

**BUSHFIRE PROTECTION ASSESSMENT**

**FOR THE CONSTRUCTION OF THE**

**PROPOSED YIRIBANA LOGISTICS  
ESTATE WEST**

**ON**

**No. 797 MAMRE ROAD,**

**KEMPS CREEK**



**ABPP**

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## EXECUTIVE SUMMARY

*Australian Bushfire Protection Planners Pty Limited* has been commissioned by THE GPT Group to prepare a report to provide advice on the bushfire protection measures required for the construction of the proposed Yiribana Logistics Estate West, on No. 797 Mamre Road, Kemps Creek.

The site forms part of the Mamre Road Precinct and the eastern portion is zoned for IN1 – General Industrial uses and a narrow corridor of RE1 – Public Open Space as defined within the State Environmental Planning Policy (Western Sydney Employment Area) 2009 (SEPP WSEA). The western portion of the development site is zoned RE1 – Public Open Space and ENZ – Environmental Recreation.

This report has been prepared to support a Development Application to Penrith City Council for the creation of two industrial lots and construction and operation of the Industrial Warehouses within the eastern portion of the development site.

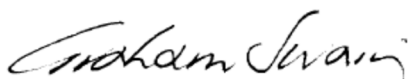
The development site is adjoined to the north by land which has been rezoned to IN1 Industrial.

The land to the south of the development site is zoned IN1 Industrial with the narrow corridor of RE1 – Public Open Space extending from within the development site.

The Penrith Council Bushfire Prone Land Map indicates that the site and adjacent lands contains Category 2 Bushfire Prone Vegetation.

This Bushfire Protection Assessment undertakes an assessment of the bushfire protection measures required to address bushfire risk to the proposed buildings, consistent with the provisions of Section 4.14 of the *Environmental Planning and Assessment Act 1979* and examines the adequacy of the setbacks [defendable spaces] to the building; fire-fighting access and provision of fire-fighting water supplies, fuel management protocols and other matters considered necessary to mitigate any potential bushfire threat to persons, property and the environment.

The characteristics of the site as discussed in this report, together with the recommendations provided in this assessment, confirms that the site is suitable in terms of its intended use.



Graham Swain  
Managing Director,  
***Australian Bushfire Protection Planners Pty Limited.***



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## SECTION 1

### INTRODUCTION

#### 1.1 Aim of this Assessment.

The aim of this Bushfire Protection Assessment is to address the aim & objectives of *Planning for Bushfire Protection 2019* including:

- Determine the formation of the vegetation within 140 metres of the development site, in accordance with the vegetation classification system contained in Appendix 1 of *Planning for Bushfire Protection 2019*;
- Undertake an assessment to determine the effective slope of the land on and surrounding the development site;
- Determine the Fire Danger Index [FDI] for the site;
- Undertake an assessment to determine bushfire protection strategies for the proposed development, including the bushfire protection measures required to be implemented in the design and construction of the Canopies and the requisite bushfire protection measures required to address the safety of the staff and shoppers.
- Prepare a report that addresses the following matters:
  - (i) The provision of building setbacks (Asset Protection Zones) from vegetated areas and the siting of buildings to minimize the impact of radiant heat and direct flame contact;
  - (ii) Fire-fighting water supplies;
  - (iii) Access requirements for emergency service vehicles;
  - (iv) Construction standards to be used for the future buildings within the proposed development to minimize the vulnerability of buildings to ignition from radiation and ember attack;
  - (v) Land management responsibilities; and
  - (vi) Evacuation management.

#### 1.2 Statutory Requirements.

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

##### 1.2.1 Legislation.

###### (a) *Environmental Planning and Assessment Act (EPA Act)*

Planning and development within NSW is regulated by the *Environmental Planning & Assessment Act, 1979* (EPA Act).

In relation to bushfire planning for development in bushfire prone areas in NSW Section 4.14 requires the consent authority, prior to issuing consent for the development, to determine whether the development complies with '*Planning for Bushfire Protection 2019*'.

**(b) Rural Fires Act 1997**

The objectives of the *Rural Fires Act* are to provide:

- The prevention, mitigation and suppression of fires;
- Coordination of bushfire fighting and prevention;
- Protection of people and property from fires; and
- Protection of the environment.

In relation to the management of bushfire fuels on public and private lands within NSW Sections 63(1) and 63(2) require public authorities and owners / occupiers of land to take all practicable steps to prevent the occurrence of bushfires on, and to minimize the danger of the spread of bushfires.

**1.2.2 Planning Policies.**

***Planning for Bushfire Protection – 2019. (NSW Rural Fire Service)***

This document provides guidance on the planning and development control processes in relation to bushfire protection measures for rural residential and residential subdivision, "*Special Fire Protection*" and Class 5 – 8 and 10 buildings in bushfire prone areas [Industrial buildings are Class 7 as defined by the Building Code of Australia].

These measures include the provision of defensible space requirements and access/water supply provisions to Class 5 – 8 & 10 developments in bushfire prone areas.

Provision for the assessment of construction standards to buildings and management / maintenance of the Asset Protection Zones/defensible space to buildings is also provided.

**1.3 Documentation Reviewed.**

The following documents were reviewed in the preparation of this assessment:

- Architectural documents for the proposed Yiribana Logistics Estate West SYD05-06-07 Yiribana Logistics Estate West prepared by SBA Architects;

- Penrith Council Certified Bushfire Prone Land Map;

#### **1.4 Site Inspection.**

Graham Swain of *Australian Bushfire Protection Planners Pty. Limited* inspected the development site on the 12<sup>th</sup> September 2022 to assess the topography, slopes, vegetation classification and land use within and adjoining the development site. Visual assessment was undertaken to determine likely fire runs, influence of terrain on wind patterns within the bushfire prone vegetation and an assessment of access and egress to the development site.

Adjoining properties were also inspected to determine the surrounding land use / land management.

#### **1.5 Development Proposal.**

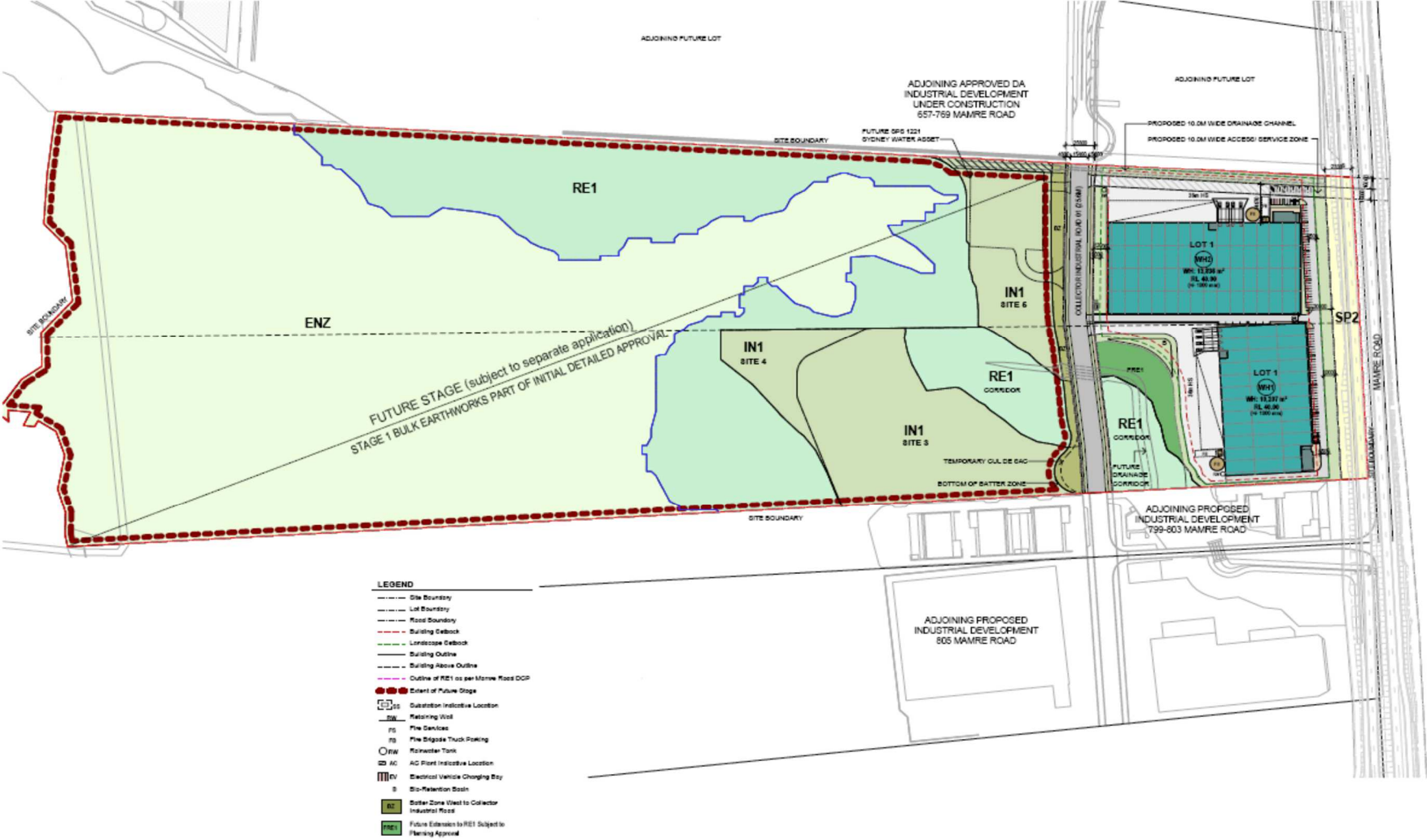
This report has been prepared to support a Development Application to Penrith City Council for the creation of two industrial lots and construction and operation of the Industrial Warehouses within the eastern portion of the development site.

The development proposal also provides for the construction of Phase 1 of the Collector Road, extending from the industrial estate to the north of the site.

*[Refer to Figure 1 – Plan of proposed Yiribana Logistics Estate West on Page 8].*



Figure 1 – Plan of the proposed Yiribana Logistics Estate West Complex.





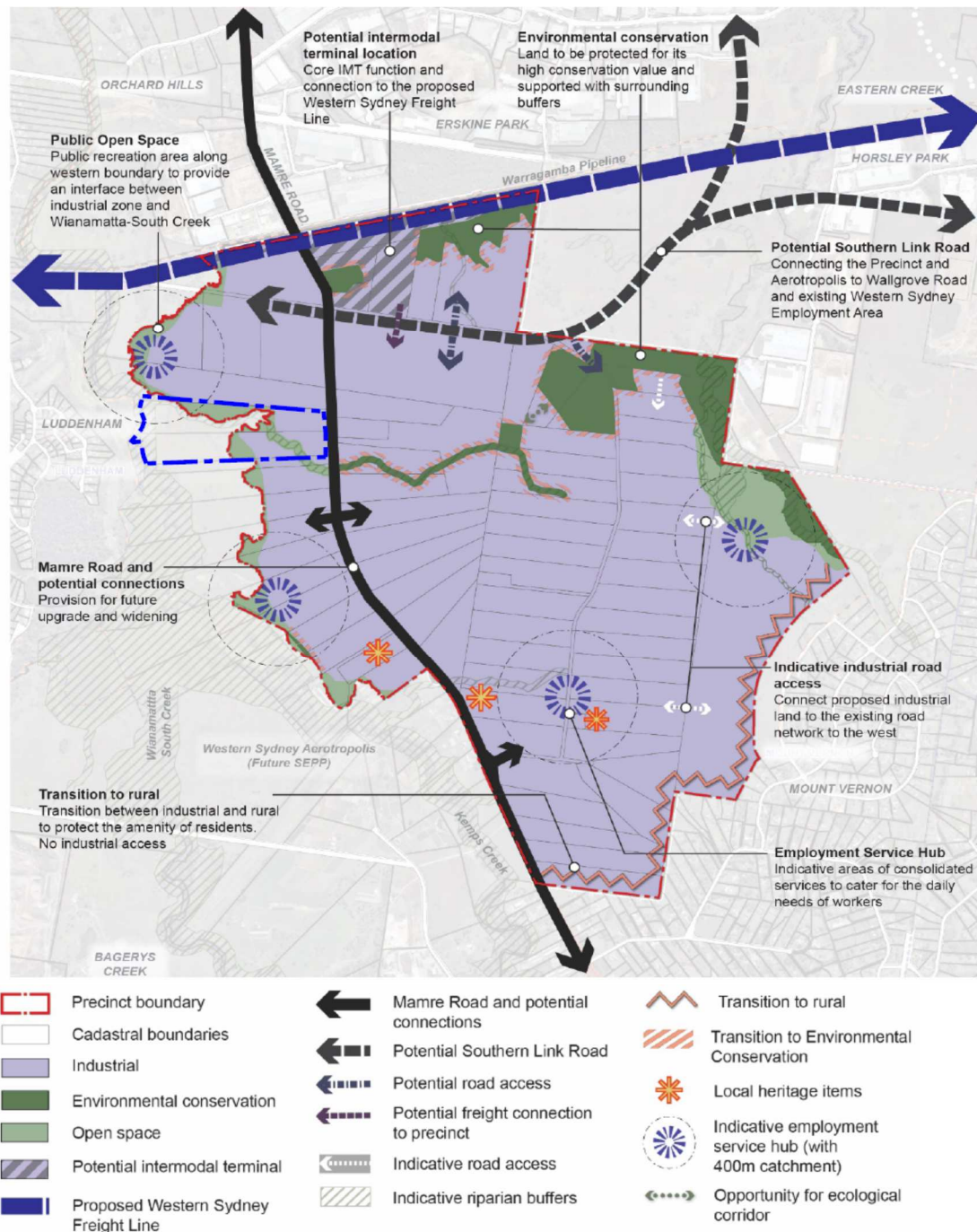
## SECTION 2

### DESCRIPTION OF DEVELOPMENT SITE

#### 2.1 Location & Description.

The Yiribana Logistics Estate West is to be constructed on No. 797 Mamre Road, Kemps Creek and is in the Local Government Area [LGA] of Penrith City Council.

**Figure 2 – Location of Development Site within the within the Mamre Road Structure Plan.**



## 2.2 Existing Land Use.

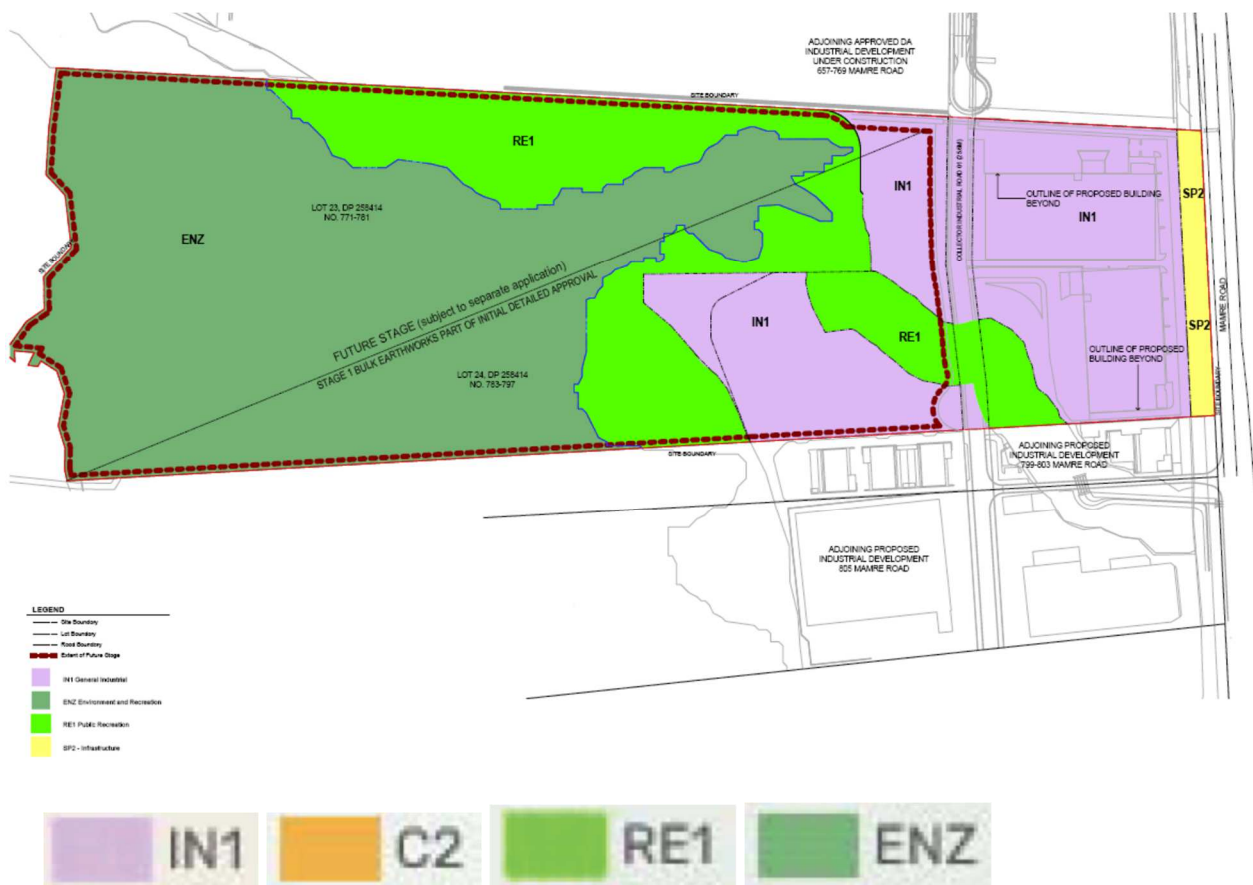
The development site contains an existing rural residential dwelling and associated buildings within the eastern portion of the site. These structures will be demolished.

## 2.3 Adjoining Land Use.

The land to the north of the proposed industrial building on proposed Warehouse 1 contains farming land and an existing dwelling and associated sheds.

The land to the south of the site contains vacant IN1 Industrial zoned land.

**Figure 3 – Landuse Zoning Plan within the Mamre Road Structure Plan.**









*Figure 4 – Aerial Photograph of Development Site and surrounding lands.*







**2.4    Photograph of the Yiribana Logistics Estate West Site and adjoining land.**



*Photograph taken from Mamre Road looking to the southwest across the development site.*



*Photograph taken from Mamre Road looking to the northwest across the development site.*

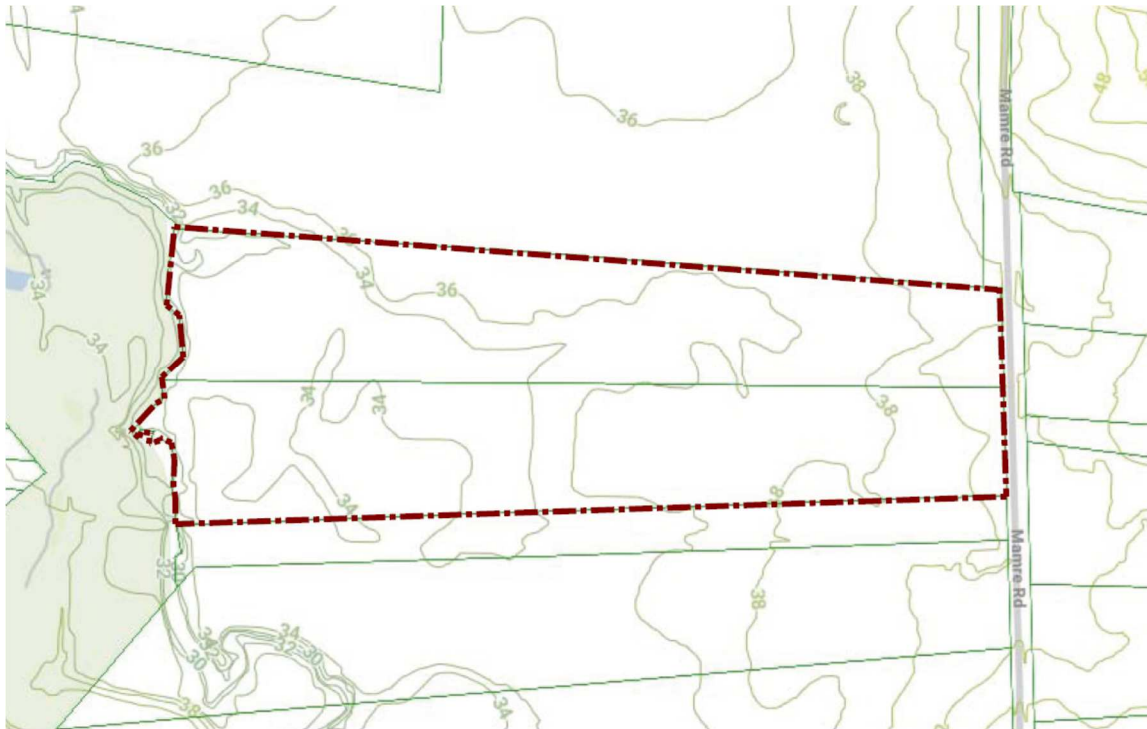
## 2.5 Topography.

Appendix 2 of *Planning for Bushfire Protection 2019* states that slopes should be assessed, over a distance of at least 100m from a development site and that the gradient of the land should be determined which will most significantly influence the fire behaviour on the site.

The topography of the land within the development site gradually falls to the west towards South Creek.

The land to the south of the development site falls to the west towards South Creek at 1 – 2 degrees. The land to the north of the development site also falls to the west at 1 – 2 degrees.

**Figure 5 – Topographic Map.**



## 2.6 Vegetation Communities on the land within the Development Site.

Vegetation is classified using 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) Woodland;
- (e) Tall Heath;
- (f) Short Heath; and
- (g) Grassland.



The vegetation within the development site is Grassland.

## **2.7 Bushfire Vegetation Communities adjoining the land within the Warehouse 1 and Warehouse 2 Development Site.**

The land to the north of proposed Warehouse 2 is currently being developed as an industrial estate with the grassland vegetation being removed.

The vegetation on the rural land to the south of Warehouse 1 currently consists of Grassland. This vegetation will be removed as part of the industrial development of this land.

The Mamre Road Structure Plan identifies that the RE1 – Public Recreation zoned land on the land to the south of Warehouse 1 forms a critical part of the tributary to South Creek.

For the purposes of determining the bushfire protection measures to the Yiribana Logistics Estate West the RE1 zoned land will be assumed to contain rehabilitated River Flat Eucalypt Forest.

The RE1 zoned land to the west of Warehouse 1 and Warehouse 2 will also be assumed to contain rehabilitated River Flat Eucalypt Forest.

The IN1 zoned land to the west of Warehouse 1 and Warehouse 2, which until developed contains, grassland vegetation.

## **2.8 Significant Environmental Features on the land within the Development Site.**

The development site does not contain any significant environmental features such as SEPP 14 – Coastal Wetlands; SEPP 26 Littoral Rainforests; SEPP 44 – Koala Habitat; areas of geological interest; steep lands [ $>18$  degrees]; land slip areas; National Parks Estate or riparian corridors.

## **2.9 Known Threatened Species, Populations, Endangered Ecological Communities or Critical Habitat on the land within the Development Site.**

There are no known threatened species, populations, endangered ecological communities or critical habitat within the development site.

## **2.10 Details of Aboriginal/European Heritage within the Development Site.**

There are no known Aboriginal sites, relics or European heritage within the development site.



## SECTION 3

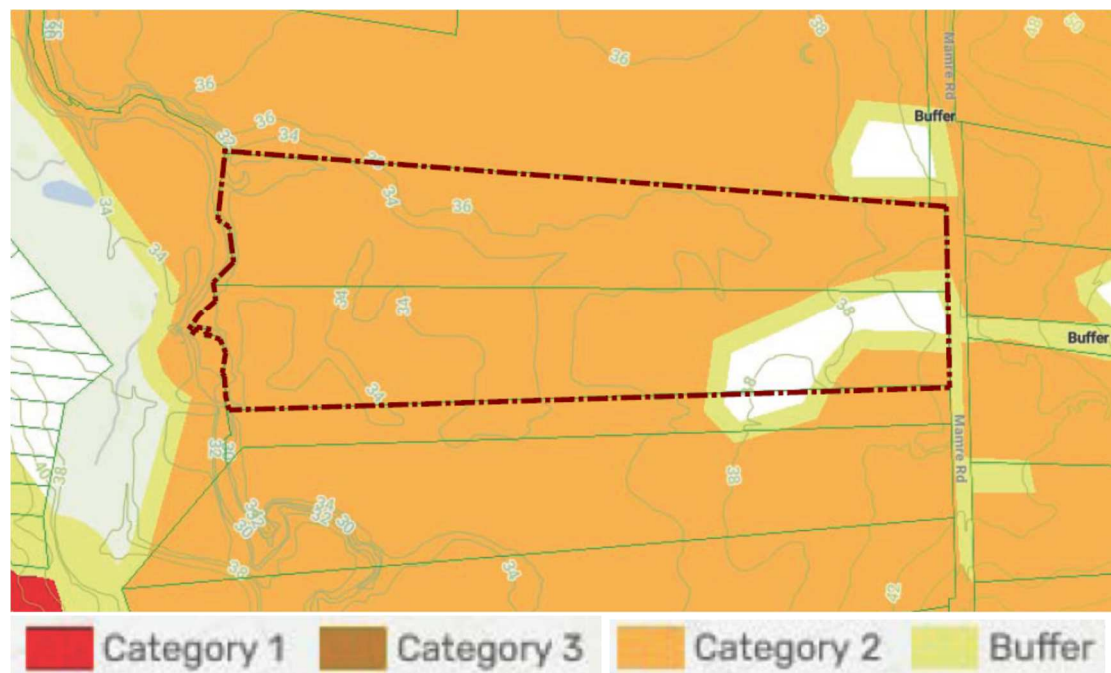
### BUSHFIRE HAZARD ASSESSMENT

#### 3.1 Certified Bushfire Prone Land Map.

Section 146 of the *Environmental Planning & Assessment Act 1979* requires councils, where a Bushfire Risk Management Plan applies, to prepare a Bushfire Prone Land Map in consultation with the Commissioner of the NSW Rural Fire Service.

The Commissioner will designate lands to be Bushfire Prone within an area and, when satisfied that the lands have been recorded on a map, will certify the map as a Bushfire Prone Land Map for the purposes of this or any other Act.

**Figure 6 – Extract from the Penrith Bushfire Prone Land Map.**



The Penrith BFPLM map shows that the Yiribana Logistics Estate and surrounding land as containing Category 2 [Orange colour] Bushfire Prone Vegetation.

The Map accurately records the extent of the bushfire prone vegetation currently within the development site and on the adjoining land to the south. The land to the north is being developed and the bushfire prone vegetation is being removed.

The RE1 zoned land will rehabilitate to contain River Flat Eucalypt Forest which will become Category 1 Bushfire Prone Vegetation.

## SECTION 4

### BUSHFIRE PROTECTION ASSESSMENT

#### 4.1 Introduction.

The Penrith Council Bushfire Prone Land Map indicates that the development site and adjacent lands contains Category 2 Bushfire Prone Vegetation.

Therefore, the construction of the proposed Yiribana Logistics Estate West is required to comply with the provisions of Section 4.14 of the *Environmental Planning & Assessment Act 1979*.

Section 4.14 of the *Environmental Planning and Assessment Act* requires that the proposed development comply with the requirements of *Planning for Bushfire Protection 2019* with respect to the protection of persons, property and the environment from the danger that may arise from a bushfire.

The aim of *Planning for Bushfire Protection 2019* is to 'provide for the protection of human life and minimise impacts on property from the threat of bushfire while having due regard to development potential and protection of the environment'.

Bushfire protection can be achieved through a combination of strategies which are based on the following principles:

- (i) Control the types of development permissible in bushfire prone areas;
- (ii) Minimise the impact of radiant heat and direct flame contact by separating development from bushfire hazards;
- (iii) Minimise the vulnerability of buildings to ignition and fire spread from flames, radiant heat and embers;
- (iv) Enable appropriate access and egress for the public and fire-fighters;
- (v) Provide adequate water supplies for bushfire suppression and operations;
- (vi) Focus on property preparation, including emergency planning and property maintenance requirements; and
- (vii) Facilitate the maintenance of Asset Protection Zones (APZs), fire trails, access for fire-fighting and on site equipment for fire suppression.

*Planning for Bushfire Protection 2019* provides the following objectives for Class 5 to 8 buildings:

- (i) *Provide safe access to/from the public road system for fire-fighters providing property protection during bushfire and for occupant egress for evacuation;*
- (ii) *Provide suitable emergency and evacuation (and relocation) arrangements for occupants of the development;*
- (iii) *Provide adequate services of water for protection of buildings during and after the passage of bushfire and to locate gas and electricity so as not to contribute to the risk of a fire to a building; and*
- (iv) *Provide for the storage of hazardous materials away from the hazard.*

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

*Planning for Bushfire Protection 2019* does not provide specific deemed-to-satisfy protection measures for Class 5 to 8 buildings as defined by the Building Code of Australia. However, compliance with A.S.3959 - 2018 must be considered when meeting the aims and objectives of *Planning for Bushfire Protection 2019*.

Section 4.2 of this report examines the development proposal in relation to the provision of a suitable "defendable space" between the bushfire hazard and the building on proposed Warehouse 1 and Warehouse 2.

The bushfire construction standards to the building is examined in Section 4.3 and the provision of access and water supplies for fire-fighting operations management of the defendable space [Asset Protection Zone] and evacuation planning are examined in Sections 4.4 – 4.9 of this report.

#### **4.2 The provision of Defendable Space/s [Asset Protection Zones].**

Defendable Spaces/Asset Protection Zones [APZs] have been assessed for the Yiribana Logistics Estate West in accordance with *Planning for Bushfire Protection 2019* and Australian Standard A.S. 3959 – 2018 (using effective slope and predominant vegetation communities).

The assessment is based on the predominant vegetation on the land to the west of Warehouse 1 and Warehouse 2 and on the adjoining land to the south being grassland within the IN1 zoned land and River Flat Eucalypt Forest within the tributary to South Creek.

The width of the vegetation in the RE1 corridor is 50 metres and therefore presents a low hazard risk to the building on Warehouse 1. The vegetation is reclassified as 'rainforest'.

The grassland vegetation on the land to the north has been removed.

The land to the south of the Yiribana Logistics Estate West falls to the west and southwest into the tributary to South Creek. The effective slope is 0–5 degrees downslope.

The land to the west of Warehouse 1 and Warehouse 2 is 0–5 degrees downslope toward South Creek.

The NSW Rural Fire Service's requirement for industrial buildings is to provide a setback from the bushfire prone vegetation which will minimise flame contact on a building.

Table A1.12.5 of *Planning for Bushfire Protection 2019* identifies that to prevent flame contact on the building on Warehouse 1 located adjacent to the RE1 zoned land to the south (with reclassified rain forest vegetation) the minimum width of the Defendable Space to prevent flame contact on the building is 11 metres.

A 11 metre wide Defendable Space will also be required to the western aspect of the building on Warehouse 1 and Warehouse 2 to prevent flame contains on the building from the rehabilitated River Flat Eucalypt Forest (reclassified as rain forest).

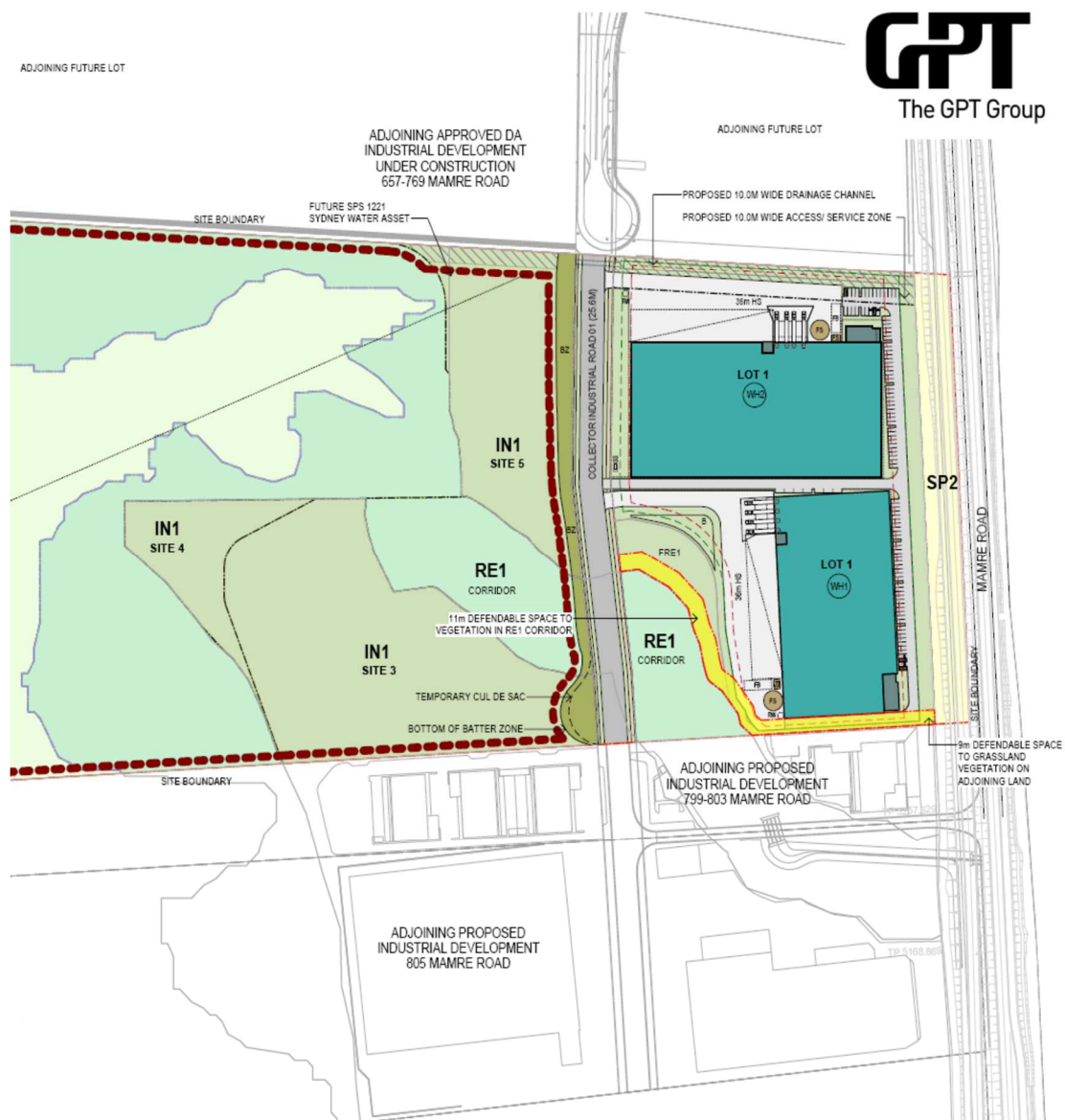
Table A1.12.5 of *Planning for Bushfire Protection 2019* identifies that to prevent flame contact on the building on Warehouse 1 and Warehouse 2 located adjacent to the IN1 zoned land to the west (with grassland vegetation) the minimum width of the Defendable Space is 9.0 metres.

The grassland vegetation on the land to the north of the Yiribana Logistics Estate West site has been removed as part of the development of the land and therefore the bushfire hazard has been removed.

Refer to Figure 7 – Fire Protection (Defendable Space) Plan requirements on Page 20.



**Figure 7 – Fire Protection (Defendable Space) Plan**



#### **4.3 Construction Measures to the Yiribana Logistics Estate West Buildings.**

Table 1 examines the bushfire construction standards required to be implemented to comply with A.S. 3959 – 2018 – ‘Construction of Buildings in Bushfire Prone Areas’.

These standards will be applicable pending development of the adjoining land to the south of the development site.

**Table 1. Determination of Bushfire Construction Standards.**

Aspect	Vegetation within 140m of development	Predominant Vegetation Formation Class	Effective Slope of Land	Width of Defendable Space provided to fixed assets	Bushfire Construction Standard – A.S. 3959 – 2018
<i>Southwest of Building on Warehouse 1</i>	Unmanaged River Flat Forest	Reclassified Rain Forest	0-5 degrees downslope	Minimum 21 metres	BAL 19 to western & southern elevations
<i>Southwest of Building on Warehouse 2</i>	Unmanaged River Flat Forest	Reclassified Rain Forest	0-5 degrees downslope	Minimum 60 metres	BAL 12.5 to western & southern elevation

The BAL 19 construction standards to the southern and western elevations of the building on Warehouse 1 that are adjacent to the River Flat Eucalypt Forest apply between 21 - 29 metres from the edge of the RE1 corridor. BAL 12.5 applies between 29 – 100 metres.

The BAL 12.5 construction standards to the southern and western elevations of the building on Warehouse 2 that are adjacent to the River Flat Eucalypt Forest apply between 21 - 100 metres from the edge of the RE1 corridor.

The grassland vegetation on the land to the south of the building on Warehouse 1 will be removed by the development of the land and therefore no bushfire construction standards will be required to the southern elevation of the building – beyond the 100 metre length to satisfy the BAL 19 requirement.

The following additional measures also apply:

- Access doors [PA and Vehicle] to the buildings shall be fitted with seals that seal the bottom, stiles and head of the door against the opening/frame to prevent the entry of embers into the building.

Particular attention shall be given to the gap at the head of the curtain of the roller doors, where mohair type seals shall be used;

- External timber doors shall be fitted with a stainless steel/Colorbond kick plate of 400mm high on the outside of the door;
- External glazed doors and windows shall comply with the requirements for glazing less than 400mm above finished ground level; paths / pavement and elevated roofs;

- Any external vents, ventilation louvres or grilles within the western and southern elevations of the building on Warehouse 1 and Warehouse 2 shall have stainless steel mesh [or perforated metal] with a maximum aperture of 2mm square fitted to prevent the entry of embers into the building or be fitted with a louvre system which can be closed in order to maintain a maximum aperture or gap of no more than 2mm;
- Roof ventilators shall be fitted with stainless steel flymesh [2mm aperture] to prevent the entry of embers into the building or be fitted with a louvre system which can be closed in order to maintain a maximum aperture or gap of no more than 2mm.

#### **4.4 Access Standards for Firefighting Operations.**

Appendix 3 “Access” of *Planning for Bushfire Protection 2019* provides specifications on the access provisions for fire-fighting operations within developments which are subject to bushfire attack.

Vehicular access to the proposed Yiribana Logistics Estate West will be provided from Mamre Road via the new proposed Collector Road.

The proposed internal access roads will be constructed to provide heavy rigid and articulated vehicle access to each of the proposed buildings. This internal road network will provide suitable access for fire-fighting appliances similar to NSW Rural Fire Service Category 1 Tankers and Fire & Rescue NSW Composite and Aerial Appliances.

Fire Appliance access is to be provided along the southern side of the building on Warehouse 1.

#### **4.5 Water Supplies for Firefighting Operations.**

The fire-fighting water supply to the proposed building shall comply with the Building Code of Australia [BCA] and Australian Standard A.S. 2419.1 – 2022.

Electricity and gas supplies will be laid underground and therefore address the performance standard of Chapter 4 of *Planning for Bushfire Protection 2019*.

#### **4.6 Emergency Management for Fire Protection / Evacuation.**

The Yiribana Logistics Estate West is unlikely to be subject to a bushfire event that will create the need for the evacuation of the buildings.

Due to the low bushfire risk there is no requirement for the preparation of a specific Bushfire Evacuation Plan or a Bushfire Management Plan for the Yiribana Logistics Estate West complex.

However, the management of evacuation of the staff/visitors will need to be addressed in the preparation of a site specific Evacuation Plan for the facility. The Evacuation Plan shall address the protocols for the timely relocation of staff/visitors in the event that an emergency occurs, both within the site or within the local area.

The Evacuation Plan shall comply with AS 3745:2010 *“Planning for Emergencies in Facilities”*.

A copy of the Evacuation Plan shall be provided to the Local Emergency Management Committee/Police, Fire & Rescue NSW and NSW Rural Fire Service.

#### **4.7 Bushfire Hazard Management.**

The intention of bushfire hazard management is to prevent flame contact with a structure, reduce radiant heat to below the ignition thresholds for various elements of a building, to minimize the potential for wind driven embers to cause ignition and to reduce the effects of smoke on occupants and fire-fighters.

The management of the Defendable Spaces within the site shall comply with the recommendations of Appendix 4 of *Planning for Bushfire Protection 2019* and *Standards for Asset Protection Zones*.

Management of the Defendable Spaces within the development shall comply with the following:

- Maintain a clear area of low-cut lawn or pavement adjacent to the buildings;
- Utilise non-flammable materials such as Scoria, pebbles and recycled crushed bricks as ground cover to landscaped gardens in close proximity to building;
- Keep areas under shrubs and trees raked and clear of combustible fuels;
- Trees and shrubs should be maintained in such a manner that tree canopies are separated by 2 metres and understorey vegetation is not continuous [retained as clumps].



## **SECTION 5**

### **BUSHFIRE MANAGEMENT STRATEGIES**

Strategies to address the aim and objectives of *Planning for Bushfire Protection 2019* are as follows:

#### **Strategy 1 – Defendable Space:**

The Defendable Space shall be maintained as an Inner Protection Area (IPA)  
- Asset Protection Zone.

#### **Strategy 2 – Landscape Management:**

The design and maintenance of the landscaped gardens within the site shall comply with the prescriptions of an Inner Protection Area [IPA] pursuant to the specifications of Appendix 4 of *Planning for Bushfire Protection 2019* and the NSW Rural Fire Services document '*Specifications for Asset Protection Zones*'.

The management of the landscaped gardens [defendable space] shall be maintained under the terms of a positive covenant, pursuant to Section 88B of the *Conveyancing Act of 1909*, on the title of the land.

#### **Strategy 3 – Bushfire Construction Standards:**

It is recommended that any part of the proposed buildings located within 100 metres of the bushfire hazard, being the vegetation within the RE1 zoned land, shall be constructed to comply with Section 3 and Section 5 [BAL 12.5] of A.S 3959 – 2018 - '*Construction of Buildings in Bushfire Prone Areas*'.

That part of the building on Warehouse 1 located adjacent to the RE1 on the land to the southwest of the building shall be constructed to comply with Section 3 and Section 6 – BAL 19 in accordance with A.S. 3959 – 2018 – '*Construction of Buildings in Bushfire Prone Areas*'.

That part of the building on Warehouse 2 located adjacent to the RE1 on the land to the southwest of the building shall be constructed to comply with Section 3 and Section 5 – BAL 12.5 in accordance with A.S. 3959 – 2018 – '*Construction of Buildings in Bushfire Prone Areas*'.

Whilst the type of construction recommended addresses the potential radiant heat levels from a future bushfire in the vegetation on the adjoining RE1 zoned land, the following additional construction standards shall be implemented to safeguard the buildings against possible burning ember attack:

- Access doors [PA and Vehicle] to the buildings shall be fitted with seals that seal the bottom, stiles and head of the door against the opening/frame to prevent the entry of embers into the building.

Particular attention shall be given to the gap at the head of the curtain of the roller doors, where mohair type seals shall be used;

- External timber doors shall be fitted with a stainless steel/Colorbond kick plate of 400mm high on the outside of the door;
- External glazed doors and windows shall comply with the requirements for glazing less than 400mm above finished ground level; paths / pavement and elevated roofs;
- Any external vents, ventilation louvres or grilles within the western and southern elevations of the building on Warehouse 1 and Warehouse 2 shall have stainless steel mesh [or perforated metal] with a maximum aperture of 2mm square fitted to prevent the entry of embers into the building or be fitted with a louvre system which can be closed in order to maintain a maximum aperture or gap of no more than 2mm;
- Roof ventilators shall be fitted with stainless steel flymesh [2mm aperture] to prevent the entry of embers into the building or be fitted with a louvre system which can be closed in order to maintain a maximum aperture or gap of no more than 2mm.

#### **Strategy 4 – Evacuation Plan:**

The management of evacuation of the staff/visitors will be addressed in the preparation of a site specific Evacuation Plan for the facility.

The Evacuation Plan shall address the protocols for the timely relocation of staff/visitors in the event that an emergency occurs, both within the site or within the local area.

A copy of the Evacuation Plan shall be provided to the Local Emergency Management Committee/Police, Fire & Rescue NSW and NSW Rural Fire Service.

The Evacuation Plan shall comply with AS 3745:2010 *“Planning for Emergencies in Facilities”*.

## SECTION 6

### CONCLUSION

A Development Application is being lodged with Penrith City Council for the construction of the proposed Yiribana Logistics Estate West on No. 706 – 769 Mamre Road, Kemps Creek.

An examination of the Penrith Bushfire Prone Land Map has determined that Category 2 Bushfire Prone Vegetation is recorded to exist within the development site and on the rural land to the south, east and north of the site.

The Mamre Road Structure Plan identifies areas of RE1 – Public Recreation zoned land to the southwest of the proposed Warehouse 1 and Warehouse 2.

The vegetation on the proposed RE1 zoned land will rehabilitate to River Flat Eucalypt Forest, increasing the bushfire hazard to the proposed warehouse buildings.

This assessment has reviewed the level of threat to the building on proposed Warehouse 1 and Warehouse 2 and made recommendations on the provision and maintenance of a “defendable space” to the south and western aspects of the buildings and the provision of bushfire construction measures to that part of the buildings which is located within 100 metres of the bushfire hazard so as to increase the protection of these building against the potential impact of radiant heat/ember attack on the exterior of the building and the impact from burning embers.

Specific bushfire construction standards have been recommended to that part of the building exposed to a bushfire in the River Flat Eucalypt Forest in the RE1 zoned land to the south of the building on Warehouse 1.

This report has examined the objectives of *Planning for Bushfire Protection 2019*, in relation to the provision of bushfire protection measures to the future construction of industrial buildings on the lots created in the subdivision, and has provided recommendations on:

- The provision of a combination of defendable space [separation of the buildings from the bushfire hazard] and the construction standards to the buildings;
- Access and water supply provisions for fire-fighting operations;
- Management of the fire protection measures, including the defendable spaces; and
- Emergency management [evacuation] planning.

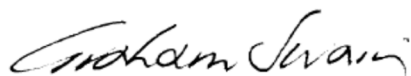


Table 2 summarises the extent to which the development conforms to the aim and objectives of *Planning for Bushfire Protection 2019*.

**Table 2. Compliance with the aim and objectives of *Planning for Bushfire Protection 2019*.**

<b>Bushfire Protection Measure</b>	<b>Compliance with the aim and objectives of <i>Planning for Bushfire Protection 2019</i>.</b>
Defendable Space setbacks/construction standards to future industrial buildings	The combination of a Defendable Space and construction standards to the buildings addresses the requirement that the occupants are afforded adequate protection from exposure to a bushfire and that the buildings will not be exposed to material ignition.
Access for fire-fighting operations	The proposed public access roads within the industrial estate comply with the specifications of Appendix 3 of <i>Planning for Bushfire Protection 2019</i> and provide satisfactory emergency access for fire-fighting appliances.
Water supplies for fire fighting	Hydrant supply to be installed in accordance with AS 2419.1 – 2022.
Management of the fire protection measures, including the defendable spaces	The owner of the Yiribana Logistics Estate West is responsible for the maintenance of the recommended fire protection measures and provision of the perimeter fire access road. Positive Covenant to be recorded on title of the proposed lots.
Emergency Management	The future owners of the buildings constructed in the Yiribana Logistics Estate West shall address protocols for the management of staff and site facilities during bushfire occurrences.

I confirm that the proposed development complies with the aim and objectives and the deemed to satisfy requirements of Section 8.3.10 of *Planning for Bushfire Protection 2019* – Buildings of Class 5 to 8 and Class 10 of the Building Code of Australia in respect to the provision of asset protection zones [defendable spaces], access and water/utilities.



Graham Swain, Managing Director,  
***Australian Bushfire Protection Planners Pty Limited.***

## REFERENCES:

- N.S.W Rural Fire Service – *Planning for Bushfire Protection 2019*;
- *Environmental Planning & Assessment Act – 1979*;
- *Rural Fires Act – 1997*;
- *Rural Fires Regulation 2022*;
- NSW Rural Fire Service – *Guideline for Bushfire Prone Land Mapping 2015*;
- *Bushfire Environmental Assessment Code 2019*;
- Building Code of Australia;
- Australian Standard A.S. 3959-2018 “*Construction of Buildings in Bushfire Prone Areas*”;
- *Penrith Bushfire Prone Land Map*.