting

*A building is sited to ensure the site best achieves the following:*

- *The maximum separation distance between the building and the bushfire hazard*

The subject site dwelling building site is located 20 metres from the grassland, 38 metres from the forest to the northeast and 35 metres from the woodland from the south. The construction level for the dwelling will be BAL 29.

The dwelling is located in a suitable location on the site. Main Neerim Road is a relatively wide sealed public road, that essentially provides a fire break to the south. The defendable space around the dwelling provides a suitable level of risk reduction on the site, combined with the proposed 3.5 metre wide accessway.

- *The building is in close proximity to a public road*

The rear of the dwelling building is located approximately 120 metres off the public road, Main Neerim Road a sealed public road. Main Neerim Road provides access to the urban area of Drouin, which is within 7 to 10 minutes travel time.

The accessway/driveway off Main Neerim Road is approximately 120 metres to the rear of dwelling, there will be a new accessway, that will be constructed to the BMO required width of the accessway to be 3.5 metres. As the dwelling is located more than 120 metres off Main Neerim Road, firefighting vehicle access is required to the dwelling and firefighting water supply tank via the accessway/driveway.

- *Access can be provided to the building for emergency service vehicles*

As the proposed dwelling building is greater than 100 metres off Main Neerim Road, there is a requirement for firefighting vehicles to enter the site via the site accessway/driveway off Main Neerim Road. There will be a 10,000 litre firefighting water supply tank on the site located near the dwelling site. The accessway will have a Y or T turning head for the firefighting vehicles at the water supply tank.

Approved Measure AM 2.2 has been met

Yes



No



### Approved Measure 2.3 – Building Design

*A building is designed to be responsive to the landscape risk and reduce the impact of bushfire on the building.*

The building has been designed so as to reduce the accumulation of debris and entry of embers. The ground cover in the grassland, woodland and forest areas surrounding the dwelling will be managed in order to reduce the potential for ember attack from the ground cover fuel.

Approved Measure AM 2.3 has been met

Yes



No



### 53.02-4.2 – Defendable Space and Construction Objective

- Defendable space and building construction mitigate the effect of flame contact, radiant heat and embers on the buildings.

#### Approved Measure AM 3.1 – Bushfire Construction and Defendable Space

*A building provides the defendable space in accordance with Column A, B, C of Table 2 and is managed in accordance with Table 6 of Clause 53.02-5 wholly within the title boundaries of the land.*

*The dwelling building will be provided with defendable space in accordance with Table 2 to Clause 53.02-5*

Defendable space has been established using Table 2. The construction standard for the dwelling and the carport is to be BAL 29.

Defendable space for dwelling is provided for a distance of 35 metres north, south, west and east, and managed in accordance with Table 6 of Clause 53.02-5 below.

#### **Table 6 of Clause 53.02-5 – Defendable space management requirements:**

Defendable space is provided and is managed in accordance with the following requirements:

- Grass must be short cropped and maintained during the declared fire danger period.
- All leaves and vegetation debris must be removed at regular intervals during the declared fire danger period.
- Within 10 metres of a building, flammable objects must not be located close to the vulnerable parts of the building.
- Plants greater than 10 centimetres in height must not be placed within 3 metres of a window or glass feature of the building.
- Shrubs must not be located under the canopy of trees.
- Individual and clumps of shrubs must not exceed 5 square metres in area and must be separated by at least 5 metres.
- Trees must not overhang or touch any elements of the building.
- The canopy of trees must be separated by at least 5 metres.
- There must be a clearance of at least 2 metres between the lowest tree branches and ground level.

Unless specified in a schedule or otherwise agreed in writing to the satisfaction of the relevant fire authority.

- ✓ Acceptance confirmed of Table 6 Vegetation Management Requirements

There are no significant siting constraints that would allow Column D of Table 2 to Clause 53.02-5

Yes  No  Not Applicable

*A building is constructed to the bushfire attack level:*

*That corresponds to the defendable space provided in accordance with Table 2 to Clause 53.02-5*

#### **The Dwelling and Carport buildings to be constructed to Bushfire Attack Level BAL 29**

The defendable space is wholly contained within the boundaries of the property

Yes  No  if no, see Alternative Measure 3.3

Approved Measure AM 3.1 has been met

Yes

No

## Alternative Measures

### Alternative Measures AltM 3.3 – Defendable Space

*Adjoining land may be included as defendable space where there is reasonable assurance that the land will remain or continue to be managed in that condition as part of the defendable space.*

Alternative Measure AltM 3.3 has been met	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
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### Alternative Measure AltM 3.4 – Calculate defendable space using Method 2 of AS3959-2009

*Defendable Space and the bushfire attack level is determined using Method 2 of AS3959:2009 Construction of buildings in bushfire prone areas (Standards Australia) subject to any guidance published by the relevant fire authority.*

Alternative Measure AltM 3.4 been met	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
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### Alternative Measure AltM 3.5 – Dwellings subject to direct flame contact

*A building used for a dwelling (including an extension or alteration to a dwelling) may provide defendable space to the property boundary where it can be demonstrated that:*

- *The lot has access to urban, township or other areas where:
 
  - *Protection can be provided from the impact of extreme bushfire behaviour*
  - *Fuel is managed in a minimum fuel condition*
  - *There is sufficient distance or shielding to protect people from direct flame contact or harmful levels of radiant heat**
- *Less defendable space and higher construction standard is appropriate having regard to the bushfire hazard landscape assessment*
- *The dwelling is constructed to a bushfire attack level of BAL-FZ*

*This alternative measure only applies where the requirements of Approved Measure 3.1 cannot be met.*

Alternative Measure AltM 3.5 been met	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
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### 53.02-4.3 – Water Supply and Access Objectives

- A static water supply is provided to assist in protecting property.
- Vehicle access is designed and constructed to enhance safety in the event of a bushfire.

#### Approved Measure AM 4.1 – Water Supply and Access

##### Water Supply Requirement

A building used for a dwelling (including an extension or alteration to a dwelling), a dependant person's unit, industry, office or retail premises service station or warehouse is provided with:

- A static water supply for firefighting and property protection purposes as specified in Table 4 to Clause 53.02-5.

The water supply may be in the same tank as other water supplies provided that a separate outlet is reserved for firefighting water supplies.

Lot Size (m <sup>2</sup> )	Hydrant Available	Capacity (litres)	Fire Authority Fittings & Access Required	Requirement
Less than 500	Not Applicable	2,500	No	<input type="checkbox"/>
500 – 1000	Yes	5,000	No	<input type="checkbox"/>
500 – 1000	No	10,000	Yes	<input type="checkbox"/>
1001 and above	Not Applicable	10,000	Yes	<input checked="" type="checkbox"/>

Note: A hydrant is available if it is located within 120 metres of the rear of the building

<b>Confirm Static Water Supply meets the following requirements</b>	<ul style="list-style-type: none"> <li>✓ Is stored in an above ground water tank constructed of concrete or metal</li> <li>✓ All fixed above ground water pipes and fittings for firefighting purposes must be made of corrosive resistant metal.</li> <li>✓ Include a separate outlet for the occupant use</li> </ul> <p><b>The following additional requirements apply when 10,000 litres of static water are required:</b></p> <ul style="list-style-type: none"> <li>✓ Be readily identifiable from the building or appropriate identification signage to the satisfaction of CFA must be provided.</li> <li>✓ Be located within 60 metres of the outer edge of the approved building</li> <li>✓ The outlet/s of the water tank must be within 4 metres of the access-way and unobstructed</li> <li>✓ Incorporate a ball or gate valve (British Standard Pipe (BSP 65mm) and coupling (64mm CFA 3 thread per inch male fitting)</li> <li>✓ Any pipework and fittings must be a minimum of 65mm (excluding the CFA coupling)</li> </ul>
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##### Additional Information:

A 10,000 litre static water supply tank is to be provided and maintained solely for firefighting purposes. The tank location is marked on the bushfire management plan and the bushfire hazard site assessment plan.

Approved Measure AM 4.1 (Water Supply) Has been met

Yes



No



*Access requirement***Table 5 Vehicle Access Design and Construction Requirements:**

*A building used for a dwelling (including an extension or alteration to a dwelling), a dependant person's unit, industry, office or retail premises service station or warehouse is provided with is provided with vehicle access is designed and constructed as specified in Table 5 to Clause 53.02-5.*

*Vehicle access (or part thereof) of a length specified in Column A implements the design and construction requirements specified in Column B.*

Column A	Column B
Length of access is less than 30 metres	<input type="checkbox"/> There are no design and construction requirements if fire authority access to water supply is not required under AM 4.1
Length of access is less than 30 metres	<input type="checkbox"/> Where fire authority access to the water supply is required under AM 4.1 fire authority vehicles should be able to get within 4 metres of the water supply outlet
Length of access is greater than 30 metres	The following design and construction requirements apply: <ul style="list-style-type: none"> <li>✓ All weather construction</li> <li>✓ A load limit of at least 15 tonnes</li> <li>✓ Provide a minimum trafficable width of 3.5 metres</li> <li>✓ Be clear of encroachments for at least 0.5 metres on each side and at least 4 metres vertically</li> <li>✓ Curves must have a minimum inner radius of 10 metres</li> <li>✓ The average grade must be no more than 1 in 7 (14.4%) (8.1°) with a maximum grade of no more than 1 in 5 (20%) (11.3°) for no more than 50 metres</li> <li>✓ Dips must have no more than 1 in 8 (12.5 per cent) (7.1 degrees) entry and exit angle</li> </ul>
Length of access is greater than 100 metres	A turning area for fire fighting vehicles must be provided close to the building by one of the following: <ul style="list-style-type: none"> <li>✓ A turning circle with a minimum radius of eight metres</li> <li>✓ A driveway encircling the dwelling</li> <li>✓ The provision of other vehicle turning heads such as a T head or Y Head – which meet the specification of Austroad Design for an 8.8 metre service vehicle.</li> </ul>
Length of access is greater than 200 metres	<input type="checkbox"/> Passing bays must be provided at least every 200 metres. <input type="checkbox"/> Passing bays must be a minimum of 20 metres long with a minimum trafficable width of 6 metres.
Note	<i>The length of access should be measured from a public road to either the building or the water supply outlet, whichever is longer.</i>

**Additional Information:****Firefighting vehicle access and design:**

*The length of access is greater than 100 metres (120 metres) from Main Neerim to the rear of dwelling, and fire authority access to the water supply tanks is required under clause AM4.1 fire authority vehicle should be able to get within 4 metres of the water supply outlet.*

Approved Measure AM 4.1 (Access) Has been met

Yes

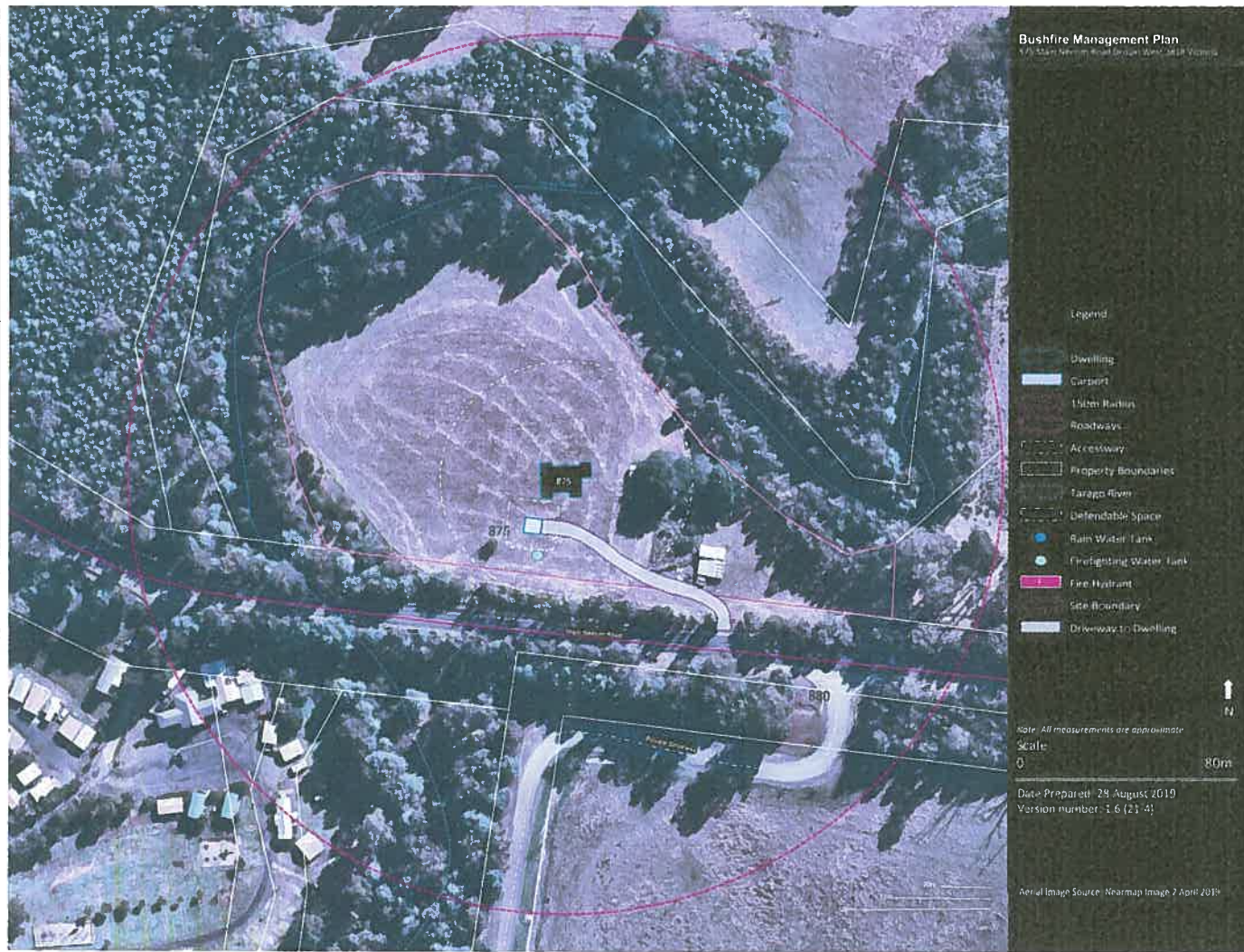
✓

No



# Bushfire Management Plan

## Bushfire Management Plan – 875 Main Neerim Road Drouin West 3818 Victoria



### Bushfire Protection Measures

#### a) Defendable Space

Defendable space is provided for a distance of 35 metres around the carport to the north, south, east and west with managed in accordance with the following requirements:

- Grass must be short cropped and maintained during summer
- All leaves and vegetation debris must be removed
- Within 10 metres of a building, flammable objects must be removed
- Plants greater than 10 centimetres in height must be removed
- Shrubs must not be located under the canopy of trees
- Individual and clumps of shrubs must not exceed 1.5 metres in height
- Trees must not overhang or touch any elements of the building
- The canopy of trees must be separated by at least 2 metres
- There must be a clearance of at least 2 metres between trees

#### b) Construction Standard

- Dwelling and Carport designed and constructed to meet AS/NZS 4561:2003

#### c) Water Supply

- Show 10,000 litres of effective water supply for fire
- Be stored in an above ground water tank constructed to AS/NZS 4561:2003
- Have all fixed above ground water pipes and fittings protected to AS/NZS 4561:2003
- Include a separate outlet for occupant use.
- Be readily identifiable from the building or appropriate signage
- Be located within 60 metres of the outer edge of the defendable space
- The outlet/s of the water tank must be within 4 metres of the building
- Incorporate a separate ball valve (British Standard male fitting).
- Any pipework and fittings must be a minimum of 60mm diameter

#### d) Access

- Show the access for firefighting purposes which must be a minimum of 3.5 metres wide
- All-weather construction.
- A load limit of at least 15 tonnes
- Provide a minimum trafficable width of 3.5 metres
- Be clear of encroachments for at least 0.5 metres
- Curves must have a minimum inner radius of 10 metres
- The average grade must be no more than 1 in 7 (14.3 degrees) for no more than 50 metres
- Dips must have no more than a 1 in 8 (12.5 degrees) for no more than 50 metres
- Incorporate a turning area for firefighting vehicles

### Mandatory Condition

The bushfire protection measures forming part of this permit, including defendable space, water supply, and access, must be implemented in accordance with the standards set out in this plan.

## Bushfire Management Requirements - Owner Obligations

The following is a summary of the planning requirements that form part of the construction of the dwelling building at the subject site of this report, based on the BAL rating and BMO requirements for the property.

### Bushfire Management Plan Endorsed

Before the development starts, the Bushfire Management Plan forming part of the Bushfire Management Statement, must be submitted to and endorsed by the Responsible Authority. The plan must not be altered unless otherwise agreed in writing by CFA and the Responsible Authority.

### Bushfire Management Plan

Before the development starts, the bushfire management plan which is generally in accordance with the bushfire management plan submitted to and endorsed by the Responsible Authority. The plan must show the following bushfire mitigation measures, unless otherwise agreed in writing by the CFA and the Responsible Authority:

### Building Permit Conditions Relevant to the Bushfire Planning Requirements

A permit to construct a building or construct or carry out works must include the following condition:

*“The bushfire protection measures forming part of this permit or shown on the endorsed plans, including those relating to construction standards, defensible space, water supply, and access, must be maintained to the satisfaction of the responsible authority on a continuing basis. This condition continues to have force and effect after the development authorised by this building permit has been completed.”*

### Bushfire protection measures and defensible space

The following is a summary of the building permit requirements for the property, covering all of the key parts of the building permit that relate to the Bushfire Management and Planning, firefighting water supply, access, fire protection and defensible space requirements.

### Construction Standards

The construction of the dwelling building must be designed and constructed to a minimum Bushfire Attack Level of **BAL 29** in accordance with the relevant sections to AS3959-2009.

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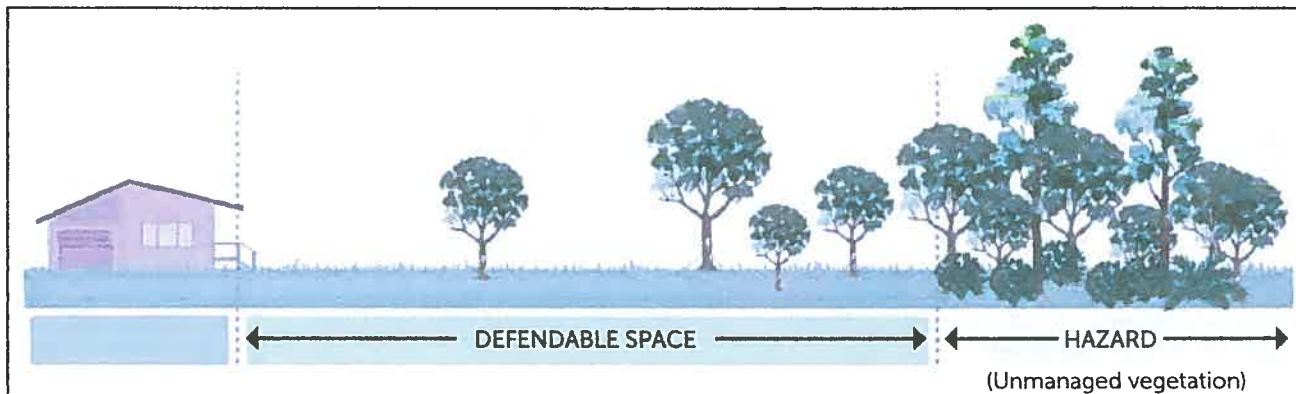
## Defendable space and BMO vegetation management standard for Dwelling

Defendable space for dwelling is provided for a distance of 35 metres north, west, south and east, and managed in accordance with the following:

### Clause 53.02-5 Table 6 Vegetation management requirements

- Grass must be short cropped and maintained during the declared fire danger period.
- All leaves and vegetation debris must be removed at regular intervals during the declared fire danger period.
- Within 10 metres of a building, flammable objects must not be located close to the vulnerable parts of the building.
- Plants greater than 10 centimetres in height must not be placed within 3m of a window or glass feature of the building.
- Shrubs must not be located under the canopy of trees.
- Individual and clumps of shrubs must not exceed 5 sq. metres in area and must be separated by at least 5 metres.
- Trees must not overhang or touch any elements of the building.
- The canopy of trees must be separated by at least 5 metres.
- There must be a clearance of at least 2 metres between the lowest tree branches and ground level.

### Defendable Space Outline



## Access requirements required and recommended

Before the occupation of the development starts, emergency vehicle access to the static water supply dedicated for firefighting purposes must be provided. The minimum design requirements (including gates, bridges and culverts) that must be complied with are;

The length of access is greater than 100 metres off Main Neerim Road and fire authority access to the water supply is required under clause AM4.1 fire authority vehicle should be able to get within 4 metres of the water supply outlet.

### Clause 53.02-5 Table 5 Vehicle access design and construction

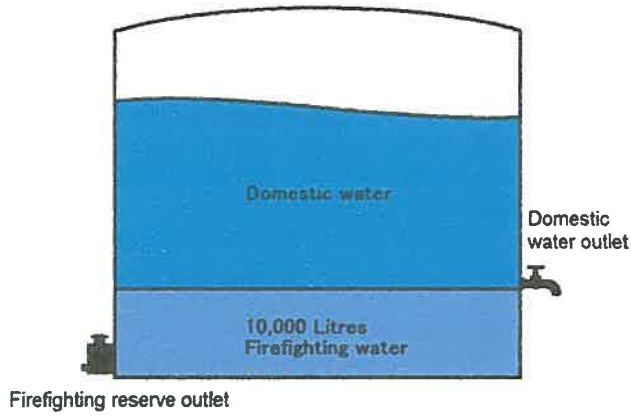
Vehicle access (or part thereof) of a length specified in Column A implements the design and construction requirements specified in Column B.

Column A	Column B	Applies
Length of access is less than 30 metres	There are no design and construction requirements if fire authority access to the water supply is not required under <b>AM4.1</b>	<input type="checkbox"/>
Length of access is less than 30 metres	Where fire authority access to the water supply is required under <b>AM4.1</b> fire authority vehicles should be able to get within 4 metres of the water supply outlet.	<input type="checkbox"/>
Length of access is greater than 30 metres	The following design and construction requirements apply: <ul style="list-style-type: none"> <li>• All weather construction</li> <li>• A load limit of at least 15 tonnes</li> <li>• Provide a minimum trafficable width of 3.5m</li> <li>• Be clear of encroachments for at least 0.5 metres on each side and at least 4 metres vertically</li> <li>• Curves must have a minimum inner radius of 10m.</li> <li>• The average grade must be no more than 1 in 7 (14.4 per cent) (8.1 degrees) with a maximum of no more than 1 in 5 (20 per cent) (11.3 degrees) for no more than 50m.</li> <li>• Dips must have no more than a 1 in 8 (12.5%) (7.1° degrees) entry and exit angle.</li> </ul>	✓
Length of access is greater than 100 metres	A turning area for fire fighting vehicles must be provided close to the building by one of the following: <ul style="list-style-type: none"> <li>• A turning circle with a minimum radius of eight metres.</li> <li>• A driveway encircling the dwelling.</li> <li>• The provision of other vehicle turning heads – such as a T or Y head – which meet the specification of Austroad Design for an 8.8 metres Service Vehicle.</li> </ul>	✓
Length of access is greater than 200 metres	<ul style="list-style-type: none"> <li>• Passing bays must be provided at least every 200 metres.</li> <li>• Passing bays must be a minimum of 20 metres long with a minimum trafficable width of 6 metres.</li> </ul>	<input type="checkbox"/>

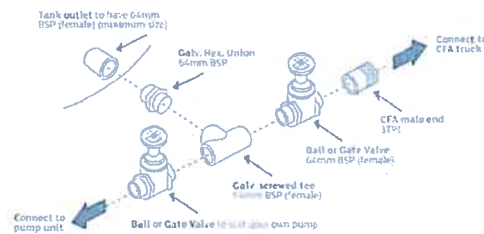
*Note: The length of access should be measured from a public road to either the building or the water supply outlet, whichever is the longer.*

## Static Water Supply Fittings/Requirements & Access Requirements

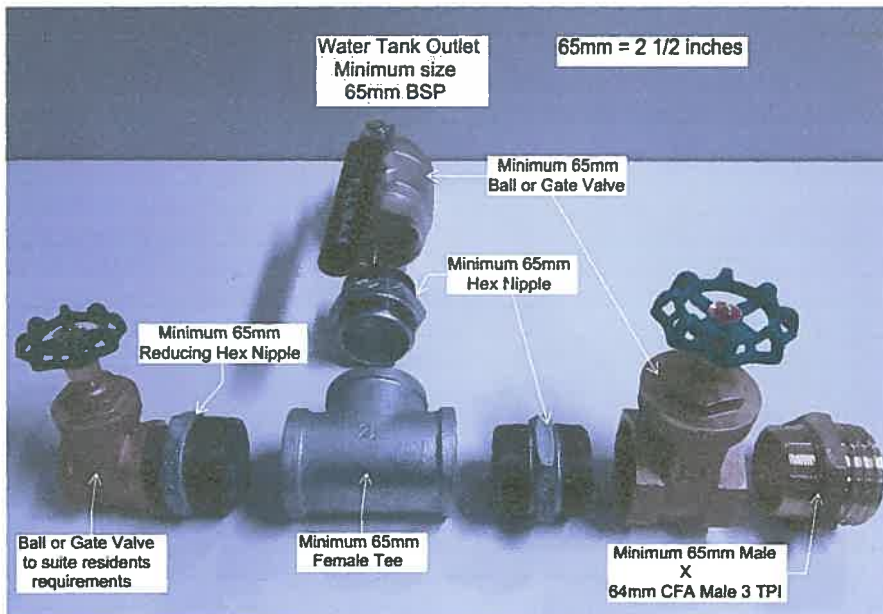
### CFA Water Supply Requirements:



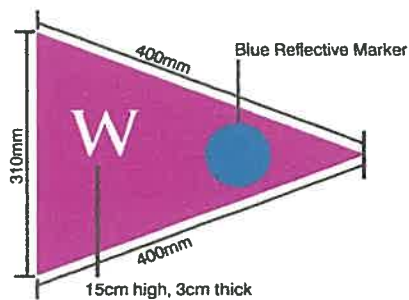
### Water Requirements



### CFA 65mm to 64mm male 3 TPI outlet

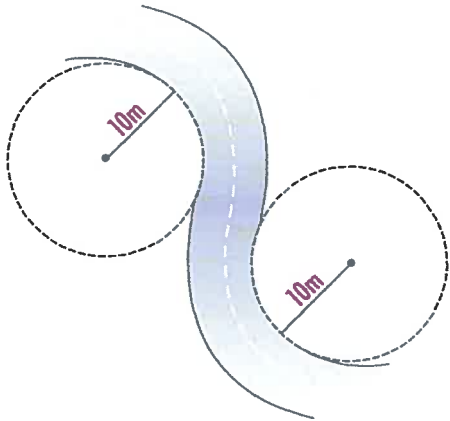


### CFA Water supply signage is required as set out below

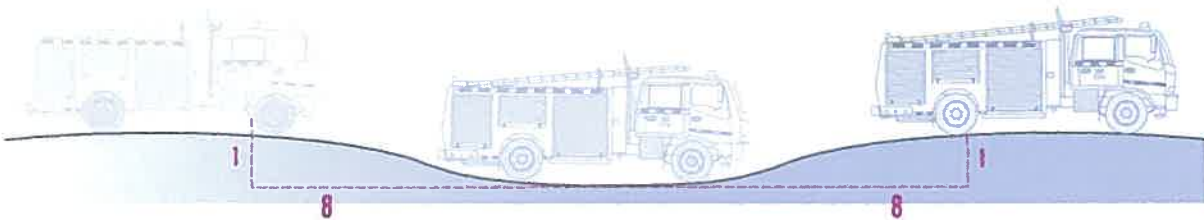


## Access Requirements Diagrams for BMO

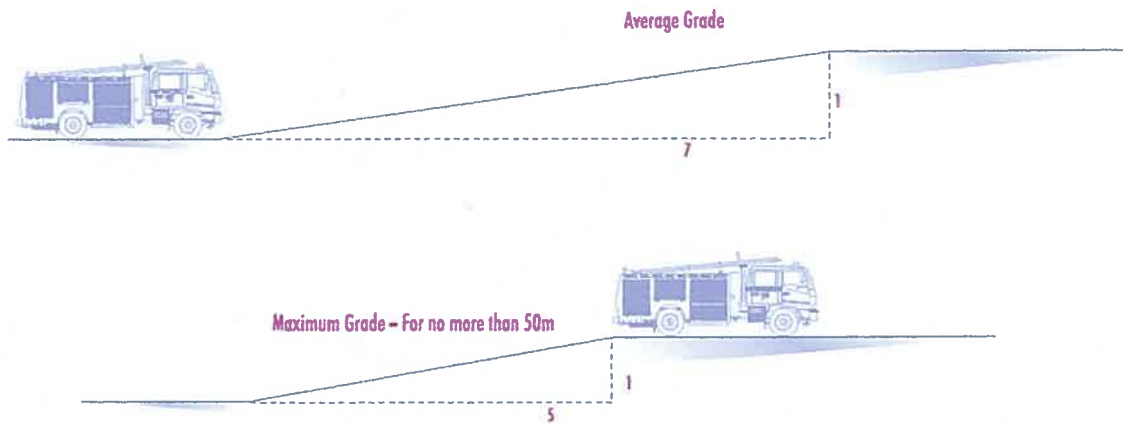
**Curves in the accessway - a minimum inner radius of 10m.**



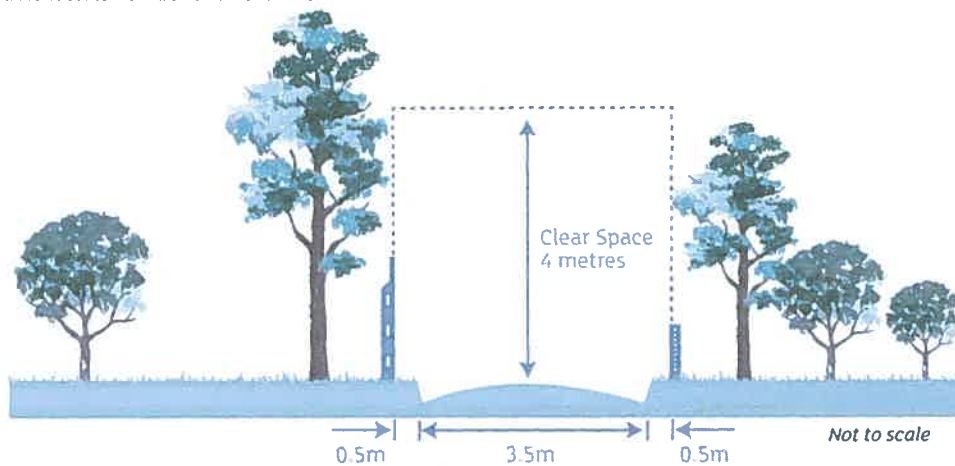
**Dips in the accessway - no more than a 1 in 8 (12.5 per cent) (7.1 degrees) entry and exit angle.**



**Average grade - no more than 1 in 7 (14.4 per cent) (8.1 degrees)**



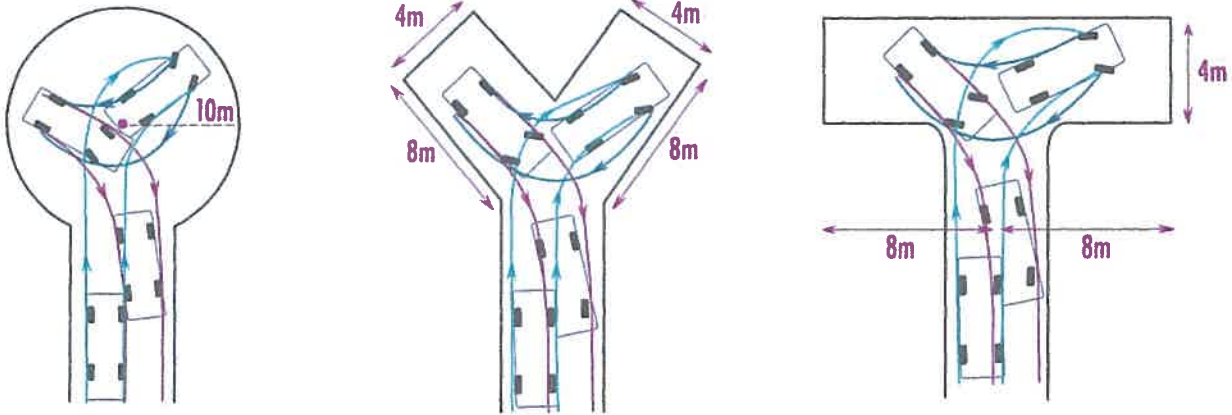
**Widths and clearances around the accessway** - minimum trafficable width of 3.5m and be substantially clear of encroachments for at least 0.5m on each side and clear of encroachments at least 4m vertically.



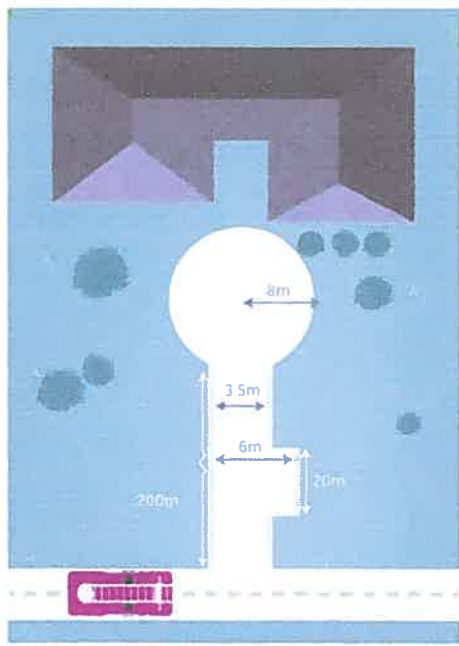
#### **Construction of an all-weather surface**

Accessway should be constructed of an all-weather surface (e.g. 150mm depth concrete).

**Turning circles – required where accessway is in excess of 100m**



**Passing bays – required where an access way is in excess of 200m**



Not to scale

0.5m required to open firetruck door



## Conclusion

The subject site is in a very high-risk to extreme bushfire landscape, with the potential for short and long run bushfires from more than 30 km away. With potential short run bushfires of less than 1 km from the north, northwest, northeast, south, west and southwest.

The potential for a short or long run landscape bushfire impacting the site is likely to be associated with extreme to catastrophic fire weather and extremely dry fuel conditions. Bushfires can potentially approach from more than three directions, including from the north, northwest, northeast, southwest, west, south, southeast and east, it is most likely that the subject site will be impacted by a bushfire approaching from primarily the north, northwest, northeast and southwest. Furthermore, due to the topography, vegetation, slope and aspect, the wider area and region has a history of major high impact bushfires going back more than 150 years.

This bushfire management statement outlines how the proposed dwelling on the site responds to the requirements of Clause 44.06 – Bushfire Management Overlay, and in accordance with the application requirements of Clause 53.02 – Bushfire Planning, and Clause 13.02-1S.

The proposed development appropriately prioritises the protection of human life, and strengthens community resilience to bushfire, through strategic siting, design and construction measures that reduce the bushfire risk to life and property to an acceptable level.

In terms of vegetation and topography surrounding the site, the site is exposed to extensive very high to extreme risk grassland, woodland and forest vegetation to the north, west, east and south.

As the bushfire hazard landscape risk is primarily to the north, northwest, west and southwest it is likely that Main Neerim Road will be compromised very quickly during a bushfire impacting the area, due to the extensive vegetation impinging on the road network. This may potentially result in a situation where there may be no suitable egress from the site or access to alternative places to shelter, when a bushfire is approaching or impacting the site.

The proposed development takes into account site constraints, the closest vegetation threat and incorporates measures and strategies to mitigate bushfire risk. When considering factors of vegetation threat, slope and vegetation character, *this report demonstrates that BAL 29 will be achieved for construction of the dwelling and the carport.*

It is recommended that Council and CFA support and approve the proposed development as presented in its current form.

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# Attachment 1: Bushfire Prone Area & Planning Reports

## PLANNING PROPERTY REPORT



From: www.planning.vic.gov.au on 04 Nov 2019 08:55 AM

### PROPERTY DETAILS

Address: **875 MAIN MEERSH ROAD DROUIN WEST 3818**  
 Lot and Plan Number: **Lot 1 TP296481**  
 Standard Parcel Identifier (SPI): **11TP296481**  
 Local Government Area (Council): **BAW BAW** [www.bawbaw.vic.gov.au](http://www.bawbaw.vic.gov.au)  
 Council Property Number: **909**  
 Planning Scheme: **Slow Bush** [planning.schemes.donk.vic.gov.au/bawbaw](http://planning.schemes.donk.vic.gov.au/bawbaw)  
 Directory Reference: **VicRoads 96 G2**  
 This property has 3 parcels. For full parcel details get the free Basic Property report at [Property Reports](#)

### UTILITIES

Rural Water Corporation: **Southern Rural Water**  
 Melbourne Water Retailer: **South East Water**  
 Melbourne Water: **Inside drainage boundary**  
 Power Distributor: **ALPNET**

### STATE ELECTORATES

Legislative Council: **EASTERN VICTORIA**  
 Legislative Assembly: **NARRACAN**

### Planning Zones

#### RURAL ACTIVITY ZONE (RAZ)

#### SCHEDULE TO THE RURAL ACTIVITY ZONE (RAZ)



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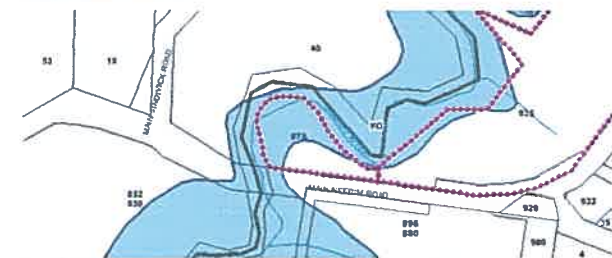
PCRZ - Public Conservation & Resource  
 RAZ - Rural Activity  
 RAZ1 - Road - Category 1  
 PCZ1 - Public Use - Services & Utility

Note: Labels for zones may appear outside the actual zone - please compare the labels with the legend.

### Planning Overlays

#### FLOODWAY OVERLAY (FO)

#### FLOODWAY OVERLAY SCHEDULE (FO)



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FO - Floodway  
 Note: Due to overlaps, some overlays may not be visible, and some colours may not match those in the legend.

#### OTHER OVERLAYS

Other overlays in the vicinity not directly affecting this land

#### HERITAGE OVERLAY (HO)



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HO - Heritage  
 Note: Due to overlaps, some overlays may not be visible, and some colours may not match those in the legend.

### Planning Overlays

#### BUSHFIRE MANAGEMENT OVERLAY (BMO)

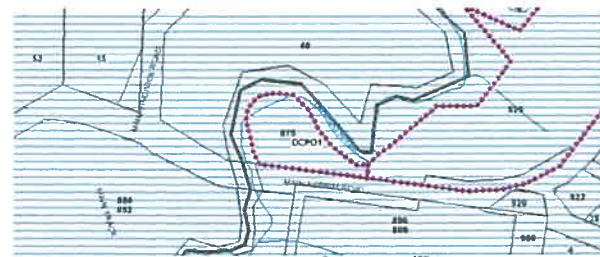


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BMO - Bushfire Management  
 Note: Due to overlaps, some overlays may not be visible, and some colours may not match those in the legend.

#### DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY (DCPO)

#### DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 1 (DCPO)



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DCPO - Development Contributions Plan  
 Note: Due to overlaps, some overlays may not be visible, and some colours may not match those in the legend.

#### Areas of Aboriginal Cultural Heritage Sensitivity

All or part of this property is an 'area of cultural heritage sensitivity'.  
 'Areas of cultural heritage sensitivity' are defined under the Aboriginal Heritage Regulations 2018, and include registered Aboriginal cultural heritage places and land form types that are generally regarded as more likely to contain Aboriginal cultural heritage.  
 Under the Aboriginal Heritage Regulations 2018, areas of cultural heritage sensitivity are one part of a two part trigger which requires a cultural heritage management plan to be prepared where a listed 'high impact activity' is proposed.  
 If a significant land use change is proposed (for example, a subdivision into 3 or more lots), a cultural heritage management plan may be triggered. One or two dwellings, works ancillary to a dwelling, services to a dwelling, alteration of buildings and minor works are examples of works exempt from this requirement.  
 Under the Aboriginal Heritage Act 2006, where a cultural heritage management plan is required, planning permits, licences and work authorities cannot be issued unless the cultural heritage management plan has been approved for the activity.  
 For further information about whether a Cultural Heritage Management Plan is required go to <https://www.spa.gov.au/aboriginal-heritage>  
 More information, including links to both the Aboriginal Heritage Act 2006 and the Aboriginal Heritage Regulations 2018, can also be found here - <https://www.spa.gov.au/aboriginal-heritage/visiting-and-heritage-management-processes.html>



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Aboriginal Heritage

#### Designated Bushfire Prone Area

This property is in a designated bushfire prone area.  
 Special bushfire construction requirements apply. Planning provisions may apply.



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Designated Bushfire Prone Area

Designated bushfire prone areas as determined by the Minister for Planning are in effect from 8 September 2011 and amended from time to time.  
 The Building Regulations 2018 through application of the Building Code of Australia, apply bushfire protection standards for building works in designated bushfire prone areas.  
 Designated bushfire prone areas maps can be viewed on VicPlan at <http://www.vicplan.vic.gov.au/vicplan> or at the relevant local council.  
 Note: prior to 8 September 2011, the whole of Victoria was designated as bushfire prone area for the purposes of the building control system.  
 Further information about the building control system and building in bushfire prone areas can be found on the Victorian Building Authority website [www.vba.vic.gov.au](http://www.vba.vic.gov.au)  
 Copies of the Building Act and Building Regulations are available from [www.legislation.vic.gov.au](http://www.legislation.vic.gov.au)  
 For Planning Scheme Provisions in bushfire areas visit <https://www.spa.gov.au>