

# LOCAL PLANNING SCHEME NO.2

## AMENDMENT No.19

Shire of



Boyup Brook

**MUSEUM**



**PLANNING AND DEVELOPMENT ACT 2005**

**RESOLUTION TO PREPARE AMENDMENT  
TO LOCAL PLANNING SCHEME**

**LOCAL PLANNING SCHEME NO. 2  
AMENDMENT NO. 19**

Resolved that the Local Government pursuant to section 75 of the *Planning and Development Act 2005*, prepare the above Local Planning Scheme by:

1. Rezoning Lot 34 Blechynden Street and Lot 38 Mitchell Avenue, Boyup Brook from the 'Residential' zone to the 'Public Purpose' reservation and amending the Scheme maps accordingly.

Note: The amendment is a standard amendment in accordance with part (e), (f) and (g) of the standard amendment definition contained in Regulation 34 of the *Planning and Development (Local Planning Schemes) Regulations 2015*.

- (e) an amendment that would have minimal impact on land in the scheme area that is not the subject of the amendment;
- (f) an amendment that does not result in any significant environmental, social, economic or governance impacts on land in the scheme area;
- (g) any other amendment that is not a complex or basic amendment.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_

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(Chief Executive Officer)

<b>Document</b>	<b>Procedure</b>	<b>Date</b>
Amendment No 19	Report to Shire Boyup Brook Council requesting preparation of Scheme Amendment No.19	March 2018
Amendment No 19		

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## 1. INTRODUCTION

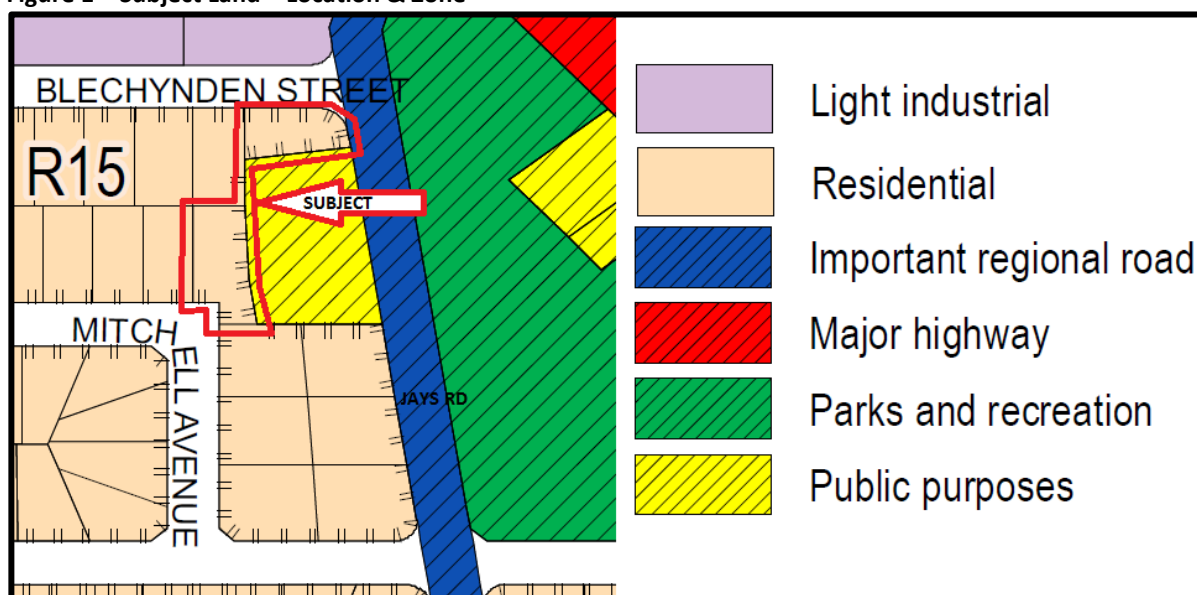
The amendment proposes to rezone Lot 34 Blechynden Street and Lot 38 Mitchell Avenue, Boyup Brook from the 'Residential' zone to the 'Public Purpose' reservation and to amend the Scheme maps accordingly.

Lot 34 Blechynden Street and Lot 38 Mitchell Avenue, Boyup Brook are currently zoned 'Residential' in accordance with the Shire of Boyup Brook *Local Planning Scheme No.2*.

The residential zone is not appropriate as the land is intended for long term use as a Museum.

The amendment brings the scheme classification for the land in-line with the neighbouring Lot 1 Jays Road, which is reserved for 'Public Purpose'.

Figure 1 – Subject Land – Location & Zone



Cadastral details for the subject land, including Lot 1 Jays Rd, is summarised below:

Lot	Owner	Deposited Plan	Volume	Folio
Lot 34 Blechynden Street	Shire of Boyup Brook	52926	1879	77
Lot 38 Mithchell Avenue	Shire of Boyup Brook	38/D52926	1565	75
Lot 1 Jays Road	Shire of Boyup Brook	73327	2034	660

A copy of the current Certificate of Title for Lot 34 Blechynden Street, Lot 38 Mitchell Avenue and Lot 1 Jays Road, is included in Appendix 1.

**Figure 2 – Cadastre Boundaries – Subject Land**



The Shire of Boyup Brook seeks the support of the Western Australian Planning Commission (WAPC) and the approval of the Hon. Minister for Planning to amend the Shire of Boyup Brook *Local Planning Scheme No. 2* (LPS2).

**a) Location**

The subject properties are located in a residential area on the western end of the Boyup townsite.

Lot 34 Blechynden Street is located on the corner of Jays Road and Blechynden Street. The property shares a boundary with a residential lot (L33) and the Boyup Museum (L1).

Lot 38 Mitchell Avenue also shares a boundary with the Boyup Museum and two residential lots (Lot 33 & Lot 26).

**b) Site Area**

Lot 34 Blechynden Street is 814m<sup>2</sup> in area.

Lot 38 Mitchell Avenue is 1104.34m<sup>2</sup> in area.

**c) Ownership**

The registered proprietor of Lot 34 Blechynden Street and Lot 38 Mitchell Avenue is the Shire of Boyup Brook.

**d) Current and Surrounding Land Uses**

Lot 34 Blechynden Street is developed to form part of the Boyup Museum.

Lot 38 Mitchell Avenue is a vacant lot with residential lots joining to the south, west and north and the Boyup Museum joining to the east.

**e) Physical Characteristics**

The subject properties are flat.

Lot 34 Blechynden Street is developed with access, parking areas and outbuildings.

Lot 38 Mitchell Avenue is cleared of vegetation.

**f) Infrastructure**

Potable water and power infrastructure run along Mitchell Avenue, Blechynden Street and Jays Road.

**2. LOCAL PLANNING CONTEXT**

**a) State & Regional Planning Context**

The *Planning and Development (Local Planning Schemes) Regulations 2015* came into force on 25 August 2015 to introduce 'model' and 'deemed' provisions.

The proposed amendment is in-keeping with the deemed and model provisions.

The Department of Lands, which is a subsidiary department to the Department of Planning, Lands and Heritage, encourages the enhancement of land assets to ensure the economic, business, social, and environmental needs and expectations of Government and the Western Australian community are met.

**b) Local Planning Strategy**

N/A

**c) Local Planning Policies**

The amendment is in keeping with Local and State Planning Policy.

SPP 3.5 Historic Heritage Conservation

The states planning policy 3.5 recommends that:

- planning decision-making takes into account matters of heritage significance at both the State and local levels.
- improved certainty is provided to landowners and the community about the planning processes for heritage identification, conservation and protection.

### SPP 3.7 Planning in Bushfire Prone Areas.

Regarding SPP3.7, the amendment is captured by Section 6.2 b) of the Policy, which requires that:

*“Any strategic planning proposal, subdivision or development application in an area to which policy measure 6.2 a) applies, that has or will, on completion, have a moderate BHL and/or where BAL-12.5 to BAL-29 applies, may be considered for approval where it can be undertaken in accordance with policy measures 6.3, 6.4 or 6.5”.*

A scheme amendment is defined as a ‘Strategic Planning Proposal’ for the purposes of the Policy.

As required by Section 6.3 c) of SPP3.7, this amendment demonstrates that compliance with the *Guidelines for Planning in Bushfire Prone Areas* can be achieved in subsequent planning stages.

Demonstration of compliance has been achieved in the form of a Bushfire Management Plan, which includes a Bushfire Attack Level assessment, an Emergency Evacuation Plan and an assessment of ‘Location’, ‘Siting and Design’, ‘Vehicle Access’, and ‘Water’.

The BMP confirms that the land is not located in an extreme bushfire hazard area.

### **3. PROPOSAL**

The amendment seeks to identify land as ‘Public Purpose’ (reserve), to reflect current use and ownership.

Lot 34 Blechynden Street and Lot 38 Mitchell Avenue are both situated alongside a property (Lot 1 – Jays Rd) currently developed as a museum and reserved for ‘Public Purpose’. All these properties fall under the ownership of the Shire of Boyup Brook.

Lot 34 Blechynden Street is currently developed and is in use as a museum.



It is proposed, once the amendment has been considered, that a development application is submitted for a storage shed to house historic artefacts at the subject Lot 38 Mitchell St. Development is proposed to incorporate appropriate setbacks to neighbouring residential lots (e.g.

3m) and the use of materials (colourbond) to emulate existing development and to blend to the surrounds.

The sites are not classified as being contaminated.

A Bushfire Management Plan developed at Appendix 2 of this document identifies Lot 34 Blechynden Street as having a Bushfire Attack Level rating of 19kw/m<sup>2</sup> and Lot 38 Mitchell Avenue as having a Bushfire Attack Level rating of 12.5kw/m<sup>2</sup>.

An evacuation plan produced to accompany the BMP recommends that the museum caretaker notifies visitors to evacuate to the Boyup Brook Visitors Centre, in the instance of a forthcoming bushfire.

#### **4. CONCLUSION**

The amendment is proposing to rezone Lot 34 Blechynden Street and Lot 38 Mitchell Avenue, Boyup Brook from the 'Residential' zone to the 'Public Purpose' reservation. The amendment accords with existing and proposed museum land use and the land ownership, being the Shire of Boyup Brook.

The support of the Shire of Boyup Brook Council and the Western Australian Planning Commission and the approval of the Minister for Planning are respectfully requested.



**Planning and Development Act 2005**

**RESOLUTION TO AMEND LOCAL PLANNING SCHEME**

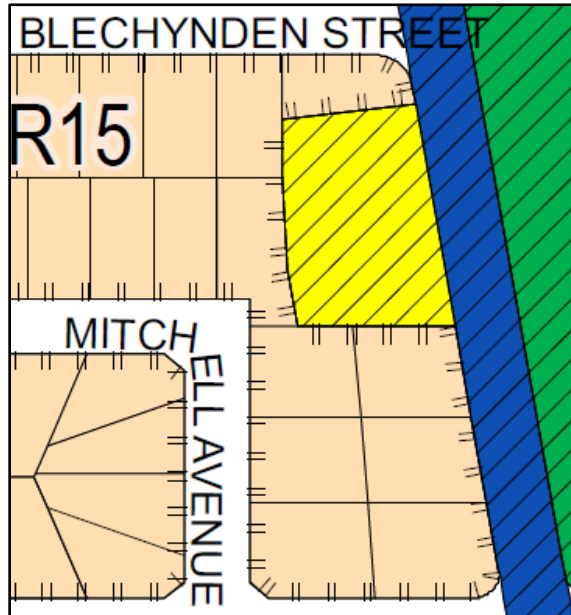
**LOCAL PLANNING SCHEME NO. 2**

**AMENDMENT NO. 19**

**Resolved that the Local Government pursuant to section 75 of the *Planning and Development Act 2005*, support the above Local Planning Scheme by:**

- 1. Rezoning Lot 34 Blechynden Street and Lot 38 Mitchell Avenue, Boyup Brook from the 'Residential' zone to the 'Public Purpose' reservation and amending the Scheme maps accordingly.**

**SHIRE OF BOYUP BROOK**  
**Local Planning Scheme No.2**  
**Amendment No.19**






**Existing Zoning**

**LPS**

**Legend**

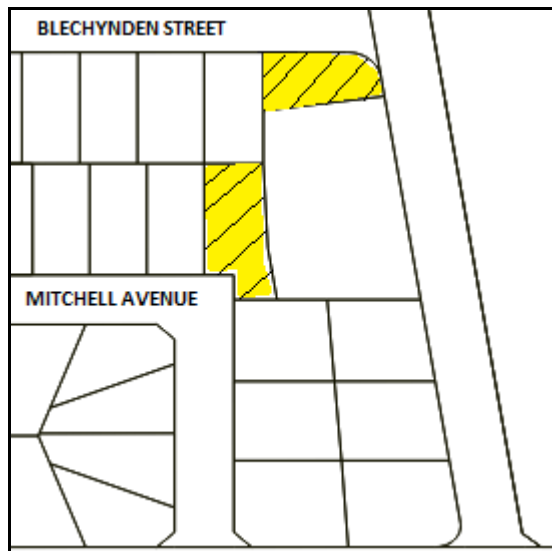
 Cadastre

**Local Scheme Reserves**

-  Public purposes
-  Parks and recreation
-  Important regional road

**Local Scheme Zones**


 Residential




**Proposed Zoning**

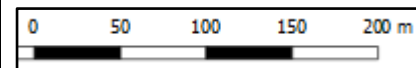
**Proposed LPS**

**Legend**

 Cadastre

 Public purposes

SCALE @ A4  
 1:10,000



## COUNCIL PREPARATION

This Standard Amendment was prepared by resolution of the Council of the Shire of Boyup Brook at the Ordinary Meeting of the Council held on the 15 day of March, 2018.

.....

MAYOR/SHIRE PRESIDENT

.....

CHIEF EXECUTIVE OFFICER

## COUNCIL RECOMMENDATION

This Amendment is recommended for support by resolution of the Shire of Boyup Brook at the Ordinary Meeting of the Council held on the [ number ] day of [ month ], 20[ year ] and the Common Seal of the Shire of Boyup Brook was hereunto affixed by the authority of a resolution of the Council in the presence of:

.....

MAYOR/SHIRE PRESIDENT

.....

CHIEF EXECUTIVE OFFICER

## WAPC ENDORSEMENT (r.63)

.....

DELEGATED UNDER S.16 OF  
THE P&D ACT 2005

DATE.....

FORM 6A - CONTINUED

## APPROVAL GRANTED

.....

MINISTER FOR PLANNING

DATE.....

# **APPENDIX 1**

## **TITLES**

WESTERN



AUSTRALIA

**RECORD OF CERTIFICATE OF TITLE**  
UNDER THE TRANSFER OF LAND ACT 1893

REGISTER NUMBER	
<b>38/D52926</b>	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
<b>3</b>	<b>3/2/2015</b>

VOLUME FOLIO  
**1565 75**

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 38 ON DIAGRAM 52926

**REGISTERED PROPRIETOR:**  
(FIRST SCHEDULE)

SHIRE OF BOYUP BROOK OF PO BOX 2, BOYUP BROOK

(T M899442 ) REGISTERED 30/1/2015

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:**  
(SECOND SCHEDULE)

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
\* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.  
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 1565-75 (38/D52926)  
PREVIOUS TITLE: 1226-866  
PROPERTY STREET ADDRESS: 6 MITCHELL AV, BOYUP BROOK.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BOYUP BROOK



# CERTIFICATE OF TITLE

UNDER THE "TRANSFER OF LAND ACT, 1893" AS AMENDED

I certify that the person described in the First Schedule hereto is the registered proprietor of the undermentioned estate in the undermentioned land subject to the easements and encumbrances shown in the Second Schedule hereto.

Dated 26th July, 1990

*S. J. Mulcahy*  
REGISTRAR OF TITLES



## ESTATE AND LAND REFERRED TO

Estate in fee simple in portion of Boyup Brook Lot 205 and being Lot 34 on Diagram 52926, delineated on the map in the Third Schedule hereto, limited however to the natural surface and therefrom to a depth of 00.96 metres.

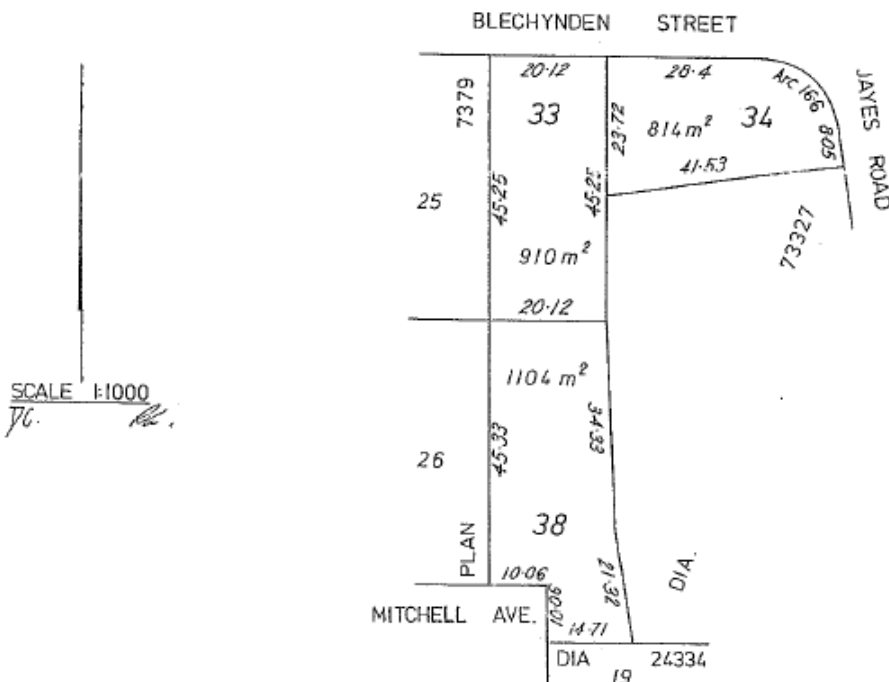
## FIRST SCHEDULE (continued overleaf)

~~Wayne Arthur Pryor and Dorothy Pryor, both of Kojonup, as joint tenants of one undivided third share, Neil Alexander Wholagan and Meryl Wholagan both of Hillman Street, Darkan, as joint tenants of one undivided third share, Malcolm Keith Gillam and Mary Rhonda Gillam, both of Muir Street, Mandurah, as joint tenants of one undivided third share, as tenants in common.~~

## SECOND SCHEDULE (continued overleaf)

NIL

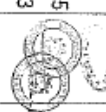

## THIRD SCHEDULE



PERSONS ARE CAUTIONED AGAINST ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON

NOTE: ENTRIES MAY BE AFFECTED BY SUBSEQUENT ENDORSEMENTS

REGISTERED PROPRIETOR

REGISTERED PROPRIETOR		INSTRUMENT		REGISTERED	TIME	SEAL	CERT. OFFICER
		NATURE	NUMBER				
<u>Daniel-David-Bode and Noeleen-Fay-Bode both of Post Office Box 122, Boyup Brook.</u>		Transfer	E407585	26.7.90	15.51		
<u>Arnold George Bode and Doreen May Bode both of RMB 310, Boyup Brook as joint tenants.</u>		Transfer	6631845	10.11.97	15.05		
<u>Shire of Boyup Brook of Abel Street (Post Office Box 2), Boyup Brook.</u>		Transfer	H331435	10.1.00	12.23		

NOTE: ENTRIES MAY BE AFFECTED BY SUBSEQUENT ENDORSEMENTS

[illegible]

FOL

22

Transfer F340134

WESTERN



AUSTRALIA

REGISTER BOOK  
VOL. FOL.

Volume 1802 Folio 572

# CERTIFICATE OF TITLE

2034 660

UNDER THE "TRANSFER OF LAND ACT, 1893" AS AMENDED

I certify that the person described in the First Schedule hereto is the registered proprietor of the undermentioned estate in the undermentioned land subject to the easements and encumbrances shown in the Second Schedule hereto.

*CG Sack*

REGISTRAR OF TITLES



Dated 20th January, 1994

## ESTATE AND LAND REFERRED TO

Estate in fee simple in portion of Boyup Brook Lot 205 and being Lot 1 the subject of Diagram 73327, delineated on the map in the Third Schedule hereto, limited however to the natural surface and therefrom to a depth of 60.96 metres.

## FIRST SCHEDULE (continued overleaf)

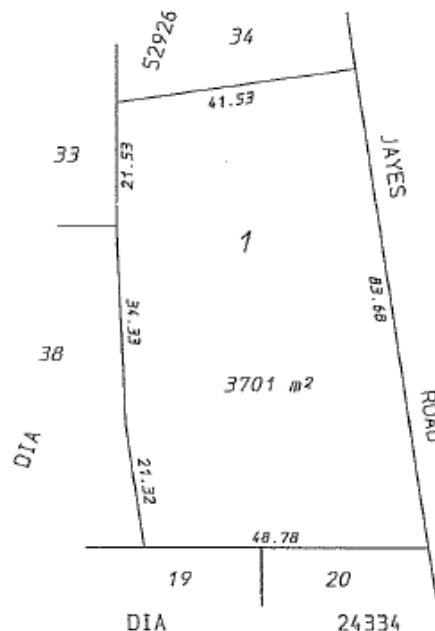
Shire of Boyup Brook of Abel Street, Boyup Brook.

## SECOND SCHEDULE (continued overleaf)

NIL

## THIRD SCHEDULE

SCALE 1:1000  
K.



PERSONS ARE CAUTIONED AGAINST ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON

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VOL. FOL.



# APPENDIX 2

## BUSHFIRE MANAGEMENT PLAN



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## 1. Background Information

### 1.1 Introduction

The subject site is located within the townsite of Boyup Brook. The subject site comprises of two lots currently subdivided for development. Lot 34 Blechynden Street is developed with infrastructure to support a museum. Lot 38 Mitchell Avenue is vacant and is proposed to support artefacts associated with the Boyup Museum.

The subject site is located in a bushfire prone area.

DFES bushfire prone areas.



Lot 34 Blechynden Street is under 1,100m<sup>2</sup> (814m<sup>2</sup>) in area and is therefore exempt from bushfire planning standards, as indicated in the below clause 78B. Bushfire building code standards still apply.

*78B. Application of Part to development (1) This Part does not apply to development unless the development is — (a) the construction or use, or construction and use, of a single house or ancillary dwelling on a lot or lots with a total area of 1 100 m2 or more; or (b) the construction or use, or construction and use, of — (i) a habitable building other than a single house or ancillary dwelling; or (ii) a specified building. (2) The requirements in this Part are in addition to any provisions relating to development in a bushfire prone area that apply in a special control area (Planning and Development (Local Planning Schemes) Amendment Regulations 2015).*

Lot 38 Mitchell Avenue is 1104.34m<sup>2</sup> in area and therefore requires a bushfire assessment in accordance with the State Planning Policy 3.7 and subsidiary guidelines.

### 1.2 Accreditation

This BMP has been produced by Adrian Nicoll who has completed the Level 1 training (Fire Protection Association Australia).

A Method 1 BAL calculation (in the form of a BAL assessment) has been completed for the proposed development in accordance with AS 3959-2009 methodology. The BAL rating gives an indication of the level of bushfire attack (i.e. the radiant heat flux) that may be received by proposed buildings and subsequently informs the standard of



building construction required to increase building tolerance to potentially withstand such impacts in line with the assessed BAL.

Vegetation and slope within the subject site and surrounding 150 m (the assessment area) was assessed in accordance with AS 3959-2009 Construction of Buildings in Bushfire Prone Areas and with regard given to the Visual guide for bushfire risk assessment in Western Australia (DoP 2016).

### 1.3 SPP3.7 Requirements

The proposal meets the requirements of the SP3.7.

### 1.4 Summary – solutions proposed

The subject lot is located outside of areas subject to BAL- FZ or BAL-40 ratings. No issues relating to the BAL assessment are expected.

Should there be any changes in development design or vegetation/hazard extent that requires a modified bushfire management response, then the BAL will need to be reassessed for the affected areas.

## 2. Spatial consideration of bushfire threat

### 2.1 Map –

#### Location of fuel areas.

The subject properties are located within 100m of 'woodland' vegetation located to the east (Plot 1). The ground fuel load within this plot (1) is managed by the Shire of Boyup Brook and is kept to a leaf and grass under layer. See below map and photo for vegetation representations.





## Vegetation – Plot 1



### Fuel ages.

Annual burning is undertaken by the Shire of Boyup Brook (Plot 1) to keep fuel loads to a minimum. Leaves are also raked periodically for amenity reasons associated with the neighbouring recreation area.

### Land uses.

Land uses within the area include residential housing, shire administration offices and a public park.

### Water supply.

Reticulated water supplies the Boyup townsite.

### Vehicle access.

Vehicle access is developed (Public Roads – sealed) to provide movement in more than two directions.

## 3. Proposal compliance and Justification

Lot 34 Blechynden Street is developed and less than 1,100m<sup>2</sup> (814m<sup>2</sup>). It may be argued that the land is exempt from bushfire planning legislation in accordance with the *Planning and Development (Local Planning Schemes) Amendment Regulations 2015*, which states:

*78B. Application of Part to development (1) This Part does not apply to development unless the development is — (a) the construction or use, or construction and use, of a single house or ancillary dwelling on a lot or lots with a total area of 1 100 m2 or more; or (b) the construction or use, or construction and use, of — (i) a habitable building other than a single house or ancillary dwelling; or (ii) a specified building. (2) The requirements in this Part are in addition to any provisions relating to development in a bushfire prone area that apply in a special control area ().*

Lot 34 Blechynden Street is not exempt from a Bushfire Attack Level Assessment in accordance with the Building Codes of Australia...hence a BAL assessment has been completed to accompany this BMP.

Lot 38 Mitchell Avenue is subdivided and ready for development, however is greater than 1,100m<sup>2</sup>. This lot is required to comply with SPP 3.7 and the Guidelines.

### **3.1 Does the proposal meet the objectives of SPP 3.7?**

Implementation of this BMP is expected to meet the following objectives of SPP 3.7:

5.1: Avoid increasing the threat of bushfire to people, property and infrastructure. The preservation of life and the management of bushfire impact is paramount;

5.2: Reduce vulnerability to bushfire through the identification and assessment of bushfire hazards in decision-making at all stages of the planning and development process;

5.3: Ensure that planning proposals and development applications take into account bushfire protection requirements and include specified bushfire protection measures where land has or will have a moderate or extreme bushfire hazard level, and/ or where a rating higher than BAL-Low applies; and

5.4: Achieve a responsible approach between bushfire management measures and landscape amenity and biodiversity conservation values, with consideration of the potential impacts of climate change.

### **3.2 What policy measure(s) apply to the proposal?**

The following policy measures apply to the proposal:

#### 6.2 Strategic planning proposals, subdivision and development applications

- a) Strategic planning proposals, subdivision and development applications within designated bushfire prone areas relating to land that has or will have a Bushfire Hazard Level (BHL) above low and/or where a Bushfire Attack Level (BAL) rating above BAL-LOW apply, are to comply with these policy measures.
- b) Any strategic planning proposal, subdivision or development application in an area to which policy measure 6.2 a applies, that has or will, on completion, have a moderate BHL and/or where BAL-12.5 to BAL-29 applies, may be considered for approval where it can be undertaken in accordance with policy measures 6.3, 6.4 or 6.5.
- c) This policy also applies where an area is not yet designated as a bushfire prone area but is proposed to be developed in a way that introduces a bushfire hazard, as outlined in the Guidelines.

#### 6.5 Information to accompany development applications

Any development application to which policy measure 6.2 applies is to be accompanied by the following information prepared in accordance with the Guidelines:

- a) (i) a BAL assessment. BAL assessments should be prepared by an accredited Level 1 BAL Assessor or a Bushfire Planning Practitioner unless otherwise exempted in the Guidelines; or

- (ii) a BAL Contour Map that has been prepared for an approved subdivision clearly showing the indicative acceptable BAL rating across the subject site, in accordance with the Guidelines. BAL Contour Maps should be prepared by an accredited Bushfire Planning Practitioner; and
- b) the identification of any bushfire hazard issues arising from the BAL Contour Map or the BAL assessment; and
- c) an assessment against the bushfire protection criteria requirements contained within the Guidelines demonstrating compliance within the boundary of the development site.

#### 6.6 Vulnerable or high-risk land uses

In areas where BAL-12.5 to BAL-29 applies.

Subdivision and development applications for vulnerable or high-risk land uses in areas between BAL-12.5 to BAL-29 will not be supported unless they are accompanied by a Bushfire Management Plan jointly endorsed by the relevant local government and the State authority for emergency services. Subdivision applications should make provision for emergency evacuation. Development applications should include an emergency evacuation plan for proposed occupants and/or a risk management plan for any flammable on-site hazards.

### **3.3 Does the proposal comply with the relevant policy measures?**

In response to the above requirements of SPP 3.7 and the Guidelines, bushfire management measures have been devised for the proposed development in accordance with Guideline acceptable solutions to meet compliance with bushfire protection criteria.

‘Acceptable solutions’ have been used to meet all performance principles.

A Bushfire Emergency Evacuation Plan has been prepared for the proposed development in accordance with Policy Measure 6.6 of SPP 3.7.

### **3.4 How has the proposal addressed the bushfire protection criteria?**

The Guidelines for Planning in Bushfire Prone Areas (WAPC, 2017) outlines bushfire protection criteria which subdivision and development proposals are assessed for compliance. The bushfire protection criteria (Appendix 4, WAPC, 2017) are a performance based criteria utilised to assess bushfire risk management measures and they outline four elements, being:

- Element 1: Location
- Element 2: Siting and Design of Development;
- Element 3: Vehicle Access; and
- Element 4: Water.

Development is required to meet the "Acceptable Solutions" of each Element of the bushfire mitigation measures (WAPC, 2017).

The Subject Site was assessed against the bushfire protection criteria Acceptable Solutions for Elements A1, A2, A3 and A4. Please refer to the summary table below and the detailed assessment.

## Bushfire protection criteria applicable to the site

Element	Acceptable Solution	Applicable or not Yes/No	Meets Acceptable Solution
<b>Element 1 – Location</b>	A1.1 Development Location	Yes	Compliant BAL 29 or less applied to lots
<b>Element 2 – Siting and Design</b>	A2.1 Asset Protection Zone	Yes	Compliant, non-vegetated areas surrounding.
	A3.1 Two Access Routes	Yes	Compliant access to 3 destinations.
	A3.2 Public Road	N/A	Established not assessed to A3.2
	A3.3 Cul-de-sacs	N/A	Established not assessed to A3.3
	A3.4 Battle axes	N/A	N/A.
<b>Vehicular Access</b>	A3.5 Private driveways	Yes	Compliant to minimum standards.
	A3.6 Emergency Access	Yes	Compliant to minimum standards.
	A3.7 Fire Service Access	N/A	Public road network used.
	A3.8 Firebreaks	Yes	Compliant to Fire Management Notice
<b>Element 4 – Water</b>	A4.1 Reticulated areas A4.2 Non-reticulated areas A4.3 Individual lots in non-reticulated areas	Yes	Compliant reticulated water supplied

Element 1: Location	
<p><b>Intent:</b> To ensure that strategic planning proposals, subdivision and development applications are located in areas with the least possible risk of bushfire to facilitate the protection of people, property and infrastructure.</p>	
Acceptable Solutions	Assessment to Acceptable Solutions
<p><i>A 1.1 Development Location: The strategic planning proposal, subdivision and development application is located in an area that is or will, on completion, be subject to either a moderate or low Bushfire hazard level or BAL-29 or below (WAPC, 2017).</i></p>	<p><i>A 1.1 Development Location:</i> The publicly released Bushfire Prone Mapping (DFES, 2017) indicates the subject area as bushfire prone.</p> <p>The BAL assessment identifies external vegetation of Woodland Type B, and the effect on the subject lot. This demonstrates Lot 34 Blechynden Street could be subject to BAL 19 and Lot 38 Mitchell avenue could be subject to BAL 12.5.</p> <p><b>Compliance</b> Development compliant to Acceptable Solution A1.1.</p> <p><b>Recommendations</b> The recommendations arising from the assessment of the development to Element 1: Location:</p> <p>Individual BAL assessments may be considered on the lot when building design/placement is known and can be undertaken at building approval stages.</p>

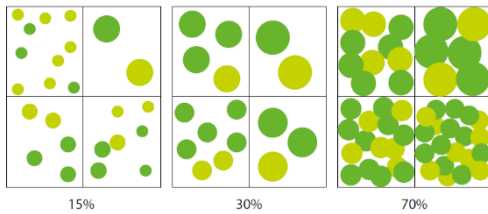


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Element 2: Siting and Design	
Intent: To ensure that the siting and design of development minimises the level of bushfire impact.	
Acceptable Solutions	Assessment to Acceptable Solutions
<p>A2.1 Asset Protection Zone (APZ): Every habitable building is surrounded by, and every proposed lot can achieve, an APZ depicted on submitted plans, which meets the following requirements:</p> <p><u>Width:</u> Measured from any external wall or supporting post or column of the proposed building, and of sufficient size to ensure the potential radiant heat impact of a bushfire does not exceed <math>29\text{kW/m}^2</math> (BAL-29) in all circumstances.</p> <p><u>Location:</u> The APZ should be contained solely within the boundaries of the lot on which the building is situated, except in instances where the neighbouring lot or lots will be managed in a low-fuel state on an ongoing basis, in perpetuity (see explanatory notes).</p> <p><u>Management:</u> The APZ is managed in accordance with the requirements of 'Standards for Asset Protection Zones'. (WAPC, 2017)</p> <p>An Asset Protection Zone (APZ) is an area surrounding a building that is managed to reduce the bushfire hazard to an acceptable level (WAPC, 2017). This is also defined as a "defendable zone". Any buildings will have an APZ utilising Low threat or non-vegetated areas as classified by AS3959-2009 Section 2.2.3.2. Any replanting, revegetation and landscaping across the lot is to be to an APZ standard as per WAPC Guidelines V 1.1 (WAPC, 2017) as outlined below.</p> <p>WAPC Guidelines for an APZ (WAPC. 2017)</p> <p><u>Fences:</u> Within the APZ are constructed from non-combustible materials (e.g. iron, brick, limestone, metal post and wire). It is recommended that solid or slatted non-combustible perimeter fences are used.</p> <p><u>Objects:</u> Within 10 metres of a building, combustible objects must not be located close to the vulnerable parts of the building i.e. windows and doors.</p> <p><u>Fine Fuel load:</u> Combustible dead vegetation matter less than 6 millimetres in thickness reduced to and maintained at an average of two tonnes per hectare.</p>	<p>A2.1 Asset Protection Zone (APZ): Future buildings can achieve an APZ. Neighbouring lot or lots will be managed in a low-fuel state on an ongoing basis, in perpetuity. Neighbouring lots are defined as 'non-vegetated areas' (As per AS3959).</p> <p><b>Compliance</b></p> <p>Future development is deemed to be compliant with A2.1.</p> <p><b>Recommendations</b></p> <p>The recommendations arising from assessment to Element 2: Siting and design:</p> <p>N/A.</p>

Trees (> 5 metres in height): Trunks at maturity should be a minimum distance of 6 metres from all elevations of the building, branches at maturity should not touch or overhang the building, lower branches should be removed to a height of 2 metres above

Figure 16: Tree canopy cover – ranging from 15 to 70 per cent at maturity



the ground and or surface vegetation, canopy cover should be less than

15% with tree canopies at maturity well spread to at least 5 metres apart as to not form a continuous canopy. See Figure 7 (WAPC Figure 16, Appendix 4) below.

Shrubs (0.5 metres to 5 metres in height): Should not be located under trees or within 3 metres of buildings, should not be planted in clumps greater than 5m<sup>2</sup> in area, clumps of shrubs should be separated from each other and any exposed window or door by at least 10 metres. Shrubs greater than 5 metres in height are to be treated as trees.

Ground covers (<0.5 metres in height): Can be planted under trees but must be properly maintained to remove dead plant material and any parts within 2 metres of a structure, but 3 metres from windows or doors if greater than 100 millimetres in height. Ground covers greater than 0.5 metres in height are to be treated as shrubs.

Grass: Should be managed to maintain a height of 100 millimetres or less. (WAPC, 2017).

### Element 3: Vehicle Access

**Intent:** To ensure that the vehicular access serving a subdivision/development is available and safe during a bushfire event.

Acceptable Solutions	Assessment to Acceptable Solutions
<p><i>A3.1 Two access routes: Two different vehicular access routes are provided, both of which connect to the public road network, provide safe access and egress to two different destinations and are available to all residents/the public at all times and under all weather conditions.</i></p> <p><i>A3.2 Public road: A public road is to meet the requirements in Table 5, Column 1.</i></p> <p><i>A3.3 Cul-de-sac (including a dead-end road): A cul-de-sac and/or a dead-end road should be avoided in bushfire prone areas. Where no alternative exists (i.e. the lot layout already exists and/or will need to be demonstrated by the proponent), the following requirements are to be achieved: Requirements</i></p>	<p>A3.1 Two access routes: Access is available to three separate destinations through the public road network.</p> <p>General public access and egress will be along the public roads.</p> <p>The lots are already created and no other public roads are proposed.</p> <p>A3.2 Public roads: No Public Roads are proposed for this proposal.</p>

<p><i>in Table 5, Column 2; Maximum length: 200 metres; and Turn-around area requirements, including a minimum 17.5 metre diameter head.</i></p> <p><i>A3.4 Battle-axe: Battle-axe access leg should be avoided in bushfire prone areas. Where no alternative exists, (this will need to be demonstrated by the proponent) all of the following requirements are to be achieved: Requirements in Table 5, Column 3; Maximum length: 600 metres; and Minimum width: 6 metres.</i></p> <p><i>A3.5 Private driveway: Longer than 50 metres A private driveway is to meet all of the following requirements: Requirements in Table 5, Column 3; Required where a house site is more than 50 metres from a public road; Passing bays: every 200 metres with a minimum length of 20 metres and a minimum width of two metres (i.e. the combined width of the passing bay and constructed private driveway to be a minimum six metres); Turn-around areas designed to accommodate type 3.4 fire appliances and to enable them to turn around safely every 500 metres (i.e. kerb to kerb 17.5 metres) and within 50 metres of a house; and any bridges or culverts are able to support a minimum weight capacity of 15 tonnes. All-weather surface (i.e. compacted gravel, limestone or sealed).</i></p> <p><i>A3.6 Emergency access way: An access way that does not provide through access to a public road is to be avoided in bushfire prone areas. Where no alternative exists (this will need to be demonstrated by the proponent), an emergency access way is to be provided as an alternative link to a public road during emergencies. An emergency access way is to meet all of the following requirements: – Requirements in Table 4, Column 4; – No further than 600 metres from a public road; – Provided as right of way or public access easement in gross to ensure accessibility to the public and fire services during an emergency; and – Must be signposted.</i></p> <p><i>A3.7 Fire service access routes (perimeter roads): Fire service access routes are to be established to provide access within and around the edge of the subdivision and related development to provide direct access to bushfire prone areas for fire fighters and link between public road networks for firefighting purposes. Fire service access routes are to meet the following requirements: Requirements Table 5, Column 5; Provided as right of ways or public access easements in gross to ensure accessibility to the public and fire services during an emergency; Surface: all-weather (i.e. compacted gravel, limestone or sealed) Dead end roads are not permitted; Turn-around areas designed to accommodate type 3.4 appliances and to enable them to turn around safely every 500 metres (i.e. kerb to kerb</i></p>	<p>A3.3 No cul-de-sacs are proposed for this proposal.</p> <p>A3.4 Battle-axe: No battle-axe legs proposed.</p> <p>A3.5 Private driveways: crossover to existing lot developed at future (building) stage.</p> <p>A3.6 Emergency access ways: N/A</p> <p>A3.7 Fire Service Access Routes: N/A</p> <p>A3.8 Firebreak width; N/A</p> <p><b>Compliance</b></p> <p>The proposed amendment and future development is deemed compliant to Element 3.</p> <p><b>Recommendations</b></p> <p>The recommendations from assessment of the plan of development to Element 3: Vehicular Access:</p> <p>The developer develops a crossover to the Lot 38 Mitchell Avenue, to the satisfaction of the Shire of Boyup Brook.</p>
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17.5 metres); No further than 600 metres from a public road; Allow for two-way traffic and Must be signposted.

A3.8 Firebreak width: Lots greater than 0.5 hectares must have an internal perimeter firebreak of a minimum width of three metres or to the level as prescribed in the local firebreak notice issued by the local government.

Table 5: Vehicular Access Technical Requirements (WAPC, 2017)

Technical requirements	Private Driveways & Battle	Emergency Access Ways (EAW)
Minimum trafficable surface	4	*6
Horizontal clearance (m)	6	6
Vertical clearance (m)	4.5	4.5
Maximum grades	1 in 10	1 in 10
Minimum weight capacity (t)	15	15
Maximum crossfall	1 in 33	1 in 33
Curves minimum inner radius (m)	8	8.5
Maximum Length	50m	600m

#### Element 4: Water

Intent: To ensure that water is available to the subdivision, development or land use to enable people, property and infrastructure to be defended from bushfire.

Acceptable Solutions	Assessment to Acceptable Solutions
<p>A4.1 Reticulated areas: The subdivision, development or land use is provided with a reticulated water supply in accordance with the specifications of the relevant water supply authority and Department of Fire and Emergency Services.</p> <p>A4.2 Non-reticulated areas: Water tanks for firefighting purposes with a hydrant or standpipe are provided and meet the following requirements: Volume: minimum 50,000 litres per tank; Ratio of tanks to lots: minimum one tank per 25 lots (or part thereof); Tank location: no more than two kilometres to the further most house site</p>	<p>A4.1 Reticulated areas: Scheme water is available to the subject lot.</p> <p>A4.2 Non-reticulated areas: N/A</p> <p>A4.3 Individual lots within non-reticulated areas (Only for use if creating 1 additional lot and cannot be applied cumulatively): N/A</p> <p>Compliance</p> <p>Development deemed compliant to Acceptable Solution A4.1.</p> <p>A4.3 Individual lots within non-reticulated areas: Assessment of subdivision plan to A4.3 not required.</p>

within the residential development to allow a 2.4 fire appliance to achieve a 20 minute turnaround time at legal road speeds; Hardstand and turn-around areas suitable for a type 3.4 fire appliance (i.e. kerb to kerb 17.5 metres) are provided within three metres of each water tank; and Water tanks and associated facilities are vested in the relevant local government.

A4.3 Individual lots within non-reticulated areas (Only for use if creating 1 additional lot and cannot be applied cumulatively): Single lots above 500 square metres need a dedicated static water supply on the lot that has the effective capacity of 10,000 litres.

#### Recommendations

The recommendations from assessment to Element 4: Water:

- Is deemed compliant with Element 4 through the provision of reticulated water to the subject lot.

### 3.5 Any existing Bushfire Management Plan prepared over the subject site

A Bushfire Hazard Level Assessment was developed for the townsite of Boyup Brook (2016) to accompany a Draft Local Planning Strategy – developed for the Shire of Boyup Brook. The Bushfire Hazard Level Assessment was assessed by DFES. The Bushfire Hazard Level Assessment confirmed the subject area to be of a moderate bushfire hazard.

### 3.6 Any existing Bushfire Hazard Level assessment or BAL assessment prepared over the subject site

The following Bushfire Attack Level assessment has been developed to accompany the BMP.

## AS 3959 Bushfire Attack Level (BAL) Assessment Report

Site Details			
Address:	Lot 34 Blechynden Street and Lot 38 Mitchell Avenue		
Suburb:	Boyup Brook Townsite	State:	WA
Local Government Area:	Shire of Boyup Brook		
Description of Building Works:	Rezoning from 'Residential to 'Public Purpose'. Future – Storage Shed		

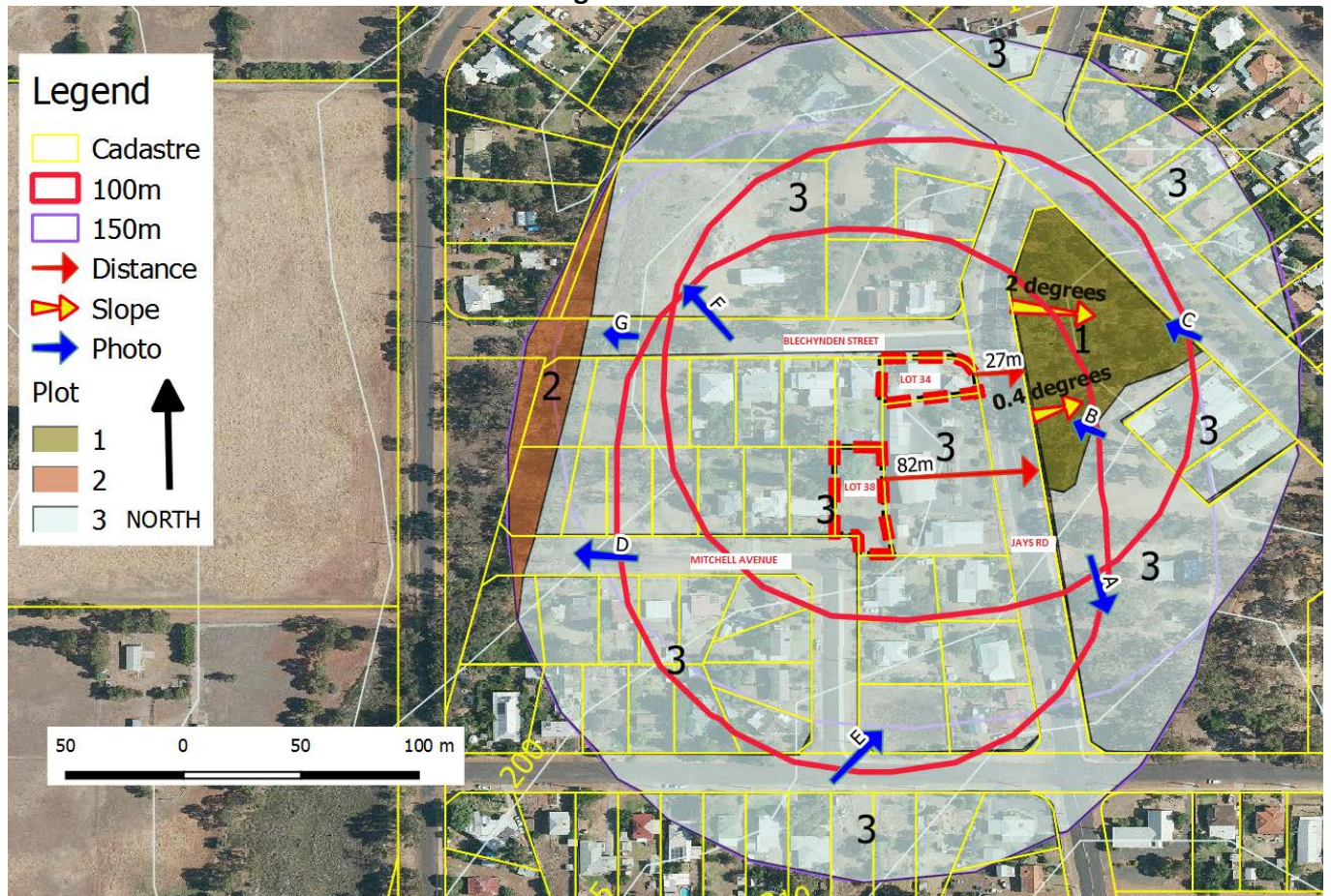
Report Details			
Report / Job Number:	4	Report Version:	1
Assessment Date:	17 February 2018	Report Date:	18 February 2018

### Site Assessment & Site Plans

The assessment of this site / development was undertaken on **17 February 2018** by Adrian Nicoll (BAL assessment course completed) for the purpose of determining the Bushfire Attack Level in accordance with AS 3959 - 2009 Simplified Procedure (Method 1).




Figure 1: Site Plan





### Vegetation Classification

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


<b>Plot</b>	<b>3</b>	<b>Classification or Exclusion Clause</b>	Exclusion 2.2.3.2 (f)
Photo ID: <b>A</b>			
			<p>Low threat vegetation. Maintained public reserve and parkland.</p> <p>There is insufficient fuel available to significantly increase the severity of a bushfire attack.</p>
<b>Plot</b>	<b>1</b>	<b>Classification or Exclusion Clause</b>	<b>Class B Woodland</b>
Photo ID: <b>B</b>			
			<p><i>Description</i>  <i>Trees 10-30 m high; 10-30% foliage cover dominated by eucalypts; understorey leaf litter and shrubs (grass trees).</i></p>




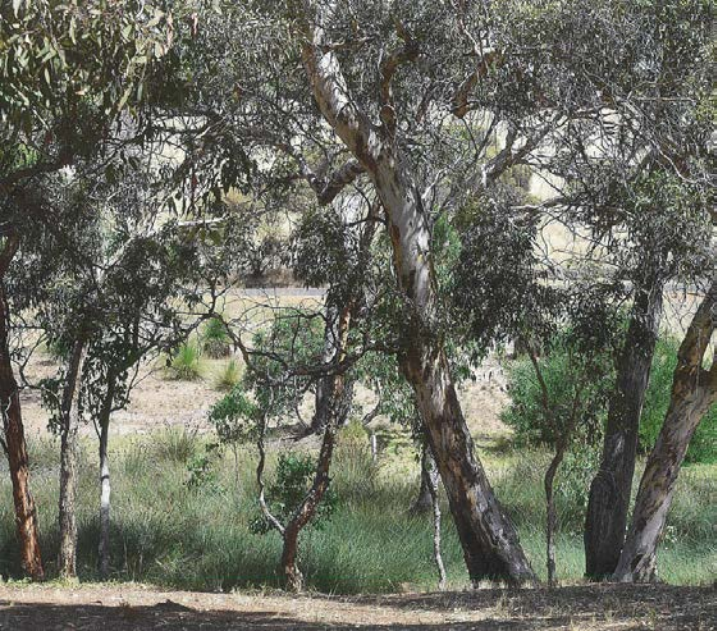
Plot	1	Classification or Exclusion Clause	Class B Woodland
Photo ID: <b>C</b>			
			<p><i>Description</i>  <i>Trees 10-30 m high; 10-30% foliage cover dominated by eucalypts; understorey leaf litter and shrubs (grass trees).</i></p>

Plot	2	Classification or Exclusion Clause	Class B Woodland
Photo ID: <b>D</b>			
			<p><i>Description</i>  <i>Trees 10-30 m high; 10-30% foliage cover dominated by eucalypts; understorey leaf litter and shrubs.</i></p>



Plot	3	Classification or Exclusion Clause	Exclusion 2.2.3.2 (f)
Photo ID: <b>E</b>			
			<p><i>Description</i>  Low threat vegetation, including maintained parkland, roads and cultivated gardens (amongst residential allotments).</p>

Plot	3	Classification or Exclusion Clause	Exclusion 2.2.3.2 (f)
Photo ID: <b>F</b>			
			<p><i>Description</i>  Low threat vegetation, including maintained parkland, roads and cultivated gardens (amongst residential allotments).</p>

Plot	2	Classification or Exclusion Clause	Class B Woodland
Photo ID: <b>G</b>			
		<p><i>Description</i>  Trees 10-30 m high; 10-30% foliage cover dominated by eucalypts; understorey leaf litter and shrubs.</p>	

### Relevant Fire Danger Index

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

### Fire Danger Index

FDI 40 ☐

Table 2.4.5

FDI 50 ☐

Table 2.4.4

FDI 80 ☒

Table 2.4.3

FDI 100 ☐

Table 2.4.2

### Potential Bushfire Impacts

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

**Table 1: BAL Analysis**

Plot	Vegetation Classification	Effective Slope	Separation (m)	BAL
1	Class B Woodland	All upslopes and flat land. <ul style="list-style-type: none"><li>• 2° upslope; and</li><li>• 0.4° upslope</li></ul>	<ul style="list-style-type: none"><li>• 27m to Lot 34 Blechynden Street; and</li><li>• 82M to Lot 38 Mitchell Avenue.</li></ul>	<b>BAL19</b> Lot 34 Blechynden Street  <b>BAL12.5</b> Lot 38 Mitchell Avenue.
2	Class B Woodland	Downslope >0 to 5 degrees	<ul style="list-style-type: none"><li>• &gt;100m</li></ul>	<b>Low</b>
3	'Exclusion 2.2.3.2 (f)  'Low threat vegetation, including grassland managed in a minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, vineyards, orchards, cultivated gardens, commercial nurseries, nature strips and windbreaks.'	N/A	N/A	N/A

### Determined Bushfire Attack Level (BAL)

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

<b>Determined Bushfire Attack Level</b>	<b>BAL19</b> <b>Lot 34 Blechynden Street</b>  <b>BAL12.5</b> <b>Lot 38 Mitchell Avenue.</b>
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### Application of Shielding Provisions

The western side of a proposed development at the subject lot 34 Blechynden St may be developed at the BAL12.5 rating, as explained below.

The construction requirements for the next lower BAL than that determined for the site may be applied to an elevation of the building where the elevation is not exposed to the source attack. An elevation is

deemed to be not exposed to the source of bushfire attack if all of the straight lines between that elevation and the source of bushfire attack are obstructed by another part of the building.

The construction requirements for a shielding shall be not less than that required for BAL-12.5, except where the exposed elevations have been determined as BAL-low.

### Additional Information / Advisory Notes / Justifications Related to Assessment

#### Bushfire Attack Level Assessment Explained

A Bushfire Attack Level (BAL) Assessment is a means of measuring the severity of a buildings potential exposure to ember attack, radiant heat and direct flame contact in a bushfire event, and thereby determining the construction measures required for the dwelling.

The methodology used for the determination of the BAL rating, and the subsequent building construction standards, are directly referenced from Australian Standard *AS3959 Construction of Buildings in Bushfire Prone Areas*.

The BAL rating is determined through identification and assessment of the following parameters:

- Fire Danger Index (FDI) rating; assumed to be FDI-80 for WA;
- All classified vegetation within 100m of the subject building;
- Separation distance between the building and the classified vegetation sources; and
- Slope of the land under the classified vegetation.

AS3959 has six levels of BAL, based on the radiant heat flux exposure to the building, and also identifies the relevant sections for building construction, as detailed below:

TABLE 3.1 (AS3959)

#### 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	$\leq 12.5 \text{ kW/m}^2$	Ember attack	3 and 5
BAL-19	$> 12.5 \text{ kW/m}^2$ to $\leq 19 \text{ kW/m}^2$	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux	3 and 6
BAL-29	$> 19 \text{ kW/m}^2$ to $\leq 29 \text{ kW/m}^2$	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux	3 and 7
BAL-40	$> 29 \text{ kW/m}^2$ to $\leq 40 \text{ kW/m}^2$	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	$> 40 \text{ kW/m}^2$	Direct exposure to flames from fire front in addition to heat flux and ember attack	3 and 9

[illegible]

LEGEND

00000 EXF571169 STBQK WOHU

+++++	fence
-----	road

LIMESTONE BLOCK WALL

~~7777~~ PARICADE

\*\*\*\*\*  
GATED FENCE

## CHAPTER DRILLING

Proposed Museum

EX 4251045 + 104.

Serial of 607 of 1560

SE15 Rev A UH

2,05,2015

# Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2009

## Site Details

**Address:** Lot 34 Blechynden Street and Lot 38 Mitchell Avenue

**Suburb:** Boyup Brook Townsite **State:** WA

**Local Government Area:** Shire of Boyup Brook

**Report / Job Number:** 4 **Report Date:** 18 February 2018

## Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B Woodland	All up-slopes and flat land	27m; and 82m	BAL19 (Lot 34 Blechynden St) BAL12.5 (Lot 38 Mitchell Av)

## Practitioner Details

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2009 (Incorporating Amendment Nos 1, 2 and 3).

**Name:** Adrian A Nicoll

**Signature:**  \_\_\_\_\_

**Certificate Date:** 18 February 2018



### 3.7 Local planning strategy references to Bushfire Risk Management

N/A

### 3.8 Local planning scheme provisions relating to bushfire risk management

N/A

### 3.9 Any applicable structure plans, special control area provision previous planning approvals or similar referencing bushfire risk management applicable to the subject site

N/A

### 3.10 Any relevant landscaping plans applicable to the subject site

N/A

### 3.11 Standard fire break orders of the area

Current bushfire management measures activated by the Shire of Boyup Brook Bushfire Brigade, for the Townsite include:

- Periodic burns of vegetated Crown reserve areas;
- Notice of:
  - Prohibited burning periods;
  - Restricted burning periods;
  - The chance of a fire starting;
  - Non operation of machinery (e.g. lawn mower) that may cause a bushfire;
  - A bushfire and where necessary the need to evacuate;
  - Land 2023m<sup>2</sup> or less, is to be free of all inflammable matter (except living trees) and cultivated plants, shrubs and lawns, to a height no greater than 5cm: or
  - Land in excess of 2023m<sup>2</sup>, is to clear a 2.5 metre wide bare earth firebreak immediately inside all external boundaries of the land or immediately surrounding all buildings on the land by removing all inflammable matter and vegetation within the 2.5 metre wide firebreak between the ground and 4 metres above the ground.
  - Offensive operations including operating welding apparatus of any kind or power operated abrasive cutting discs of any kind in the open air unless at least one fire extinguisher is provided at the place where the welding or cutting operation is carried out the place where the welding or cutting operation is carried out is surrounded by a firebreak which is at least 5 metres wide.

## 4. Bushfire Risk Management Measures

### 4.1 What measures should be put in place to reduce the bushfire threat

- Lots to be connected to reticulated water.
- Development is to be constructed to meet BAL19 for Lot 34 Blechynden St and BAL12.5 for Lot 38 Mitchell Avenue.
- The development, maintenance and signposting of on-site safety and evacuation areas.

## 5. Implementation and enforcement

### 5.1 What upfront and ongoing tasks need to be completed?

It is recommended that the on-site museum caretaker is responsible for the following:

Lot owner- Ongoing management			
No	Implementation Action	Annual	All times
1	Individual BAL assessments may be considered on the lots at the time of development.		Yes
2	Implementing the minimum technical standards for crossover to Lot 38 Mitchell Avenue.		Yes
3	The development, maintenance and signposting of on-site safety and evacuation areas.		Yes
4	Implementation of Emergency Evacuation Plan		Yes – Fire danger exceeds high.

## 6. EEP

### Emergency Evacuation Plan

In considering the land is proposed to be used for 'Public Purpose' – museum, it is recommended that an emergency evacuation plan is implemented by the on-site museum caretaker.

#### 1. Location details

Facility type:	Location:	Infrastructure:	Occupation / Visitation (number of people):	Access:	Fire Weather Forecast Area:
▪ Museum - vulnerable	▪ Townsite – Boyup Brook	▪ Existing buildings for showing heritage artefacts. Proposed Storage Shed	▪ Maximum visitors: 40 – based on car-parking and bus	▪ Jays Road	• South West Land Division Fire District

#### 2. Communications

Mobile:	Landline:	Radio:	Internet Sites:
▪ Mobile reception is available	▪ Landline available for emergency use	▪ ABC: Local Radio (630 AM)	▪ Preparing your Property – <a href="#">DFES Link</a> ▪ Emergency WA – <a href="http://www.emergency.wa.gov.au">www.emergency.wa.gov.au</a> ▪ DFES on Facebook - <a href="https://www.facebook.com/dfeswa">www.facebook.com/dfeswa</a> ▪ DFES on Twitter - <a href="https://www.twitter.com/dfes_wa">www.twitter.com/dfes_wa</a> ▪ National Bushfires app - <a href="http://www.bushfireblankets.com/bushfire-app.html">www.bushfireblankets.com/bushfire-app.html</a>

#### 3. Contacts

Fire reporting 000  
Museum Manager  
DFES (Emergency Information) 13 33 37  
SES (Emergency Assistance) 132 500



WA Police 000  
WA Ambulance 000  
Bureau of Meteorology (BoM)  
Recorded Information  
1300 659 213

#### 4. Evacuation preparedness

All guests must be briefed during the Bushfire Danger Period on the bushfire evacuation procedures with updated advice provided when the fire danger exceeds Very High or a fire warning is issued by Emergency Services (currently DFES) for the locality.

This Evacuation Plan is to be displayed on buildings.

BUSHFIRE PREPAREDNESS MATRIX						
ACTION	LOW/ MOD	HIGH	VERY HIGH	SEVERE	EXTREME	CATASTROPHIC
Museum caretaker to perform checks on the DFES and BOM websites to determine the Fire Danger Rating and to update resort visitors if there is a likelihood of an evacuation.						

#### 5. Evacuation triggers

A decision to evacuate is to be determined by:

- Instructions from Police, DFES, other Emergency Services or Museum Manager
- The Bushfire Evacuation Matrix
- A warning regarding a known bushfire in the locality

#### 6. Evacuation Procedures

Every bushfire attack is different. The response to each must therefore be specific and be in response to bushfire warnings.

##### Bushfire Warning Notification

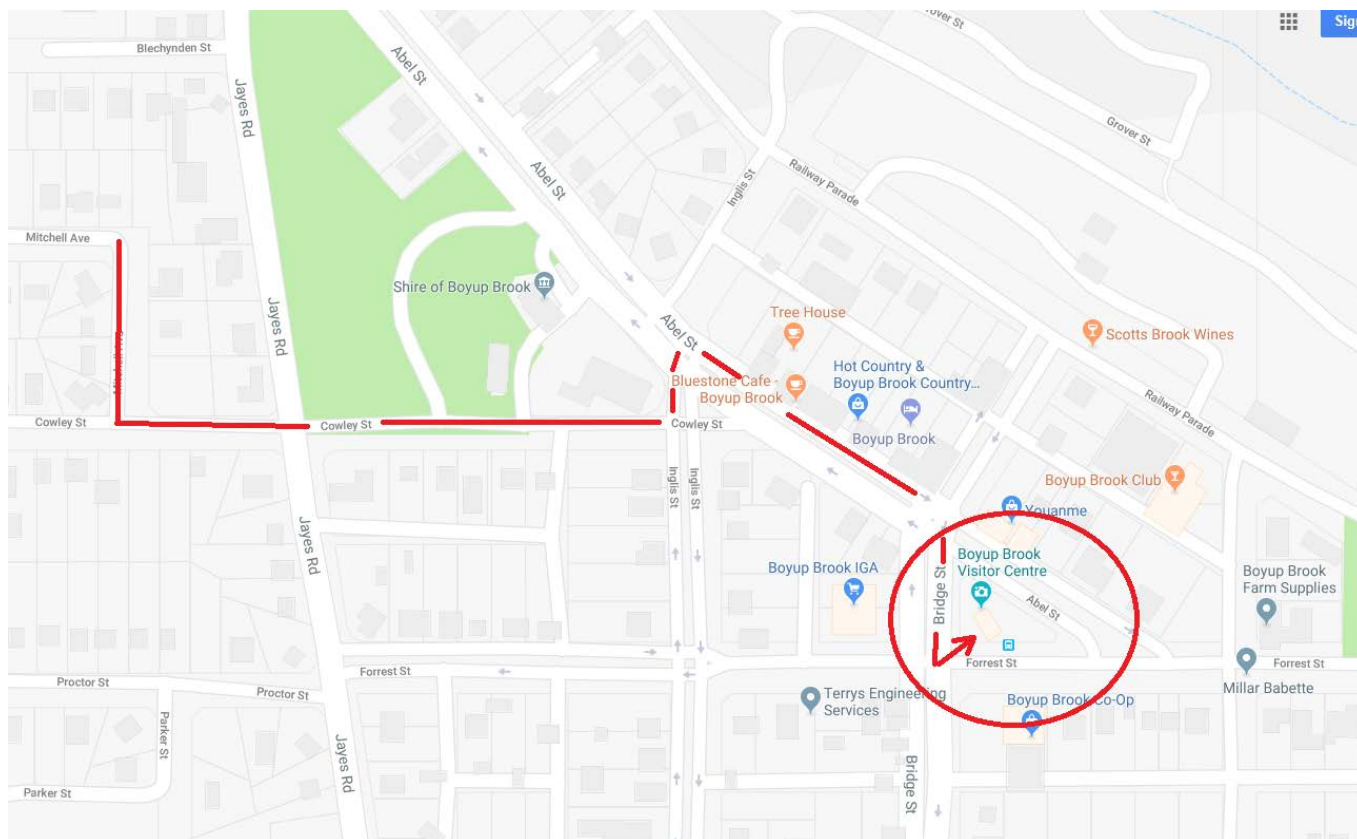
- Emergency WA website, SMS or the 'National Bushfires' App (for smartphones) will provide initial notification of a fire and evacuation instructions.
- DFES, Police (or other incident personnel) may also attempt to notify visitors (on site).
- The Museum Manager is also responsible to ensure any visitors are aware of a fire warning has been issued

##### Off-site evacuation

- Off-site evacuation is always safer, provided adequate time is available to complete it safely. Confirm with DFES or other Emergency.

##### Service prior to evacuating.

- Off-site evacuation is to occur by driving directly to Boyup Brook Visitor Centre which is located in the centre of town. The Boyup Brook Visitor Centre is located in a LOW bushfire threat area and with parking and public toilets...refer to below illustration.
- Evacuation well in advance of a fire's predicted arrival time is safer than remaining on-site.



## 8. Building Preparedness Checks

- Include such tasks as ensuring reduced fuel loads around buildings, routine house maintenance is up to date including cleaning of gutters and static water supply is available.
- Detailed information and checklists are available on the DFES website including the 'The Homeowner's Bushfire Survival Manual' and the '*Prepare Act Survive Booklet*' published by DFES:

[https://www.dfes.wa.gov.au/safetyinformation/fire/bushfire/BushfireManualsandGuides/DFES\\_Bushfire-Homeowners\\_Survival\\_Manual.pdf](https://www.dfes.wa.gov.au/safetyinformation/fire/bushfire/BushfireManualsandGuides/DFES_Bushfire-Homeowners_Survival_Manual.pdf)

[https://www.dfes.wa.gov.au/safetyinformation/fire/bushfire/BushfireManualsandGuides/DFES\\_Bushfire-Prepare\\_Act\\_Survive\\_Booklet.pdf](https://www.dfes.wa.gov.au/safetyinformation/fire/bushfire/BushfireManualsandGuides/DFES_Bushfire-Prepare_Act_Survive_Booklet.pdf)

## 9. Notes on Fire Danger Rating and Total Fire Ban Declaration

- The Fire Danger Rating (FDR) gives an indication of the potential consequences of a fire, if a fire was to start.
- The rating is based on predicted conditions such as the forecast temperature, humidity, wind and dryness of the landscape.
- The higher the fire danger rating, the more dangerous the conditions.
- During the Bushfire Danger Period (1st November – 30th April) the forecast FDR for the following day is typically released around 4pm but can be changed as weather conditions unfold.
- Both predicted and current FDR are available from the DFES and BoM websites.

A 'Total Fire Ban' (known as TFB) is a separate declaration (i.e. a particular day or part thereof may have both 'Severe' FDR and a TFB).

## 10. What to do if caught in a bushfire

The following provide current guidelines on what to do if caught in a bushfire in a building or on foot. Each requires a different response involving critical decisions for your survival.

## **What to do if caught in a bushfire:**

### **Outside your building**

- Ensure you drink plenty of water so you do not dehydrate
- Block your downpipes, (a sock full of sand/soil will help) and fill your gutters with water
- Move flammable items such as outdoor furniture, doormats,
- Gas cylinders should have the valve facing away from the building
- Do not stand on the roof with a hose. In bush fires, often more people are injured by falling from roofs than suffering burns
- Patrol the outside of the building, putting out any embers and spot fires that may start. An ember or spark can reach your home hours before the fire front arrives
- Just before the fire arrives, wet down timber decks and gardens close to the building
- Move any firefighting equipment to a place where it will not get burnt.

### **Inside your building**

- Continue to drink water so you do not dehydrate
- Close doors, windows, vents, blinds and curtains to prevent flames, smoke and embers from entering
- Put tape across the inside of the windows so they stay in place if they break
- Shut off gas at the meter or bottle
- Move furniture away from the windows to prevent any embers that enter the building from igniting
- Fill sinks, bath and buckets with water for putting out any fires that may start inside
- Place wet towels around window and door edges to stop smoke and embers from entering
- Put a ladder next to the access hole to the roof space so you can check for spot fires.

### **During the fire**

- When the fire arrives, go inside to protect you from the radiant heat
- Ensure you have torches ready as it is likely to become completely dark and you will not be able to see
- Patrol the inside of the building, including the roof space for sparks and embers
- Remember – if your life is at risk, call Triple Zero (000) immediately.

### **After the fire**

- Once the fire has passed, you may need to patrol the property for hours. Go outside and put out any part of the building which is alight.
- An ember or spark from a fire can impact on a house many hours after the main fire front has passed and small spot fires can quickly get out of control.

### **On Foot**

- Try to move on to bare or burnt ground at least 100 m from where fire is likely to burn, if this is not feasible find the largest bare or burnt ground possible
- Do not run uphill or away from the fire unless you know a safe refuge is able to be reached before the fire arrives. Try and position yourself downhill of the on-coming fire.
- Move across the slope out of the path of the fire front and work your way downslope towards the back of the fire or onto burnt ground.
- Do not attempt to run through flames unless you can see clearly behind them. This generally means that the flames are less than 1 metre high and less than 1 to 2 metres deep at the back or on the flanks of the fire.
- Lulls in the fire often result in the flames in these parts being low enough to step or run through to the burnt ground beyond.
- When conditions become severe use every possible means to protect yourself from radiation. On bare ground cover yourself, use wheel ruts, depressions, large rocks or logs to give protection.
- Take refuge in ponds, running streams or culverts, but behind solid objects such a rock
- Remain calm and do not run blindly from the fire. If you become exhausted you are much more prone to heat stroke and you may easily overlook a safe refuge. Consider an alternative course of action.

## 7. References

1. *Planning and Development (Local Planning Schemes) Amendment Regulations 2015;*
2. *State Planning Policy 3.7 - Planning in Bushfire Prone Areas 2015;*
3. *Guidelines for Planning in Bushfire Prone Areas 2015;*
4. *Guidelines for Planning in Bushfire Prone Areas 2015 (Appendices);*
5. *Australian Standards 3959 – Construction of Buildings in Bushfire Prone Areas;*
6. *Office of Bushfire Risk Management - Bush Fire Prone Area Mapping;*
7. Western Australian Planning Commission, Fact Sheet Version 3, Developing Mixed Use, Commercial, Industrial Buildings or Public Facilities.