

BUSHFIRE PROTECTION ASSESSMENT

**FOR THE CONSTRUCTION OF A NEW
INDUSTRIAL/WAREHOUSE DEVELOPMENT ON
LOT 2 in DP 1238214,**

No. 20 – 24 LOCKYER STREET GOULBURN

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|--------------------------|-----------------|-----------------------------|-----------------------|---------------------------|
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| B234003 | Final | 01.06.2023 | 02.06.2023 | <i>A. Hawkins</i> |

EXECUTIVE SUMMARY

Australian Bushfire Protection Planners Pty Limited has been commissioned by *Lockyer Street Trust* to prepare a Bushfire Protection Assessment for the Construction of a new Industrial/Warehouse Development on Lot 2 In DP 1238214, No. 20 – 24 Lockyer Street Goulburn

The development site is located within an area of Industrial commercial subdivision.

The Goulburn Mulwaree Council Bushfire Prone Land Map records that the site is located within an area of mapped of bushfire prone vegetation.

This report assesses the bushfire protection requirements necessary to provide compliance with Section 4.14 of the *Environmental Planning and Assessment Act*; and makes recommendations on the landscape management of the site and examines access, water supplies and building construction standards to satisfy the requirements for bushfire protection measures for other development as defined by Chapter 8 “Other Development” of *Planning for Bushfire Protection 2019*.



Director,
Australian Bushfire Protection Planners Pty Limited.
BPAD 48592

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SECTION 1

INTRODUCTION

1.1 Aim of this Assessment.

Development Applications for development on bushfire prone land must be accompanied by a Bushfire Assessment Report demonstrating compliance with the aim and objectives of *Planning for Bushfire Protection 2019* and the specific objectives and performance criteria for the land use proposed. In particular, the following matters must be addressed:

- A statement that the site is bushfire prone;
- The location, extent and vegetation formation of any bushland on or within 140 metres of the site;
- The slope and aspect of the site and of any bushfire prone land within 100 metres of the site;
- Any features on or adjoining the site that may mitigate the impact of a bushfire on the proposed development;
- A statement assessing the likely environmental impact of any proposed bushfire protection measures (BPMs);
- A site plan showing access, water supplies, Asset Protection Zones, Bushfire Attack Level (BAL) requirements and building footprint in relation to the bushfire hazards; and
- Calculated BAL construction levels.

1.2 Statutory Requirements.

This report has been prepared having regard to the following legislative and planning requirements:

1.2.1 Legislation.

Environmental Planning and Assessment Act (EPA Act)

Section 4.14 of the EP&A Act requires a consent authority to determine if a proposed development that is located within a designated Bushfire Prone Area or the buffer zone to the Bushfire Prone Land complies with *Planning for Bushfire Protection 2019*.

1.2.2 Planning Policies.

Planning for Bushfire Protection – 2019 [NSW Rural Fire Service]

This document provides deemed-to-satisfy provisions in relation to bushfire protection measures for residential, Special Fire Protection Developments and other developments [Industrial / Commercial] in bushfire prone areas.

1.3 Documentation reviewed in this Assessment.

- Concept masterplan prepared by Reid Campbell;
- *Planning for Bushfire Protection 2019* prepared by the NSW Rural Fire Service;
- Australian Standard AS3959 - 2018 '*Construction of Buildings in Bushfire Prone Areas*';
- The Goulburn Mulwaree Council Bushfire Prone Land Map.

1.4 Site Inspection.

Tony Hawkins of Australian Bushfire Protection Planners Pty Limited undertook an inspection of the development site and adjoining land on the 19th May 2023.

The inspection determined the landuse, vegetation type, topography and existing bushfire protection measures on and adjoining the development site.

1.5 Development Proposal.

The proposed development includes the construction of new Industrial/Warehouse Development on Lot 2 In DP 1238214, No. 20 – 24 Lockyer Street Goulburn.

The following figure provides a copy of the site concept masterplan.

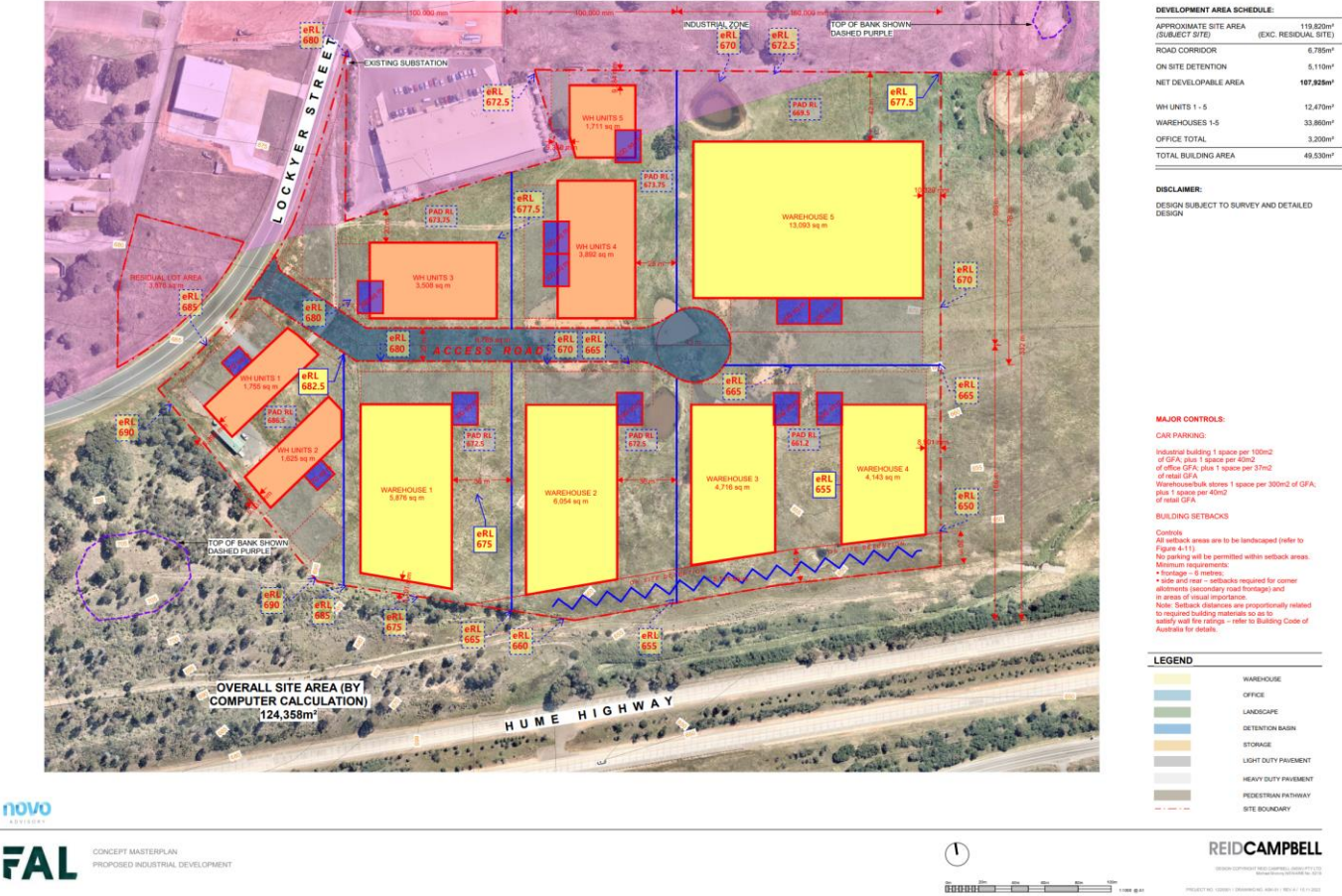


Figure 1: Concept Masterplan.

SECTION 2

PROPERTY DESCRIPTION

2.1 Location.

The development site [Lot 2 In DP 1238214.] is located at No. 20 – 24 Lockyer Street Goulburn in The Goulburn Mulwaree Council Local Government Area (LGA).

2.2 Existing Land Use.

The development site contains vacant land.

2.3 Land Use within 100 metres of Development Site.

The properties adjoining the development site to the north, northeast and northwest are occupied by existing commercial development.

Vacant land exists to the east, west and south of the site.

The Hume Motorway is located to the south of the site.

2.4 Topography.

Appendix 1 – Site Assessment Methodology of *Planning for Bushfire Protection 2019* states that the determination of vegetation and slopes gradient should be assessed, over a distance of at least 140m from a development site and that the gradient of the land should be determined which will most significantly influence the fire behaviour to the site.

The land within the development site falls generally from the west of the site to the east, with a slope of approximately 4°.



Figure 2; Topographic Map of development site and adjoining lands

2.5 Vegetation.

Vegetation is classified using Appendix 1 - Figure A1.2 of *Planning for Bushfire Protection 2019*, which classifies vegetation types into the following groups:

- (a) Rainforest;
- (b) Wet Sclerophyll Forest;
- (c) Dry Sclerophyll Forest;
- (d) Woodlands;
- (e) Tall Heaths;
- (f) Short Heaths; and
- (g) Grassland.

The development site has been cleared of native vegetation.

2.5.1 Bushfire Prone Vegetation within 140 metres of the Development Site.

The property surrounding the site contains commercial development to the north, northeast and northwest are occupied by existing commercial development.

To the east, grassland is present. To the south and west, grassy woodland is present.

2.6 Significant Environmental Features within the Development Site.

The land within the proposed development site does not contain significant environmental features such as Koala Habitat; SEPP 14 Wetlands, SEPP 26 Littoral Rainforests; land slip areas or National Parks Estate; areas of geological interest, steep lands [>18 degrees] or riparian corridor to a watercourse.

2.7 Known Threatened Species, population or ecological community within the Development Site.

There is no known threatened species, population or ecological species within the development site.

2.8 Details and location of Aboriginal relics or Aboriginal place.

The site is neither identified as containing an Aboriginal object, nor identified as an Aboriginal place of heritage significance (AHIMS Report attached - Appendix 1)

SECTION 3

BUSHFIRE PROTECTION ASSESSMENT

3.1 Introduction.

The Goulburn Mulwaree Council Bushfire Prone Land Map records that the site is located within a zone of Category 3 vegetation.



Figure 3; Extract of The Goulburn Mulwaree Council Bushfire Prone Land Map (Source: Planning Portal 2023).

The proposed development, consisting of the construction of new Industrial/Warehouse Development on Lot 2 In DP 1238214, No. 20 – 24 Lockyer Street Goulburn on the existing lot, is defined as “other development” under Section 8 of *Planning for Bushfire Protection 2019*.

Section 8.3.10 of *Planning for Bushfire Protection 2019 (PBP)* recommends and the provisions of Chapter 7 as a base for the development of a package of bushfire protection measures.

3.2 Asset Protection Zone/Defendable Space.

Appendix 1 of *Planning for Bushfire Protection 2019* provides the following procedure for determining setback distances, (Asset Protection Zones):

- (a) Determine the predominant vegetation formations in all directions for a distance of 140 metres;
- (b) Determine the effective slope of the land between the predominant vegetation class and the building for at least 100 metres;
- (c) Determine the appropriate fire weather area;

Table A1.12.5 of *Planning for Bushfire Protection 2019* provides a summary of the determination of Asset Protection Zones for residential developments in bushfire prone areas having a Fire Danger Index (FDI) of 100.

The effective slope of the land under the bushfire prone vegetation in the west and south-western portion of the development site is upslope.

The effective slope under the grassland vegetation on the land to the east is downslope.

Table xx provides the proposed building setbacks from hazard vegetation and recommended construction standards.

Table 1: Proposed APZ and assessment

| Building | Proposed setback from boundary | Effective slope of hazard vegetation | Vegetation type | BAL (FDI 100) | Construction Standard (CS) |
|-------------|--|--------------------------------------|-----------------|---------------|---|
| WH Unit 1 | 16.4m | Upslope | Grassy Woodland | BAL 29 | BAL 29 CS to the south west, BAL 19 for other facades |
| WH Unit 2 | 6.9m | Upslope | Grassy Woodland | BALFZ | BAL FZ CS to the south west, BAL 40 for other facades |
| WH Unit 3 | 46m | Upslope | Grassland | BAL12.5 | BAL 12.5 CS to the west, BAL 12.5 for other facades |
| WH Unit 4 | Isolated from boundary by other buildings and managed land | N/A | N/A | N/A | BAL 12.5 recommended. |
| WH Unit 5 | 9.3m | 0 -<5° Downslope | Grassland | BAL40 | BAL FZ CS to the north, BAL 40 for other facades |
| Warehouse 1 | 8.1 | 0 -<5° Downslope | Grassy Woodland | BAL40 | BAL 40 CS to the south, BAL |

| | | | | | |
|-------------|-----------------------------|---------------------|------------------------------|---------------------------------|--|
| | | | | | 29 for other facades |
| Warehouse 2 | 20m | 0 -<5° Downslope | Grassy Woodland | BAL29 | BAL 29 CS to the south, BAL 19 for other facades |
| Warehouse 3 | 20m | 0 -<5° Downslope | Grassy Woodland | BAL29 | BAL 29 CS to the south, BAL 19 for other facades |
| Warehouse 4 | 20m (south) 8.9m (east) | 0 -<5° Downslope | Grassy Woodland Grassland | BAL29 | BAL 29 CS to the north, BAL 19 for other facades |
| Warehouse 5 | 42m (North) 10.3m (East) | 0 -<5° Downslope | Grassland | BAL12.5 (north) BAL40 (east) | BAL FZ CS to the east, BAL 40 for other facades |

3.3 Construction Standards.

Planning for Bushfire protection provides guidance for Class 5 to 8 buildings in section 8.3.1;

Under the building classification system within the NCC, Class 5 to 8 buildings include offices, shops, factories, warehouses, public car parks and other commercial and industrial facilities.

The NCC does not provide for any bush fire specific performance requirements for these particular classes of buildings. As such AS 3959 and the NASH Standard are not considered as a set of Deemed to Satisfy provisions, however compliance with AS 3959 and the NASH Standard must be considered when meeting the aims and objectives of PBP.

Whilst bush fire is not captured in the NCC for Class 5-8 buildings, the following objectives will be applied in relation to access, water supply and services, and emergency and evacuation planning:

- to provide safe access to/from the public road system for firefighters providing property protection during a bush fire and for occupant egress for evacuation;*
- to provide suitable emergency and evacuation (and relocation) arrangements for occupants of the development;*

- *to provide adequate services of water for the protection of buildings during and after the passage of bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building; and;*
- *provide for the storage of hazardous materials away from the hazard wherever possible.*

The general fire safety construction provisions of the NCC are taken as acceptable solutions however construction requirements for bush fire protection will need to be considered on a case-by-case basis.

3.4 Water Supply.

A reticulated water supply is available in Lockyer Street.

3.5 Electricity & Gas Installations.

New electricity and gas installations to the new buildings will be underground.

3.6 Access for Fire-fighting Operations.

Complying access for fire-fighting appliances is provided off Lockyer Street to the proposed buildings.

3.7 Landscape Management.

The site shall be managed to the standard of an Inner Protection Area in accordance with Appendix 4 of *Planning for Bushfire Protection 2019* and the Rural Fire Service “*Standards for Asset Protection Zones*”.

3.8 Emergency management

A Bushfire emergency management and evacuation plan consistent with the NSW RFS publication: *A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan*, and the AS 3745:2010 should be prepared prior to occupation of the development.

SECTION 4

CONCLUSION

The proposed development consists of the Construction of a new Industrial/Warehouse Development on Lot 2 In DP 1238214, No. 20 – 24 Lockyer Street Goulburn.

The Goulburn Mulwaree Council Bushfire Prone Land Map shows that the site is located in bushfire prone land.

The propose development has been assessed as “Other Development” as per the guidelines provided by Section 8 of PBP.

This report has examined the bushfire risk and provides recommendations on the bushfire protection measures required to mitigate the risk.



Anthony Hawkins, BPAD 48592
Director,
Australian Bushfire Protection Planners.



Appendix 1; AHIMS Report

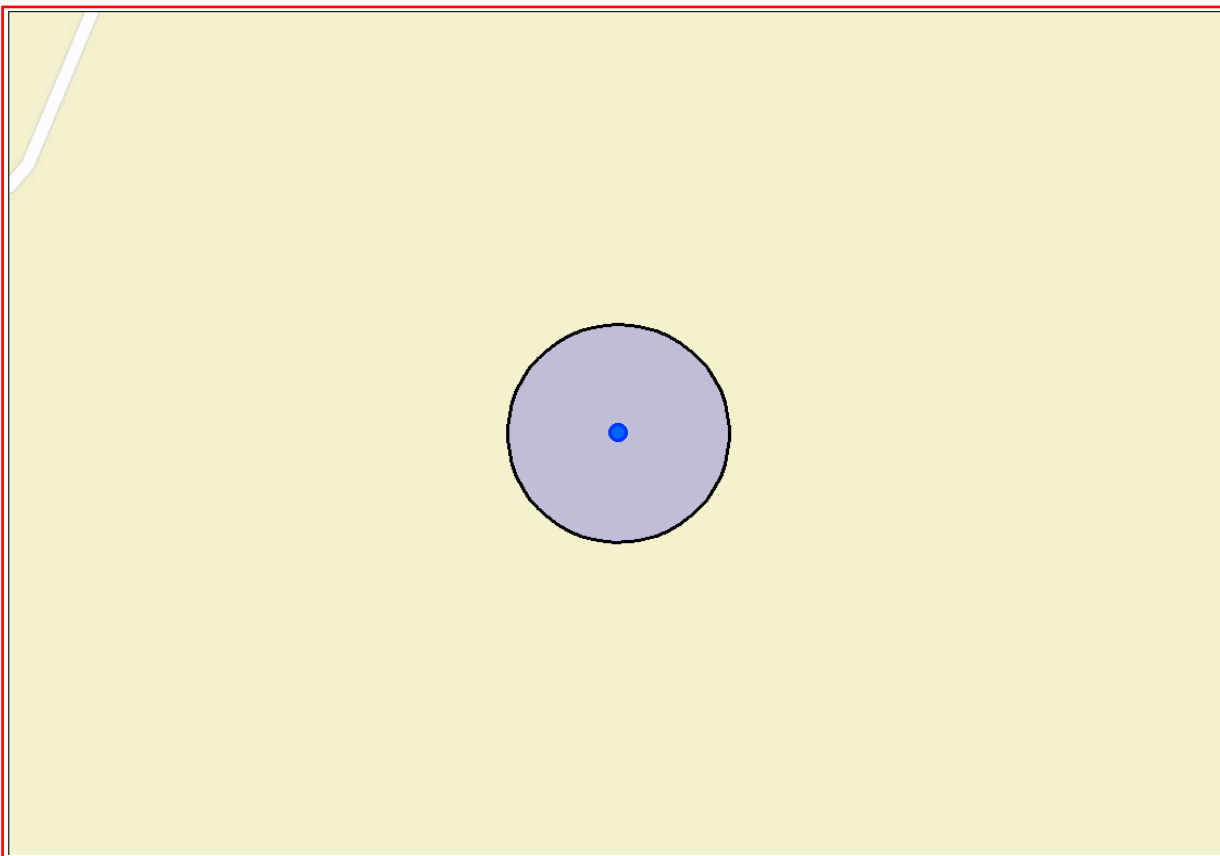
Anthony Hawkins
34 Canning Street
Wolombi New South Wales 2325
Attention: Anthony Hawkins
Email: anthonyhawkins1a@gmail.com

Date: 01 June 2023

Dear Sir or Madam:

AHIMS Web Service search for the following area at Address : 20-24 LOCKYER STREET GOULBURN 2580 with a Buffer of 50 meters, conducted by Anthony Hawkins on 01 June 2023.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

| | |
|---|---|
| 0 | Aboriginal sites are recorded in or near the above location. |
| 0 | Aboriginal places have been declared in or near the above location. * |

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(https://www.legislation.nsw.gov.au/gazette\)](https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.